

Asymmetric Inclusion in Rural Ghana: Participation and Belonging among Students with Physical Disabilities

Gmanikpa Gaou*, Rabbi Abu-Sadat

Department of Special Education, University of Education, Winneba - Ghana

*Corresponding Author

DOI: <https://doi.org/10.47772/IJRISS.2026.100700645>

Received: 25 July 2026; Accepted: 30 July 2026; Published: 08 August 2026

ABSTRACT

This study examined how teacher preparation and instructional practice, school environmental features and material resources, and peer and co-curricular experiences shape the educational participation of students with physical disabilities in one rural Ghanaian basic school. A qualitative single embedded case study was conducted within an interpretivist paradigm. Participants comprised the complete population of students with physical disabilities enrolled at the school during fieldwork and two staff members occupying classroom and institutional leadership roles (N = 4). Data were generated through individual semi-structured interviews and analysed using Braun and Clarke's reflexive thematic analysis. Three themes were developed. First, staff described inclusive education primarily through admission, mixed grouping, classroom questioning, encouragement, and participation in academic competitions, while the interviews provided limited evidence of curriculum, pacing, assessment, or task adaptation. Second, the school environment supported general movement but did not consistently support physical autonomy. All four participants identified the school toilet as the clearest environmental difficulty, particularly because of its distance and squatting-type design. Third, students described positive peer relationships and academic participation alongside non-participation in sport, which they attributed to their physical conditions. Staff also described recurring teasing and efforts to manage such behaviour. The findings suggest an uneven pattern of inclusion in which relational and administrative dimensions were more visible than pedagogical, environmental, and activity-specific adaptations. This case-derived pattern is conceptualised as asymmetric inclusion, referring to the uneven development of different dimensions of inclusion within the same school because they require different forms of organisational, pedagogical, material, and environmental support. The study argues for monitoring systems that assess participation and adaptation rather than presence alone, teacher development focused on practical instructional adaptation, accessible sanitation, and meaningful pathways into physical activity and sport.

Keywords: Inclusive education, Physical disability, Belonging, Participation, Physical activity, Accessibility, Ghana, Rural schools

INTRODUCTION

Inclusive education is grounded in the principle that learners with disabilities should have equitable opportunities to access and participate in education alongside their peers. This commitment is reflected in international frameworks including the Salamanca Statement (UNESCO, 1994) and the Convention on the Rights of Persons with Disabilities (United Nations, 2006). Contemporary understandings of inclusion extend beyond placement in mainstream classrooms to encompass participation, belonging, equity, accessibility, and responsiveness to learner diversity (UNESCO, 2020). Accordingly, school admission provides an important starting point for inclusion but does not by itself establish that learners experience meaningful participation.

Several concepts require distinction in examining this process. Access concerns whether a learner can enter and use educational spaces and opportunities. Integration refers more specifically to placement within existing mainstream settings. Inclusion involves changes in school structures, cultures, relationships, and practices so that learners participate meaningfully rather than merely occupy the same setting. Belonging concerns the learner's experience of acceptance, membership, and social connection. Participation refers to involvement in

learning and school activities, while autonomy concerns the extent to which learners can undertake activities without unnecessary dependence on others. These dimensions overlap, but they are not interchangeable.

The distinction is particularly important for students with physical disabilities. A learner may attend a mainstream classroom and experience positive peer relationships while still encountering barriers to independent movement, classroom participation, physical activity, or other co-curricular activities. Research on the social dimension of inclusion has shown the importance of peer acceptance and belonging for learners' school experiences (Koster et al., 2009; Farmer et al., 2019; Juvonen et al., 2019). At the same time, research on inclusive schooling has demonstrated that physical accessibility, instructional adaptation, and meaningful opportunities for participation remain important conditions for substantive inclusion.

The Ghanaian context provides an important setting for examining these distinctions. Ghana's Inclusive Education Policy was issued by the Ministry of Education in 2015 and identifies equitable access and participation as central goals of inclusive education (Ministry of Education, 2015). The associated implementation framework and standards provide further guidance for translating policy commitments into school practice. Nevertheless, research in Ghana continues to identify challenges involving teacher preparedness, curriculum adaptation, school accessibility, resources, and social inclusion (Ackah-Jnr & Danso, 2019; Naami & Mort, 2023; Opoku-Nkoom & Ackah-Jnr, 2023; Opoku et al., 2019).

Research on teacher preparedness suggests that positive orientations toward inclusion do not necessarily translate into confidence or competence in adapting instruction. Naami and Mort (2023), for example, identified continuing concerns regarding teacher preparedness in Ghana. Similarly, Opoku-Nkoom and Ackah-Jnr (2023) found that although inclusive cultures and acceptance were reported across primary schools, knowledge relating to curriculum adaptation remained limited and school facilities were not consistently accessible. Earlier research by Kuyini and Desai (2008) also identified limited instructional adaptation in Ghanaian inclusive classrooms. These findings suggest a distinction between an inclusive orientation and the practical capacity required to alter teaching in response to learner diversity.

The physical environment presents a related challenge. Ackah-Jnr and Danso (2019) documented accessibility problems in Ghanaian inclusive schools, including difficulties associated with seating, facilities, and activity spaces. Participatory work with children with disabilities has similarly highlighted inaccessible physical environments and limited assistive resources (Asamoah et al., 2023). Research focused specifically on water, sanitation, and hygiene has further shown that sanitation design represents a distinct accessibility and dignity concern for students with physical disabilities (Azupogo et al., 2023). These findings suggest that infrastructure should not be treated only as a general resource category. Design features may determine whether students move independently, use facilities privately, and participate without avoidable dependence.

Social participation presents another dimension. Ghanaian research has documented disability-related stigma, discrimination, and difficulties in peer interaction (Mantey, 2017; Naami, 2014; Ocran, 2022). At the same time, positive peer relationships and supportive school cultures are associated with more inclusive experiences. Studies outside Ghana similarly suggest that acceptance and exclusion may coexist within the same educational setting, with exclusion occurring in activities rather than across school life (Adugna et al., 2024; Gyimah et al., 2025).

Physical activity and sport are particularly relevant to this distinction. Participation in these activities requires more than physical presence and may depend on activity design, equipment, teacher support, peer interaction, communication, and opportunities for adaptation. Bertills and Björk (2024) found that participation in physical education (physical activity and sport) was supported through welcoming environments, peer collaboration, adapted teaching styles, modified activities, additional support, and close teacher-student communication. A recent meta-synthesis by Liu et al. (2025) similarly concluded that participation in physical activity among students with disabilities is shaped by interacting individual, staff, peer, and school-level factors rather than by a single condition.

The literature therefore establishes several barriers to inclusive education, but a further question requires attention. What happens when some dimensions of inclusion are functioning within a school while others are not? A school may admit students with disabilities, encourage classroom participation, and foster positive peer relationships while providing limited instructional adaptation, inaccessible sanitation, or no meaningful pathway

into physical activity. Treating such a school simply as either "inclusive" or "non-inclusive" risks overlooking these internal differences.

