

# **The Impact of Culturally Responsive Teaching practices on Social and Emotional Development of Early Learners in Diverse classrooms in Ghana**

**Draft Baseline Studies Report**

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## **1.0 Background**

Research in neuroscience and child psychology has considered education in the early years a critical building block for development in later years. This has necessitated the huge investments nations and development agencies have made into the sector across the globe. Like many other nations, Ghana places exceptional premium on early childhood education, positioning itself as a regional leader in South Saharan Africa in this domain. In 2008, Ghana included two years of pre-primary education (Kindergarten) as part of its constitutional commitment to Free and Compulsory Universal Basic Education (fCUBE), making it ahead of the curve compared to other countries in sub-Saharan Africa. By this, the government achieved remarkable enrolment rates, with 3 in every 4 children in school (73.8%-2018/19 EMIS), leading Ghana in pre-primary education.

The strategic importance of early childhood education is codified in Ghana's comprehensive policy framework. The Ministry of Education and the Ghana Education Service has facilitated the approval of the ECE Policy Framework and endorsed by cabinet in 2020. This framework emphasizes ensuring that children are enrolled in KG at the right age (4 and five years) and exposed primarily to early stimulating experiences and nurturing care, and taught numeracy, literacy and problem-solving skills through play and games.

The government's commitment aligns with international development goals, specifically targeting SDG 4 by 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education. Despite impressive enrolment achievements, quality challenges persist, including overcrowded KG classrooms with an average of 52 students per class, learning materials shortages with one workbook for every six children, and predominantly rote-based learning with minimal play-based activities.

While quality early learning has demonstrated long-term academic, economic, and social benefits (García & Weiss, 2017), Ghanaian classrooms often utilize Western pedagogies that ignore cultural assets children with diverse socio-cultural and linguistic background. This discordance frequently leads to disengagement among such pupils. Even when pursuing inclusion, teachers lack adequate training for enacting culturally responsive methods shown to enhance diverse learners' self-efficacy and school adjustment (Dee & Penner, 2017). For instance, early childhood educators in Ghana's capital region displayed limited familiarity with practices like cooperative learning, curricular customization, or trans languaging to support diverse students. Thus, significant gaps remain in teacher capacity and practice of differentiated techniques suited to the cultural schemas learners from marginalized backgrounds bring to school. This mismatch puts children from marginalised families behind from the early years, restricting their socioemotional growth and identity formation needed to achieve universal quality education (SDG 4).

The traditional pedagogies often fail to meet the needs of children from diverse cultural, ethnic, gender and linguistic backgrounds, contributing to achievement gaps that widen over time (Ladson-Billings, 1995). Also, to promote equity and inclusion among boys and girls, and to lay resilient foundation, there is need to use culturally responsive pedagogies in diverse early childhood learning settings. Culturally responsive teaching incorporates students' unique cultural

strengths into the learning process through strategies like cooperative learning, indirect questioning, and contextualization of concepts (Souto-Manning, 2013).

Inclusive pedagogies, such as culturally responsive approaches, promote education equity and equality of opportunity for all children regardless of background or ability (Akyeampong, 2017). The use of culturally responsive approaches in learning spaces has been linked to improved motivation and engagement among diverse learners (Adarkwah, 2021). A growing body of international research suggests culturally responsive pedagogical approaches can serve as an empowering, asset-based intervention to elevate educational outcomes, socio-emotional competencies and positive identity development among marginalized learners across diverse global contexts, including Ghana.

However, there is dearth of literature in Ghana. This pilot project offers an opportunity to rigorously evaluate these impacts on psychosocial and academic growth indicators for diverse learners during the critical early childhood period. Generating localized evidence can inform systemic efforts to make Ghanaian early learning environments more inclusive and equitable through pedagogies affirming cultural wealth. Indeed, in this proposed project we intend to adopt some of these best practices and approaches into pedagogies and teaching practices that are used at the early child education classrooms, and push for policy shift through GES that favours the incorporation of them in both public and private schools in Ghana.

## **Research Questions**

To explore the current state of the impact of the use of culturally responsive teaching practices on social and emotional learning of early learners in Ashanti and Greater Accra Regions of Ghana, the following research questions were posed to guide the baseline investigation;

1. What is the current state of culturally responsive teaching practices (CRTTP) in early childhood classrooms across diverse contexts in Ashanti and Greater Accra regions?
  - What culturally responsive teaching practices are currently being implemented?
  - How frequently and consistently are these practices observed?
  - What variations exist across urban/rural, treatment/control schools?
2. What are the baseline levels of social and emotional learning (SEL) competencies among early learners from diverse backgrounds in the study schools?
  - What is the current distribution of SEL competencies across the five CASEL domains?
  - How do SEL levels vary by gender, ethnicity, location, and other demographic factors?
  - What patterns emerge in learners' social and emotional development dimensions?
3. To what extent are gender equity and inclusion (GEI) practices currently implemented in early childhood classrooms?
  - What gender-equitable teaching strategies are currently in use?
  - How inclusive are current classroom environments and practices?
  - What gaps exist in supporting learners from diverse backgrounds?
4. What is the current capacity of early childhood educators to implement culturally responsive and gender-equitable practices?

- What is teachers' familiarity with local cultural contexts?
- What professional qualifications and experience do teachers bring to CRTP implementation?
- What linguistic competencies do teachers possess relative to community needs?
- 5. What relationships exist between current implementation levels of CRTP, GEI practices, and learner SEL outcomes at baseline?
  - How do higher levels of culturally responsive practices correlate with SEL competencies?
  - What associations exist between gender-equitable practices and social-emotional development?
- 6. What are the current challenges and barriers to implementing culturally responsive and gender-equitable practices in study contexts?
  - What systemic, institutional, and individual barriers exist?
  - How do resource constraints, training gaps, and policy limitations affect implementation?

## **Theory of Change**

The project's Theory of Change (ToC) posits that “If culturally responsive teaching practices are implemented in early childhood classrooms through teacher professional development and adapted instructional materials, marginalized learners will experience greater identity affirmation, self-efficacy, and socio-emotional wellbeing leading to improved learning readiness”. This multifaceted approach will generate new insights while building localized assets for sustaining pedagogical improvement.

Figure 1 is an exemplification of a theory of change for assessing the impact of culturally responsive pedagogies on the social and emotional development of early childhood learners in diverse contexts in Ghana.

**Context:** This pillar outlines the key considerations such as resources, factors affecting the delivery of ECCE, such as ethnic/linguistic diversity across Ghana; use of traditional models of teaching, inadequate teacher training on CRP, inadequate CRP issues in ECCE curriculum, limited CRP materials, implicit biases about diversity and policy gaps in promoting equitable early learning.

**Interventions:** the pillar describes the core activities and strategies central to the theory of change. This includes conducting research to generate evidence, developing culturally relevant curricula and teacher training, redesigning learning environments, establishing coaching/mentorship supports, and rolling out responsive pedagogy practices in classrooms. These are meant to generate and mobilize knowledge that would lead to capacity strengthening of individuals and relevant institutions.

**Outputs:** This pillar represents the tangible products and initial results stemming directly from the intervention activities. Potential outputs would include empirical data on impacts, effective

practice guides and manuals, adapted assessment tools, a cohort of trained teachers, and transformed classroom environments reflecting diversity.

**Outcomes:** Building on the outputs, this section outlines the expected changes in knowledge, capacities, motivations and practices anticipated to occur as a result of the interventions and rendered outputs. Anticipated outcomes may include improved social-emotional competencies in learners, increased engagement and self-efficacy, teacher mindset shifts, and adoption of responsive ECE practices.

**Impact:** This culminating pillar articulates the overarching long-term goal and transformative change the initiative aims to achieve through the combined sequence of interventions and incremental outcome achievements. The ultimate impact would be equitable, high-quality early education that promotes diversity to empower all early learners from diverse ethnic, linguistic and gender backgrounds.

The pillars are inherently interdependent, with each component serving as a building block reinforcing progress towards the next. Contextual factors shape the intervention activities; interventions drive the outputs; outputs reshape knowledge and capacities reflected in outcomes; and incremental outcome achievements gradually come together to realize the projected impact over time. The underlisted are further details of the theory of change:

**Intended Results: Knowledge Generation:**

- Evidence on impact of responsive pedagogy strategies and psychosocial development in diverse early learners
- Identification of adaptations needed in materials, activities, teacher prep to support cultural inclusion

**Capacity Strengthening:**

- Enhanced teacher proficiency in practices affirming diversity and mitigating bias
- Improved school leader support for responsive classrooms
- Increased family and community understanding of relevance

**Knowledge Mobilization:**

Development of practice, training, and policy briefs communicating key lessons  
Results disseminated through conferences, community meetings, open access platforms  
Establishment of community of practice networks on pedagogical enhancement

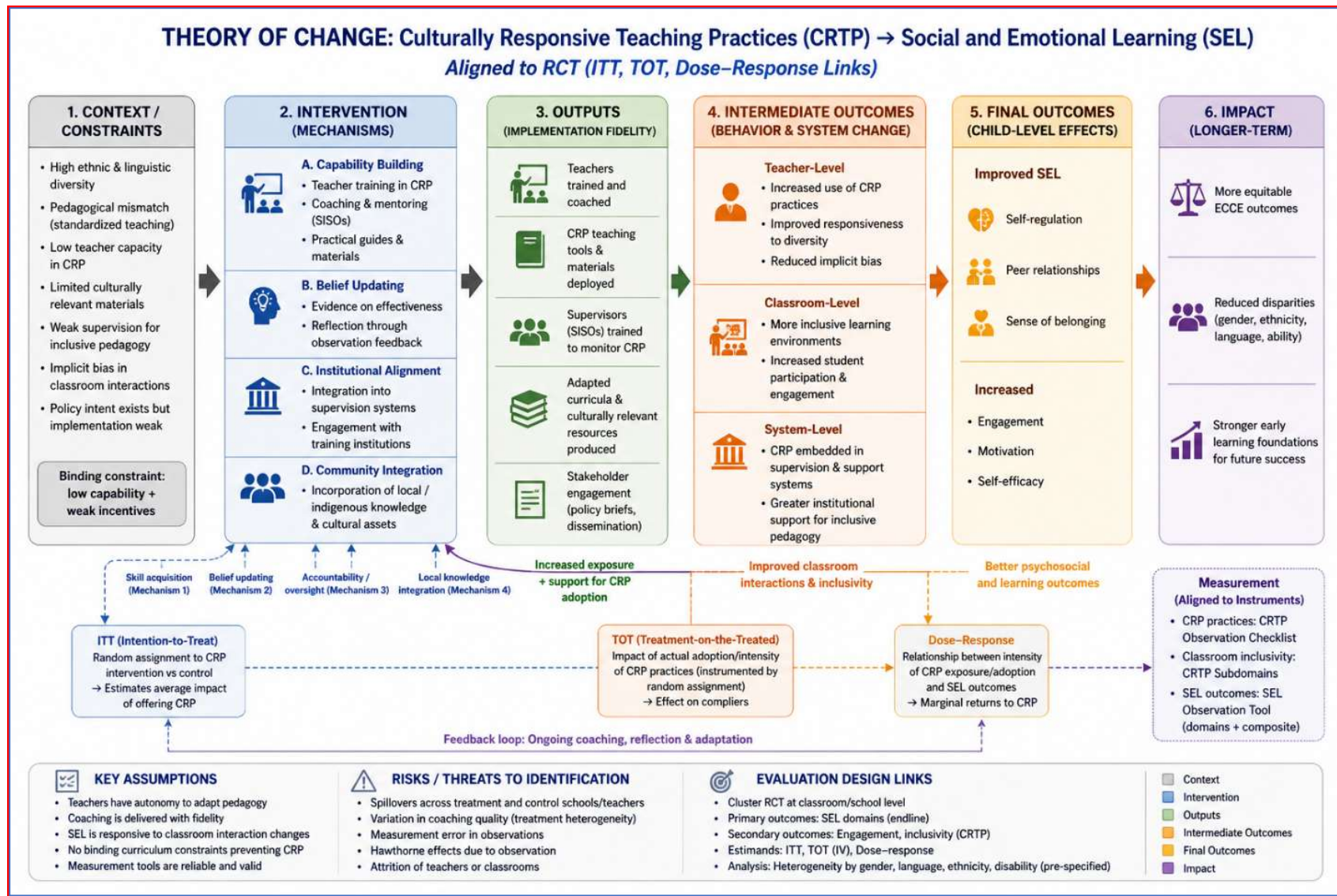


Figure 1: Theory of Change

## 2.0 Literature Review

High-quality early childhood education lays a crucial foundation for children's cognitive, social-emotional, and academic skills (Yoshikawa et al., 2013). However, traditional pedagogies often fail to meet the needs of children from diverse cultural, ethnic, gender and linguistic backgrounds, contributing to achievement gaps that widen over time (Ladson-Billings, 1995). Also, to promote equity and inclusion among boys and girls, and to lay a resilient foundation, there is a need to use culturally responsive pedagogies in diverse early childhood learning settings. Culturally responsive teaching incorporates students' unique cultural strengths into the learning process through strategies like cooperative learning, indirect questioning, and contextualization of concepts (Souto-Manning, 2013). Evidence suggests culturally responsive approaches enhance diverse students' self-esteem, engagement, and learning outcomes (Sleeter, 2012), thereby promoting inclusivity. Yet few studies examine the impact of these practices on key competencies like self-regulation and relationship building during early childhood specifically, across the globe.

