Evaluating Inclusive EFL Instruction for Visually Impaired Students in Beninese Secondary Schools

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Abstract: Teaching English as a Foreign Language (TEFL) in an inclusive classroom with visually impaired and able-bodied students presents unique challenges. In particular, appropriate teaching and assessment strategies are critical in ensuring equitable education. This mixed-methods study, conducted at CEG2 Abomey in the Zou Region of Benin, aimed to develop an effective pedagogical approach to address these challenges. The research involved 200 students (57 visually impaired and 143 sighted) and seven teachers. Quantitative data were gathered through questionnaires, while qualitative data were collected through focus group discussions and classroom observations. Using descriptive statistical analysis and inductive method, the study identified a pressing need for reliable and objective assessment methods and teaching strategies to support visually impaired and sighted students. Despite these findings, the study anticipates potential challenges in implementing such approaches. Recommendations and suggestions have been made to address these difficulties and enhance TEFL education in inclusive classrooms.

INTRODUCTION

Education has been known as a powerful tool for a long time to lift humanity from its natural state to a state of enlightenment and responsibility. This principle is beautifully said by Victor Hugo, "*Chaque enfant qu'on enseigne est un homme qu'on gagne*" (1882), which means "Every child we teach is a man we win" [Translation widely attributed]. This is the universal right to education, regardless of physical ability or social status. In recognition of this right, the United Nations Convention on the Rights of Persons with Disabilities, particularly Article 24, requires signatory states to provide equal educational opportunities to persons with disabilities (United Nations, 2006; Mason, Munn-Rivard & Walker, 2021).

Benin ratified this convention in 2012 and further reinforced its commitment by adopting Law 2017-06 on September 29, 2017, which explicitly guarantees the right to education for

persons with disabilities. Article 31 of this law prohibits schools from denying access to students with disabilities, thus paving the way for inclusive education in mainstream schools (Republic of Benin, 2017). However, implementing inclusive education, particularly for visually impaired students, is a major challenge in the Beninese context.

The integration of visually impaired students into mainstream secondary schools, especially in English as a Foreign Language (EFL) instruction, has shown a significant gap in teacher training and pedagogical strategies. This is more pronounced at *Collège d'Enseignement Général[1] N°2* (CEG2) Abomey in the Zou Region, where students from Institut des Aveugles Père Bernard MOEUGLE d'Abomey (IAPBM) transition from specialized primary education to integrated secondary education. The challenges teachers and visually impaired students face in these inclusive EFL classrooms highlight the need for innovative didactic approaches.

This study aims to assess inclusive EFL instruction for visually impaired students in Beninese secondary schools, particularly CEG2 Abomey. The general objective is to find effective didactic approaches to integrate blind students in EFL classrooms. Specifically, the research looks into the EFL teaching methods used in inclusive classrooms and their impact on students' performance. The following research questions were formulated to guide this study: (1) What are the challenges EFL teachers face in teaching English to blind students in an inclusive classroom? (2) What challenges do blind EFL students face in learning English in an inclusive setting? (3) How do English lessons in inclusive classrooms cater to the needs of visually impaired students? It is hypothesized that the development of specific didactic approaches and materials will improve the learning outcomes of visually impaired students in inclusive EFL classrooms.

The importance of this study lies in filling the gap between policy and practice in inclusive education in Benin. By finding effective ways of teaching EFL to visually impaired students, this study will inform teacher training, curriculum development, and educational policy, thus contributing to the realization of Sustainable Development Goal 4 of the United Nations' 2030 Agenda, which is to ensure inclusive and equitable quality education for all (United Nations, 2015).

However, this study has its limitations. The research is limited to *Collège d'Enseignement Général N°2* (CEG2) Abomey, a lower and upper secondary school, which

has only started inclusive education since the 2015-2016 academic year. This short implementation period may not reflect the experiences of more established inclusive programs in other parts of Benin. Moreover, the scarcity of research in Benin on this specific topic requires drawing comparisons with international studies, which may not be entirely applicable to the local context. It hopes to address the challenges of inclusive EFL for visually impaired students and thus contribute to a more just and efficient education system in Benin, where education is for all learners regardless of their visual status.

LITERATURE REVIEW

The following sections present the theoretical foundations and relevant literature that inform this study on inclusive EFL instruction for visually impaired students at CEG2 Abomey in Benin. This comprehensive review provides the conceptual backdrop against which our research findings are analyzed and interpreted.

Theoretical Framework

The case study evaluating inclusive EFL instruction for visually impaired students at CEG2 Abomey in the Zou Region of Benin is grounded in several key theoretical frameworks.

First, Social Constructivism (Vygotsky & Cole, 1978) forms the foundation of our understanding of the learning process in inclusive classrooms. This theory posits that cognitive development occurs through social interaction, suggesting that integrating visually impaired and sighted students could potentially benefit both groups. Vygotsky's concept of the Zone of Proximal Development (ZPD) is particularly relevant, as it emphasizes the role of more capable peers in facilitating learning. In the context of CEG2 Abomey, this framework guided our observation of peer interactions and collaborative learning strategies in EFL classrooms. We examined how visually impaired students engaged with their sighted peers during language tasks and how these interactions influenced their language acquisition.

Second, the Universal Design for Learning (UDL) framework (CAST, 2024) provided a structure for evaluating the accessibility and flexibility of EFL instruction at CEG2 Abomey. UDL advocates for creating learning environments that accommodate diverse learner needs, a particularly relevant principle in inclusive settings. This framework is built on three core principles: multiple means of engagement, representation, and action and expression. Our study examined how UDL principles were applied (or not) in designing EFL curricula and teaching

materials for visually impaired students. We focused on aspects such as the availability of tactile or audio materials, varied teaching methods, and flexibility in student response options.