This study addresses this problem through a qualitative case study of one rural basic school in Northern Ghana. The study examines three interconnected domains: teacher preparation and instructional practice, school environmental features and material resources, and peer relationships and co-curricular participation. The purpose is not to generalise the experiences of one school to Ghanaian schools. Rather, the study provides an in-depth account of how different dimensions of inclusion coexist within one institutional setting.

Against this background, the study addressed three research questions: (1) How do staff describe the enactment of inclusive education policy through teacher preparation and instructional practice? (2) How do school environmental features and material resources facilitate or constrain physical autonomy and dignity? (3) How do peer relationships and co-curricular participation shape belonging and participation among students with physical disabilities?

LITERATURE REVIEW

Inclusive education in Ghana

Ghana's Inclusive Education Policy establishes a national commitment to equitable educational participation for learners with special educational needs and disabilities (Ministry of Education, 2015). The policy is supported by implementation guidance concerning teacher development, accessible environments, identification and support, and participation. Evidence suggests, though, that policy implementation varies across settings. Opoku et al. (2019) identified a range of implementation challenges in their scoping review of Ghanaian inclusive education research. Ackah-Jnr and Danso (2019) similarly found that physical environments within inclusive schools were not consistently suitable or accessible. More recent research has highlighted continuing limitations in teacher preparedness and curriculum adaptation (Naami & Mort, 2023; Opoku-Nkoom & Ackah-Jnr, 2023).

The literature therefore points to an important distinction between policy presence and policy enactment. Policy establishes expectations, but school-level enactment depends on teachers, leadership, resources, physical environments, peer relationships, and wider institutional support.

Teacher preparation and instructional adaptation

Teacher preparation is central to inclusive education because classroom teachers translate policy into daily instructional decisions. Inclusive practice requires more than acceptance of learners with disabilities. Teachers need practical knowledge for adapting tasks, materials, assessment, communication, pacing, grouping, and classroom participation. Kuyini and Desai (2008) found that teachers in Ghanaian inclusive classrooms used relatively few instructional adaptations for students with special educational needs. Their findings remain relevant because they identify instructional adaptation as a distinct dimension of inclusive practice rather than an automatic consequence of placement.

More recent research continues to report concerns regarding teacher preparedness. Naami and Mort (2023) examined the preparedness of student teachers in Ghana and highlighted the continuing importance of teacher education in developing capacity to respond to diverse learning needs. Opoku-Nkoom and Ackah-Jnr (2023) similarly reported limited knowledge of curriculum adaptation among primary school teachers, despite evidence of inclusive cultures and acceptance. Leadership also matters. School leaders influence how policy expectations are communicated, monitored, and supported within schools. Opoku (2021) found that Ghanaian school leaders expressed concerns about the resources available to sustain inclusive education. DeMatthews et al. (2020) likewise emphasised leadership as an important component of effective inclusive schools.

These studies suggest that teacher commitment and policy awareness should not be treated as equivalent to instructional competence. A school may have teachers who support inclusion but still lack the practical repertoire required to modify instruction.

Physical accessibility, autonomy, and dignity

Physical accessibility is a core component of meaningful participation. A school environment may permit entry while still creating barriers to independent movement and use of facilities. Ackah-Jnr and Danso (2019) identified accessibility concerns across Ghanaian inclusive schools, while Asamoah et al. (2023) documented children's experiences of unfriendly physical environments and limited assistive resources. Yahaya et al. (2025) further highlighted the significance of the built environment in rural Ghanaian schools. Sanitation deserves particular attention because toilets are not peripheral educational facilities. Their accessibility affects privacy, bodily autonomy, attendance, comfort, and dignity. Azupogo et al. (2023) identified specific water and sanitation barriers affecting students with physical disabilities in Ghanaian primary schools. Their work supports an approach in which individual environmental features are examined rather than reducing accessibility to a general statement about inadequate infrastructure.

For students with physical disabilities, therefore, access and autonomy should be distinguished. A student might enter a classroom but require assistance to use a toilet. A learner might move across a compound but encounter difficulty using a raised veranda. Such experiences demonstrate why physical presence is insufficient as an indicator of inclusion.

Belonging, peer relations, and participation

Belonging involves a learner's sense of acceptance and membership within the school community. Koster et al. (2009) conceptualised the social dimension of inclusion in terms of relationships and participation in the peer group. Farmer et al. (2019) similarly emphasised teacher and peer dynamics in building inclusive classroom communities. Ghanaian research has documented both positive and negative peer experiences. Mantey (2017), Naami (2014), and Ocran (2022) show that disability stigma and discrimination remain relevant concerns. Other studies indicate that learners with disabilities may experience acceptance in some contexts while experiencing teasing or exclusion in others (Gyimah et al., 2025; Okyere et al., 2019).

This evidence supports a domain-specific understanding of participation. A learner does not experience "inclusion" in the same way across all school activities. Classroom learning, academic competitions, recreation, physical education, and informal peer interaction may offer different participation conditions.

Inclusive physical education and adapted activity

Physical education provides a particularly clear test of substantive inclusion because participation often depends on activity design, equipment, teacher support, peer interaction, and opportunities for adaptation. Bertills and Björk (2024) found that teachers facilitated participation through welcoming environments, peer collaboration, adapted teaching styles, modified activities, additional instructions, and special support. Their findings show that inclusive physical education involves active pedagogical design rather than simply placing students with disabilities in the same activity as their peers. Liu et al. (2025), in a qualitative meta-synthesis of 22 studies, similarly found that physical activity participation is shaped by interacting factors involving school administrators, staff, students, peers, and individual circumstances. Their findings emphasise autonomy, competence, relatedness, environmental support, and adaptation.

This literature is important for interpreting non-participation in the present study. If students attribute their non-participation to their physical conditions, researchers should not automatically reinterpret those accounts as evidence of teacher or peer exclusion. At the same time, neither should physical conditions be treated as the complete explanation without considering whether the school provides alternative activity pathways. The relevant question is therefore whether the environment offers meaningful routes into participation for students with different physical capacities.

Research gap

Existing Ghanaian research has established concerns about teacher preparedness, accessibility, resources, stigma, and participation. Less attention has been given to how these dimensions coexist within one rural basic school.

The gap is therefore conceptual as well as geographical. Much of the existing literature examines teacher preparedness, accessibility, resources, stigma, or participation as distinct dimensions. This study instead examines how these dimensions coexist within one institutional setting and whether different dimensions of inclusion progress unevenly within the same school.

THEORETICAL FRAMEWORK

The study draws on Bronfenbrenner's Ecological Systems Theory (1979) and the Social Model of Disability (Oliver, 1990). The frameworks are used as complementary analytical perspectives rather than as competing explanations.

