Institutional support and teaching practices for students with intellectual disabilities in inclusive schools in Indonesia

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Abstract: Inclusive education has become an essential framework for ensuring equitable access to quality education for students with intellectual disabilities. Institutional support and effective teaching practices play a critical role in facilitating successful inclusive education implementation. This study aims to explore institutional support mechanisms and teaching practices for students with intellectual disabilities in inclusive schools in Surabaya, Indonesia. This research employed a qualitative approach using in-depth interviews, classroom observations, and document analysis involving classroom teachers, special education teachers, and school leaders from three inclusive schools. The findings indicate that institutional support is reflected in inclusive education policies, administrative commitment, individualized education planning, and collaborative support systems. Teaching practices include curriculum adaptation, differentiated instruction, visual learning strategies, and individualized assistance to support students' cognitive and socio-emotional development. However, challenges remain in terms of limited teacher training, insufficient specialized resources, and workload constraints. Institutional commitment and collaboration among stakeholders significantly contribute to improving educational access and participation for students with intellectual disabilities. Strengthening teacher capacity, improving institutional support systems, and enhancing resource availability are essential to ensure sustainable, inclusive education practices. This study contributes to understanding inclusive education implementation in developing country contexts and provides practical implications for improving inclusive education quality.

Keywords: Inclusive education, Institutional support, Intellectual disabilities, Teaching practices.

1. Introduction

Education is universally recognized as a fundamental human right and a critical foundation for sustainable development, social inclusion, and individual well-being [1]. International frameworks, including the United Nations Convention on the Rights of Persons with Disabilities and the Sustainable Development Goals, emphasize the obligation of education systems to ensure equitable access to quality education for all learners, including students with disabilities [2, 3]. Among students with disabilities, those with intellectual disabilities often face significant barriers to accessing equitable educational opportunities [4-6]. Intellectual disabilities are characterized by substantial limitations in intellectual functioning and adaptive behavior, which may affect conceptual, social, and practical skills required for learning and daily life [7-10]. These characteristics necessitate appropriate educational accommodations, adaptive instructional approaches, and supportive learning environments that address diverse learning needs while promoting student participation and development [11-13].

Inclusive education has emerged as a globally endorsed approach to addressing educational inequities and promoting equal opportunities for students with disabilities. Inclusive education refers to the process of ensuring that all students, regardless of their abilities or disabilities, have access to

meaningful learning opportunities within mainstream educational settings [14-17]. This approach emphasizes the principles of equity, participation, and non-discrimination, ensuring that students with intellectual disabilities are able to learn alongside their peers while receiving the support necessary to facilitate their academic and social development [18-21]. Inclusive education extends beyond physical placement in mainstream classrooms and requires systemic transformation, including curriculum adaptation, flexible teaching practices, and supportive institutional structures [22-24]. Research has consistently shown that inclusive education contributes not only to academic development but also to improved social interaction, emotional well-being, and self-confidence among students with intellectual disabilities, while promoting positive attitudes toward diversity within school communities [25-27].

The successful implementation of inclusive education depends on multiple interconnected factors, among which institutional support represents a critical component. Institutional support refers to the policies, leadership practices, organizational structures, and resource allocation mechanisms that enable inclusive education to be implemented effectively [28-30]. Schools play a central role in translating inclusive education policies into practice by establishing supportive institutional environments that facilitate inclusive teaching and learning [31-34]. Institutional commitment is reflected in leadership engagement, policy implementation, provision of specialized services, and support for teacher professional development [35-37]. Strong institutional support contributes to the sustainability of inclusive education initiatives and ensures that inclusive practices are embedded within school culture and organizational systems rather than implemented as isolated or temporary interventions.

Teaching practices represent another essential dimension influencing the effectiveness of inclusive education. Teachers play a central role in facilitating inclusive learning by implementing instructional strategies that address diverse student needs [38-41]. Effective inclusive teaching practices include differentiated instruction, individualized learning support, curriculum adaptation, and the use of multimodal instructional approaches [42, 43]. These strategies enable teachers to accommodate variations in students' cognitive abilities, learning styles, and developmental needs [44, 45]. Teachers who are equipped with inclusive pedagogical competencies are better able to promote student engagement, enhance academic achievement, and support the social and emotional development of students with intellectual disabilities [46-48]. Conversely, inadequate instructional preparation and limited access to adaptive resources may hinder the effective implementation of inclusive education.