Inclusive pedagogies, such as culturally responsive approaches, promote education equity and equality of opportunity for all children regardless of background or ability (Akyeampong, 2017). This is particularly relevant in Ghana where enrollment gaps exist between able-bodied and disabled learners and across income levels (Anlimachie, 2019). The use of culturally responsive approaches in learning spaces has been linked to improved motivation and engagement among diverse learners (Adarkwah, 2021). Ghana has over 50 ethnic groups with distinct cultural knowledge that is often excluded from Eurocentric curriculum (Owu-Ewie, 2006). Early childhood is a critical period for developing language, literacy, social skills, and emotional regulation (Sackey et al., 2018). High-quality, play-based ECCE helps build this foundation especially for disadvantaged early learners.

A synthesis of research from the United States by Aronson and Laughter (2016) found that culturally responsive educational practices consistently promote improved academic outcomes, higher engagement levels, enhanced motivation and sense of belongingness among ethnically diverse student populations. For example, a study by Dee and Penner (2017) used a randomized experiment and found culturally relevant teaching boosted math and reading achievement by around 0.22 standard deviations for students of color. Another study by Byrd (2016) observed increased participation, critical thinking skills, and self-confidence among marginalized students whose teachers employed culturally responsive pedagogical tools compared to control classrooms.

Evidence from indigenous contexts points to culturally grounded curricula nurturing resilient psychosocial and educational trajectories. Research by Whitbeck et al. (2001) among American Indian youth indicated those engaged with culturally adaptive programmes exhibited higher self-esteem, prosocial behaviours and academic motivation than peers in mainstream schools. Similarly, studies in New Zealand found culturally responsive pedagogies effectively promoted Māori students' identity affirmation, self-efficacy beliefs and school adjustment (Bishop et al., 2003; Savage et al., 2011). Duren (2017) further highlighted how culturally responsive literacy



instruction increased kindergarteners' oral language skills, motivation for reading, and positive ethnic-racial attitudes compared to counterparts lacking these experiences.

Studies in South Africa by Mpisi and Alexander (2022) touts the use of culturally responsive pedagogies in promoting multicultural education. While limited empirical data exists specific to Ghana, Anlimachie et al.'s (2023) qualitative study in one basic school in Asunafo North district in Ghana found that, both teachers and learners come from ten different ethnic groups- with 30% and 45% of them from ethnic minority backgrounds respectively. There was also a teacher-student cultural mismatch that had implications for achieving culturally responsive learning experiences for the non-Akan minority students.

Further, while quality early learning has demonstrated long-term academic, economic, and social benefits (García & Weiss, 2017), stark inequalities persist in access and outcomes between minority children and their mainstream peers (Annan et al., 2017). Ghanaian classrooms often utilize Western pedagogies that ignore cultural assets non-Akanethnic groups possess (Dzamesi, 2018). This discordance frequently leads to disengagement among such pupils (Seshie-Nasser, 2021). Even when pursuing inclusion, teachers lack adequate training for enacting culturally responsive methods shown to enhance diverse learners' self-efficacy and school adjustment (Dee & Penner, 2017). For instance, early childhood educators in Ghana's capital region displayed limited familiarity with practices like cooperative learning, curricular customization, or trans languaging to support diverse students (Faustin et al., 2020). Thus, significant gaps remain in teacher capacity and practice of differentiated techniques suited to the cultural schemas learners from marginalized backgrounds bring to school. This mismatch puts English language-learners and non-Akan children behind from the early years (Wolf et al., 2022), restricting their socioemotional growth and identity formation needed to achieve universal quality education (SDG 4). This study addresses these biases by developing and assessing culturally responsive interventions to strengthen teacher practice and diverse learners' social and emotional development in diverse early childhood contexts. Findings will guide scalable models to enrich inclusion and equity from the start of schooling.

### **3.0 Study Approach and Methodology**

#### **3.1 Introduction**

This section summarizes the approach and methodology of the baseline study. The baseline phase was for pre-intervention data collection to establish a reference point for comparison of future outcomes of the social-emotional competencies, self-regulation, motivation, and teacher-child relationships.

#### **3.2. Conceptual framework**

The Phenomenological Variant of Ecological Systems Theory (PVEST) provides a framework for examining the impact of culturally responsive pedagogy on marginalized learners in early childhood education. PVEST focuses on the identity formation process in children as the key mechanism behind their coping responses and developmental outcomes based on the experiences they have across settings like home, school, and community (Spencer et al., 1997). It posits that

children's self-perceptions get shaped through these lived experiences with risk and protective factors.

Culturally responsive teaching aligned to PVEST works as a protective factor or corrective problem-solving strategy by incorporating cultural references and practices into the classroom. This would help affirm students' identity, enhances teacher-student relationships and treatment expectancy, and enables resilient mindsets (Dotterer et al., 2021). Studies show classrooms focused on cultural validation via PVEST improve diverse students' academic self-efficacy and skill growth trajectories (Swanson et al., 2003). In line with PVEST principles, the study will implement responsive pedagogy to assess how rescuing and promoting cultural assets impacts identity assets and adaptive coping responses tied to key developmental competencies in early childhood education.

### 3.3 Study Design

The baseline study adopted the mixed-method design, embedding both quantitative and qualitative approaches, to provide a comprehensive understanding of the current state of the impact of culturally responsive pedagogy on social and emotional development of diverse early learners in selected districts. This design was particularly suitable given the complex, multi-dimensional nature of the subject, which required both measurable outcomes and rich insights from participants.

### 3.4 Study Population

The study targeted a carefully selected group of individuals whose roles and experiences provided critical insights into the early childhood learning system. The main study population included:

- **Kindergarten pupils (Early Learners)** – The primary focus of the study was to assess how learners interacted with culturally responsive experiences and the extent to which these experiences generated social and emotional learning. All learners 32 kindergarten classrooms across, 16 schools and eight districts in Ashanti and Greater Accra Region constituted the population for the study.
- **Kindergarten Teachers** – All teachers in kindergarten one and two in public basic schools where all observed and interviewed to understand teaching methodologies, classroom management, and pedagogical challenges.
- **Head teachers** – All head teachers of 16 basic schools were also interviewed to assess school-level leadership, support systems, and administrative perspectives on early childhood education.
- **Community Members** – Some selected members of the community who are opinion leaders were also involved to provide contextual information on community engagement, norms, and perceptions about early learning.

This multi-stakeholder approach ensured addressing the holistic view of all collaborators in the educational environment by addressing the real needs and expectations of diverse perspectives. It also enhanced the accuracy of study findings thus, supporting evidence-based recommendations.

### 3.5 Sampling and Recruitment

A multistage sampling procedure was employed in selecting regions, districts, schools and various categories of respondents. The purposive sampling was used in selecting the Ashanti and Greater Accra Regions while sampling random sampling by replacement method was used in selecting in four districts each from the regions with two designated as treatment districts and two as control districts. From each district, two kindergartens were purposively selected based on guided information provided by education officers, accessibility, level of program implementation. This brought the total number of schools to eight per region.

**Table 1: The distribution of districts and schools involved in the study**

| <b>Ashanti Region</b>       |                            |                                                                                                 |                 |
|-----------------------------|----------------------------|-------------------------------------------------------------------------------------------------|-----------------|
|                             | <b>District</b>            | <b>Schools</b>                                                                                  | <b>Category</b> |
| <b>Rural</b>                | Amansie East               | Ntinanko Roman Catholic, Bekwai Methodist                                                       | Treatment       |
| <b>Rural</b>                | Atwima Nwabiagya North     | Barekese Methodist, Ataase DA                                                                   | Control         |
| <b>Urban</b>                | Kwadaso                    | Apatrapa Roman Catholic, Asuoyeboa MA                                                           | Treatment       |
| <b>Urban</b>                | Oforikrom                  | Emena MA, Weweso MA                                                                             | Control         |
| <b>Greater Accra Region</b> |                            |                                                                                                 |                 |
| <b>Rural</b>                | Ga East, Abokobi           | Abokobi Presby 1 and 2 basic school, Abokobi Adenkrebi M/A basic school                         | Treatment       |
|                             | Ga South, Ngleshie Amanfro | Christ the King Anglican basic school, Twerebo Taribiyya Islamic basic school, Ngleshie Amanfro | Control         |
| <b>Urban</b>                | Ga Central, Sowutuom       | St. Justin Anglican 1 and 2 basic school St. Justin Anglican 3 and 4 Basic School               | Control         |
|                             | Kpong Katamanso, Kpong     | Nii Oglie MA Model School Michel Camp basic school                                              | Treatment       |

Further, purposive sampling was used to ensure that selected participant KG teachers, head teachers, and learners were those most likely to provide relevant information and diverse perspectives on early learning. For the learner observations, researchers used a systematic purposive technique guided by a project directive to work with 60% of the class population for each school.

To ensure gender equilibrium, the 60% was calculated separately for boys and girls using the class register. Pupils present on the day of data collection were then selected systematically, often by choosing every other learner on the register. If the target number could not be met with learners present, absent learners were noted and marked with an asterisk in the field notebook to indicate

selection but non-participation. Each pupil was also coded using their corresponding register number to maintain consistency and aid data analysis.

It is worth noting that researchers were paired during fieldwork. If the final dataset appears to have a skewed gender distribution, it may reflect how work was split among team members, with one partner possibly observing more boys or girls than the other.

### **3.6 Research context**

The selection of Ashanti and Greater Accra regions as study sites for this pilot investigation into culturally responsive teaching practices in Ghanaian kindergartens was strategically designed to capture the full spectrum of educational and cultural contexts within the country. These two regions collectively represent Ghana's most significant linguistic landscapes, with Ashanti region serving as the heartland where Twi predominantly shapes educational discourse, while Greater Accra region presents a more linguistically diverse environment where multiple local languages coexist alongside English as the medium of instruction. This linguistic diversity provides an essential foundation for understanding how culturally responsive pedagogical approaches adapt and function across different language contexts that teachers encounter daily.

Beyond their linguistic significance, these regions offer a comprehensive urban-rural educational continuum that reflects the broader Ghanaian educational landscape. Greater Accra's metropolitan areas present urban educational contexts with their associated infrastructural advantages and challenges, while Ashanti region encompasses both the urban sophistication of Kumasi and the more traditional, semi-rural educational settings that characterize much of Ghana's interior. This geographical and developmental diversity ensures that findings from the pilot study will capture how culturally responsive teaching practices manifest across different socioeconomic and infrastructural realities.

The demographic and institutional density of these regions further strengthens their selection as study sites. As Ghana's two most populous regions, they contain the highest concentration of educational institutions, ranging from well-resourced and less endowed public institutions serving diverse communities. This provides sufficient sample size while offering access to various school types, ensuring that the research findings will be both robust and representative of the educational diversity found throughout Ghana.

Perhaps most importantly, these regions embody the dynamic tension between cultural preservation and educational modernization that defines contemporary Ghanaian education. Ashanti region, with its deep roots in Akan cultural traditions, offers invaluable insights into how indigenous cultural practices can be authentically integrated with modern pedagogical approaches. Meanwhile, Greater Accra's cosmopolitan character demonstrates how culturally responsive teaching strategies function in increasingly multicultural educational environments where learners bring diverse cultural backgrounds into the classroom.

The strong educational administrative structures and established teacher education institutions in both regions also ensure the practical feasibility of implementing and evaluating culturally responsive interventions. Success in these well-developed educational contexts would provide

compelling evidence for the scalability of such approaches across Ghana's diverse educational landscape, making this pilot study a crucial stepping stone toward broader educational transformation.

### 3.7 Data Collection Methods

A total of 10 field days were scheduled for the baseline, although the actual school visits occurred within 8 working days which lasted from 2<sup>nd</sup> to 11<sup>th</sup> of April, 2025. Each district visit spanned two to three days, depending on its remoteness and logistical requirements. The quantitative component allowed the use of culturally responsive teaching practices toolkit, the Social and Emotional Learning toolkit developed from the CASEL Framework and the Gender, Equity, Equality and Inclusion checklist across all schools in 16 districts in the two regions of Ghana. The quantitative rigorous data collection and analysis were used to identify baseline CRP, SEL and GEEI practices. The tools captured numerical data based on observed behaviours/traits and teacher-learner interactions. Selected pupils in each class were observed in different learning settings in two days per class by different enumerators.

The qualitative component of the study focused on non-participant classroom observations, participant observations, and key informant interviews, including selected members of school management committee, assembly members and parents, which allowed the gathering of rich, contextual data from various stakeholders. This dual-methodological approach helped to assess both the observable behaviours and deeper contextual factors influencing early learning interactions.

