



# **Strongarmed by Silence: How Inaction Sustains the Exclusion of Students with Vision Impairment from STEM Education?**

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# OUTLINE

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# Background

- Higher Education has attained recognition as a public as global economies shift to one in which knowledge and skills are heavily priced (Altbach, 2019).
- Discourse on widening access to higher education has intensified, recognising the urgent need to include groups that have historically been marginalised (Burke, 2020; Swanzy, Lanaga & Ansah, 2019).
- Despite the existence of such frameworks, Ghanaian universities exclude students with vision impairment from STEM Education programmes and courses even after granting them admission (Abosi, 2007; Odame et al., 2021).



## Background Cont'd

- Exclusion is assumed to be resulting from visible and active challenges such as gaps in educational policy, the lack of financial or technological resources or the lack of qualified professionals to support the learning needs of students with vision impairment (Boakye, 2025; Odame, 2021).
- Hence, this study shifts the lens to passive barriers arguing that the sustained exclusion of SVI from STEM is not only caused by what we see or what institutions fail to provide. It hints that the exclusion is promoted by a more subtle but equally powerful phenomenon: *silence*.

# Nature of Inquiry

- The study assumes that exclusion is not only caused by visible barriers but also by socially constructed silences omissions in discourse, policy, and practice that are often normalized or overlooked.
- Thus, the research is not concerned with measuring exclusion through numerical data, but with interpreting meaning: how silence is experienced, reproduced, and sustained as a tool for promoting exclusion of SVI from STEM education within Ghanaian universities.



# Theoretical Lens

- The study employed Sociology of Silence as the theoretical lens to the study. It is suitable to explore how silence can be a tool of power or oppression.
- In the case of this study, the exclusion of SVI from STEM education, it takes shape through the omission of public discourse on disability rights in STEM, through the absence of policy language that centres accessibility and through continued neglect of the specific dilemmas of SVI.



# Methodology

- Research paradigm: Interpretivism (Kuhn, 1985)
- Approach: Qualitative Research Approach (Cresswell & Poth, 2018)
- Design: Case Study
- Data Collection Method: PQRS framework
- Data Collection Instrument: Document review guide
- Data Sources.
  - Institutional policy and documents (inclusion policy, STEM curricula)



# Findings

- **Curricular Silence**

- No structured conversation on SVI in STEM programme and course designs.
- Universities curricula is either mute or implicit on accessibility considerations for SVI.

- **Pedagogical Silence**

- Faculty lack training to teach and support SVI in STEM education.
- No urgency or institutional response to the challenge.





# Findings

- **Policy Silence**

- Vague or absent disability provisions.
- STEM specific inclusion is unaddressed.
- Lack of structures to promote compliance of equity, diversity and inclusion in Ghanaian universities.

While these silences are known among major stakeholders in Ghana's higher education, the problem persists as anti-silence frameworks do not exist to bring to light persisting issues that perpetuate the exclusion of SVI from STEM education.



# Implications for Widening Access

- Admission into institutions is not access.
- Institutional silence over issues of inequity undermines participation
- Access for SVI requires disruption of institutional silence.



# Thank you!



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