Indonesia has demonstrated its commitment to advancing inclusive education through national policy frameworks aimed at expanding access to education for students with disabilities. Government initiatives have promoted the designation of inclusive schools and encouraged the integration of students with disabilities into mainstream educational settings. These efforts reflect broader national commitments to educational equity and social inclusion in alignment with global frameworks [19, 49-51]. Surabaya, one of Indonesia's largest and most developed urban centers, has played an important role in implementing inclusive education policies. Schools in Surabaya have been designated to provide inclusive education services and are expected to accommodate students with diverse learning needs, including intellectual disabilities, through institutional support systems and adaptive teaching practices.

Despite these policy advancements, the implementation of inclusive education remains complex and uneven across educational contexts. Schools may encounter challenges related to institutional capacity, availability of specialized resources, and teacher preparedness [52, 53]. Teachers may face difficulties in implementing individualized instructional strategies while managing diverse classroom needs [54, 55]. Institutional structures and support systems may vary in their effectiveness, influencing the extent to which inclusive education can be implemented successfully [49]. Furthermore, collaboration among stakeholders, including school leaders, teachers, parents, and specialists, plays an essential role in ensuring comprehensive support for students with intellectual disabilities [56, 57]. Variations in institutional readiness and instructional practices may contribute to differences in student participation and educational outcomes.

Previous research has emphasized the importance of institutional support, leadership commitment, and teacher competence in facilitating inclusive education. Studies have highlighted the role of school

leadership in promoting an inclusive school culture, supporting teacher professional development, and ensuring the availability of appropriate educational resources [58, 59]. However, existing studies have often focused on policy implementation or general inclusive education practices, with limited attention to the specific experiences of students with intellectual disabilities. In particular, there remains a lack of qualitative research examining how institutional support mechanisms and teaching practices are implemented in inclusive schools within urban Indonesian contexts, such as Surabaya.

Understanding institutional support and teaching practices in inclusive schools is essential for identifying strengths, challenges, and opportunities for improvement. Qualitative inquiry can provide valuable insights into educators' experiences, institutional practices, and instructional strategies that influence inclusive education implementation. Such understanding is critical for informing policy development, strengthening institutional capacity, and enhancing teaching effectiveness.

Therefore, this study aims to explore institutional support and teaching practices for students with intellectual disabilities in inclusive schools in Surabaya, Indonesia. Specifically, this study seeks to examine how institutional structures and leadership support inclusive education and how teachers implement instructional strategies to address the diverse learning needs of students with intellectual disabilities. By providing an in-depth analysis of institutional and instructional practices, this study contributes to advancing knowledge on inclusive education implementation in developing country contexts and offers practical implications for strengthening inclusive education systems.

2. Method
2.1. Research Design
This study employed a qualitative research design to explore institutional support and teaching practices for students with intellectual disabilities in inclusive schools. Qualitative research is particularly appropriate for examining complex social and educational phenomena, as it allows researchers to understand participants' experiences, perspectives, and practices within their natural contexts [60, 61]. This approach enables an in-depth exploration of institutional processes, leadership roles, and instructional practices that cannot be fully captured through quantitative methods [62, 63]. Furthermore, qualitative research supports the interpretation of meanings, interactions, and contextual factors influencing inclusive education implementation. This study adopted an interpretive qualitative approach to understand how institutional support mechanisms and teaching practices are implemented in inclusive school settings.

2.2. Research Site and Participants
The study was conducted in three inclusive schools located in Surabaya, Indonesia, including elementary and junior secondary schools that have formally implemented inclusive education programs. These schools were selected because they represent institutional contexts where inclusive education policies are actively implemented.

Participants were selected using purposive sampling, a strategy commonly used in qualitative research to identify individuals who possess relevant knowledge and experience related to the research topic [64]. This sampling approach ensures that participants can provide rich, relevant, and detailed information regarding institutional and instructional practices.

The participants included:
- Six classroom teachers
- Three special education teachers
- Three school principals
- Three inclusive education coordinators

These participants were selected because of their direct involvement in planning, implementing, and supporting inclusive education. Their diverse professional roles provided multiple perspectives on

institutional support and teaching practices, thereby enhancing the comprehensiveness and credibility of the findings.

2.3. Data Collection

Data were collected using multiple qualitative data collection methods to ensure depth and triangulation of information. Using multiple sources of data enhances the credibility and trustworthiness of qualitative research findings.