#### Validity and Reliability of the instruments

Table 2a: Internal Consistency Reliability (Cronbach's Alpha) of SEL Domains

| SEL Domain                                   | Cronbach's Alpha | Reliability Rating |
|----------------------------------------------|------------------|--------------------|
| <b>Self-Awareness (QA1–QA7)</b>              | 0.83             | Very Good          |
| <b>Self-Management (QB1–QB7)</b>             | 0.79             | Good               |
| <b>Social Awareness (QC1–QC7)</b>            | 0.82             | Very Good          |
| <b>Relationship Skills (QD1–QD7)</b>         | 0.75             | Acceptable         |
| <b>Responsible Decision-Making (QE1–QE7)</b> | 0.84             | Excellent          |

The content of each domain of SEL was predetermined by technical team of Educationists and fixed at 7 per domain. Therefore, prior to broader exploration, the internal consistency of the domains was examined using Cronbach's alpha. All five subscales demonstrated satisfactory reliability, with alpha coefficients ranging from 0.75 to 0.84 as detailed with reliability ratings. This confirms that the items within each SEL domain consistently capture their respective constructs and support the use of items for assessing SEL competencies among early learners.

Table 2b: Internal Consistency Reliability of CRTP

| <b>CRPT Domain</b>                       | <b>Cronbach's Alpha</b> | <b>Reliability Rating</b> |
|------------------------------------------|-------------------------|---------------------------|
| <b>A1 – Local Language Integration</b>   | 0.626                   | Acceptable                |
| <b>A2 – Storytelling Traditions</b>      | 0.712                   | Good                      |
| <b>B1 – Traditional Games and Play</b>   | 0.579                   | Poor                      |
| <b>B2 – Community Connection</b>         | 0.692                   | Acceptable                |
| <b>B3 – Cultural Arts and Crafts</b>     | 0.574                   | Poor                      |
| <b>C1 – Learning Environment Design</b>  | 0.662                   | Acceptable                |
| <b>C2 – Learning Materials</b>           | 0.778                   | Good                      |
| <b>D1 – Interactive Learning</b>         | 0.628                   | Acceptable                |
| <b>D2 – Social Learning</b>              | 0.849                   | Excellent                 |
| <b>E1 – Observation-Based Assessment</b> | 0.830                   | Very Good                 |
| <b>E2 – Performance Assessment</b>       | 0.587                   | Poor                      |

In exploring and ascertaining the internal consistency and reliability of the CRTP toolkit, the subscales generated indexes ranging between 0.579-0.849. Though, three subscales fell below the required threshold of 0.6, cumulatively the toolkit was considered reliable and capable of eliciting responses required.

Table 2c: Internal Consistency reliability of GEEI subscale

| <b>KGE Domain</b>                            | <b>Cronbach's Alpha</b> | <b>Reliability Rating</b> |
|----------------------------------------------|-------------------------|---------------------------|
| <b>A – Teaching and Learning Strategies</b>  | 0.795                   | Good                      |
| <b>B – Classroom Resources</b>               | 0.800                   | Good                      |
| <b>C – Learning Environment Organization</b> | 0.676                   | Acceptable                |
| <b>D – Support for Learners</b>              | 0.856                   | Excellent                 |
| <b>E – Assessment Practices</b>              | 0.747                   | Acceptable                |

The internal consistency of the GEEI toolkit explored also generated indexes from 0.676-0.856 suggesting that the scale is adequately reliable and can elicit the responses required for the study.

### 3.8 Research Team and Coordination

The enumeration was carried out by trained research assistants working in pairs under the supervision of the project research team. Each pair was responsible for coordinating with school staff, the sampling of the participating pupils, and administering the tools as per the project protocols. Coordination with the District Directorate of Education in each district was essential for finalizing school selections and scheduling visits.

The field team was also trained and regularly reminded, on ethical considerations, especially regarding working with young children. Informed consent was obtained from teachers and head teachers, and assent protocols were observed when engaging learners.

### **3.9 Limitations of the study**

The fieldwork coincided with an examination period on the school calendar. The research team therefore had to work within a limited time frame of two weeks to collect the relevant baseline data. To ensure that the data collection was done within that frame, more enumerators were recruited; sixteen. To enhance the number observation days of the sampled pupils in a class, the class teachers were given a quick on-site training to observe the pupils for a minimum of three days after the research team had departed (see section 1.4.1). Also, to ensure that the fieldwork did not disrupt the examinations, the normal periods for the examinations were allowed and the teachers were then asked to simulate the same class periods for the observation to be done.

## **4.0 Findings**

This section is organized into the results and discussion. The results summarize the quantitative and qualitative data collected using the three observational instruments and two interview guides that centred on CRTP, KGE and SEL. It also presents the summary baseline status of CRTP, KGE and SEL in both the treatment and control study districts in the Ashanti and Greater Accra regions. The discussions elaborate on the key results using primary data (collected from KIIs and FGDs) and secondary data.

### **4.1 The context of the quantitative data gathering**

The CRTP checklist is organized into five major domains: (A) Language and Communication, (B) Cultural Integration, (C) Learning Environment, (D) Teaching Methods, and (E) Assessment Strategies. Each domain comprises two subdomains, making 11 subdomains and 55 observable items in total. For every item, trained external observers (team of research assistants) recorded the presence of the practice using a 3-point scale (Not Observed, Observed Sometimes, Observed Often) and how many times the practice was observed during period of observation. The radar plots of means of the 3-point observation ratings and the practice counts were used to summarize observed patterns across 55 CRTPs, grouped under five domains. Tables and boxplots were further used to summarize the composite (domain) level insights.

We also observe Kindergarten Gender Equity (KGE) via a separate instrument. This observation checklist is a direct operationalization of the UNESCO Gender-Responsive Pedagogy (UNESCO GRP) framework (Mekonnen & Cherinet, 2020), which lays out four core “pillars” of gender-equitable teaching: A) Use of teaching & learning strategies which corresponds to Pedagogical Strategies pillar of the UNESCO GRP; B) Use of resources in classroom like the Learning Materials & Resources pillar; C) Organization of learning space in line with Classroom Environment pillar E) Use of assessment practices which corresponds to Assessment Practices. We included a 5<sup>th</sup> pillar, D) Support provided for learners to reflect Support & Inclusion. Each of the KGE domain is consists of a set of items (A1–A12, B1–B7, C1–C8, D1–D8, E1–E8). These offer 48 item adaptations for Ghanaian kindergartens. These were used as the rubric in observing and scoring how kindergarten teachers enact gender-equity. Each item is scored by its frequency and rating of its occurrence on a 3-point scale (1=never, 2=rarely, 3=often). Table 17 summarizes

observations via a KGE checklist on how often gender and inclusive practices are used in kindergartens across five key areas. Table 17 presents averages and percentages of the counts and ratings.

## 4.2 Context of the qualitative data gathering

In gathering qualitative data, interview guides were developed to address culturally responsive elements and issues KG teachers and community/traditional leaders want to find expression in the kindergarten curriculum, and in the training of their early years of children and the challenges they anticipate in their integration.

## 4.3 Key results

### 4.3.1 Study Schools, Teachers, and Pupils

In total 46 teachers were observed (34.6% one-time and 65.4% between 2 and 4 times across 21 schools (8 in Ashanti (with 17 teachers) and 13 in Greater Accra Regions (with 29 teachers) distributed across the 8 districts under the study (4 in each region). Table 3 details the coverage of the surveys across the two regions. About 20 teachers (43.5%) were observed in rural areas and 26 (56.5%) in urban areas of the two regions.

#### Biographic Data

Table 3: Surveyed Schools by Region, District and Location and treatment assignment

| School No. | Greater Accra Region                                           | District (Location)                   | Status (Treated/Control) | Ashanti Region                       | District (Location)                | Status (Treated/Control) |
|------------|----------------------------------------------------------------|---------------------------------------|--------------------------|--------------------------------------|------------------------------------|--------------------------|
| 1.         | Abokobi Presby I Basic School<br>Abokobi Presby 2 Basic School | Ga East (Rural, less endowed)         | Treated                  | Apatrapa Roman Catholic Primary      | Kwadaso (Urban, well endowed)      | Treated                  |
| 2.         | Adenkrebi Municipal Assembly Basic School                      | Ga East (Rural)                       | Treated                  | Asuoyeboa Municipal Assembly Primary | Kwadaso (Urban)                    | Treated                  |
| 3.         | Michel Camp Kindergarten                                       | Kpone Katamanso (Urban)               | Treated                  | Bekwai Methodist Primary             | Amansie East (Rural)               | Treated                  |
| 4.         | Nii Oglie Model School                                         | Kpone Katamanso (Urban, well endowed) | Treated                  | Ntinanko Roman Catholic Primary      | Amansie East (Rural, less endowed) | Treated                  |



|     |                                                                                                 |                                       |         |                                   |                                               |         |
|-----|-------------------------------------------------------------------------------------------------|---------------------------------------|---------|-----------------------------------|-----------------------------------------------|---------|
| 5.  | Taifa St. Dominic Roman Catholic 1 Basic School Taifa St. Dominic Roman Catholic 2 Basic School | Ga East (Urban, well endowed)         | Control | Barekese Methodist Primary        | Atwima Nwabieggya North (Rural, less endowed) | Control |
| 6.  | Apollonia Methodist Basic School                                                                | Kpone Katamanso (Urban)               | Control | Ataase District Assembly Primary  | Atwima Nwabieggya North (Rural, less endowed) | Control |
| 7.  | Kubekro K.K.M.A Basic School                                                                    | Kpone Katamanso (Rural, less endowed) | Control | Weweso Municipal Assembly Primary | Oforikrom (Urban, well endowed)               | Control |
| 8.  | Christ the King Anglican Basic School                                                           | Ga South (Rural)                      | Control | Emena Municipal Assembly Primary  | Oforikrom (Urban, well endowed)               | Control |
| 9.  | Taribiya Islamic Basic School                                                                   | Ga South (Rural)                      | Control |                                   |                                               |         |
| 10. | Ngleshie Amanfro Community 1 Basic School                                                       | Ga South (Rural)                      | Control |                                   |                                               |         |
| 11. | St. Justin Anglican 1&2 Basic School St. Justin Anglican 3&4 Basic School                       | Ga Central (Urban, well endowed)      | Control |                                   |                                               |         |

Table 4: Distribution of teachers across regions and districts

| Districts                       | Ashanti |       | Greater Accra |       | Urban |       | Rural |       | Total |       |
|---------------------------------|---------|-------|---------------|-------|-------|-------|-------|-------|-------|-------|
|                                 | N       | %     | N             | %     | N     | %     | N     | %     | N     | %     |
| Amansie East (Rural)            | 6       | 35.29 | 0.00          | 0.00  | 6     | 23.08 | 0     | 0.00  | 6     | 13.04 |
| Atwima Nwabieggya North (Rural) | 3       | 17.65 | 0.00          | 0.00  | 3     | 11.54 | 0     | 0.00  | 3     | 6.52  |
| Kwadaso (Urban)                 | 4       | 23.53 | 0.00          | 0.00  | 0     | 0.00  | 4     | 20.00 | 4     | 8.70  |
| Oforikrom (Urban)               | 4       | 23.53 | 0.00          | 0.00  | 0     | 0.00  | 4     | 20.00 | 4     | 8.70  |
| Ga Central (Urban)              | 0       | 0.00  | 3.00          | 10.34 | 0     | 0.00  | 3     | 15.00 | 3     | 6.52  |
| Ga East (Rural)                 | 0       | 0.00  | 10.00         | 34.48 | 10    | 38.46 |       | 0.00  | 10    | 21.74 |

|                         |    |        |       |        |    |        |    |        |    |        |
|-------------------------|----|--------|-------|--------|----|--------|----|--------|----|--------|
| Kpone Katamanso (Urban) | 0  | 0.00   | 9.00  | 31.03  | 0  | 0.00   | 9  | 45.00  | 9  | 19.57  |
| Ga South (Rural)        | 0  | 0.00   | 7.00  | 24.14  | 7  | 26.92  |    | 0.00   | 7  | 15.22  |
| Total                   | 17 | 100.00 | 29.00 | 100.00 | 26 | 100.00 | 20 | 100.00 | 46 | 100.00 |

The distribution of teachers reveals significant regional and urban-rural disparities in the sample. Greater Accra contributed the majority of teachers (63% of the total sample), while Ashanti provided 37%. This distribution shows a clear urban concentration, with Greater Accra's teachers predominantly located in urban districts like Kpone Katamanso (45% of urban teachers) and rural areas like Ga East (38.5% of rural teachers). The Ashanti region shows more balanced coverage across its districts, though rural districts like Amansie East contributed fewer teachers. The urban-rural split across both regions shows 57% of teachers from rural settings and 43% from urban areas, suggesting the study captured diverse teaching contexts despite the regional concentration.