Ecological Systems Theory

Ecological Systems Theory positions individual experiences within interacting levels of social organisation. In the present study, the microsystem includes classroom teaching, peer relationships, school activities, and daily interactions. The mesosystem concerns relationships among settings that affect participation, including connections between home and school. The exosystem includes institutional and district arrangements influencing the school, such as professional development partnerships and resource provision. The macrosystem includes national policy and broader social understandings of disability.

The framework therefore supports examination of how a policy commitment becomes visible in everyday school practices and where translation between levels appears incomplete.

Social Model of Disability

The Social Model of Disability directs attention to barriers produced by social organisation, environmental design, institutional practices, and attitudes rather than locating disability solely within individual impairment (Oliver, 1990). In this study, the model is especially relevant to the built environment and participation opportunities.

The framework does not mean that participants' own explanations should be rejected. Where students attributed non-participation in sport to their physical conditions, those accounts were retained. The analysis therefore distinguishes between participant explanation and theoretical interpretation. The data do not permit a definitive determination of whether physical limitation, environmental design, internalised expectations, or a combination of these factors best explains non-participation in sport.

Conceptualising asymmetric inclusion

The two frameworks together support a case-derived concept of asymmetric inclusion. Asymmetric inclusion refers to a situation in which different dimensions of inclusion within the same school progress unevenly, with some dimensions showing meaningful participation and belonging while others remain constrained by limited pedagogical adaptation, inaccessible environments, or insufficient activity-specific support.

The concept is used here as an interpretive proposition generated from this case, not as a universal theory. Its value lies in drawing attention to differences within schools that might be obscured by binary classifications of schools as inclusive or non-inclusive.

METHODOLOGY

Research approach and design

A qualitative single embedded case study was conducted within an interpretivist paradigm (Creswell & Poth, 2018; Yin, 2018). The school constituted the bounded case, conceptualised as a school-level educational system within which different dimensions of inclusion could be examined. The four participants represented embedded units occupying different positions within that system: two students with physical disabilities, one classroom teacher, and the headteacher. The case study design was selected to permit detailed examination of how teacher practice, physical accessibility, and social participation interact within one school. The design was not intended to produce statistical generalisation.

Research setting

The study was conducted in a rural basic school in Northern Ghana. The school enrolled students with physical disabilities within mainstream classrooms. The physical environment included relatively spacious classrooms, a flat compound, a football field, raised veranda areas, traditional classroom furniture, and a toilet located some distance from the classroom block. To reduce the risk of internal identification, the school is not named in this article. The location is reported only at the regional level because the student participants constituted the complete population of students with physical disabilities enrolled at the school during fieldwork.

Participants and sampling

Four participants took part in the study. The two students represented the complete population of students with physical disabilities enrolled at the school during the study period. Total population enumeration was therefore used for the student group rather than purposive selection from a larger population. For staff, criterion sampling was used to identify participants whose roles directly related to the research questions (Palinkas et al., 2015). The classroom teacher provided a classroom-level perspective on teacher preparation and instructional practice, while the headteacher provided an institutional perspective on policy implementation, monitoring, resources, and school-level priorities.

Participants were identified using pseudonyms: SWD1, SWD2, Teacher1, and Headteacher.

Sample adequacy and information power

The small sample requires careful interpretation. The study does not claim that four participants are sufficient to represent rural Ghanaian schools or all teachers within the study setting. The sample was appropriate for the bounded case for three reasons. First, the two student participants constituted the entire eligible student population at the school during fieldwork. Second, the two staff participants occupied roles directly related to the research questions. Third, all participants had direct experience of the school practices under examination.

Information power was therefore considered in relation to the specificity of the case and the narrow purpose of the study rather than through a generic numerical threshold (Malterud et al., 2016). The sample provides concentrated evidence about this school's configuration of inclusion. It does not provide evidence about the prevalence of those practices elsewhere.

The analysis also identified areas where the information base was stronger and weaker. The sanitation finding had convergence across all four participants. Evidence concerning instructional adaptation relied primarily on staff accounts. Evidence concerning peer dynamics was thinner because non-disabled peers were not interviewed and some student responses were brief.

Data collection

Individual semi-structured interviews were conducted face-to-face in a private setting within the school environment. Separate interview guides were used for students and staff while maintaining common domains across the interviews. The guides addressed teacher preparation and policy implementation, instructional practice, physical accessibility and resources, peer relationships, co-curricular participation, and priorities for improvement.

Student interviews were shorter and used concrete questions appropriate to the participants' circumstances. This approach facilitated participation but resulted in some brief responses. In two instances, the interviewer introduced wording later affirmed by the student. Such responses were retained as dialogue rather than represented as fully independent participant formulations.

Transcription and data handling

All interviews were audio recorded with consent and transcribed verbatim. The transcripts retained disfluencies, repetitions, fillers, false starts, and non-standard forms. Where an extract contained interviewer wording, the exchange was presented as dialogue so that readers could distinguish participant speech from interviewer speech.

Square brackets were used only where an authorial insertion was necessary to clarify an indistinct recording. Ellipses indicate omitted material from a continuous turn.

Data analysis

The transcripts were analysed using Braun and Clarke's reflexive thematic analysis (Braun & Clarke, 2006, 2019, 2021, 2022). Analysis involved familiarisation with the transcripts, generation of initial codes, construction of candidate themes, review of candidate themes against the complete dataset, definition and naming of themes, and production of the analytic account. The authors transcribed and repeatedly reviewed the interviews. Initial coding produced 41 codes, which were subsequently consolidated to 30 through merging overlapping codes and separating two conflated codes. Analysis combined attention to the research questions with openness to patterns emerging from participants' accounts.

Attention was given to divergence as well as convergence. For example, staff participants identified traditional furniture as a concern, while neither student foregrounded furniture when discussing accessibility. Conversely, all four participants identified the toilet as a difficulty. These differences were retained as part of the analysis rather than resolved through forced consensus.

Coding structure

Table 1: Final Coding Structure by Research Question

Research question	Theme	Sub-themes	Illustrative codes
RQ1. How do staff describe the enactment of inclusive education policy through teacher preparation and instructional practice?	Procedural inclusion with limited evidence of pedagogical adaptation	1a. Professional development and external dependence; 1b. Inclusion enacted through presence and participation; 1c. Resource constraints as a reported limitation	Pre-service inclusive education; in-service workshops; partner-led training; staff briefing; policy awareness; admission; mixed grouping; classroom questioning; encouragement; academic competitions; limited discussion of curriculum adaptation; limited discussion of assessment adaptation; traditional furniture; inadequate resources
RQ2. How do architecture and material resources facilitate or constrain physical autonomy and dignity?	Physical access without consistent autonomy	2a. Baseline environmental access; 2b. Traditional furniture as a staff-identified constraint; 2c. Sanitation as the strongest reported environmental barrier	Spacious classrooms; flat compound; movement space; traditional furniture; adjustable furniture; raised veranda; distance to toilet; squatting-type toilet; difficulty climbing; independent use; dignity; privacy
RQ3. How do peer relationships and co-curricular participation shape belonging and participation?	Belonging alongside domain-specific non-participation	3a. Peer warmth and academic participation; 3b. Non-participation in sport; 3c. Teasing and school-level responses	Love; peer support; quizzes; debates; mixed grouping; entertainment; sport; physical condition; enjoyment of sporting group; teasing; reprimand; cross-group play; stigma reduction

Note. The table presents the final analytic structure rather than a claim of exhaustive coding coverage.