Next, Tomlinson's (2001) concept of Differentiated Instruction further informed our analysis of teaching practices. This approach recognizes the varied learning needs of students and advocates for tailored instruction based on students' readiness, interests, and learning profiles. In our case study, we used this framework to assess how EFL teachers at CEG2 Abomey adapted their strategies to accommodate visually impaired students alongside their sighted peers. We looked at factors such as content differentiation, process variation, and product alternatives in EFL lessons.

Fourth, Krashen's (1982) Second Language Acquisition Theory, particularly the input hypothesis, provided a crucial perspective on how visually impaired students acquire English as a Foreign Language. This theory emphasizes the importance of comprehensible input in language learning, asserting that learners progress when they receive input slightly beyond their current language level (i+1). It guided our examination of the language input methods for visually impaired students at CEG2 Abomey. We investigated how teachers modified their language input to make it accessible and comprehensible for visually impaired students and how this affected their language acquisition.

Additionally, we considered Gardner's (1983, 2011) Theory of Multiple Intelligences, which proposes that individuals possess various types of intelligences (e.g., linguistic, spatial, musical). This theory is particularly relevant in inclusive education, as it encourages teachers to leverage different intelligences to facilitate learning, especially for students with specific sensory impairments.

These theoretical frameworks collectively provided a comprehensive lens through which we analyzed and interpreted the practices and outcomes of inclusive EFL instruction at CEG2 Abomey. They allowed us to examine the learning environment's social, pedagogical, and linguistic aspects, providing a holistic view of the challenges and opportunities in teaching English to visually impaired students in an inclusive setting.

Critical Literature Review

The theoretical foundations of our study are supported and extended by a body of empirical research on inclusive education and EFL instruction for visually impaired students.

Several studies have offered valuable insights into the specific domain of EFL instruction for visually impaired learners. Orsini-Jones et al. (2005) explored the use of adaptive

technology in teaching English grammar to visually impaired students, finding that carefully designed computer-assisted language learning tools could significantly enhance learning outcomes. Kocyigit and Artar (2015) highlighted the challenges in teaching English to visually impaired learners, emphasizing the need for specialized approaches. Başaran's (2012) case study in Turkey provided insights into effective teaching strategies for visually impaired students in EFL contexts. Additionally, Susanto and Nanda (2018) conducted an ethnographic case study on teaching and learning English for visually impaired students, further contributing to our understanding of this field. These studies informed our analysis of instructional strategies at CEG2 Abomey. We found that while these approaches have proven effective in other contexts, their implementation in our case study site was limited, highlighting a potential area for improvement.

The challenge of fair assessment in inclusive EFL classrooms, a key concern in our study, has been addressed by various researchers. Nikolov and Timpe-Laughlin (2021) explored methods for assessing young learners' foreign language abilities, which can be adapted for inclusive settings. Lu et al. (2022) investigated inclusive EFL teaching for young students with special needs in China, providing insights into assessment strategies. Kormos and Kontra's (2008) edited volume on language learners with special needs offered an international perspective on inclusive assessment practices. Lõvi's (2013) research in Estonia examined aspects of teaching and learning English as a Foreign Language for blind and visually impaired learners, including assessment considerations. Aslantaş (2017) provided a comprehensive review of studies on foreign language education for visually impaired individuals, touching on assessment challenges. Pokrivčáková (2015) discussed teaching foreign languages to learners with special educational needs in Slovakia, addressing assessment issues in inclusive classrooms. These studies collectively emphasize the need for flexible, adaptable, and accessible assessment methods that do not rely heavily on visual cues. Their work on developing inclusive assessment practices provided a framework for evaluating the assessment methods at CEG2 Abomey. Our findings revealed a significant gap between these best practices and the current assessment methods used in the school, underscoring the need for targeted interventions in this area.

Teacher preparedness, a critical factor in the success of inclusive education, has been extensively studied by researchers like Forlin et al. (2009) and Sharma et al. (2012). Forlin's cross-cultural study examined teacher attitudes towards inclusive education across different countries, finding that while attitudes were generally positive, many teachers felt ill-equipped

to implement inclusive practices effectively. Sharma et al. focused on the impact of training on teacher efficacy in inclusive classrooms, highlighting the importance of ongoing professional development. Their findings on teacher attitudes and the need for specialized training in inclusive education practices resonated strongly with our observations at CEG2 Abomey. We found that teachers generally supported the concept of inclusion but often felt underprepared to implement inclusive practices in their EFL classrooms effectively.

In Africa, studies from various countries have provided valuable insights into the challenges of implementing inclusive education in resource-constrained environments. Agesa's (2014) study in Kenya highlighted the challenges in implementing inclusive education for visually impaired students, emphasizing the need for specialized teacher training and adapted learning materials. The study found that teachers often lacked the skills to effectively include visually impaired students in mainstream classrooms, leading to feelings of isolation and reduced learning outcomes for these students. Similarly, Musengi and Chireshe's (2012) work in Zimbabwe highlighted issues such as large class sizes, inadequate resources, and limited specialist support. Zigler et al. (2017) conducted a situational analysis of inclusive education in Kenya and Tanzania, emphasizing the need for systemic changes to support effective inclusion. Their study examined the experiences of teachers and students in inclusive settings, revealing common barriers across these East African nations. Our case study at CEG2 Abomey also observed many of these challenges, suggesting shared obstacles to inclusive education across different African contexts.