Table 5: Rounds of observation per teacher

| Rounds of Observation | Count | # of Observations                                      | % Observations (N=78) |
|-----------------------|-------|--------------------------------------------------------|-----------------------|
| 1                     | 27    | 27 unique teacher-school IDs                           | 34.6%                 |
| 2                     | 38    | 38 entries are repeated once (total of 19 pairs)       |                       |
| 3                     | 9     | 9 entries are part of triples (3 each → 3 groups)      | 11.5%                 |
| 4                     | 4     | 4 entries are part of four identical records (1 group) | 5.1%                  |
| Total                 | 50    | 78 Observations                                        |                       |

The observation data demonstrates varying levels of classroom monitoring intensity across the teacher sample. Over one-third of teachers (34.6%) were observed only once, which may limit the reliability of findings for these cases since single observations can be influenced by unusual circumstances. Nearly half of the observations (48.7%) involved teachers observed twice, providing a more robust dataset for 19 individual teachers. A smaller subset received more intensive monitoring, with 11.5% observed three times and 5.1% observed four times. This distribution suggests that while most teachers received basic observation coverage, a substantial portion benefited from multiple observations that could capture more typical teaching patterns and reduce the impact of atypical classroom events.

Table 6: Learner Enrollment Age distribution by Location (Rural v. Urban) of Schools

| Variable              | Observation | Mean  | Std. Dev. | Urban (n=20) | Rural (n=26) | MeanDiff |
|-----------------------|-------------|-------|-----------|--------------|--------------|----------|
| Number of Boys        | 46          | 15.15 | 8.87      | 16.65        | 14.00        | 2.65     |
| Number of Girls       | 46          | 15.65 | 8.29      | 18.65        | 13.35        | 5.304**  |
| Total enrolment       | 46          | 30.80 | 16.33     | 35.30        | 27.35        | 7.954    |
| <b>Age of learner</b> | 444         | 5.21  | 1.17      | 5.49 (n=189) | 5.00 (n=255) | 0.488*** |

Table 6 shows that urban classes are larger than rural ones in general and the enrolment of girls per urban class is statistically significant ( $p < .05$ ), with 5 more girls per class on average relative to rural classes.

During the observations “Our World–Our People” (OWOP) dominated (observed among 46% of teachers), with heavy emphasis on “My Nation Ghana” and “My Local Community” as strands. Literacy comes next (observed for 18 (39%) of teachers), driven largely by Phonics work (12/18). Revision and General Studies play smaller roles (11% and 7%), together with Creative Arts is almost absent at 4%. Pure Numeracy is under-represented (7%), split between Numbers (2) and Counting (1). A handful of niche sub-strands (2–3% each) — e.g. local stories/proverbs (“Adoe ne kwadu”), “Profession in My Community,” “Religions” - highlight occasional but limited cultural content in the existing curriculum.

### 4.3.2 Teacher and Learner Profiles

#### Learner profiles

Table 7: Distribution of Learners by location (Urban/Rural) across regions

| Region        | Urban (%)    | Rural (%)    | Total n (%)  |
|---------------|--------------|--------------|--------------|
| Ashanti       | 100 (22.5 %) | 155 (34.9 %) | 255 (57.4 %) |
| Greater Accra | 89 (20.0 %)  | 100 (22.5 %) | 189 (42.6 %) |
| Total         | 189 (42.6 %) | 255 (57.4 %) | 444 (100 %)  |

Table 7 shows that about 57% (255 of the total sample of 444) of learners were observed in the Ashanti Region, where 61% (155 of 255) were from rural settings. In Greater Accra, where the remaining 43% (189) of learners came from, learners from rural areas make up 53% of the regional sample. Learner ages average 5.2 years across the survey as shown in table. Those in Greater Accra Region (urban areas) are 5 months (6 months) older than their Ashanti Region (rural) counterparts on average, i.e. given their average ages of 5.1 and 5.4 respectively (5 yrs and 5.4 respectively). The Figure 2 below shows that male learners are older in general and female learners in Ashanti Region are the youngest on average. All age differences are statistically significant.

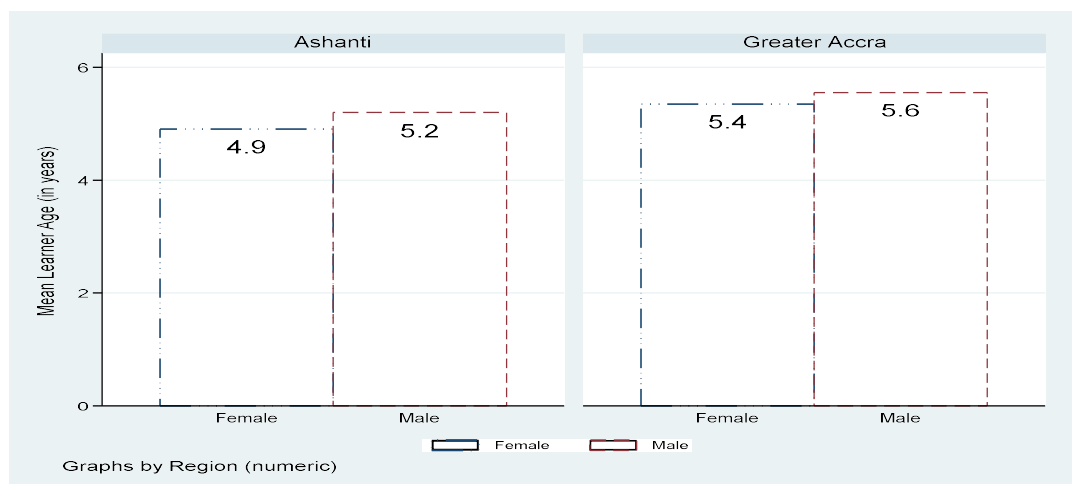
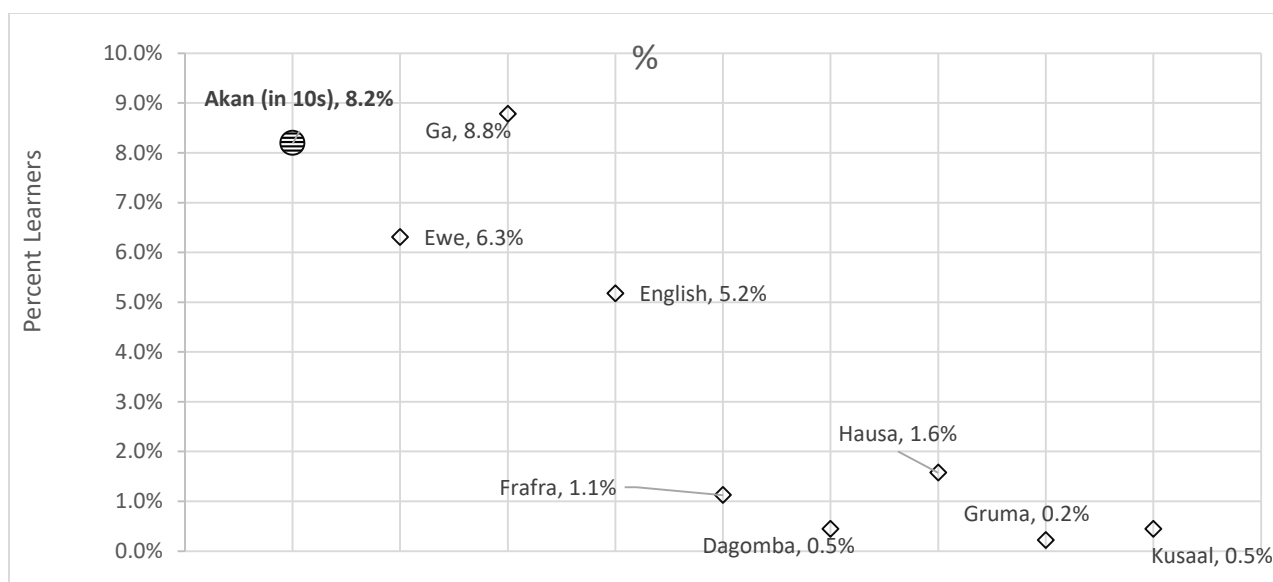


Figure 2 Distribution of learner ages (mean) by gender across regions

In term of distribution of mother tongues and learner's proficient languages, languages in the Akan ethnic group show a dominance. About 82% (9%) of learner's report being proficient in Akan and 60% (11%) as their mother tongue. Thus, there are 40% of pupils for whom instruction in Akan could be a barrier. But 26% are bilingual (3% more so in urban relative to rural areas, 28% relative to 25%) and less than 1% are trilingual. Like Ga, for the second commonest set of learner proficient languages (Ewe and Hausa), some discrepancy between mother tongue and proficiency is observed. In Ewe, there is a 6.3% proficiency and 12% home language gap, whilst Hausa has a 7% mother tongue to 2% proficiency gap. Data suggests many Ewe-speaking children are not receiving sufficient reinforcement to speak it confidently in school. Lastly, the Figure 2 also show that mother tongue shows a larger diversity relative to proficient language. Thus, Akan as a potential lingua franca in the two regions could aid communication if promoted. But, investing in basic glossaries or bilingual aides for major and tiny minority languages (Ga, Ewe, Hausa) could narrow comprehension gaps and reduce the risk of marginalizing minority-language pupils.

Table 8: Distribution of learners' language proficiency

|   | Number of Proficient languages | Ashanti     | Greater Accra | Total       | Urban       | Rural       | Total (n=444) |
|---|--------------------------------|-------------|---------------|-------------|-------------|-------------|---------------|
| 1 |                                | 166 (65.1%) | 158 (83.6%)   | 324 (73.0%) | 135 (71.4%) | 189 (74.1%) | 324 (73.0%)   |
| 2 |                                | 88 (34.5%)  | 29 (15.3%)    | 117 (26.4%) | 53 (28.0%)  | 64 (25.1%)  | 117 (26.4%)   |
| 3 |                                | 1 (0.4%)    | 2 (1.1%)      | 3 (0.7%)    | 1 (0.5%)    | 2 (0.8%)    | 3 (0.7%)      |
|   |                                | 255 (100%)  | 189 (100%)    | 444 (100%)  | 189 (100%)  | 255 (100%)  | 324           |



**Figure 3 Distribution of Learner's Proficient Languages**

To align all language percentages on a common scale, percentage of Akan as a proficient language, is marked "(in 10s)" to imply that it was divided by 10.

## Teacher profiles

**Table 9: Teacher Demographics and Experience by Region and Urban-Rural Status**

|                                  | Mean<br>(N=46) | Std.<br>Dev. | Ashanti<br>(n=13) | Greater<br>Accra<br>(n=33) | Mean<br>Diff | Urban<br>(n=20) | Rural<br>(n=26) | Mean<br>Diff |
|----------------------------------|----------------|--------------|-------------------|----------------------------|--------------|-----------------|-----------------|--------------|
| Age of teacher                   | 38.35          | 14.43        | 27.23             | 42.73                      | -15.5***     | 35.8            | 40.31           | -<br>4.508   |
| Years of teaching at<br>KG level | 9.43           | 4.60         | 8.46              | 9.82                       | -1.357       | 9.35            | 9.50            | -0.15        |
| Years teaching in<br>community   | 5.04           | 3.60         | 6.08              | 4.64                       | 1.441        | 4.75            | 5.27            | -<br>0.519   |

Table 9 displays the age and teaching experiences of the teachers observed. Teachers in Ashanti (27 years on average), are about 16 years younger than those in Greater Accra (42.7 yrs. Urban teachers (aged 36 years on average) are also slightly younger than their rural peers by about 5 yrs. Average years of teaching at the kindergarten level are similar across regions and settings ( $\approx 9$  yrs.). In terms of teacher tenure in the communities hosting the kindergartens, teachers in Ashanti region those in rural settings tend to stay marginally longer than urban ones.

Table 10: Distribution of Teacher Professional Qualifications by Academic Credential

| Professional Qualification              | Academic Qualification |        |         |        | Total |        |
|-----------------------------------------|------------------------|--------|---------|--------|-------|--------|
|                                         | Bachelor's Degree      |        | Diploma |        | Count | %      |
|                                         | Count                  | %      | Count   | %      |       |        |
| Degree in Basic Education               | 11                     | 34.38  | **      | **     | 11.00 | 24.44  |
| Degree in Basic Education – English     | 1                      | 3.13   | **      | **     | 1.00  | 2.22   |
| Degree in Basic Education - Mathematics | 2                      | 6.25   | **      | **     | 2.00  | 4.44   |
| Degree in Early Childhood Education     | 16                     | 50.00  | **      | **     | 16.00 | 35.56  |
| Diploma in Basic Education              | **                     | **     | 7       | 53.85  | 7.00  | 15.56  |
| Diploma in Early Childhood Education    | **                     | **     | 5       | 38.46  | 5.00  | 11.11  |
| Other                                   | **                     | **     | 1       | 7.69   | 1.00  | 2.22   |
| Post Graduate Diploma in Educ           | **                     | **     | 2       | 15.38  | 2.00  | 4.44   |
| Total                                   | 32                     | 100.00 | 13      | 100.00 | 45.00 | 100.00 |

Table 10 shows that the observed teachers are mostly bachelor's degree holders (70%) and 50% (16/32) of them hold Degrees in Early Childhood Education as their Professional Qualification. An additional 39% (5/13) of Diploma holders are, similarly, professionally trained in Early Childhood Education. The rest of the 50% teachers with bachelor's degrees, hold professional qualifications in Education (Basic, English and Mathematics). And the bulk of Diploma holders (54%) hold Diploma in Basic Education as their professional qualifications. This is consistent with national data suggesting that majority of KG teacher may be professional teachers but are not early childhood professionals.