Trustworthiness

Credibility was supported through comparison of accounts from different participant positions, attention to convergent and divergent evidence, and explicit reporting of the evidential limits of brief or interviewer-shaped responses. Rather than describing this as methodological triangulation, the study uses source and perspective comparison. The four participants did not provide equivalent forms of evidence. Staff accounts were particularly

relevant to institutional processes and teacher practice, whereas student accounts were especially important for lived experiences of accessibility, belonging, and participation.

Dependability was supported through an analytic audit trail documenting coding development, theme revision, and treatment of problematic extracts. Transferability is supported through detailed description of the case while avoiding claims of statistical or direct generalisation. Confirmability was addressed through explicit separation of participant wording from researcher interpretation and through reflexive consideration of the first author's theoretical position.

Positionality

The authors are Ghanaian scholars in special education. The first author conducted the fieldwork and entered the study with familiarity with Northern Ghanaian school contexts and a commitment to the Social Model of Disability. This orientation supported attention to environmental and institutional barriers but also created a risk of interpreting participants' accounts through a predetermined theoretical lens. The analysis therefore retained participants' own explanations, including their attribution of sport non-participation to physical conditions. The researchers did not reinterpret these statements automatically as evidence of internalised ableism or environmental exclusion.

The second author, a lecturer in special education, reviewed the analytic process and interpretation, with particular attention to assumptions underlying theme development and theoretical claims.

The first author's position as an adult, non-disabled researcher interviewing minors also presented a potential influence on responses. This risk was addressed through transparent presentation of interviewer wording and participant responses, especially where participants affirmed formulations introduced by the interviewer.

Ethical considerations

Ethical approval was obtained from the relevant district education authority before data collection. Written informed consent was obtained from adult participants. For student participants, parental or guardian consent and student assent were obtained. Participants were informed of their right to decline questions or withdraw from the interview.

FINDINGS

Three themes were developed in relation to the three research questions. The findings are presented as participants' accounts and researchers' interpretations rather than as direct measurements of school practice.

Research Question 1: How do staff describe the enactment of inclusive education policy through teacher preparation and instructional practice?

Theme 1: Procedural inclusion with limited evidence of pedagogical adaptation

This theme describes a pattern in which staff accounts emphasised admission, participation, grouping, questioning, encouragement, and academic competitions as visible forms of inclusion. The interviews provided considerably less evidence concerning curriculum, task, pacing, assessment, or assistive adaptations.

Sub-themes 1a: Professional development and external dependence

Both staff participants described receiving inclusive education preparation through pre-service education and subsequent in-service workshops.

We have received both during uh what's the name teacher training college time we had uh pre-service training includes models on inclusive education and then during the service we had... workshops where we are trained on how to handle the special needs students and then some in a partnership with NOS's who come to organize those workshops for us. (Teacher1)

The headteacher similarly described external workshops and internal dissemination: "I think um there have been some workshops for teachers on the set topic and my teachers do attend and when they come and make sure, they always brief the entire staff as to how to go by uh special needs students." (Headteacher)

Training was therefore present in the participants' accounts. At the same time, the frequency and content of in-service provision appeared to depend partly on external partners. "Uh this one it depends. Sometimes the NOS [non-governmental organisations] might come more than necessary and organize as many as possible but at least twice in a time there it does happen." (Headteacher)

The phrase "it depends" suggests that the school did not describe a fully school-controlled professional development schedule. The finding therefore concerns the reported organisation of professional development rather than a claim about the quality of every training event.

Teacher1 described the practical effect of previous preparation primarily in terms of ensuring that students were not left out:

Since we already have those training during our college time and then even when we came to be teachers we we already have that in mind. So, we help me to be always keep them allow them to mingle always making sure that they are the physical challenge ones are not left out they are always included in what activities that is happening in the class and in the school. (Teacher1)

The account indicates awareness of inclusion and a commitment to participation. It provides less detail about specific instructional adaptations.

Sub-themes 1b: Inclusion enacted through presence and participation

The headteacher described admission as a principal expression of policy implementation: "Uh through admission. Through admission we we admit all kind of students, and we don't uh look at their physical erm before admission." (Headteacher)

Teacher1 similarly described the classroom as inclusive: "I would say it's very friendly and it includes all the children. No student is left out." (Teacher1)

He also described inclusion in terms of an enabling environment: "To me, I think social inclusion means that creating an enabling environment where every student is valued, supported and no student is left out during instructional and even after instructional time." (Teacher1)

Mixed grouping was identified as a practical classroom strategy: "I think the students we nor group them. We don't separate the physical challenge at once. We mix them with those who are not having physical challenge so that they can all support each other during the group activities." (Teacher1)

Teacher1 also described encouragement:

Very confident. Um I think uh what's the name? The students are always full confidence in in answering question. They don't they are not left out. And then the physical ones I always encourage them to to give out their best and and encourage them that they can do better. (Teacher1)

The headteacher's monitoring practice focused on students' participation in questioning:

As the headmaster, it has always been my duty to go around during instructional time and always I see that my students my teachers rather always includes the people living with disability in questioning and answers. So I always go there during instruction to ensure teachers are actually uh including them in their teaching. (Headteacher)

The headteacher also described academic competitions as another participation pathway:

In my school we have competitions for the houses and including football and other things, but we also have quiz competitions, debate competitions of which one student will find yourself in one or the other which will allow all the special needs students to also participate in those competitions. (Headteacher)

Limited evidence of pedagogical adaptation

Across the interviews, the staff participants discussed inclusion extensively but provided little specific evidence concerning curriculum modification, differentiated tasks, alternative assessment, changes in pacing, individualised learning plans, or assistive instructional materials.

This absence should not be interpreted as proof that no such practices occurred. The more defensible finding is narrower: these practices were not substantively represented in the interview accounts, despite the interview guide addressing instructional practice.

The contrast is important because staff were able to describe other forms of inclusive practice in considerable detail. Their accounts included admission, grouping, questioning, encouragement, academic competitions, and teacher monitoring. By comparison, examples of changing the learning task, assessment format, instructional pace, or materials were not developed.

The finding therefore suggests a difference between the forms of inclusion most readily articulated by participants and the more specialised pedagogical adaptations described in the literature.

Sub-themes 1c: Resource constraints as a reported limitation

Both staff participants identified resources as a significant constraint.