2.3.1. In-Depth Interviews

Semi-structured interviews were conducted to explore participants' experiences, perceptions, and roles in implementing inclusive education. Semi-structured interviews allow flexibility for participants to express their perspectives while ensuring that key research topics are addressed [65]. Interviews lasted between 45 and 60 minutes and were conducted in person. The interview protocol included questions related to institutional support, leadership roles, instructional strategies, and challenges in inclusive education implementation. All interviews were audio-recorded with participant consent and later transcribed for analysis.

2.3.2. Classroom Observations

Classroom observations were conducted to examine actual teaching practices, instructional adaptations, and student participation. Observation enables researchers to understand real-time interactions and instructional processes within natural settings [66, 67]. Observations focused on instructional strategies, teacher-student interaction, classroom engagement, and support provided to students with intellectual disabilities. Field notes were recorded during observations to capture relevant instructional practices and contextual factors.

2.3.3. Document Analysis

Document analysis was conducted to examine institutional and instructional documents related to inclusive education implementation. Document analysis provides valuable contextual information and helps corroborate findings from interviews and observations. The documents analyzed included:
- Individualized Education Programs (IEPs)
- School inclusive education policies
- Curriculum adaptation plans
- Institutional guidelines for inclusive education

These documents provided insights into institutional commitment, instructional planning, and formal support mechanisms.

2.4. Data Analysis

Data were analyzed using thematic analysis, a systematic method for identifying, analyzing, and interpreting patterns within qualitative data. Thematic analysis is widely used in qualitative educational research to examine participant experiences and institutional practices. The analysis process involved several stages:
- · Data familiarization - reading and reviewing interview transcripts, observation notes, and documents
- Initial coding – identifying meaningful units of data and assigning codes
- Theme identification – grouping codes into broader categories
- Theme development – refining and defining themes
- Interpretation – analyzing relationships between themes and research objectives

Data triangulation was used to enhance the credibility and validity of the findings by comparing data from interviews, observations, and document analysis. This process helped ensure consistency and strengthen the trustworthiness of the results. Additionally, careful documentation of the research process was maintained to support transparency and methodological rigor.

3. Results and Discussion

3.1. Institutional Commitment to Inclusive Education

The findings indicate that inclusive schools in Surabaya demonstrate a strong and structured institutional commitment to inclusive education. This commitment is reflected in leadership practices, formal institutional policies, and organizational support systems designed to facilitate the inclusion of students with intellectual disabilities.
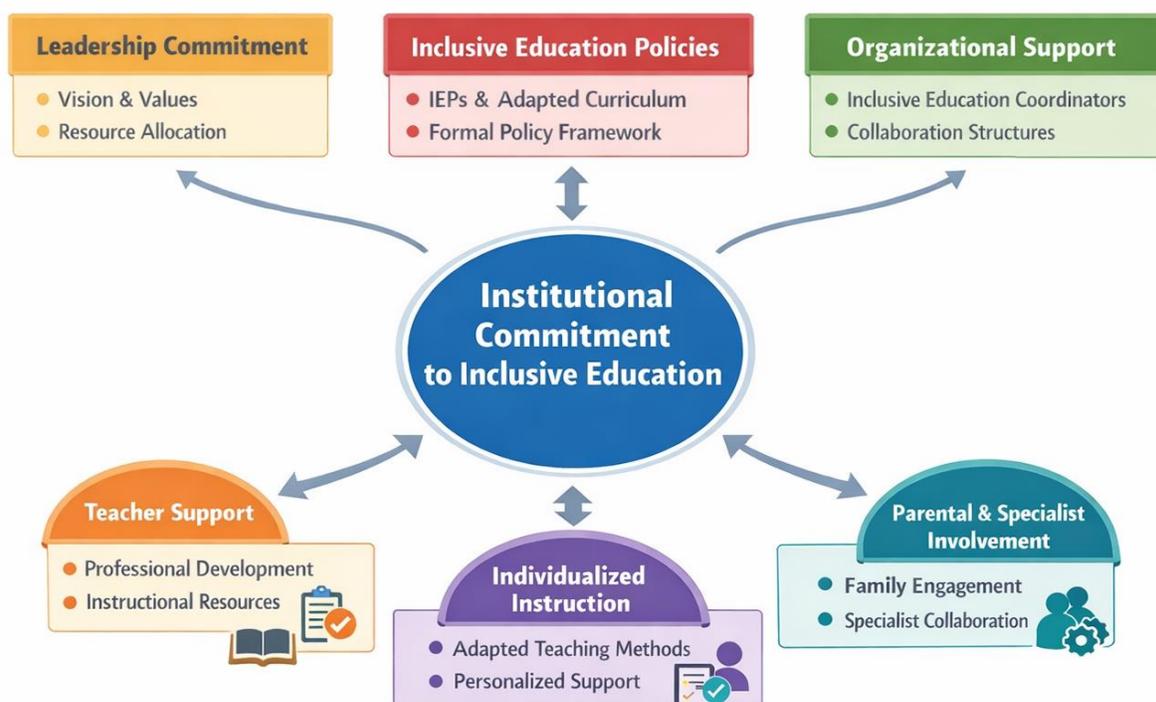
Figure 1.
Institutional commitment framework.