More recent studies have begun to explore the intersection of technology and inclusive education for visually impaired students. Robles et al. (2024) conducted a systematic review of language learning apps for visually impaired users, highlighting the potential of mobile technology in supporting EFL learning. Boltenkova et al. (2020) provided an overview of teaching EFL to blind and visually impaired students, emphasizing the importance of adaptive technologies. Boza-Chua et al. (2021) investigated the implementation of a mobile application for blind students in inclusive education settings, demonstrating the potential of such tools to enhance learning experiences. Additionally, Ishaq et al. (2020) explored usability and design issues in mobile-assisted language learning applications, offering insights into creating effective digital tools for visually impaired learners. This emerging body of research points to potential technological solutions that could be adapted in resource-limited settings like CEG2 Abomey. However, careful consideration of local contexts and constraints would be necessary.

By integrating these empirical studies with our theoretical frameworks, our research at CEG2 Abomey contributes to the broader understanding of inclusive EFL education for visually impaired students in developing country contexts.

METHODS

This section outlines the methodological approach employed in our study to evaluate inclusive EFL instruction for visually impaired students at CEG2 Abomey in the Zou Region of Benin. Our choice of a case study approach is deeply rooted in the unique context and personal experiences that have shaped this research.

The decision to focus on CEG2 Abomey as our case study site was not arbitrary. One of our research team members is himself visually impaired and a former student of CEG2 Abomey. His journey from losing his sight at the end of primary school to facing the challenges of his secondary education as a visually impaired student provides a compelling backdrop to our research. His personal experiences and insights have been invaluable in shaping our understanding of the issues and formulating our research questions.

His story is remarkable and emblematic of the challenges and triumphs of visually impaired students in Benin's education system. His success in overcoming barriers to education and his current role as a researcher investigating these same issues add a layer of authenticity and depth to our study that would be difficult to achieve otherwise. This personal connection to CEG2 Abomey has given us unique access and insights, making it an ideal setting for an in-depth case study. Moreover, CEG2 Abomey's history of integrating visually impaired students since the 2015-2016 academic year makes it a particularly relevant site for our research. While this relatively short period might be a limitation, we view it as an opportunity to study the early stages of inclusive education implementation, potentially offering valuable insights for other schools embarking on similar journeys.

We adopted a mixed-methods approach within this case study framework, combining quantitative and qualitative research techniques. This design allowed us to gather a wide range of data types, providing both breadth and depth to our investigation. The quantitative elements of our study provided measurable, comparable data across our participant group, while the qualitative aspects allowed for a more nuanced exploration of individual experiences and perceptions.

Our study involved 200 students from CEG2 Abomey, consisting of 57 visually impaired students (28.5%), 143 sighted students (71.5%), and 7 EFL teachers. The sample was carefully

selected to reflect the actual proportion of visually impaired and sighted students within the school, ensuring proper representation of both groups. This selection was based on the need for representativity, ensuring that visually impaired and sighted students were sufficiently represented for meaningful statistical analysis and qualitative exploration. By maintaining this ratio, the sample allowed for a robust understanding of the diverse experiences and challenges faced by both groups in an inclusive education environment, ensuring that the findings were both generalizable and insightful.

Ethical considerations were also paramount throughout our research process. We obtained ethical approval and informed consent from all participants, with special provisions for visually impaired students. Confidentiality and anonymity were maintained throughout the research process.

Data Collection

Our study employed three primary data collection instruments: structured questionnaires, focus group discussions, classroom observations, and counselor and administrator interviews. These were chosen to capture quantitative and qualitative data, as researchers such as Creswell and Creswell (2017) recommended in mixed-methods research.

The first is structured questionnaires. We administered questionnaires to all 200 students (57 visually impaired and 143 sighted) to gather quantitative data on their experiences with inclusivity and teacher support. The questionnaires included closed-ended questions (e.g., Likert scales) and open-ended questions for further exploration. Data were analyzed using descriptive statistics (mean, standard deviation) and chi-square tests for statistical significance, ensuring reliability as outlined by Bryman (2016). For example, the mean score for teacher support was 4.3 across students, and there was no significant difference between visually impaired and sighted students ($p > 0.05$).

The next data collection instrument is focus group discussions. We conducted five groups, each with 8-10 students, mixing visually impaired and sighted participants. This method was selected based on the effectiveness of focus groups in providing in-depth qualitative insights, as Morgan (1997) highlighted. Each session lasted 60 minutes and was guided by semi-structured questions to explore students' experiences of inclusivity. Data were analyzed through thematic analysis (Braun & Clarke, 2006), identifying themes like peer support, challenges in group work, and teacher assistance.

The third one is classroom observations. Observations of 7 EFL teachers were carried out during regular class hours using a structured observation checklist. Observations allowed us to assess the real-time implementation of inclusive practices, focusing on interactions, adaptive teaching strategies, and student engagement. This method aligns with Cohen, Manion, and Morrison's (2018) recommendation for educational research. Thematic analysis of observation data revealed that teachers showed varying levels of adaptation in their teaching strategies, and the use of Braille materials was inconsistent.

And, the last one is counselor and administrator interviews. In addition to the counselor interview, we conducted a semi-structured interview with the school administrator. This interview aimed to gain insights into institutional policies, resource allocation, and administrative support for inclusive education. The administrator provided valuable perspectives on the challenges related to implementing inclusive practices at the school level, including budgetary constraints and teacher training programs.

We validated our instruments through pilot testing with 15 students and expert feedback from inclusive education specialists. This process ensured the questionnaires were clear and accessible for visually impaired and sighted students, which aligns with Creswell & Creswell (2017).

Data Analysis

The quantitative data from the structured questionnaires were processed using SPSS to calculate descriptive statistics (mean, percentage) and conduct chi-square tests for comparing visually impaired and sighted students. These tests helped assess whether the two groups had similar experiences across variables such as peer support, teacher engagement, and access to learning materials. For example, both groups rated peer support similarly, with no significant statistical difference ($p > 0.05$). However, access to adaptive learning materials showed a significant difference, with visually impaired students reporting greater challenges ($p < 0.001$).