"For the resources aspect I think uh we don't have adequate resources in class for example some our furniture the traditional type of furniture where it's not adaptive to those who are physically challenged." (Teacher1)

The headteacher similarly stated:

My school still have the oldening days um facilities and Especially in the classroom we use the traditional furniture which doesn't support some students also the some of the students how to get to school is difficult... therefore inadequate resources in the school is actually the problem I'm encountering right now. (Headteacher)

The convergence between these two accounts is important. Both staff members independently identified material resources as a problem. Yet the findings do not support reducing the limited evidence of pedagogical adaptation entirely to material scarcity. Some forms of adaptation, such as varying task difficulty, pacing, questioning, or assessment formats, do not necessarily require substantial physical resources.

The findings therefore suggest two related issues: material constraints and limited evidence of specialised instructional adaptation.

Research Question 2: How do architecture and material resources facilitate or constrain physical autonomy and dignity?

Theme 2: Physical access without consistent autonomy

The second theme distinguishes general movement through the school from independent use of facilities. Participants described the compound and classroom spaces as broadly usable while identifying specific architectural features that created difficulty.

Sub-themes 2a: Baseline environmental access

The headteacher described the classrooms and compound positively:

For um enabling, I think my classes are big enough When you enter class there are there are more spaces the every student can walk to come to the board go to sit down without any challenge. Coming to the veranda the football field everything is flat when they are walking they have no problem of falling. (Headteacher)

Teacher1 similarly distinguished the furniture's design from its spatial arrangement: "In a classroom the the furniture even though we are the traditional furniture but there arranged very well that the student can easily move or easy movement both the physical challenge and then the the the normal ones." (Teacher1)

The students initially gave brief affirmative responses when asked whether school facilities were accessible.

Interviewer: So how do the classrooms, the toilets, uh corridor and furniture affect your movement and participation... Are they accessible?

SWD1: Yes.

Interviewer: How do you also use this uh facilities? Are you able to participate well in using them.

SWD2: Yes.

Because these were short responses to closed questions, they are not treated as comprehensive evaluations of accessibility. The more informative evidence emerged when participants were asked to identify difficulties.

Sub-themes 2b: Traditional furniture as a staff-identified constraint

Teacher1 identified traditional furniture as a concern: "Some students are not able to get adequate uh things or things that will help them come to school early. So because of that the physical challenged ones normally come to school late." (Teacher1)

He proposed adjustable furniture:

With the adaptive furniture we need the adjust adjustable decks and chairs for the children since they are using the traditional one which they find it difficult to move and then sometimes how to come from home to school. They find it difficult to come from home to school early. So I think if they have the adjustable one, it will help them both in classroom and then moving back to home. (Teacher1)

The headteacher also identified traditional furniture as inadequate.

Neither student independently raised furniture as the principal facility problem. This divergence is analytically important. Staff may have identified a constraint more visible from their teaching position, while students foregrounded the facility with the most immediate implications for bodily autonomy. The study therefore treats furniture as a staff-identified barrier rather than claiming student-level convergence.

Sub-themes 2c: Sanitation as the strongest reported environmental barrier

The school toilet was the most consistently reported environmental difficulty.

Teacher1 stated:

The toilet facility I think the distance there's much distance that the those who are physically challenged find it difficult to walk to that place and apart from that the use of the facility to is the squatting type which those who have physical challenge problem will find it difficult to use it. (Teacher1)

The headteacher similarly identified both distance and design:

However climbing to the veranda is too up for some students and they actually facing some challenge there. And also the toilet facility we still use the traditional one the acting [squatting] kind of uh facility and I think it does not allow many physically challenged student to have themselves free. (Headteacher)

The phrase "to have themselves free" is important because the participant linked the environmental difficulty to independence and bodily dignity rather than merely inconvenience.

SWD1 identified the toilet without being presented with a list of possible problems: "I'm able to use the school facilities except the toilet that give me the problem." (SWD1) and added "I find it difficult to climb it." (SWD1)

SWD2 also identified distance:

Interviewer: So, what are some of the challenges you face when using these resources or how does it affect your movement?

SWD2: No problem. The toilet the toilet is far from the classroom.

Interviewer: What of climbing to the toilet?

SWD2: It's very difficult.

Interviewer: It is difficult. You find it difficult when you You want to use the toilet? You find it difficult to climb?

SWD2: Yeah.

The evidential strength of these responses differs. SWD1 independently identified the toilet and difficulty climbing. SWD2 independently identified distance but affirmed the interviewer-supplied formulation concerning climbing. The study therefore does not treat both responses as equivalent.

The convergence nevertheless remains notable. All four participants identified the toilet as a problem, while the students presented it as an exception to their otherwise positive responses concerning the school environment.

The finding supports a distinction between access and autonomy. The school environment was not described as uniformly inaccessible. Instead, specific features created difficulty in completing activities independently.

Research Question 3: How do peer relationships and co-curricular participation shape belonging and participation?

Theme 3: Belonging alongside domain-specific non-participation

The third theme captures a tension between positive social belonging and limited participation in physical activity. The evidence does not support describing the students as universally excluded. Rather, their experiences differed across activities.

Sub-themes 3a: Peer warmth and academic participation

SWD1 offered a strongly positive account: "They treat me with love. They include me in everything that we do. And they also support me." (SWD1)

The headteacher described school activities as broadly participatory: "In competitions like I said earlier where all students participate programs sometimes entertainments are organized and students all participate which uh I think it it's a culture that support all of them." (Headteacher)

Teacher1's account of mixed grouping also suggests that peer support was incorporated into classroom practice.

The student account of quizzes and debates provides a concrete example of participation:

"Yes, I I feel included because my colleagues help me or they help me in quizzes or debates." (SWD1)

The evidence therefore supports genuine experiences of belonging and academic co-participation.

Sub-themes 3b: Non-participation in sport

The same students reported non-participation in sport.

Interviewer: So, are there times when uh you feel excluded in some of the activities?

SWD1: Yes.

Interviewer: Which are these activities?

SWD1: Sports activities.

Interviewer: So why do they exclude you from the sporting activities?

SWD1: Because of my health condition.

SWD2 similarly stated:

"Because of my condition." (SWD2)

These responses should be interpreted cautiously. Neither participant described a teacher explicitly preventing participation or peers refusing participation. Both attributed non-participation to their physical conditions.

SWD2 also reported enjoying the sporting group:

Interviewer: So which activities or school groups uh Do you enjoy sporting?... You enjoying the sporting group?

SWD2: Yes.

This suggests that belonging to a sporting social environment and participating physically in the activity were not necessarily the same experience.

The findings therefore do not establish active interpersonal exclusion from sport. They establish non-participation in sport alongside positive social belonging and a reported physical explanation for non-participation.

Sub-themes 3c: Teasing and school-level responses

The positive peer account is qualified by staff reports of teasing.