Evidence from interviews conducted across three inclusive schools shows that school leaders consistently view inclusive education as a core institutional responsibility aligned with broader educational equity goals [68, 69].

Based on interviews with school principals from different schools, inclusive education has been integrated into institutional vision, policy, and operational planning. One school principal stated, *"Inclusive education is not only a government requirement but part of our institutional responsibility to ensure that all students receive equal access to education. We ensure that teachers receive support and students receive individualized assistance."* Similarly, another principal emphasized the role of leadership in sustaining inclusive education, explaining, *"We provide structured coordination through inclusive education coordinators and ensure that individualized education programs are implemented."* These statements indicate that institutional leadership plays a central role in establishing inclusive education as an integral part of school organizational systems. Leadership commitment is widely recognized as a key factor influencing

inclusive education effectiveness, as school leaders shape institutional culture, allocate resources, and support teacher professional practices [70].

Interviews with inclusive education coordinators and classroom teachers further revealed that schools have established formal coordination mechanisms to support inclusive education implementation. One inclusive education coordinator explained, *"We conduct regular coordination meetings with classroom teachers and special education teachers to review student progress and adjust instructional strategies."* Teachers also reported receiving institutional support in developing individualized education programs and adapting instructional materials. These findings demonstrate that institutional commitment is reflected not only in leadership policies but also in structured professional collaboration. Collaborative institutional support systems are essential for enabling teachers to implement inclusive pedagogical practices effectively [71].

Classroom observations conducted in the participating schools provided direct evidence of institutional support in instructional practice. Teachers were observed adapting teaching materials, simplifying instructions, and providing individualized guidance to students with intellectual disabilities. In several classrooms, special education teachers worked collaboratively with classroom teachers to support students during instructional activities. These practices indicate that institutional structures facilitate inclusive teaching practices and promote student participation. Observations also showed that teachers had access to structured planning support, which enabled them to implement differentiated instruction and individualized assistance. Such institutional support mechanisms are consistent with research emphasizing that inclusive education requires coordinated institutional structures that support teachers and facilitate instructional adaptation [72].

The findings of this study are consistent with previous research highlighting the critical role of institutional leadership and organizational support in facilitating inclusive education. That inclusive education requires systemic institutional commitment, including leadership engagement, policy implementation, and organizational coordination [49]. Similarly, school leadership plays a crucial role in establishing inclusive school environments and supporting teacher collaboration [73]. Institutional leadership contributes to creating supportive conditions that enable teachers to implement inclusive instructional practices effectively.

Inclusive education cannot be sustained without strong institutional frameworks, including leadership commitment, resource allocation, and structured support systems. The findings of this study support this perspective by demonstrating that inclusive schools in Surabaya have established formal leadership roles, policy frameworks, and coordination mechanisms that facilitate inclusive education implementation. Institutional commitment ensures that inclusive education is implemented systematically rather than as an isolated or temporary initiative [3]. Inclusive education requires institutional transformation, including policy integration, leadership support, and coordinated implementation strategies. Institutional commitment enables schools to create inclusive learning environments that support student participation, engagement, and development. The findings demonstrate that institutional leadership, formal policy development, and structured coordination mechanisms play a critical role in ensuring effective inclusive education implementation. Institutional commitment creates supportive environments that enable teachers to implement adaptive instructional practices and provide individualized support to students with intellectual disabilities [74]. These findings highlight the importance of strengthening institutional leadership and organizational capacity to ensure sustainable, inclusive education implementation and promote equitable educational opportunities for all students.