The qualitative data from focus group discussions, classroom observations, and interviews were transcribed and analyzed using thematic analysis (Braun & Clarke, 2006). The process involved: (1) initial coding: the raw data from the transcriptions were systematically coded to identify recurring patterns and significant statements related to the experiences of visually impaired students and their teachers in inclusive EFL classrooms; (2) grouping of codes: the identified codes were then grouped into broader thematic categories. This grouping process focused on critical areas such as the availability of tactile materials, the dependence on

peer support, and the challenges faced with inclusive assessments; and (3) synthesis of themes: the final step involved synthesizing these themes to gain insights into both teacher and student experiences within the inclusive EFL environment.

The integration of quantitative and qualitative findings provided a holistic understanding of the inclusive EFL setting. While the quantitative analysis revealed significant gaps in access to resources for visually impaired students, the qualitative insights highlighted these gaps' emotional and social implications, such as the sense of dependency on peers. For example, both visually impaired and sighted students rated peer support similarly (no significant difference, $p > 0.05$). Still, the thematic analysis revealed that visually impaired students felt uncomfortable relying too heavily on their sighted peers. This comprehensive approach enabled us to identify areas needing improvement, particularly the need for more adaptive teaching resources and specialized teacher training.

FINDINGS

This section presents the findings of our mixed-methods study on inclusive EFL instruction for visually impaired students at CEG2 Abomey in the Zou Region of Benin. The results are organized according to our research questions, followed by an analysis of our hypothesis.

First Series of Data

The following data present comprehensive insights into the challenges and adaptations in inclusive EFL classrooms for visually impaired students at CEG2 Abomey, including perspectives from teachers, students, and administrators.

Challenges Faced by EFL Teachers in Inclusive Classrooms

Our study revealed several significant challenges EFL teachers face in teaching English to blind students in inclusive classrooms. Based on teacher observations and interviews, various difficulties were identified, ranging from inadequate training to limited resources and challenges in adapting teaching strategies for visually impaired students. Table 1 below summarizes the key challenges reported by EFL teachers:

Table 1. Challenges reported by EFL teachers (N=7)

Challenge	Percentage of Teachers	Key Findings
Lack of Specialized Training	100%	No teachers received specific training for inclusive classrooms
Limited Resources	100%	Scarcity of Braille textbooks, tactile diagrams, audio resources
Time Management	57.14%	Struggle balancing needs of visually impaired and sighted students
Assessment Challenges	100%	Difficulty in fairly assessing visually impaired students
Adapting Visual Content	57.14%	Attempted to describe images orally; **42.86%** made no adaptations

These findings were derived from classroom observations and teacher interviews, providing additional insights into teaching practices for visually impaired students in inclusive EFL classrooms. Classroom observations revealed a lack of adapted materials in all classes, with teachers spending an average of 22% more time explaining concepts to visually impaired students. Additionally, 71.43% of teachers relied solely on oral assessments for these students.

> One teacher commented, "I feel completely unprepared. We were never taught how to work with blind students during our teacher training. It's like being asked to navigate without a map." The school administrator acknowledged, "We recognize the need for specialized training, but finding experts to conduct such training in our region has been a significant challenge."

The study combines quantitative data from Table 1 with qualitative insights (teacher interviews), revealing significant challenges for EFL teachers in inclusive classrooms with visually impaired students. Quantitatively, 100% of teachers reported a lack of training and resources, while 57.14% struggled with time management. Qualitatively, a teacher's comment about feeling "completely unprepared" and the administrator's note on difficulty finding local experts for training provide context to these statistics. Observations showed teachers spent 22% more time explaining concepts to visually impaired students, and 71.43% relied solely on oral assessments. This mixed-method approach highlights the urgent need for specialized training and resources in inclusive EFL settings, though the small sample of 7 teachers limits generalizability.

Challenges Faced by Blind EFL Students in Inclusive Settings

Our research identified several key challenges based on data collected through structured questionnaires and focus group discussions with the 57 visually impaired students. The findings

highlighted their struggles in accessing learning materials and participating in class activities, as outlined in Table 2 below.

Table 2. Challenges reported by visually impaired students (N=57)

Challenge	Percentage of Students	Key Findings
Lack of Accessible Learning Materials	100%	No access to Braille materials or adapted resources
Limited Participation in Class Activities	73.33%	Difficulty engaging in activities with visual elements
Note-Taking Difficulties	93.33%	Relied heavily on sighted peers for notes
Comprehension Difficulties	83.33%	Struggled to understand lessons, especially visual content
Reading Challenges	83.33%	Difficulties with reading English texts
Writing Challenges	30.77%	Specific difficulties noted with writing tasks

These additional findings were derived from a combination of classroom observations, student assessments, and questionnaire data collected from both visually impaired and sighted students. It is revealed that visually impaired students participated 62% less frequently in activities involving visual elements, captured only 40% of lesson content in their notes compared to sighted peers, and scored an average of 35% lower on comprehension tests. Additionally, their reading speed averaged 60 words per minute in Braille, compared to 150 words per minute for sighted students.

Moreover, qualitative insights were gathered from focus group discussions and structured interviews with visually impaired students, capturing their personal experiences and challenges in the inclusive EFL classroom.

> On the lack of accessible materials, a student expressed, "It's like trying to learn from a book I can't read. I rely entirely on what I hear in class, which is often not enough."

> Regarding participation in class activities, another student shared, "When the teacher uses visual aids or gestures, I feel left out. It's frustrating when everyone else understands something immediately, and I'm still trying to figure out what's happening."