Low numbers of teachers with specialized and postgraduate credentials (2 of 46) suggest targeted professional development in specific subjects and advanced pedagogical training might be necessary. One such area might be professional development in Ewe and Ga in communities where these languages are dominant. For instance, figure 2 asserts that Ewe is reported in the top three community languages 54 % of the time and Ga, 70% of the time. However, at most, only 22% of teachers know Ewe or Ga, and a maximum of just 9% of lessons are delivered in these languages. English is used more in teaching (11%) than teacher proficiency would suggest (2.2%). Twi appeared universal for teaching, matching the near-universal teacher proficiency and popularity in the communities shown in Figure 2. However, Twi (Akan) is only the home language of about 60% of learners and 82% Akan proficient.

Table 11: Teacher Familiarity with Key Cultural Aspects of the Host Communities

| Cultural Dimension             | Mean Rating | SD   | Not familiar (count) | Quite familiar (count) | Very familiar (count) | Not familiar (%) | Quite familiar (%) | Very familiar (%) |
|--------------------------------|-------------|------|----------------------|------------------------|-----------------------|------------------|--------------------|-------------------|
| Family structures and dynamics | 1.98        | 0.71 | 12                   | 23                     | 11                    | 26.09            | 50.00              | 23.91             |
| Cultural values and norms      | 2.09        | 0.66 | 8                    | 26                     | 12                    | 17.39            | 56.52              | 26.09             |
| Communication patterns         | 2.17        | 0.68 | 7                    | 24                     | 15                    | 15.22            | 52.17              | 32.61             |
| Customs and traditions         | 2.02        | 0.75 | 12                   | 21                     | 13                    | 26.09            | 45.65              | 28.26             |
| Religious practices            | 2.22        | 0.63 | 5                    | 26                     | 15                    | 10.87            | 56.52              | 32.61             |
| Play, songs, storytelling      | 1.70        | 0.81 | 24                   | 12                     | 10                    | 52.17            | 26.09              | 21.74             |

Professional development may also target getting teachers familiar with play, songs, and storytelling ethos of the host communities given that 52% of teachers are not familiar with this dimension of communal culture (see Table 11). It may also target dimensions of community culture where most teachers report only moderate familiarity such as “family structures, cultural norms” (50%), and “customs and traditions” (46%). Over 85% of respondents rate themselves as Quite or Very familiar with community “religious practices” and “communication patterns”. Leveraging these may offer low hanging fruits to CRTPs.

#### 4.4 Quantitative data analysis and Interpretation

This baseline assessment captures the current state of educational practices across treatment and control schools before any intervention implementation. The data provides critical insights into existing disparities across gender, geographic, ethnic, and regional dimensions that will serve as the foundation for measuring intervention effectiveness of the use of culturally responsive teaching practices, gender, equity, equality and inclusion and social and emotional learning. A summary of selected baseline indicators and their values have been attached as Annexes.

Table 12: Summary of Implementation Frequencies for CRTP Subdomains (A1–E2) at baseline

| Subdomain                    | 1              | 2             | 3             | Key Takeaway                                                                                                                                                 |
|------------------------------|----------------|---------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1: Language & Communication | 93<br>(40.4%)  | 44<br>(19.1%) | 93<br>(40.4%) | Strong and balanced implementation, with nearly half of all responses being “Often Observed.” It shows high engagement with local languages and expressions. |
| A2: Local Storytelling       | 201<br>(87.4%) | 20<br>(8.7%)  | 9<br>(3.9%)   | Very limited implementation of culturally rich oral storytelling practices.                                                                                  |
| B1: Traditional Games & Play | 204<br>(88.7%) | 13<br>(5.7%)  | 13<br>(5.7%)  | Games are almost completely absent. Teachers are not integrating indigenous play forms like <i>ampe</i> , despite their developmental benefits.              |

|                                  |                |               |               |                                                                                                           |
|----------------------------------|----------------|---------------|---------------|-----------------------------------------------------------------------------------------------------------|
| B2: Community Connections        | 216<br>(93.9%) | 9<br>(3.9%)   | 5<br>(2.2%)   | Negligible community involvement — artisans, elders, or parents are rarely brought in                     |
| B3: Cultural Arts & Crafts       | 213<br>(92.6%) | 10<br>(4.3%)  | 7<br>(3.0%)   | Materials like kente or adinkra and related cultural resources are seriously underused.                   |
| C1: Physical Environment         | 138<br>(60.0%) | 24<br>(10.4%) | 68<br>(29.6%) | Mixed implementation. Seen mainly in seating arrangements                                                 |
| C2: Learning Materials           | 197<br>(85.7%) | 18<br>(7.8%)  | 15<br>(6.5%)  | Mostly non-inclusive culturally relevant themes.                                                          |
| D1: Interactive Learning         | 160<br>(69.6%) | 43<br>(18.7%) | 27<br>(11.7%) | Teachers are using <i>some</i> interactive methods (e.g., drumming, circle time), but inconsistently.     |
| D2: Social & Communal Learning   | 150<br>(65.2%) | 56<br>(24.3%) | 24<br>(10.4%) | Slightly more balanced. Practices like greetings and elder respect appear but inconsistently.             |
| E1: Observation-Based Assessment | 187<br>(81.3%) | 23<br>(10.0%) | 20<br>(8.7%)  | Low integration of cultural contexts (e.g., cultural behaviors or language development are not checked).  |
| E2: Performance-Based Assessment | 161<br>(70.0%) | 30<br>(13.0%) | 39<br>(17.0%) | One of the stronger “Often Observed” due mainly to higher the inclusion of language communication skills. |

*Note: Percentages reflect the share of responses in each category, using as denominator the total number of valid observations across all items within each subdomain for all teachers (5 items by 46 teachers = 230). 1 =>Not Observed (count), =>Sometimes Observed (count), and 3 =>Often Observed (count)*

The implementation of Culturally Responsive Teaching Practices reveals a stark contrast between language-based and culturally-embedded practices. Language and communication (A1) emerge as the strongest area, with 40% of observations showing frequent implementation and another 19% showing occasional use. This suggests that teachers are making meaningful efforts to incorporate local languages and expressions into their instruction, creating a foundation for cultural responsiveness. However, the data reveals significant gaps in deeper cultural integration. Traditional storytelling (A2), despite being a cornerstone of Ghanaian cultural transmission, appears in only 12.6% of classrooms with any frequency. Even more concerning, traditional games and play (B1) are almost entirely absent, with 88.7% of observations showing no implementation despite their proven developmental benefits and cultural significance. Community connections (B2) fare equally poorly, with 93.9% showing no evidence of involving elders, artisans, or community members in learning experiences.

The physical environment (C1) shows moderate integration, with 29.6% of classrooms demonstrating frequent cultural representation in their setup, though learning materials (C2) remain predominantly Western-oriented. Teaching methods show mixed results, with interactive learning (D1) present in 30.4% of classrooms to some degree, while social and communal learning approaches (D2) appear slightly more frequently at 34.7%. Assessment practices reveal minimal cultural contextualization, with observation-based approaches (E1) rarely incorporating cultural behaviours or multilingual development indicators.



While teachers demonstrate strong commitment to linguistic inclusion, deeper cultural practices remain largely absent from classrooms. The data suggests that current teacher preparation and resource availability support basic language integration but fail to equip educators with tools for comprehensive cultural responsiveness.

Table 13: Summary of Observed Social and Emotional Learning (SEL) Competencies Among Learners Across Domains

| SEL Domain                            | 1               | 2               |  | 3              | 4              | Key Takeaway                                                                                                                    |
|---------------------------------------|-----------------|-----------------|--|----------------|----------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>A: Self-Awareness</b>              | 556<br>(18.0%)  | 1082<br>(35.0%) |  | 885<br>(28.6%) | 585<br>(18.4%) | <b>Relatively strong SEL performance;</b> nearly half of all responses were in the 'Often' or 'Consistent' range.               |
| <b>B: Self-Management</b>             | 742<br>(24.1%)  | 1114<br>(36.0%) |  | 796<br>(25.6%) | 456<br>(14.4%) | <b>Mixed self-management: frequent</b> 'Rarely' and 'Never' responses suggest low regulation and initiative.                    |
| <b>C: Social Awareness</b>            | 943<br>(30.2%)  | 1274<br>(40.3%) |  | 681<br>(21.5%) | 210<br>(6.6%)  | <b>Weakest domain overall;</b> rarely are social awareness indicators consistently observed.                                    |
| <b>D: Relationship Skills</b>         | 629<br>(20.0%)  | 838<br>(26.5%)  |  | 709<br>(22.4%) | 488<br>(15.1%) | <b>Moderate social engagement:</b> while some skills are present, peer conflict resolution is particularly lacking.             |
| <b>E: Responsible Decision Making</b> | 1164<br>(36.6%) | 1431<br>(45.0%) |  | 713<br>(22.4%) | 243<br>(7.6%)  | <b>Decision-making is underdeveloped;</b> many learners struggle with reasoning, consequences, and making constructive choices. |

Notes: Column Titles: Columns “1” to “4” represent the four response categories: 1 = Never, 2 = Rarely, 3 = Often, 4 = Consistently observed social-emotional learning behaviours. Percentage Computation: Percentages reflect the proportion of all observations in each category, using the sum of domain-level responses across all items as the denominator (Number of items by number of learners observed).

The SEL assessment reveals concerning patterns in early learners' socio-emotional development across the five domains. Self-awareness (Domain A) shows the strongest performance, with 47% of observations falling in the "often" or "consistent" categories, suggesting that children demonstrate reasonable ability to understand their emotions and strengths. However, even in this strongest domain, 18% of children never display self-awareness indicators, highlighting significant developmental gaps.

Self-management (Domain B) presents a mixed picture, with 40% of children showing positive regulation skills while 24.1% never demonstrate self-control or initiative-taking behaviours. This disparity suggests that classroom environments may not consistently support the development of executive function skills critical for academic success.

Social awareness (Domain C) emerges as the weakest domain, with 70.5% of observations showing children rarely or never demonstrating awareness of others' emotions, social cues, or community dynamics. Only 28.1% of children consistently show social awareness skills, indicating a critical gap in interpersonal competency development that may affect classroom collaboration

and peer relationships. Relationship skills (Domain D) show moderate development, with 37.5% of children demonstrating positive peer interactions frequently or consistently. However, 46.5% rarely or never show effective relationship skills, suggesting that many children struggle with communication, cooperation, and conflict resolution. Responsible decision-making (Domain E) reveals the most significant challenges, with 81.6% of children rarely or never demonstrating age-appropriate reasoning about consequences or constructive choice-making. Only 30% show these skills with any consistency, indicating fundamental gaps in cognitive-behavioural development.

The data reveals uneven SEL development with particular weaknesses in social awareness and decision-making. These patterns suggest that current early childhood approaches may not adequately support the interpersonal and cognitive-behavioural skills essential for school readiness and later academic success

Table 14: Summary of Observed Gender-Equitable and Inclusive Teaching Practices Among Kindergarten Teachers

| Subdomain                                    | 1              | 2              | 3              | Key Takeaway                                                                                              |
|----------------------------------------------|----------------|----------------|----------------|-----------------------------------------------------------------------------------------------------------|
| <b>A: Teaching &amp; Learning Strategies</b> | 125<br>(24.5%) | 123<br>(24.1%) | 304<br>(51.4%) | Widely adopted inclusive strategies, especially in learner engagement and equitable participation.        |
| <b>B: Use of Resources</b>                   | 194<br>(59.2%) | 65<br>(19.8%)  | 63<br>(19.2%)  | Resources remain the least implemented dimension, with over 59% marked as never used.                     |
| <b>C: Organization of Classroom</b>          | 88<br>(28.5%)  | 75<br>(24.3%)  | 205<br>(66.3%) | Inclusive classroom design is a clear strength, with 66% of practices frequently observed.                |
| <b>D: Learner Support</b>                    | 104<br>(28.3%) | 102<br>(27.8%) | 162<br>(44.0%) | Supportive interactions for diverse needs are moderately applied, with growth seen in accommodations.     |
| <b>E: Assessment Practices</b>               | 135<br>(36.6%) | 71<br>(19.2%)  | 162<br>(44.0%) | Assessment practices are split; while praise and demonstrations are common, tools and peer practices lag. |

*Note: Column Titles: “1” = Never Used, “2” = Rarely Used, “3” = Often Used. Percentage Computation: Each percentage is calculated as the proportion of observations in a given response category, relative to the total number of teachers observed per subdomain (N = 46 × number of items per subdomain).*

The analysis of gender-equitable teaching practices reveals significant variation across implementation domains. Teaching and learning strategies (Domain A) represent the strongest area, with 51.4% of practices frequently observed and only 24.5% never implemented. This suggests that teachers are actively working to ensure equitable participation and engagement across gender lines in their instructional approaches. Classroom organization (Domain C) also shows strength, with 66.3% of practices frequently observed, indicating that teachers are generally successful in creating physical learning environments that support inclusive participation. The moderate performance in learner support (Domain D), with 44% frequent implementation,

suggests that teachers are making efforts to accommodate diverse learning needs, though consistency remains a challenge.