Teacher1 stated:

Some of the students are from you know in school some students will like to tease the quality... But some too who are welcoming they don't feel like teasing them. But I think as a teacher we always try to talk to them not to do that in terms of teasing. (Teacher1)

He also described difficulties in cross-group play:

Some too they have uh they they they find it difficult to mingle with the physical challenge one as they they they don't normally see them to to play with them and then some with physical challenge find it difficult to sometimes play with those who are not physically challenged. (Teacher1)

The teacher's response to teasing was corrective: "Normally I I would say we I will reprimand such student so that they will not it will not encourage other student to do that in the school." (Teacher1)

The headteacher independently identified stigma reduction as a priority: "Well is to bring everyone on board and moving to future to make sure everybody gets uh is valued in the future. More importantly to deal away with some stigma against people living with uh disabilities." (Headteacher)

The evidence therefore supports a more differentiated account of peer relations. Students reported warmth and support. Staff also described teasing and difficulties in cross-group interaction. These findings are not mutually exclusive. Positive belonging and intermittent stigma-related behaviour may coexist within the same school.

DISCUSSION

The findings indicate that inclusion within this case was uneven across domains. The school demonstrated practices associated with access, grouping, classroom participation, academic competition, and positive interpersonal relationships. At the same time, the interviews provided less evidence concerning pedagogical adaptation, and specific environmental and activity-related barriers persisted.

This pattern is conceptualised as asymmetric inclusion. The concept does not suggest that the school is either fully inclusive or non-inclusive. Instead, it identifies differences in the degree and form of inclusion achieved across domains.

From policy awareness to instructional adaptation

The first finding concerns the difference between inclusive orientation and pedagogical adaptation. Staff described inclusive education in concrete terms involving admission, mixed grouping, questioning, encouragement, and participation in academic competitions. These practices are meaningful. They demonstrate that inclusion was not understood solely as a matter of physical placement.

At the same time, the interviews contained limited detail about curriculum adaptation, modified tasks, differentiated assessment, pacing, or assistive instructional materials. This finding should not be interpreted as proof that such practices never occurred. Rather, these practices were not substantively represented in the participants' accounts.

The pattern is consistent with Ghanaian research. Kuyini and Desai (2008) found relatively limited instructional adaptation in Ghanaian inclusive classrooms, while Naami and Mort (2023) identified continuing concerns about teacher preparedness. Opoku-Nkoom and Ackah-Jnr (2023) similarly reported limited knowledge of curriculum adaptation despite evidence of inclusive cultures in primary schools.

The present case adds a more specific observation. Participants described inclusion confidently at the level of presence and participation but offered less evidence at the level of instructional design. This distinction matters because different forms of inclusive practice require different types of capacity. A teacher who knows that students with disabilities should participate is not necessarily equipped with strategies for adapting a task. Likewise, a headteacher who checks whether a student is called upon during instruction is not necessarily checking whether the instructional task itself is accessible.

The finding therefore points toward a monitoring problem as well as a teacher-development problem. Monitoring focused on visible participation risks overlooking less visible dimensions of pedagogical inclusion.

Material constraints and the limits of resource explanations

Both staff participants identified resource limitations, particularly traditional furniture. This aligns with Ghanaian evidence concerning accessibility and resources (Ackah-Jnr & Danso, 2019; Asamoah et al., 2023).

The findings nevertheless suggest caution in treating resources as a complete explanation for limited pedagogical adaptation. Some adaptations require specialised materials or furniture, but others involve changes in task design, pacing, grouping, questioning, feedback, or assessment.

This distinction is important for intervention. If every inclusion problem is framed as a shortage of physical resources, schools may overlook forms of pedagogical adaptation possible within existing conditions.

The finding also supports a more differentiated understanding of teacher development. General awareness training and practical instructional training should not be treated as equivalent. The staff accounts indicate that inclusive education awareness existed. The evidence concerning specialised instructional adaptation was weaker.

Access is not equivalent to autonomy

The sanitation finding provides the clearest example of the difference between physical access and autonomy.

Participants did not describe the entire school compound as inaccessible. Classrooms were described as spacious, the compound was generally flat, and students were able to move through much of the environment. Yet all four participants identified the toilet as a particular difficulty.

This finding is consistent with research identifying sanitation as a specific accessibility concern for students with physical disabilities in Ghanaian schools (Azupogo et al., 2023). It also complements broader research documenting physical accessibility concerns within Ghanaian inclusive schools (Ackah-Jnr & Danso, 2019).

The significance of the finding extends beyond convenience. Toileting involves privacy, bodily control, dignity, and independence. A school that permits classroom attendance while requiring avoidable dependence for toilet use has achieved access in one dimension while leaving autonomy constrained in another.

The finding therefore supports the conceptual distinction between presence, access, and autonomy. These should not be collapsed into a single measure of inclusion.

Belonging and participation are related but distinct

The third finding provides the strongest basis for the concept of asymmetric inclusion.

SWD1 described being treated with love, included in activities, and supported by peers. The student also described participation in quizzes and debates. Yet both students reported non-participation in sport and explained this in terms of their physical conditions.

This finding should not be reduced to a simple claim of peer exclusion. The students did not describe teachers or peers preventing them from participating in sport. Indeed, SWD2 indicated enjoyment of the sporting group. The evidence therefore suggests a distinction between social belonging within an activity and physical participation in the activity.

Research on inclusive physical activity and physical education supports this distinction. Bertills and Björk (2024) found that participation requires active adaptation of teaching approaches, activity content, peer arrangements, communication, and support. Liu et al. (2025) similarly found that participation in physical activity among students with disabilities depends on interacting environmental and social factors.

The present study cannot determine whether the students' physical conditions alone explain their non-participation. Nor does it establish that teachers intentionally excluded them. What the case does show is that academic competitions were described as an established avenue for participation, whereas no similarly developed or adapted pathway into sport was described in the interviews for students with physical disabilities.

This difference is analytically important. Inclusion in one co-curricular domain does not automatically transfer to another.

A more inclusive approach to physical activity and sport would require consideration of modified activities, alternative roles, adapted equipment, peer support, flexible grouping, and teacher-student communication. Such strategies are consistent with contemporary research on inclusive physical education and physical activity (Bertills & Björk, 2024; Liu et al., 2025).

Warmth does not eliminate stigma

The positive peer accounts should not obscure the staff reports of teasing and difficulties in cross-group play.

The evidence does not support characterising the school as broadly hostile. Instead, teasing appears to coexist with positive relationships. The headteacher's identification of stigma reduction as a priority reinforces the interpretation that disability-related attitudes remain a concern.

This finding is consistent with Ghanaian research documenting disability stigma and discrimination (Mantey, 2017; Naami, 2014; Ocran, 2022).

The school response involved talking to students and reprimanding those who teased. These responses indicate institutional recognition of the problem. The study cannot determine whether such approaches are sufficient to change underlying attitudes because no longitudinal or observational evidence was collected.

The important point is therefore not that the school failed to address stigma. Rather, the findings show that interpersonal warmth and stigma-related behaviour may coexist.