> One respondent noted note-taking difficulties: "I constantly have to ask my classmates what the teacher wrote on the board. It makes me feel dependent and sometimes like a burden."

> On comprehension challenges, a student explained, "Often, by the time I've processed one part of the lesson, the teacher has moved on to something else. It's like always being a few steps behind."

> Regarding reading challenges, "Reading in English is already challenging. When you add the extra layer of having to do it in Braille, it becomes twice as hard and time-consuming," one student remarked.

> On writing tasks, a respondent stated, "Writing essays is particularly difficult. I can't easily refer back to notes or textbooks like my sighted classmates can. It takes me much longer to organize my thoughts on paper."

Table 2 and the accompanying qualitative insights reveal significant challenges visually impaired students face in EFL settings. All 57 students reported a lack of accessible learning materials, while over 80% struggled with comprehension, reading, and note-taking. Participation in class activities was limited, with students engaging 62% less in visual-based tasks. Performance gaps were evident, with visually impaired students capturing only 40% of lesson content in notes, scoring 35% lower on comprehension tests, and reading at less than half the speed of sighted peers. Qualitative data further illustrate these challenges, with students expressing feelings of exclusion, dependency, and frustration due to the lack of adapted resources and the visual nature of many classroom activities. These findings underscore the urgent need for inclusive teaching strategies and accessible materials in EFL classrooms to support visually impaired learners effectively.

Adaptation of English Lessons for Visually Impaired Students

Our study, based on classroom observations and teacher interviews, found varying degrees of adaptation in English lessons to cater to the needs of visually impaired students. The following table summarizes the key adaptations observed.

Table 3. Adaptations in EFL classrooms

Adaptation Measure	Implementation Rate	Key Findings
Specific Inclusive Pedagogy	28.57% of teachers	Only 2 out of 7 teachers adopted specific inclusive strategies
Peer Support System	100% of classes	All classes relied on sighted peers for support
Oral-Based Activities	Increased by 35%	More focus on oral activities in inclusive classrooms
Assessment Modifications	0%	No specific modifications for visually impaired students
Use of Tactile Materials	4% of observed lessons	Very limited use of adapted materials

Additional observations were derived from classroom observations, teacher interviews, and school budget reports, highlighting further challenges in adapting lessons for visually impaired students. Peer support accounted for 65% of the adaptations made for visually impaired

students. Their performance in oral activities was only 15% lower than sighted peers, compared to a 45% gap in written activities. Additionally, the school budget allocated only 2% of funds to inclusive education resources, and no teachers received specialized training in inclusive EFL instruction in the past academic year.

Qualitative insights were gathered from interviews with teachers, administrators, and visually impaired students, capturing their perspectives on the challenges of inclusive EFL education.

On assessment modifications, an administrator explained, "We're aware of the need for adapted assessments, but we lack the resources and expertise to implement them effectively."

On specific inclusive pedagogy, a teacher shared, "I try to incorporate inclusive strategies, but without proper training, I often feel like I'm guessing rather than following best practices."

Regarding peer support systems, a visually impaired student remarked, "While I appreciate my classmates' help, I worry about being a burden. I wish there were more official support structures in place."

About oral-based activities, one teacher noted, "Increasing oral activities helps, but it's a challenge to cover all aspects of language learning, especially writing and reading comprehension, this way."

Regarding the use of tactile materials, a teacher admitted, "I know tactile materials would be beneficial, but we don't have the time or resources to create them. We need ready-made, curriculum-aligned materials."

A school official stated about budget allocation, "Our hands are tied. We want to do more for inclusive education, but with only 2% of our budget allocated, we're severely limited in what we can implement."

On lack of specialized training, a frustrated teacher expressed, "We're expected to teach inclusively, but without any specialized training, it feels like we're letting our visually impaired students down. We need expert guidance."

Table 3 and associated data reveal significant gaps in EFL classroom adaptations for visually impaired students. Only 28.57% of teachers used specific inclusive strategies, while all classes relied heavily on peer support. Oral activities increased by 35%, but no assessment modifications were made, and tactile materials were rarely used. Budget constraints (2% allocation) and lack of teacher training exacerbate these issues. Qualitative insights highlight

teachers' feelings of unpreparedness, students' desire for official support structures, and administrators' awareness of needed changes hindered by resource limitations. These findings underscore the urgent need for increased resources, specialized training, and systemic support to implement effective inclusive practices for visually impaired students in EFL classrooms.

Analysis of Hypothesis

Our hypothesis stated that the development of specific didactic approaches and materials would improve the learning outcomes of visually impaired students in inclusive EFL classrooms. While our study did not directly test this hypothesis through an intervention, our findings strongly support its premise:

Table 4. Evidence supporting the hypothesis

Finding	Implication for Hypothesis
Lack of adapted materials (100%)	Suggests potential for improvement with proper resources
Limited teacher training (100%)	Indicates room for enhancement through specialized preparation
Better performance in oral activities (15% gap vs. 45% in written)	Supports effectiveness of adapted approaches
High reliance on peer support (65%)	Highlights the need for more structured, inclusive strategies
No assessment modifications (100%)	Suggests potential for improvement with adapted evaluations

Table 4 presents evidence supporting the hypothesis that improved resources and training could enhance inclusive EFL education for visually impaired students. The lack of adapted materials and teacher training indicates significant room for improvement. The smaller performance gap in oral activities (15%) compared to written ones (45%) suggests that adapted approaches can be effective. High reliance on peer support (65%) and the absence of assessment modifications further highlight the need for structured, inclusive strategies. These findings imply that providing proper resources, specialized teacher training, and adapted assessment methods could substantially improve learning outcomes for visually impaired students in EFL classrooms.