However, resource utilization (Domain B) emerges as a critical weakness, with 59.2% of inclusive resource practices never observed and only 19.2% frequently implemented. This pattern likely reflects both limited availability of gender-inclusive materials and insufficient training on how to use existing resources in ways that promote equity. Assessment practices (Domain E) show mixed results, with 44% of equitable assessment approaches frequently observed but 36.6% never implemented. While teachers appear to use praise and demonstrations effectively, they struggle with implementing peer assessment strategies and using diverse evaluation tools that account for different learning styles and cultural backgrounds.

Teachers demonstrate strong commitment to inclusive instruction and classroom organization but are significantly constrained by resource limitations and gaps in assessment practices. The data suggests that professional development should focus on resource optimization and diversified assessment strategies.

#### **4.4.1 Patterns of KGE and CRTP levels versus SEL outcomes**

Tables 15 below summarize the observed patterns of KGE and CRTP levels versus SEL outcomes. It can be deduced that both CRTP and KGE are significantly related to SEL outcomes, such that High KGE and High CRTP are both associated with higher proportions of learners achieving High SEL. Moderate levels of KGE and CRTP do not yield proportional SEL benefits—these may reflect incomplete or superficial practice.

Table 15: Distribution of Learners' SEL Levels Across Kindergarten Gender Equity (KGE) Categories

| KGE ↓ \ SEL →           | Low SEL                      | Moderate SEL                  | High SEL                     | Total           |
|-------------------------|------------------------------|-------------------------------|------------------------------|-----------------|
| <b>Low (&lt;1.5)</b>    | 28 [5.7]<br>(51.85%, 19.05%) | 25 [1.0]<br>(46.30%, 9.92%)   | 1 [3.7]<br>(1.85%, 2.22%)    | 54<br>(12.16%)  |
| <b>Moderate (1.5–2)</b> | 65 [7.2]<br>(46.10%, 44.22%) | 73 [0.6]<br>(51.77%, 28.97%)  | 3 [8.9]<br>(2.13%, 6.67%)    | 141<br>(31.76%) |
| <b>High (&gt;2)</b>     | 54 [9.8]<br>(21.69%, 36.73%) | 154 [1.1]<br>(61.85%, 61.11%) | 41 [9.8]<br>(16.47%, 91.11%) | 249<br>(56.08%) |
| <b>Total</b>            | 147<br>(33.11%, 100%)        | 252<br>(56.76%, 100%)         | 45<br>(10.14%, 100%)         | 444<br>(100%)   |

$\chi^2 = 47.95$ ,  $p\text{-value} < 0.001$  Chi-2 contributions in [ ], row and column percentages in (##,##)

It is evident from the table that the relationship between Kindergarten Gender Equity practices and student SEL outcomes reveals a clear positive association that strengthens with higher implementation levels. Among classrooms with low KGE implementation, 51.85% of learners demonstrate low SEL competencies, with only 1.85% achieving high SEL levels. This pattern suggests that inadequate attention to gender equity creates an environment that undermines socio-emotional development for all children.

Moderate KGE implementation shows improvement but with concerning inconsistencies. While the proportion of children with low SEL decreases to 46.10%, high SEL achievement remains minimal at 2.13%. This suggests that superficial or inconsistent equity practices may not provide sufficient support for optimal socio-emotional development. The most striking pattern emerges in classrooms with high KGE implementation, where the proportion of children with low SEL drops dramatically to 21.69%, while those achieving high SEL increases substantially to 16.47%. Additionally, 61.85% of children in these classrooms demonstrate moderate SEL competencies, indicating that comprehensive gender equity practices create learning environments conducive to socio-emotional growth. The statistical significance ( $\chi^2 = 47.95$ ,  $p < 0.001$ ) confirms that this relationship is not due to chance, suggesting that gender-equitable teaching practices serve as a protective factor for children's socio-emotional development across demographic groups.

High-quality gender equity implementation is strongly associated with improved SEL outcomes, while low or moderate implementation correlates with concerning SEL deficits. This relationship suggests that gender equity practices function as a fundamental component of supportive learning environments rather than as an isolated intervention.

Table 16: Distribution of Learners' SEL Levels Across Culturally Responsive Teaching Practice (CRTP) Categories

| <b>CRTP ↓ \ SEL →</b>   | <b>Low SEL</b>                | <b>Moderate SEL</b>           | <b>High SEL</b>              | <b>Total</b>    |
|-------------------------|-------------------------------|-------------------------------|------------------------------|-----------------|
| <b>Low (&lt;1.5)</b>    | 105 [0.9]<br>(30.26%, 71.43%) | 200 [0.0]<br>(57.64%, 79.37%) | 42 [1.3]<br>(12.10%, 93.33%) | 347<br>(78.15%) |
| <b>Moderate (1.5–2)</b> | 28 [0.4]<br>(37.33%, 19.05%)  | 44 [0.0]<br>(58.67%, 17.46%)  | 3 [2.8]<br>(4.00%, 6.67%)    | 75<br>(16.89%)  |
| <b>High (&gt;2)</b>     | 14 [6.2]<br>(63.64%, 9.52%)   | 8 [1.6]<br>(36.36%, 3.17%)    | 0 [2.2]<br>(0.00%, 0.00%)    | 22<br>(4.95%)   |
| <b>Total</b>            | 147<br>(33.11%, 100%)         | 252<br>(56.76%, 100%)         | 45<br>(10.14%, 100%)         | 444<br>(100%)   |

$\chi^2 = 15.50$ ,  $p\text{-value} = 0.004$  Chi-2 contributions in [ ], row and column percentages in (%,#%)

The data reveals that the relationship between Culturally Responsive Teaching Practices and SEL outcomes presents a complex pattern that differs from the KGE relationship. In classrooms with low CRTP implementation, which represent 78.15% of all observations, 30.26% of learners show low SEL while only 12.10% achieve high SEL competencies. This indicates that the absence of cultural responsiveness may limit children's socio-emotional development, though the effect appears less dramatic than with gender equity practices.

Moderate CRTP implementation shows mixed results, with 37.33% of children demonstrating low SEL and only 4% achieving high SEL levels. This pattern suggests that partial or inconsistent cultural responsiveness may not provide the cultural affirmation and identity support necessary for optimal socio-emotional development. Surprisingly, the high CRTP category, representing only 4.95% of classrooms, shows 63.64% of children with low SEL and no children achieving high SEL competencies. This counterintuitive finding may reflect several factors: the small sample size in this category, potential implementation quality issues, or the possibility that intensive cultural practices require time to show positive effects on SEL outcomes. The significant chi-square test ( $\chi^2 = 15.50$ ,  $p = 0.004$ ) indicates a statistically meaningful relationship, though the patterns suggest that effective CRTP implementation may require more nuanced measurement or longer observation periods to capture its full impact on socio-emotional development.



Unlike gender equity practices, the relationship between cultural responsiveness and SEL outcomes is more complex and potentially non-linear. The data suggests that cultural responsiveness may require higher implementation quality or longer exposure time to demonstrate positive effects on children's socio-emotional competencies.

Summarily, the foregoing analyses reveal that while Ghanaian kindergarten teachers demonstrate commitment to linguistic inclusion and basic equity practices, substantial gaps exist in implementing comprehensive culturally responsive and gender-equitable pedagogies. ***The strong relationship between gender equity and SEL outcomes, contrasted with the more complex CRT-P-SEL relationship, suggests that foundational inclusive practices may serve as prerequisites for effective cultural responsiveness.*** These baseline findings indicate that successful intervention will require addressing resource constraints, enhancing teacher cultural competency, and developing more sophisticated approaches to integrating cultural practices with socio-emotional learning objectives.





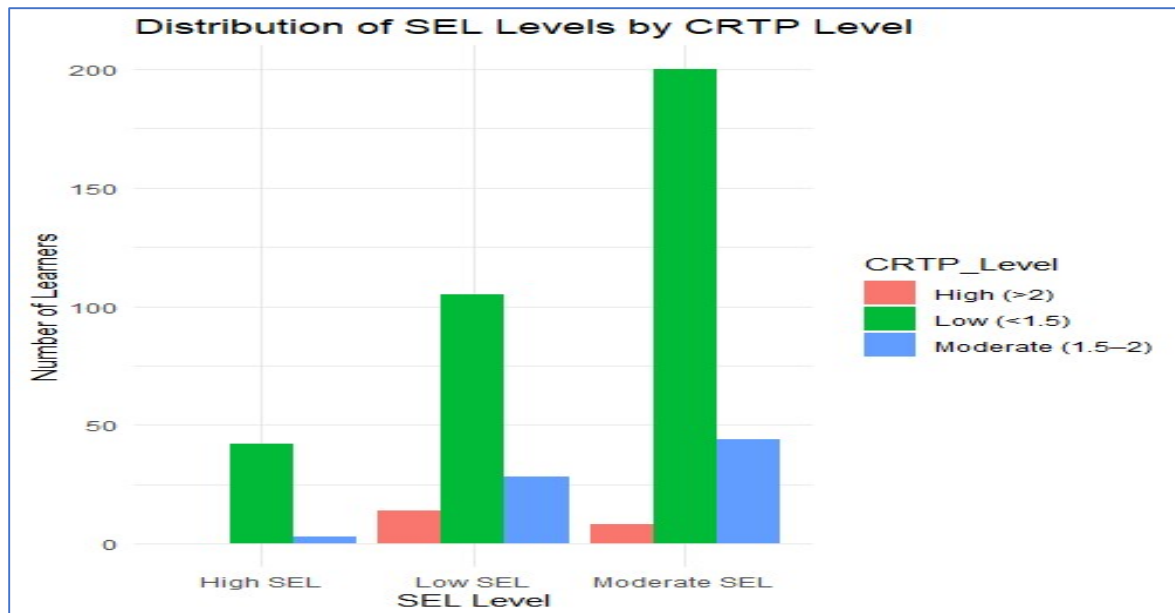


Figure 04: Distribution of SEL Levels by CRTP Level

The chart illustrates learners' Social and Emotional Learning (SEL) outcomes based on their classroom's CRTP level. While Moderate CRTP shows mixed SEL outcomes, High CRTP classrooms are strongly associated with higher SEL levels, though still numerically few.

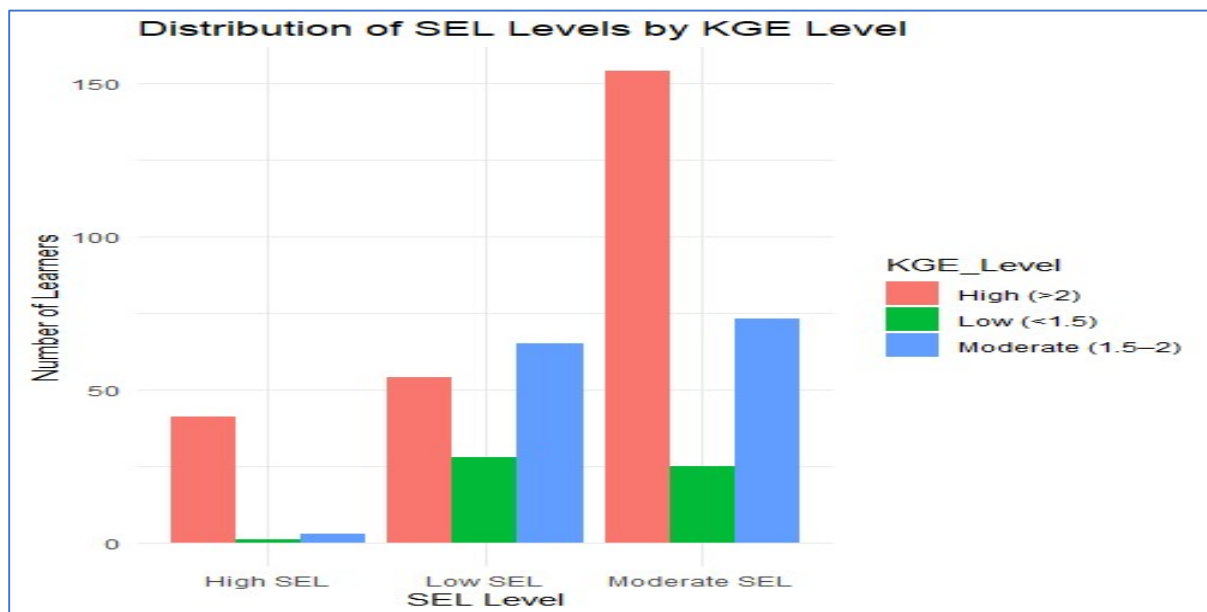


Figure 05: This chart shows how learners' SEL levels vary across different levels of observed gender equity practices in classrooms. High KGE is clearly associated with stronger SEL outcomes, including the highest proportion of learners with High SEL levels.