Asymmetric inclusion as a case-derived proposition

The three research questions converge around a common pattern.

At the level of administrative and relational inclusion, the school showed several positive practices. Students were admitted, grouped with peers, questioned in lessons, encouraged, and included in academic competitions. Students also reported positive peer relationships.

At the level of pedagogical adaptation, the interviews provided less evidence of curriculum, task, pacing, or assessment modification.

At the level of environmental accessibility, the school supported general movement but contained a specific sanitation barrier with implications for autonomy and dignity.

At the level of physical activity, students reported non-participation in sport despite belonging to the broader social environment of the school.

These differences constitute the basis for the concept of asymmetric inclusion.

The concept suggests that inclusion should be understood as multidimensional and uneven rather than binary. Different dimensions require different forms of capacity. Admission requires an institutional decision. Positive grouping requires classroom organisation. Pedagogical adaptation requires specialised knowledge and planning. Accessible sanitation requires appropriate infrastructure and design. Meaningful participation in physical activity and sport requires activity-specific pedagogical design and, in some cases, equipment and additional support.

The concept is therefore a proposition generated by this case. It should be tested through future research rather than treated as a general explanatory theory.

CONCLUSION

This case shows that inclusion within a rural Ghanaian basic school was uneven across domains. Staff described admission, mixed grouping, classroom questioning, encouragement, and participation in academic competitions, while students reported positive peer relationships and belonging. At the same time, the interviews provided limited evidence of pedagogical adaptation, specific environmental barriers constrained independent facility use, and students reported non-participation in sport. Staff also described teasing and disability-related stigma.

The findings support a distinction between access, inclusion, belonging, participation, and autonomy. A student may be physically present, socially accepted, and academically engaged while still experiencing restrictions in independent facility use or physical activity.

The study conceptualises this pattern as asymmetric inclusion, referring to the uneven development of different dimensions of inclusion within the same school. In this case, relational and administrative forms of inclusion were more visible than pedagogical, environmental, and activity-specific adaptations. The concept is proposed as a case-derived interpretive proposition rather than a general theory.

The main implication is that visible commitment to inclusion and participation does not by itself establish the specialised instructional, environmental, and activity-specific conditions required for substantive participation. Future research should examine whether similar patterns occur across multiple rural schools using interviews alongside classroom observation, environmental assessment, student perspectives, and documentation of instructional planning.

Limitation of the Study

The study has several limitations that should be considered when interpreting the findings. First, the study was conducted in one school and involved four participants, with the student participants representing the complete population of students with physical disabilities at the school during fieldwork. The findings should therefore not be interpreted as representative of students with physical disabilities across Kpandai, Northern Ghana, or Ghana as a whole. Second, the staff sample comprised only one classroom teacher and the headteacher, excluding the perspectives of other teachers, district officials, parents, and non-disabled peers, whose views might have confirmed, qualified, or challenged findings concerning peer relationships and instructional practice. Third, no classroom observations were conducted, meaning the study could not independently establish whether reported

instructional adaptations occurred in practice. Fourth, the school environment and sanitation facilities were not independently assessed using a standardised accessibility assessment instrument, so these findings represent participants' reported experiences rather than an engineering assessment of accessibility. Fifth, the study did not include longitudinal observation and therefore could not establish whether reported practices or participation patterns changed over time. Finally, reflexive thematic analysis was conducted primarily by the first author, with critical review from the second author but without independent parallel coding. The findings should therefore be understood as a contextually situated interpretive account rather than an objective measurement of school practice.

Implications of the Study

The findings suggest several implications for special and inclusive education. Teacher education and professional development should move beyond general awareness toward practical instructional adaptation, including curriculum adaptation, flexible task design, alternative assessment arrangements, pacing and participation adjustments, accessible learning materials, inclusive grouping strategies, and collaboration between classroom teachers and special educators, with school-level training responding to locally identified needs rather than relying solely on external partners. Inclusive education planning should also address physical activity and sport through modified activities, alternative movement pathways, flexible participation roles, peer support, adapted equipment where required, flexible activity duration, additional teacher instruction and feedback, and consultation with students about preferred forms of participation, supported through collaboration among classroom teachers, physical activity or sport teachers, and special education personnel. The emphasis should be on meaningful participation in shared educational activities rather than identical physical performance. Accessibility planning should similarly address specific barriers identified in the case, including toilet location and design, approach height, veranda access, classroom furniture, and routes for independent movement, with particular attention to sanitation because accessibility influences dignity, independence, and attendance. Finally, school monitoring should extend beyond admission, attendance, and visible classroom participation to include instructional adaptation, assessment accessibility, participation in curricular and co-curricular activities, independent access to essential facilities, peer participation, opportunities for adapted physical activity, student-reported barriers, and follow-up on identified environmental barriers. Taken together, these implications suggest a shift from monitoring physical presence toward monitoring substantive participation, accessibility, and adaptation.

Ethical approval was granted by the relevant district education authority. The authors declare no conflict of interest. The transcripts could identify participants at a named single site and are therefore not publicly available; the code book and audit trail are available from the corresponding author on reasonable request, subject to ethical approval. Funding: No funding was granted for this study.

REFERENCES

1. Abu-Sadat, R. (2023). Accessibility to the faculty of educational studies building at the University of Education, Winneba: Experience of two wheelchair users. *Equity in Education & Society*, 4(1), 47–59. <https://doi.org/10.1177/27526461231207400>
2. Ackah-Jnr, F. R., & Danso, J. (2019). Examining the physical environment of Ghanaian inclusive schools: How accessible, suitable and appropriate is such environment for inclusive education? *International Journal of Inclusive Education*, 23(2), 188–208. <https://doi.org/10.1080/13603116.2018.1427808>
3. Adugna, M., Ghahari, S., & Lysaght, R. (2024). Disability stigma and the pursuit of inclusion among children with physical disabilities in northwest Ethiopia. *Disability and Rehabilitation*, 47(3), 676–686. <https://doi.org/10.1080/09638288.2024.2356016>
4. Amponteng, M., Tracey, D., & Nketsia, W. (2025). Exploring teachers' concerns and recommendations regarding inclusive education in Ghana: An application of the ecological systems theory. *International Journal of Inclusive Education*. Advance online publication. <https://doi.org/10.1080/13603116.2025.2541910>
5. Arkorful, D. K., & Obeng, G. (2020). Strengthening inclusive education in Ghana. UNICEF Ghana.