3.2. Teaching Practices for Students with Intellectual Disabilities

The findings indicate that teachers in inclusive schools in Surabaya implement a range of adaptive teaching practices to support students with intellectual disabilities. These practices include instructional modification, differentiated instruction, individualized support, and the use of visual and structured teaching strategies.
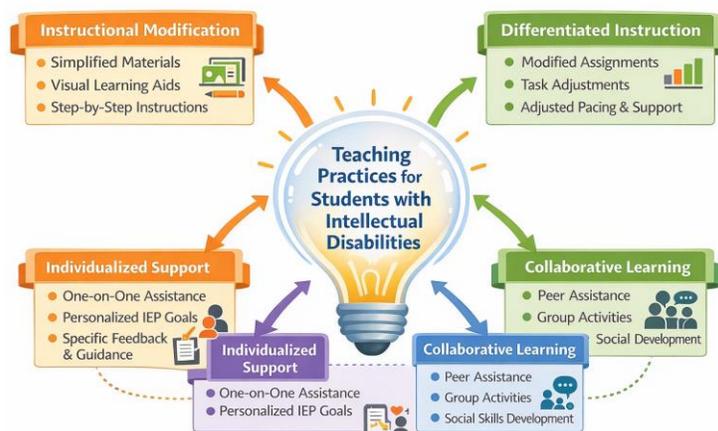
Figure 2.
Adaptive teaching practices framework supporting students.

Evidence from interviews, classroom observations, and document analysis demonstrates that teachers actively adjust instructional approaches to accommodate diverse learning needs and promote meaningful student participation. Based on interviews conducted with classroom teachers across three inclusive schools, teachers reported simplifying instructional materials to ensure accessibility for students with intellectual disabilities. One classroom teacher explained, *"We modify the content by simplifying instructions and focusing on essential learning objectives. This helps students with intellectual disabilities understand the lesson more clearly."* Another teacher emphasized the importance of visual support, stating, *"Visual aids such as pictures, charts, and step-by-step instructions help students understand concepts more effectively."* These interview findings indicate that teachers recognize the importance of adapting instructional delivery to match students' cognitive abilities. Adaptive teaching practices are widely recognized as essential for supporting students with intellectual disabilities and improving learning accessibility [75].

Classroom observations further confirmed the implementation of differentiated instructional practices. Teachers were observed modifying assignments, reducing task complexity, and providing additional instructional time for students with intellectual disabilities. In several classrooms, teachers provided individualized guidance, repeated instructions, and used concrete examples to support student comprehension. Teachers were also observed using visual materials, such as illustrated worksheets and instructional demonstrations, to reinforce learning. These practices reflect the application of differentiated instruction, which allows teachers to respond to diverse learning needs and promote inclusive learning environments [76].

Observations also revealed that teachers actively monitored student progress and provided continuous instructional support. Teachers frequently checked student understanding, provided corrective feedback, and offered additional explanations when necessary. In some cases, teachers provided one-on-one assistance to students with intellectual disabilities during learning activities. These findings indicate that teachers play an active role in facilitating student engagement and supporting individual learning needs. Continuous instructional monitoring is essential for ensuring that students with intellectual disabilities remain engaged and are able to achieve learning objectives [27].

Classroom observations demonstrated that teachers encouraged peer interaction and collaborative learning. Students with intellectual disabilities were observed participating in group activities, working with peers, and receiving support from classmates. Teachers facilitated inclusive participation by assigning cooperative learning tasks and encouraging peer assistance. These practices contribute to the social development of students with intellectual disabilities and promote inclusive classroom

environments. Collaborative learning strategies have been shown to improve both academic and social outcomes for students with disabilities by promoting peer interaction and social integration [77]

Document analysis provided further evidence of adaptive instructional practices. Individualized Education Programs (IEPs) and curriculum adaptation plans indicated that teachers developed personalized learning goals, modified instructional content, and implemented individualized assessment strategies. These documents demonstrated that instructional adaptations were systematically planned and aligned with student needs. The presence of individualized instructional planning reflects the implementation of structured, inclusive teaching practices. Individualized planning is widely recognized as a key component of effective inclusive education, as it ensures that instructional approaches are aligned with student abilities and developmental needs [78]

The findings demonstrate that teachers play a critical role in implementing inclusive education through adaptive instructional practices. Instructional adaptation, differentiated instruction, individualized support, and collaborative learning contribute to improving student engagement, participation, and learning outcomes. These teaching practices support not only academic development but also socio-emotional growth and social integration. The implementation of adaptive teaching strategies reflects teachers' commitment to inclusive education and highlights the importance of strengthening teachers' capacity to ensure effective inclusive education implementation.