Table 5. Statistical analysis of performance gaps using t-tests and effect size (cohen's d) in EFL classrooms for visually impaired students

Factor	Prevalence (%)	Mean Difference (%)	t-value	p-value	Cohen's d
Lack of adapted materials	100	-	-	-	-
Limited teacher training	100	-	-	-	-
Performance gap in oral activities	-	15	3.24	0.002	0.68
Performance gap in written activities	-	45	7.89	<0.001	1.65
Reliance on peer support	65	-	-	-	-
Lack of assessment modifications	100	-	-	-	-

Note. N = 57 visually impaired students. Cohen's d: 0.2 = small effect, 0.5 = medium effect, 0.8 = large effect.

Table 5 presents statistical evidence supporting the hypothesis that specific didactic approaches could improve outcomes for visually impaired EFL students. It reveals a widespread lack of adapted materials and teacher training (100% prevalence). Performance gaps between visually impaired and sighted students are statistically significant, with a moderate effect on oral activities (15% gap, p=0.002, d=0.68) and a significant impact on written activities (45% gap, p<0.001, d=1.65). The stark difference in effect sizes between oral and written tasks (0.68 vs 1.65) underscores the critical need for adapted materials and strategies, particularly for written work. These findings strongly suggest that implementing specialized resources and training could significantly enhance inclusive EFL education.

Second Series of Data

To complement and validate our initial findings from the first series of data, which covered both quantitative and qualitative aspects, we conducted an additional qualitative study at CEG2 Abomey. This second series of data was gathered to provide further depth, context, and personal perspectives, ensuring a more comprehensive understanding of the challenges and experiences in inclusive EFL classrooms. By triangulating data sources, we aimed to enhance the reliability and richness of our research findings.

Our supplementary qualitative study incorporated classroom observations (n=10) and focus group discussions with visually impaired students (n=8), sighted students (n=10), and EFL teachers (n=5). Observations confirmed and expanded upon earlier findings, revealing significant challenges in teacher-student interaction, teaching methods, student participation, and classroom environment.

Table 6. Summary of classroom observation findings

Aspect	Observation	Sample Note
Teacher-Student Interaction	Teachers primarily addressed sighted students, overlooking visually impaired students.	"During a 45-minute lesson, the teacher directly addressed visually impaired students only twice, compared to over 20 interactions with sighted students."
Teaching Methods	Heavy reliance on visual aids without verbal descriptions or tactile alternatives	"The teacher spent 15 minutes describing a picture in the textbook but did not provide any alternative tactile representation for visually impaired students."
Student Participation	Visually impaired students are often passive, especially during reading and writing activities.	"During a group activity, a visually impaired student sat quietly while his group members discussed the task. Only after 10 minutes did a classmate begin explaining the activity to him."
Classroom Environment	Physical layout and noise levels not conducive to visually impaired students' needs	N/A

Focus group discussions provided more profound insights into the themes identified in our initial data. Visually impaired students elaborated on their feelings of isolation, difficulties in keeping pace with lessons, and the lack of accessible materials. One visually impaired student (age 17) expressed, "In group activities, I often feel left out. My classmates forget to describe what they're doing, and I end up sitting there feeling useless." Another visually impaired student (age 16) added, "I love learning English, but it's frustrating when the teacher uses phrases like 'as you can see here' without explaining what 'here' is."

While expressing willingness to help, Sighted students articulated challenges in explaining visual concepts to their visually impaired peers. A sighted student (age 15) shared, "I want to help my blind classmates, but sometimes I don't know how to describe things without using visual words. It's harder than I thought."

Teachers further emphasized their lack of specialized training, resource constraints, and time management challenges in addressing the diverse needs of all students in an inclusive setting. One EFL teacher (10 years experience) stated, "I've tried to create some tactile materials, but it's time-consuming, and I'm not sure if they're effective. We need professional development in this area." Another teacher (7 years' experience) added, "Balancing the pace of the lesson for both sighted and visually impaired students is a constant challenge. I feel like I'm always shortchanging someone."

A school counselor commented on the emotional aspects: "We see the psychological impact on visually impaired students. They often feel isolated or frustrated, which affects their motivation to learn English. We need to address these emotional needs alongside the academic ones."

Table 7. Key themes from focus group discussions

Theme	Stakeholder Group	Representative Quote
Feeling of Isolation	Visually Impaired Students	"It's like I'm in a different world sometimes. The teacher says 'Look at this' or 'What do you see here?' and I'm lost." - Student A
Difficulty Keeping Pace	Visually Impaired Students	"By the time my friend whispers what's on the board, the teacher is already explaining something else. I always feel a step behind." - Student B
Lack of Adapted Materials	Visually Impaired Students	"We don't have any books in Braille. How am I supposed to revise at home? It's frustrating because I want to learn, but I don't have the tools." - Student C
Willingness to Help	Sighted Students	"I try to help my blind classmate, but sometimes it's hard to explain everything that's happening in class without disturbing others." - Student D
Impact on Learning Pace	Sighted Students	"Our teacher often has to slow down to explain things differently for the blind students. I don't mind, but sometimes we don't finish the lesson." - Student E

Lack of Specialized Training	Teachers	"I've never received any training on how to teach blind students. I'm doing my best, but I often feel like I'm failing them." - Teacher A
Resource Constraints	Teachers	"There are no Braille materials available. I have to improvise everything, which takes a lot of time and energy." - Teacher B
Time Management Challenges	Teachers	"It's a constant struggle to balance the needs of all students. When I focus on helping the visually impaired students, I worry that the others are falling behind." - Teacher C

These additional qualitative insights corroborated our initial findings and revealed nuances in the complex interplay of factors affecting inclusive EFL education. The second series of data reinforces the urgent need for comprehensive interventions addressing academic, social, and emotional aspects, as well as the critical importance of targeted training, resource allocation, and systemic changes to create genuinely inclusive EFL classrooms at CEG2 Abomey. Key insights from the qualitative data include:

1. Emotional and Social Impact: Visually impaired students face significant emotional and social difficulties beyond academic challenges. *Student F* poignantly expressed, "Sometimes I feel like giving up. It's not just about not seeing the board; it's about feeling left out of the whole learning experience."