6. Asamoah, E., Amaniampong, E.-M., Manful, E., Gyasi-Boadu, N., & Koomson-Yalley, E. N. M. (2023). Using photovoice to illuminate challenges facing children with disabilities in inclusive education in Ghana. *Social Work and Social Sciences Review*, 24(1). <https://doi.org/10.1921/swssr.v24i1.2025>
7. Awini, A. (2025). Differentiated instruction as an inclusive practice: Addressing the needs of learners with visual impairment in Ghanaian basic schools. *International Journal of Research and Innovation in Social Science*, 9(5). <https://doi.org/10.47772/ijriss.2025.905000404>
8. Azupogo, U., Dassah, E., & Bisung, E. (2023). Promoting safe and inclusive water and sanitation services for students with physical disabilities in primary schools: A concept mapping study in Ghana. *Journal of Water, Sanitation and Hygiene for Development*, 13(6). <https://doi.org/10.2166/washdev.2023.029>
9. Bertills, K., & Björk, M. (2024). Facilitating regular physical education for students with disability: PE teachers' views. *Frontiers in Sports and Active Living*, 6, 1400192. <https://doi.org/10.3389/fspor.2024.1400192>
10. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
11. Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
12. Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 201–216. <https://doi.org/10.1080/2159676X.2019.1704846>
13. Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.
14. Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
15. Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.
16. DeMatthews, D., Billingsley, B., McLeskey, J., & Sharma, U. (2020). Principal leadership for students with disabilities in effective inclusive schools. *Journal of Educational Administration*, 58(5), 539–554. <https://doi.org/10.1108/JEA-10-2019-0177>
17. Farmer, T. W., Hamm, J. V., Dawes, M., Barko-Alva, K., & Cross, J. R. (2019). Promoting inclusive communities in diverse classrooms: Teacher attunement and social dynamics management. *Educational Psychologist*, 54(4), 286–305. <https://doi.org/10.1080/00461520.2019.1635020>
18. Genovesi, E., Jakobsson, C., Nugent, L., Hanlon, C., & Hoekstra, R. A. (2021). Stakeholder experiences, attitudes and perspectives on inclusive education for children with developmental disabilities in sub-Saharan Africa: A systematic review of qualitative studies. *Autism*, 26(7), 1606–1625. <https://doi.org/10.1177/13623613221096208>
19. Gyimah, E., Dassah, E., Opoku, M., Nketsia, W., & Mensah, P. A. (2025). "I prefer to be alone than to be among them": In-school experiences of learners with disabilities and their caregivers in inclusive schools in Ghana. *British Journal of Special Education*. <https://doi.org/10.1111/1467-8578.12572>
20. Hamenoo, E. S., & Dayan, V. (2021). Inclusive education and disabilities: Narratives from Ghana. *Disability, CBR and Inclusive Development*. <https://doi.org/10.47985/dcidj.385>
21. Juvonen, J., Lessard, L. M., Rastogi, R., Schacter, H. L., & Smith, D. S. (2019). Promoting social inclusion in educational settings: Challenges and opportunities. *Educational Psychologist*, 54(4), 250–270. <https://doi.org/10.1080/00461520.2019.1655645>
22. Koster, M., Nakken, H., Pijl, S. J., & van Houten, E. (2009). Being part of the peer group: A literature study focusing on the social dimension of inclusion in education. *International Journal of Inclusive Education*, 13(2), 117–140. <https://doi.org/10.1080/13603110701284680>
23. Kuyini, A. B., & Desai, I. (2008). Providing instruction to students with special needs in inclusive classrooms in Ghana: Issues and challenges. *International Journal of Whole Schooling*, 4(1), 22–39.
24. Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE.
25. Liu, X., Han, H., Li, Z., Huang, S., Zhao, Y., Xiao, Q., & Sun, J. (2025). Barriers and facilitators to participation in physical activity for students with disabilities in an integrated school setting: A meta-synthesis of qualitative research evidence. *Frontiers in Public Health*, 13, 1496631. <https://doi.org/10.3389/fpubh.2025.1496631>

26. Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research*, 26(13), 1753–1760. <https://doi.org/10.1177/1049732315617444>
27. Mantey, E. E. (2017). Discrimination against children with disabilities in mainstream schools in Southern Ghana: Challenges and perspectives from stakeholders. *International Journal of Educational Development*, 54, 18–25. <https://doi.org/10.1016/j.ijedudev.2017.02.001>
28. Mbelu, S. E., & Maguvhe, M. (2024). Evaluating the socioecological classroom in full-service schools: A whole-school approach to the inclusive education context in South Africa. *Education Sciences*, 14(11). <https://doi.org/10.3390/educsci14111151>
29. Ministry of Education, Ghana. (2015). Inclusive education policy. Special Education Division.
30. Naami, A. (2014). Breaking the barriers: Ghanaians' perspectives about the social model. *Disability, CBR and Inclusive Development*, 25(1), 21–39.
31. Naami, A., & Mort, K. S.-T. (2023). Inclusive education in Ghana: How prepared are the teachers? *Frontiers in Education*, 8, 1056630. <https://doi.org/10.3389/feduc.2023.1056630>
32. Ocran, J. (2022). "There is something like a barrier": Disability stigma, structural discrimination and middle-class persons with disability in Ghana. *Cogent Social Sciences*, 8(1). <https://doi.org/10.1080/23311886.2022.2084893>
33. Okyere, C., Aldersey, H., & Lysaght, R. (2019). The experiences of children with intellectual and developmental disabilities in inclusive schools in Accra, Ghana. *African Journal of Disability*, 8. <https://doi.org/10.4102/ajod.v8i0.542>
34. Oliver, M. (1990). *The politics of disablement*. Macmillan Education.
35. Opoku, M. (2021). Exploring the intentions of school leaders towards implementing inclusive education in secondary schools in Ghana. *International Journal of Leadership in Education*, 27(3), 539–559. <https://doi.org/10.1080/13603124.2021.1889034>
36. Opoku, M., Rayner, C., Pedersen, S., & Cuskelly, M. (2019). Mapping the evidence-based research on Ghana's inclusive education to policy and practices: A scoping review. *International Journal of Inclusive Education*, 25(10), 1157–1173. <https://doi.org/10.1080/13603116.2019.1600055>
37. Opoku-Nkoom, I., & Ackah-Jnr, F. R. (2023). Investigating inclusive education in primary schools in Ghana: What inclusive cultures, environment, and practices support implementation? *Support for Learning*, 38(1), 17–36. <https://doi.org/10.1111/1467-9604.12435>
38. Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
39. Schwab, S. (2017). The impact of contact on students' attitudes towards peers with disabilities. *Research in Developmental Disabilities*, 62, 160–165. <https://doi.org/10.1016/j.ridd.2017.01.015>
40. Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837–851. <https://doi.org/10.1177/1077800410383121>
41. UNESCO. (1994). *The Salamanca statement and framework for action on special needs education*. UNESCO.
42. UNESCO. (2020). *Towards inclusion in education: Status, trends and challenges*. UNESCO.
43. United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. United Nations.
44. Yahaya, M., Braimah, I., Adu-Gyamfi, A., & Nanor, M. A. (2025). Built environment of basic schools and performance outcomes in rural Ghana: Learners' voice. *Discover Education*, 4(1). <https://doi.org/10.1007/s44217-025-00483-w>
45. Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SA