3.3. Individualized Education Planning and Student Support

The findings indicate that Individualized Education Programs (IEPs) play a critical role in supporting students with intellectual disabilities in inclusive schools in Surabaya. These individualized plans provide structured frameworks that guide instructional adaptation, assessment, and student support based on individual learning needs.
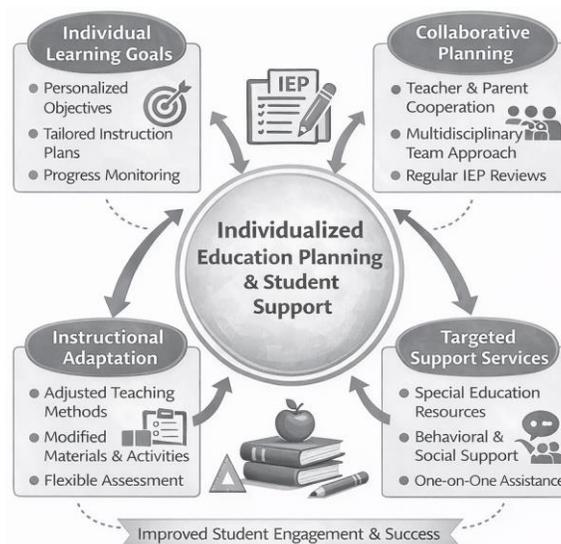
Figure 3.
Individualized education planning and student support.

Evidence from interviews, classroom observations, and document analysis demonstrates that individualized planning enables teachers to provide targeted educational support and promotes improved student participation and engagement. Based on interviews conducted with classroom teachers and inclusive education coordinators across three schools, participants emphasized the importance of individualized education planning in addressing diverse learning needs. One special education teacher explained, *"Each student with intellectual disabilities has unique learning needs, so we*

develop individualized plans that focus on achievable learning goals and appropriate instructional strategies.” Similarly, a classroom teacher stated, *“The Individualized Education Program helps us adjust teaching methods and assessments to ensure that students can participate and succeed in learning activities.”* These findings indicate that teachers recognize individualized planning as an essential tool for facilitating inclusive learning and ensuring that instructional strategies are aligned with student abilities.

Interviews with inclusive education coordinators also revealed that individualized education planning involves collaborative processes among teachers, school leaders, and parents. One coordinator noted, *“We involve parents in developing the Individualized Education Program because they understand the student's needs and development outside the classroom.”* This collaborative approach ensures that individualized support is comprehensive and responsive to student needs. Collaborative planning between educators and families is widely recognized as an important component of effective individualized education implementation [79].

Classroom observations provided additional evidence of individualized instructional implementation. Teachers were observed using modified instructional materials, adjusting task difficulty, and providing individualized assistance during learning activities. In several classrooms, teachers provided step-by-step guidance, additional explanations, and extended learning time to support students with intellectual disabilities. These instructional adaptations were aligned with individualized learning goals specified in student education plans. Observations also showed that students receiving individualized support were more actively engaged in classroom activities and demonstrated increased confidence when completing learning tasks. Individualized instruction is essential for ensuring that students with intellectual disabilities can access and participate meaningfully in inclusive educational settings [80]

Document analysis further confirmed the structured implementation of individualized education planning. Schools maintained formal Individualized Education Program documents that outlined student learning objectives, instructional strategies, assessment methods, and support services. These documents demonstrated that individualized planning was systematically implemented and regularly reviewed to monitor student progress. Institutional documentation also indicated that individualized education plans were developed collaboratively by classroom teachers, special education teachers, and inclusive education coordinators. The presence of structured individualized education documentation reflects institutional commitment to providing appropriate and responsive educational support for students with intellectual disabilities [81]

The findings also indicate that individualized education planning contributes to improved student participation, engagement, and confidence. Teachers reported that students who received individualized support were more willing to participate in classroom activities and demonstrated improved learning engagement. One teacher stated, *“When we adjust the learning tasks based on their ability, students become more confident and actively participate in classroom activities.”* These findings suggest that individualized instructional support enhances student motivation and learning participation. Individualized instructional planning enables teachers to create supportive learning environments that promote student success [82]

The findings demonstrate that individualized education planning plays a central role in facilitating inclusive education for students with intellectual disabilities. Individualized instructional planning enables teachers to provide targeted support, improve student engagement, and promote academic and socio-emotional development. The structured implementation of individualized education programs reflects institutional commitment to inclusive education and highlights the importance of individualized support in promoting equitable learning opportunities.