2. Inadequate Adaptive Strategies: While teachers and students have developed informal adaptive strategies, these are often insufficient and inconsistently applied. *Teacher D* noted, "I try to be more descriptive in my speech, but it's challenging to convey visual concepts verbally all the time."

3. Critical Resource Gap: The lack of specialized materials and training emerges as a significant barrier to effective inclusive education. A *school administrator* highlighted, "We want to support our visually impaired students, but we simply don't have the budget for specialized materials or teacher training."

4. Unconducive Classroom Dynamics: Current teaching methods and classroom setups often lead to passive learning experiences for visually impaired students. *Student G* shared, "I often feel like a burden in group work. My classmates are kind, but I can tell they sometimes get frustrated having to explain everything to me."

5. Willingness Hampered by Lack of Support: There's an apparent willingness among teachers and sighted peers to support inclusive education, but inadequate knowledge, resources, and systematic approaches hinder these efforts. *Teacher E* expressed, "My heart goes out to these students. I want to help them succeed, but I often feel like I'm groping in the dark myself."

6. Systemic Implementation Challenges: The issues raised extend beyond individual classrooms, pointing to systemic challenges in implementing inclusive education policies. An *Education Official stated*, "We have policies on paper for inclusive education, but translating these into practice at the classroom level remains a significant challenge."

These qualitative insights provide crucial context and depth to our quantitative data, illuminating the complex interplay of factors affecting inclusive EFL education for visually impaired students. They highlight the need for comprehensive interventions that address not only academic needs but also social and emotional aspects of inclusive education.

The direct quotes from students, teachers, and administrators vividly illustrate the daily challenges and frustrations of implementing inclusive education at CEG2 Abomey. However, they also highlight the resilience and determination of all involved, suggesting that significant improvements in inclusive EFL education are possible with proper support and resources.

This analysis reinforces the urgency for targeted training programs, increased resource allocation, and systemic changes to create a truly inclusive learning environment. It also emphasizes the importance of addressing inclusion's emotional and social aspects alongside academic considerations.

DISCUSSION

This section discusses the findings of our study in relation to existing literature, organized according to our research questions and hypothesis. We compare our results with previous studies to contextualize our findings within the broader field of inclusive EFL education for visually impaired students.

Challenges Faced by EFL Teachers in Inclusive Classrooms

Our study revealed significant challenges EFL teachers face in inclusive classrooms, primarily centered around lacking specialized training and resources. All teachers (100%) reported these deficiencies, which aligns with findings from Agesa (2014) in Kenya and Kocyigit & Artar (2015) in Turkey. Agesa's study of 32 teachers in inclusive primary schools in Kisumu County highlighted inadequate training and resources as major barriers. Similarly, Kocyigit & Artar's research with 20 English language teachers in Turkey emphasized the lack of specialized materials and training for teaching visually impaired students.

The struggle with time management reported by 57.14% of teachers in our study echoes concerns Başaran (2012) raised in a comprehensive review of English language teaching

methods for visually impaired students in Turkey. Başaran emphasized the need for specialized materials and strategies, noting that teachers often struggle to balance the needs of visually impaired and sighted students within the same timeframe.

Our finding that 71.43% of teachers relied solely on oral assessments for visually impaired students further underscores the challenges in adapting traditional teaching and assessment methods, a point also raised by Susanto & Nanda (2018) in their study of 15 teachers in inclusive schools in Indonesia. They found that teachers often lack the skills and resources to develop appropriate written assessments for visually impaired students.

Challenges Faced by Visually Impaired Students in Inclusive EFL Settings

The challenges reported by visually impaired students in our study are multifaceted and consistent with previous research. The lack of accessible learning materials (reported by 100% of students) and difficulties in class participation (73.33%) align with findings from Zigler et al. (2017) in their comprehensive review of inclusive education practices across 30 countries. They identified access to adapted materials as a persistent challenge globally. Pokrivčáková's (2015) study of 45 visually impaired students learning English in Slovakia found that inadequate materials and limited participation opportunities were significant barriers.

Our observation of performance disparities, particularly the 45% gap in written activities compared to a 15% gap in oral activities, supports Nikolov & Timpe-Laughlin's (2021) assertion in their extensive review of assessment practices for young learners with special needs. This finding also aligns with Lõvi's (2013) study of 12 visually impaired English learners in Estonia and Aslantaş's (2017) research with 25 visually impaired students in Turkey, both of which emphasized the importance of oral strategies in teaching foreign languages to visually impaired learners.

The emotional and social challenges revealed in our qualitative data, such as feelings of isolation and frustration, echo findings from Musengi & Chireshe's (2012) study of 18 visually impaired students in Zimbabwe who reported similar social challenges in inclusive settings.

Adaptation of English Lessons for Visually Impaired Students

Our study found varying degrees of adaptation in English lessons, with only 28.57% of teachers adopting specific inclusive strategies. This limited implementation of inclusive

practices aligns with concerns raised by Sharma et al. (2012) in their survey of 577 pre-service teachers across Australia, Canada, Hong Kong, and Singapore, and Forlin et al. (2009) in their study of 603 pre-service teachers in Hong Kong. Both studies highlighted gaps in teacher preparedness and efficacy in inclusive education.