#### 4.5 Qualitative data analysis and interpretation

Qualitative data gathered consists of interview and observation data that sought to explore the perspectives of key informants who are major stakeholders in education delivery in the communities. These are;

- Kindergarten teachers
- Opinion leaders and Assembly men and women
- Traditional and Christian church leaders
- Parent Teacher Association members

#### **4.5.1 Biographic data of Kindergartens Teachers**

Interview with the teachers showed that only a few of them were trained as early childhood practitioners. Majority of them are diploma or degree in basic education who have been posted to teach the learners as evidenced by the quantitative data. Only a few of the teachers have had university education prior to teaching at kindergarten. From the key informant interviews in Accra, the teacher with the longest teaching experience at the kindergarten level has taught the learners for 12 years.

The data reveals a significant mismatch between teacher qualifications and early childhood education requirements. Most kindergarten teachers are generalist basic education practitioners rather than specialized early childhood educators, with only a few having university-level preparation specifically for this age group. However, for both Ashanti Region and Accra, majority of the teachers have been teaching for more than five years, suggesting some good institutional knowledge exists, but the overall pattern indicates that kindergarten positions are often filled by teachers without specialized training for this critical developmental stage.

This training gap has profound implications for culturally responsive practice use. Most of the Teachers do not have adequate both the pedagogical foundation for early childhood development and the cultural competency training necessary to effectively serve diverse learners. The reliance on generalist teachers suggests systemic undervaluation of early childhood education as a specialized field requiring distinct expertise.

#### **4.5.2 Ethnicity of learners and Teacher linguistic competence**

Teachers and learners linguistic background was also explored. The anticipation is that Greater Accra, Ga would be predominantly used while in Ashanti Region Asante Twi or related Akan dialects suffices. Interestingly, the dynamics that played out suggests that the language of instruction is highly depended on the communities where the schools are located and learners socio-economic and linguistic background. Accra being a cosmopolitan city, has several ethnic groups and this also reflects in the ethnic groups of the children and the communities where the kindergarten schools are located. The main ethnic groups of children are Ga, Akan and Ewe whereas it is Akan in Ashanti Region. There are also a few orders from the northern part of Ghana but this is not dominant in any of the schools visited as shown in the quantitative analysis.

Many of the teachers however are from the Akan or Ewe background though some of them speak other languages in addition to their mother tongue. Interestingly, in Accra, where Ga is the local language spoken, teachers who speak Ga proficiently and teach with it were visibly missing in most of the schools visited and so where a community is dominated by Gas, the tendency was for such schools to have Akan or Ewe teachers. This created problem for the teachers as they have to rely on the children or other teachers to help them with translation. This has implication



for culturally responsive learning. Teachers who have problem with communication with the learners ended up using the English language as the main language for communicating with the children.

The foregoing indicates a critical disconnect emerging between community demographics and teacher backgrounds, particularly in Greater Accra's cosmopolitan context. While learners represent diverse ethnic groups (Ga, Akan, Ewe, and northern ethnicities), teacher linguistic competencies often misalign with community languages. Most notably, in Ga-dominated communities, teachers proficient in Ga are absent forcing reliance on children or colleagues for translation. The picture is quite different in Ashanti Region where are teacher retorted;

*“I often use the Twi language in my lessons compared to the English language-approximately 70% Twi and 30% English. Twi is dominant in the community, so learners find it easier dealing with the local language than with English. We often have to interpret what is said in English into Twi before they are able to grasp the lesson”.*

This linguistic mismatch creates instructional challenges. Teachers resort to English as the primary instructional language, contradicting Ghana's language policy and undermining cultural responsiveness. The irony is, in communities where Ga should serve as the foundation for learning, children become interpreters for their teachers, reversing the natural learning hierarchy and potentially undermining teacher authority and instructional effectiveness.

The dominance of Akan and Ewe speakers among teachers, while Ga communities lack Ga-speaking educators, suggests systemic issues in teacher deployment that ignore community linguistic needs. This pattern likely replicates in other regions where teacher linguistic backgrounds do not match community demographics.

Significant teacher-community linguistic mismatches undermine culturally responsive education and force inappropriate reliance on English instruction, particularly affecting Ga-speaking communities.

### **4.5.3 Perspectives on using Culturally Responsive Teaching practices**

Teachers opinion was explored on what it what culturally responsive teaching practices are. These generated varying responses reflecting their divergent understanding of the concept. For instance, a teacher in Ashanti region indicated that;

*“Culturally responsive teaching is about using our local languages in teaching. Aside from the language, it also entails the use of our local artefacts, teaching learning materials and encouraging people to patronize our local foods and local dresses...”*

In response to what it means to teach children in a culturally responsive manner, one of the teachers who tried to explain what this entails said the following;

*“We say culture is a value of life. So looking at culture in a kindergarten, it means beginning with the children, teaching them our culture; introducing them into our culture. That is the way we talk, the way we greet, the way we dress, the way we behave towards people, the way we receive people.”*

From the responses, it was noted that kindergarten education in Ghana does not really address cultural issues. This is because there are lack of teachers and resources in the community schools studied in the Greater Accra Region that could help in doing so. This may however not reflect the reality in the country as Accra where the studies were carried out is basically a cosmopolitan city.

The teachers assured, it is possible to improve the current teaching approaches that almost neglected the culture of the children. However, there will be the need to train more teachers in local languages and also more about the Ghanaian culture to improve the current situation that exists in kindergarten schools.

Teachers demonstrate varied and often surface-level understanding of culturally responsive pedagogy. Responses range from basic language inclusion “*using our local languages in teaching*” to broader cultural integration involving “local artefacts, teaching learning materials...local foods and local dresses”. Some teachers show deeper awareness, recognizing culture as encompassing behavioural norms, greetings, dress codes, and interpersonal interactions.



However, the variations in understanding suggest insufficient professional development on culturally responsive approaches. Teachers appear to be constructing their own conceptions based on intuition rather than formal training, leading to inconsistent implementation. The more comprehensive responses indicate potential for deeper practice if supported with appropriate training and resources.

The recognition that “*kindergarten education in Ghana does not really address cultural issues*” reflects teacher awareness of systemic gaps, though they express optimism about improvement potential with proper training and resources. Teachers show varied understanding of culturally responsive teaching, ranging from basic language use to comprehensive cultural integration, indicating need for systematic professional development.

#### 4.5.4 Important cultural values to be integrated in the curriculum

Furthermore, respondents' views were also solicited on what they consider important values and cultural practices to be integrated in the curriculum. In Accra, most of the respondents including the teachers said they have cultural values in the various communities. They mentioned the following as;

- respect for elders,
- Values of Christian principles (at Abokobi).
- greetings
- discipline
- honesty
- truthfulness
- modesty
- decent dressing (as that is now becoming a major social issue)
- learning to say 'thank you' at all times.

These values were mentioned by both the teachers in the schools and the key informants including opinion leaders interviewed. They explained that children are also taught at the household level to respect these values. At Abokobi, a typical Ga community which bases its cultural values on Christian beliefs and principles, it was evident that these values are also inculcated in the children at both the church and household levels. Learners at the kindergartens visited demonstrated aspects of these values when visitors enter their classrooms by getting up to welcome all visitors in a very friendly manner.

In Ashanti Region, similar values and cultural practices are considered very important. A teacher intimated that; *"Language and cultural elements like dress codes, respect, unity/diversity, and greetings should be promoted..."*

Both teachers and community leaders consider these values and cultural practices as relevant since it would; *"it will improve the confidence level of the learners. For example, if a local language is used in teaching, it motivates learners to express their thoughts confidently. It will also help to preserve the culture of society by transferring the culture to the younger generation"* as indicated by a KG teacher.

Another teacher said that;

*"...On some days, the children are made to dress like their future careers. I believe it encourages the children to learn hard so that they wear those uniforms in some years to come. Mostly, the children focus on dressing as either doctors, nurses or teachers and I think that takes away the cultural element because farming and other local occupations are not represented. The teachers should also emphasize on teaching our moral values since ours differ from the people in the Western world."*

It can be gleaned from the data that both teachers and community leaders identify consistent core values for educational integration: respect for elders, greetings, discipline, honesty, truthfulness, modesty, and decent dressing. The emphasis on Christian principles in some

communities (notably Abokobi) shows how religious and cultural values intersect in educational contexts.

The values identified reflect traditional Ghanaian social norms and suggest strong community consensus about what children should learn. The observation that children demonstrate these values when visitors arrive indicates that some cultural transmission is occurring, though perhaps more through informal socialization than systematic curriculum integration. The concern about Western cultural influence through social media highlights contemporary challenges to cultural preservation. In sum, strong community consensus exists on core cultural values for education, but traditional cultural practices face increasing competition from Western media influences.

#### **4.5.5 Language and Resources Materials used in Teaching Learners**

Discussion with the teachers and education officers suggests that culturally responsive teaching practices are not intentionally planned in the curriculum and consequently there was a lack of resources to adequately handle those lessons. It was observed that the teachers' own improvisation with limited resources is what has supported culturally teaching and learning. However, it was also observed that in Ashanti Region teachers use some local materials to form cultural symbols and representations of the environment such as rivers, trees, rocks and wild animals for teaching. In the observed classrooms, teachers displayed some of these paintings on the walls whilst others crafted with clay as artefacts of local cultural representations stood on special stands for teaching and learning. To underscore the inadequacies and efforts;

A KG teacher stated that;

*“GES curriculum does not focus much on cultural teaching pedagogies. They only appear in few parts and that the existing curricular does not emphasis cultural aspects but rather the teachers themselves incorporate in their lesson notes some aspects of cultural practices, such as songs and games/play to balance the GES curricula”*

A headmaster also pointed out that;

*“Many Western elements conflict with our cultural values, so we need to carefully blend traditional and modern methods as well as local objects and images into teaching. One challenge we face is the lack of training for new courses in the curriculum, as it's assumed teachers can handle any subject, which isn't true.”*

Regarding the use of language, it was observed that the English language was the main language used in teaching learners in both regions. Resources found in the classrooms are mostly from the Western cultural backgrounds, and where there are local resource materials in the classrooms, they are just a few. Learners continue to be taught rhymes that have Western origin and have been used for several decades, such as *‘I see the moon and the moon sees me, God bless the moon and God bless me’*. The same applies to the songs that the learners are taught. Though they are taught a few local songs, this appear to be very minimal.

Below is what a parent has to say about his two kids when they come home;

*“I have two kids, and they come home every day singing the English rhymes. Singing the English rhymes, is very good, it makes them fluent in the language. But I wonder how I will be able to let them speak Fanti”*

It is not surprising to see most teachers using English language to teach early learners instead of a Ghanaian language spoken in the community the school is located as directed by Ghana’s language policy, this is driven by a myriad of factors. Both Kumasi and Accra are largely cosmopolitan with children from socio-economically and linguistically diverse families. As shown by the quantitative data most of the children and teachers do not speak and are not proficient in the Ghanaian languages spoken in communities that the schools are located. Besides, most Ghanaian parent associate intelligence with proficiency in the English Language and elitism as result of which speak English with children.

A teacher explains that; “...There are many instances where learners speak English fluently at home but struggle to understand some of what they’re saying. Some people even think that teachers who use the local language aren’t good enough, but that’s often not the case...”

The data reveals systemic curriculum inadequacies regarding cultural content. Teachers report that the GES curriculum “does not focus much on cultural teaching pedagogies.” and allocates only one week annually for cultural education. This minimal allocation contrasts sharply with children’s enthusiasm for cultural activities, suggesting missed opportunities for engagement and learning.



Resource limitations compel teacher improvisation, with educators creating local materials from clay, displaying cultural paintings, and incorporating traditional symbols. However, these efforts remain individual initiatives rather than systematic institutional support. The predominance of Western-oriented materials and rhymes demonstrates how resource constraints perpetuate cultural displacement. The lack of training for new curriculum components, combined with assumptions that teachers can handle any subject, reveals inadequate professional development support. This “sink or swim” approach particularly disadvantages cultural content, which requires specialized knowledge and sensitivity.

A complex dynamic emerges around language use, with English dominating instruction despite policy directives favouring local languages. Teachers report using varying ratios (one teacher uses

"70% Twi and 30% English"), but overall English predominates. This occurs despite evidence that children better comprehend local language instruction.

Parental attitudes significantly influence language choices, with many parents associating English proficiency with intelligence and social mobility. One parent's concern about maintaining Fanti fluency while appreciating English rhymes exemplifies this tension. The perception that teachers using local languages "aren't good enough" creates professional pressure toward English instruction. The cosmopolitan nature of urban areas complicates language choices, as diverse linguistic backgrounds make selecting appropriate local languages challenging. However, the data suggests this complexity often becomes justification for defaulting to English rather than developing multilingual approaches.