3.4. Challenges in Teaching Students with Intellectual Disabilities

Despite the presence of institutional support mechanisms, the findings indicate that teachers in inclusive schools in Surabaya continue to face significant challenges in teaching students with intellectual disabilities. These challenges include limited professional training, insufficient adaptive

instructional resources, and increased workload demands. Evidence from interviews, classroom observations, and document analysis suggests that these challenges influence teachers' ability to implement inclusive instructional practices effectively.

Based on interviews conducted with classroom teachers across three inclusive schools, limited access to specialized professional training emerged as a major concern. Several teachers reported that they had not received sufficient formal training in special or inclusive education. One teacher stated, *"We try our best to support students with intellectual disabilities, but many of us have not received specific training on how to teach them effectively."* Another teacher emphasized the need for continuous professional development, explaining, *"We need more training on instructional strategies, assessment methods, and classroom management for students with intellectual disabilities."* These findings indicate that teachers may lack the necessary pedagogical knowledge and skills required to address diverse learning needs. Professional preparation and ongoing training are essential for equipping teachers with the competencies necessary for inclusive education [83]

Classroom observations provided additional evidence of the challenges associated with limited professional preparation. In some classrooms, teachers were observed using general instructional approaches that were not fully adapted to the specific needs of students with intellectual disabilities. While teachers demonstrated commitment and effort, instructional adaptation was sometimes limited by insufficient knowledge of specialized instructional strategies. These findings suggest that professional training plays a critical role in enhancing teachers' capacity to implement inclusive teaching practices effectively. Research indicates that teachers with specialized training in inclusive education demonstrate greater confidence and effectiveness in supporting students with disabilities.

Limited availability of adaptive instructional resources also emerged as a significant challenge. Interview findings revealed that some schools lacked specialized instructional materials, assistive technologies, and adapted learning tools. One inclusive education coordinator explained, *"We have limited access to specialized learning materials. Teachers often have to create their own adapted materials to support students."* Similarly, another teacher reported, *"Assistive tools and visual learning materials are not always available, so we need to develop alternative instructional strategies."* These findings indicate that resource constraints affect the implementation of inclusive education. Access to appropriate instructional resources is essential for supporting students with intellectual disabilities and facilitating effective learning [84].

Document analysis further confirmed resource limitations. Institutional reports and instructional planning documents indicated that while individualized education programs were developed, access to specialized instructional materials and assistive devices was limited in some schools. This suggests that institutional support structures may not always be fully supported by adequate material resources. Resource availability plays a critical role in enabling teachers to implement adaptive instructional practices and support student learning effectively [85].

In addition to training and resource limitations, increased workload demands were identified as another significant challenge. Teachers reported that managing inclusive classrooms requires additional time and effort to plan individualized instruction, monitor student progress, and provide individualized support. One classroom teacher stated, *"Teaching in inclusive classrooms requires additional preparation and attention. We need to support students with intellectual disabilities while also managing the learning needs of other students."* Observations confirmed that teachers often provided individualized assistance while simultaneously managing the entire classroom. This dual responsibility increases teacher workload and may affect instructional effectiveness. Increased workload has been identified as a major challenge in inclusive education, as teachers must balance diverse instructional demands and responsibilities [85]

Overall, the findings demonstrate that while institutional commitment to inclusive education exists, teachers continue to face practical challenges related to training, resource availability, and workload demands. These challenges highlight the need for strengthened teacher professional development, increased access to adaptive instructional resources, and enhanced institutional support systems.

Addressing these challenges is essential for improving inclusive education effectiveness and ensuring equitable educational opportunities for students with intellectual disabilities.

3.5. Collaboration and Support Systems

The findings indicate that collaboration among teachers, school leaders, parents, and educational specialists plays a critical role in supporting the successful implementation of inclusive education in schools in Surabaya. Collaborative support systems contribute to improving instructional effectiveness, strengthening institutional coordination, and ensuring that students with intellectual disabilities receive comprehensive educational support.

Figure 4.
Collaboration and support systems framework.

Evidence from interviews, classroom observations, and document analysis demonstrates that structured collaboration enhances both instructional quality and student participation. Based on interviews conducted across three inclusive schools, teachers emphasized that collaboration with school leaders and inclusive education coordinators provides essential instructional and professional support. One classroom teacher stated, *"We regularly meet with the inclusive education coordinator and school principal to discuss student progress and instructional strategies. This collaboration helps us adjust our teaching and provide appropriate support."* Similarly, an inclusive education coordinator explained, *"Collaboration allows us to monitor student development, identify challenges, and provide guidance to teachers."* These findings suggest that institutional collaboration creates a structured support system that enables teachers to implement inclusive instructional practices effectively. Collaborative professional practices are widely recognized as essential for strengthening inclusive education implementation and improving teacher capacity [86].