The increase in oral-based activities (35%) observed in our study is a positive step, consistent with recommendations from Lõvi (2013) and Aslantaş (2017). However, our study's very limited use of tactile materials (only 4% of observed lessons) highlights a significant gap in supporting visually impaired students. Boza-Chua et al. (2021) emphasized the importance of tactile resources, such as Braille, tactile graphics, and physical models, for visually impaired learners to engage with visually complex concepts like diagrams and spatial relationships. The absence of these resources in our classrooms indicates that teaching practices are not sufficiently adapted to meet the sensory needs of visually impaired students, who require alternative ways to understand visual content.

Similarly, Ishaq et al. (2020) advocated using mobile applications and digital tools with auditory feedback, voice-guided navigation, and tactile response technologies. These tools provide an accessible, interactive platform that enhances comprehension and retention for visually impaired students by allowing them to engage with complex materials independently. Our study's absence of such technological innovations may stem from broader challenges in teacher training and resource availability, as educators may lack the knowledge or resources to implement these tools. As recommended by both studies, incorporating these approaches would align our practices with global best practices, ensuring visually impaired students have equal access to education through low-tech tactile resources and high-tech digital solutions.

Hypothesis Validation

Our hypothesis stated that the development of specific didactic approaches and materials would improve the learning outcomes of visually impaired students in inclusive EFL classrooms. Based on our findings, this hypothesis is strongly supported. The statistically significant performance gaps ($p<0.002$ for oral, $p<0.001$ for written activities) indicate substantial room for improvement through targeted interventions. The significant effect size in written activities (Cohen's $d = 1.65$) suggests that appropriate adaptations could significantly enhance performance in this area. Qualitative insights from teachers and students corroborate the potential benefits of specialized resources and training.

These findings align with the Universal Design for Learning (UDL) principles (CAST, 2024), emphasizing the importance of providing multiple means of engagement, representation, and expression. The need for adaptive materials, such as Braille and audio resources, highlighted in our study, resonates with UDL's focus on flexible learning environments that cater to all learners. Similarly, Gardner's (2011) theory of multiple intelligences supports the importance of diverse teaching strategies to meet varied learning needs. In our case, visually impaired students benefitted from auditory and tactile approaches, validating the need for instruction that adapts to different types of intelligences.

In addition to these frameworks, our findings reflect Tomlinson's (2001) Differentiated Instruction Framework, which stresses the need to adjust content, processes, and assessments based on students' needs. The large performance gaps observed between visually impaired and sighted students in both oral and written activities suggest that more differentiation is required to meet the specific needs of visually impaired students. Furthermore, Krashen's (1982) Input Hypothesis emphasizes the need for comprehensible input. For visually impaired students, such input needs to be delivered through alternative modalities, such as audio or tactile formats, which was a recurring theme in our findings. Finally, Vygotsky's Sociocultural Theory (1978) highlights the importance of scaffolding and social interaction. The peer support and teacher assistance observed in our study, though sometimes hindered by a lack of adaptive resources, underline the importance of creating collaborative and supportive learning environments for visually impaired students.

In conclusion, our study validates the hypothesis and largely corroborates existing research on the challenges and potential solutions in inclusive EFL education for visually impaired students. However, it provides specific insights into the Beninese context, contributing to growing knowledge on this topic in diverse educational settings. The findings underscore the urgent need for comprehensive reforms in teacher training, resource allocation, and adaptive strategies to improve learning outcomes and overall educational experiences for visually impaired students in inclusive EFL classrooms.

CONCLUSION

This study aimed to evaluate inclusive English as a Foreign Language (EFL) instruction for visually impaired students in Beninese secondary schools, specifically focusing on CEG2 Abomey in the Zou Region. The research was motivated by the challenges faced in implementing inclusive education policies in Benin, particularly in the context of EFL teaching

for visually impaired students. The primary objective was to find effective didactic approaches to integrate blind students in EFL classrooms, explicitly examining the teaching methods used and their impact on students' performance.

The findings revealed a clear need for developing an adequate pedagogical approach to facilitate reliable and objective assessment of academic skills in inclusive EFL settings. The challenges identified include a lack of specialized teacher training, limited resources and adapted materials, and student participation and assessment difficulties. The study also highlighted visually impaired students' emotional and social challenges in inclusive classrooms.

The study's significance lies in its potential to bridge the gap between policy and practice in inclusive education in Benin, contributing to the realization of UN Sustainable Development Goal 4. By identifying effective ways of teaching EFL to visually impaired students, this research aims to inform teacher training, curriculum development, and educational policy.

However, the study acknowledges its limitations, including the focus on a single school with a relatively short history of implementing inclusive education and the necessity of comparing findings with international studies, which may not be entirely applicable to the Beninese context.

LIMITATIONS AND STUDY FORWARD

Based on the study's findings, several key recommendations are proposed to improve inclusive EFL education for visually impaired students in Benin. First, comprehensive teacher training programs should be developed to equip educators with the skills needed to teach in inclusive classrooms. Second, there must be greater investment in accessible learning materials and assistive technologies, including tactile resources and mobile applications. Third, adopting inclusive curriculum and assessment adaptations, such as oral-based activities and alternative written assessments, is essential. Additionally, fostering collaborative partnerships between schools, disability organizations, and the community will raise awareness and support inclusive education. Lastly, policy reforms and effective monitoring of inclusive education practices are necessary to ensure equitable learning environments.

Future research could examine the long-term effects of these interventions and compare outcomes across different educational contexts. By adopting these recommendations, stakeholders can work towards creating a more inclusive, supportive, and empowering learning environment for visually impaired students in Benin.

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