Classroom observations further confirmed the role of collaboration in supporting inclusive education. Teachers were observed working closely with special education teachers to provide individualized instructional support. In some classrooms, special education teachers assisted in adapting instructional materials, supporting student participation, and providing additional explanations. Observations also showed that collaborative planning contributed to improved instructional organization and more effective learning support for students with intellectual disabilities. Collaborative teaching practices enhance instructional effectiveness by combining professional expertise and supporting diverse student needs [82, 87].

In addition to teacher collaboration, parental involvement emerged as a significant component of inclusive education support. Interviews with teachers and inclusive education coordinators revealed that parents play an important role in supporting student learning and reinforcing instructional goals

outside the classroom. One teacher explained, *"Parents help us understand the student's learning needs and behavior. We communicate regularly with parents to ensure consistent support."* Similarly, one inclusive education coordinator noted, *"We involve parents in individualized education planning and regularly provide updates on student progress."* These findings indicate that parental engagement strengthens educational continuity and enhances student learning outcomes. Family involvement has been shown to improve academic achievement, social development, and overall student success in inclusive education settings [88]

Document analysis provided further evidence of structured institutional collaboration. Schools maintained records of coordination meetings, individualized education planning sessions, and parent-teacher consultations. Institutional documents indicated that inclusive education implementation involved coordinated efforts among teachers, school leaders, and parents. These formal coordination mechanisms demonstrate that collaboration is institutionalized as part of school organizational practice. Structured collaboration ensures that inclusive education is implemented consistently and that student support is coordinated across institutional and family contexts [89].

Collaboration contributes to improving institutional effectiveness and the sustainability of inclusive education. Effective collaboration promotes shared responsibility, enhances communication, and strengthens institutional support systems. Schools that foster collaborative environments are better equipped to address instructional challenges and support diverse learners [90]. These collaborative practices contribute to creating inclusive learning environments that promote student participation, engagement, and development.

The findings demonstrate that collaboration among teachers, school leaders, parents, and specialists plays a vital role in ensuring effective inclusive education implementation. Institutional collaboration strengthens instructional practices, enhances teacher capacity, and supports student learning and development. Parental involvement further contributes to reinforcing educational support and promoting student success. These findings highlight the importance of strengthening collaborative support systems to ensure sustainable and effective inclusive education implementation.

4. Conclusion

This study demonstrates that institutional support and adaptive teaching practices are fundamental to the effective implementation of inclusive education for students with intellectual disabilities in inclusive schools in Surabaya, Indonesia. The findings highlight that strong institutional commitment, reflected in leadership engagement, formal policy frameworks, individualized education planning, and structured collaboration, plays a central role in creating inclusive learning environments. School leadership and organizational systems provide essential support that enables teachers to implement inclusive instructional practices and address diverse student needs. Teachers contribute significantly to inclusive education through adaptive teaching strategies, including differentiated instruction, instructional modification, individualized assistance, and the use of visual and structured learning approaches. Individualized Education Programs and collaborative support systems further strengthen instructional effectiveness by ensuring that teaching practices are aligned with students' cognitive abilities and developmental needs. These institutional and instructional practices contribute to improving student participation, engagement, and socio-emotional development, thereby promoting equitable educational access and inclusion.

The study also identifies important challenges that may affect the sustainability and effectiveness of inclusive education implementation. Limited access to specialized teacher training, insufficient adaptive instructional resources, and increased workload demands remain significant barriers for teachers in inclusive classrooms. Addressing these challenges requires comprehensive and sustained efforts at both the institutional and policy levels. Strengthening teacher professional development, improving access to adaptive learning materials and assistive resources, and enhancing institutional coordination mechanisms are essential to support effective inclusive education implementation. Furthermore, fostering collaborative partnerships among educators, school leaders, families, and educational

specialists can enhance institutional capacity and ensure comprehensive student support. This study contributes to the growing body of knowledge on inclusive education in developing country contexts by providing empirical evidence on the role of institutional support and teaching practices. Future research should explore long-term institutional strategies and policy interventions that promote sustainable, inclusive education systems and ensure equitable educational opportunities for students with intellectual disabilities.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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