Despite policy support for local language instruction, English dominates teaching due to parental expectations, teacher perceptions of professionalism, and urban linguistic complexity.

#### **4.5.6 Appreciation of Local Culture**

Because of the cosmopolitan nature of the Greater Accra Region where teachers do not necessarily come from the Ga cultural background, they appear not to be enthused about learning the culture of the communities where they teach and as such, not eager to use it in teaching and learning. Consequently, in class, they do not delve so much into the culture of the learners. Attempts to do so takes much of their time as they have to bring in other colleague teachers to assist them with the language and whatever they want to do about culture.

The new curriculum to a large extent overlooks culture. It has only one week devoted for teaching learners at the kindergarten about their culture. This according to the key informants and the teachers is inadequate for teaching the learners about their culture. According to the teachers, the learners get very excited when they have to teach them about their culture because they bring resources from their homes to prepare for that week. They also make them do traditional dressing which they children enjoy and always look up to but the curriculum limits them to doing so for only one week. Thus, to a large extent, it appears the curriculum overlooks the importance of culture or do not make more time for teaching the children about their culture.

To underscore the dearth of attention given to culturally responsive practices in the kindergarten curriculum, A headteacher revealed that;

*"the training provided is insufficient. While we have Professional Learning Communities (PLCs) that focus on specific subjects that teachers struggle with, such as mathematics and languages, they do not adequately address the need for cultural training".*

The teachers also came across as insensitive to the cultural resources that abound in the environments they find themselves teaching. This also makes it difficult for them to use culturally responsive resources in teaching the learners as they are always waiting and hoping to get resources from government. The key informants recommend the use of local language and oral tradition more in the education of learners.

The foregoing implies that, teachers in cosmopolitan areas show limited enthusiasm for learning local cultures, particularly when teaching outside their ethnic communities. This cultural indifference undermines responsive teaching and forces time-consuming workarounds when cultural content is required. The reluctance to engage with local culture suggests both practical barriers (language differences) and attitudinal challenges.

The current kindergarten curriculum's minimal cultural focus fails to develop either teacher capacity or learner cultural identity. However, children's excitement during cultural activities indicates significant untapped potential for engagement and learning. Teachers appearing to wait for external resources rather than utilizing abundant local cultural materials, suggests need for training in community resource identification and development. This external orientation undermines community cultural assets and perpetuates dependence on outside materials.

It may be concluded that, limited teacher cultural appreciation, particularly in cosmopolitan settings, combined with minimal curriculum support, undermines cultural responsiveness despite children's evident enthusiasm for cultural learning.

Summarily, the qualitative analysis reveals systemic barriers to culturally responsive early childhood education in Ghana, stemming from teacher preparation gaps, linguistic mismatches, resource constraints, and policy inadequacies. While teachers and communities demonstrate awareness of cultural values and children show enthusiasm for cultural learning, structural challenges prevent effective implementation.

Key findings include: inadequate teacher training in both early childhood pedagogy and cultural competency; significant mismatches between teacher linguistic abilities and community languages; minimal curriculum allocation for cultural content despite strong community consensus on important values; resource limitations forcing individual teacher improvisation; and parental preferences for English instruction that conflict with culturally responsive approaches.

The data suggests that successful intervention requires multi-level approaches addressing teacher preparation, curriculum development, resource provision, and community engagement around language and cultural preservation. The evident enthusiasm for cultural activities among children indicates significant potential for improvement if systemic barriers are addressed through comprehensive reform rather than isolated interventions.

Most critically, the analysis reveals that culturally responsive education cannot be achieved through individual teacher efforts alone but requires institutional transformation including specialized teacher preparation, adequate curriculum time allocation, appropriate resource development, and community dialogue about balancing local cultural imperatives with global educational goals.

## **4.6 Summary of Key Observations of Kindergarten learners in Ashanti Region**

### **School Diversity Profile**

The Ashanti Region schools served remarkably diverse learner populations representing multiple ethnic groups including Ashanti, Ewe, Fante, Hausa, and northern ethnicities. Despite significant cultural, linguistic, and socioeconomic differences, learners interacted harmoniously without evidence of bias, exclusion, or discrimination.

This multicultural environment consistently fostered unity, tolerance, and belonging, with diversity functioning as a classroom strength rather than barrier. Children's natural openness, combined with teachers' equity promotion efforts, created inclusive learning spaces that celebrated and leveraged cultural assets of learners.

### 1. Self-Awareness

Learners across the Ashanti Region demonstrated varying levels of self-awareness influenced primarily by age, teacher experience, and classroom environment quality. In less supportive environments, self-awareness appeared underdeveloped, with learners struggling to express feelings or discuss personal and cultural identities. Many children had particular difficulty identifying their mother tongues, especially those whose home languages differed from the dominant community language.

Conversely, in more supportive classroom settings, learners displayed stronger self-awareness, confidently discussing their feelings and home lives, indicating healthy self-expression. The most advanced expressions occurred in well-managed classrooms where learners showed remarkable confidence in articulating thoughts, emotions, interests, and talents, particularly during cultural activities like traditional storytelling.

### 2. Self-Management

Self-management skills varied significantly across schools, primarily shaped by classroom conditions and available resources. In well-resourced environments, learners demonstrated calm behaviour, self-discipline, and independence, persisting through difficult tasks and following rules without constant reminders.

However, overcrowded classrooms with inadequate resources presented substantial challenges. Despite these constraints, learners generally maintained respect for teachers and followed basic rules, though they showed limited initiative and primarily acted when directly instructed. The most advanced self-management was observed where peer support systems were established, with children proactively helping struggling classmates through gestures and translation support.

### 3. Social Awareness

Social awareness development was initially challenging to observe through natural classroom interactions. Assessment techniques (such as gift-giving) by enumerators revealed that while some learners required prompting to express gratitude, others instinctively demonstrated appreciation, particularly in more structured classroom environments.

Learners consistently demonstrated strong peer recognition abilities, confidently identifying classmates' strengths and talents when prompted. Across all settings, children understood



classroom rules as tools for fairness and improved learning rather than mere restrictions, demonstrating developing social responsibility through appropriate behaviour in shared spaces.

#### 4. Relationship Skills

Strong peer relationships were evident across all observed classrooms, with systematic sharing activities revealing that every learner had established friendships and no child appeared socially isolated. Many children demonstrated multiple friendships and moderate levels of social comfort and engagement.

Learners consistently demonstrated help-seeking behaviours, confidently requesting assistance and materials from both teachers and peers, reflecting supportive classroom cultures. Notable observations revealed that children's social behaviours varied by context - some reserved during formal instruction became highly expressive during informal interactions.

#### 5. Responsible Decision-Making

Learners demonstrated strong natural curiosity across all settings, very typical of every normal growing child, actively engaging with new experiences and eagerly seeking information about their environment. In classroom contexts, children consistently made thoughtful and kind choices, including sharing materials, taking turns, and helping peers without adult prompting.

However, most learners in the 4-5year age range showed limited awareness of action consequences, often following peer behaviours impulsively. While curiosity was universally evident, deliberate decision-making requiring consequence consideration remained a developing skill requiring adult guidance and support.

#### 6. Classroom Support for Culturally Responsive Teaching

##### Positive Elements:

- Deliberate local language integration during storytelling and interactive sessions, significantly increasing learner engagement and comprehension
- Evidence of traditional cultural practices including indigenous tales, local songs and traditional games
- Systematic peer learning approaches reflecting traditional community cooperation values
- Display of cultural artefacts and some locally-relevant materials in some classroom environments

##### Limiting Factors:

- Inadequate physical infrastructure including overcrowding, poor ventilation, and incomplete facilities that hindered comfortable learning environments
- Predominance of foreign-oriented learning materials with limited locally-made or culturally-representative educational resources
- Inconsistent integration of traditional content, with limited systematic use of indigenous stories, traditional games, and authentic community connections in regular instruction

## **Key Teacher Observations**

### ***Languages Used in Classroom***

In Ashanti Region teachers effectively utilized bilingual approaches, with Twi dominating instruction complemented by English. KG1 teachers relied more heavily on local language, recognizing learners' greater fluency, while KG2 teachers balanced both languages to prepare students for higher classes.

This approach significantly enhanced understanding and participation, creating comfortable learning environments where children could express themselves freely. Teachers deliberately chose age-appropriate, clear language supporting both comprehension and confidence-building.

### **Teacher Familiarity with Community Culture**

Familiarity varied considerably based on community tenure. Teachers with 5+years in communities demonstrated deeper cultural understanding, incorporating cultural references and values into lessons. However, some long-serving teachers remained distant from local culture.

Recently transferred teachers (1-2 years) showed limited cultural awareness, impacting their ability to connect classroom content with community contexts. This pattern particularly affected cosmopolitan areas where teacher-community cultural mismatches were common.

### **Language and Community Strategies**

The use of Twi as a language of instruction proved vital, especially in combined KG1/KG2 classes (multigrade). Teachers strategically switched between languages ensuring inclusivity and comprehension, though English often dominated as lessons progressed.

Storytelling though sparingly used, emerged as highly engaging, with teachers using local narratives to introduce concepts and moral lessons. “Ananse stories” were particularly effective in capturing learners’ attention and fostering cultural connection, though usage remained inconsistent across schools.

### **Cultural Integration Strategies**

While traditional games like ampe remained popular during breaks/recreation periods, systematic classroom integration was limited. Most schools lacked locally-made play materials, relying on foreign-manufactured toys that did not reflect Ghanaian heritage.

There was minimal evidence of community engagement through guest visits, local examples, or field trips. Teachers occasionally connected lessons to community contexts but lacked systematic approaches to involving community members in education. The interview revealed that ‘open days’ were done once in a while.

It was also evident that there was limited integration of traditional crafts or culturally-themed activities. While some schools displayed cultural items, most classroom decorations featured foreign images lacking local cultural representation.

## **Learning Environment Design**

It was observed generally that most classrooms maintained organized layouts with designated learning areas and storage spaces. However, A few schools suffered from severe overcrowding with KG1/KG2 merged, creating difficult supervision and management conditions for teachers

Observation revealed that basic materials were available but culturally-relevant resources remained scarce. Teachers improvised with local items (bottle tops, clay artefacts) but lacked systematic support for developing culturally-appropriate materials. Resource sharing between KG levels was common due to shortages.

## **Teaching Methods**

It was observed that teachers fostered collaborative environments encouraging peer problem-solving and teamwork. Music, movement, and role-play were effectively used for inclusion and engagement. Circle time promoted community building and discussion participation.

Lessons frequently focused on "My Community" and "Special People in the Community," instilling cultural values including respect for elders, proper greetings, and community behavioural expectations. Teachers consistently reinforced respectful language and appropriate social interactions. Observation of similar themes across classes was because of the use of the same curriculum materials, academic calendar and teaching time tables.

## **Gender Equity and Inclusive Practices**

A strong evidence of gender equity across most schools was observed, with teachers ensuring equal participation regardless of gender. Both boys and girls were equally involved in answering questions, leading activities, and taking classroom responsibilities.

Teachers intentionally rotated tasks and avoided favouritism, creating environments where all learners felt valued and capable. This deliberate approach built confidence and fairness from early ages, establishing foundations for equity and mutual respect.

Generally, the Ashanti Region baseline study data reveals that schools demonstrate good commitment to inclusive practices and local language integration, effective bilingual instruction, and learners' evident enthusiasm for cultural content but facing significant challenges in systematic cultural responsiveness. While teachers show awareness of culturally responsive approaches, implementation remains inconsistent due to resource constraints, infrastructure challenges, and limited professional development.

## **4.7 Summary of Key Observations of Kindergarten learners in Greater Accra Region**

### **Diversity Profile**

Greater Accra's cosmopolitan character was strongly reflected in the pupil populations observed. Children represented diverse ethnic backgrounds including Ga, Akan, Ewe, Hausa, and Dagomba groups, with corresponding linguistic diversity in home languages and cultural experiences shared

during classroom discussions. Socioeconomic diversity was evident, with pupils ranging from less privileged backgrounds to well-resourced families. Learning abilities varied significantly, with some children demonstrating advanced skills while others required additional support, including those with special educational needs who often received insufficient specialized attention.

Age diversity within classes ranged from 4-6 years in KG1 and 5-8 years in KG2, creating mixed developmental levels requiring differentiated approaches. Religious diversity included both Christian and Islamic orientations, though this did not appear to create social divisions among pupils.

## 1. Self-Awareness

Across Greater Accra region schools, it was observed that learners demonstrated mixed levels of self-awareness. Most pupils were able to identify basic emotions such as "happy," "sad," or "angry" when directly asked, with some expressing statements like "I am happy because Madam said my drawing was very nice." However, many struggled to discuss their personal and cultural backgrounds unless prompted extensively by teachers or through rephrased questions.

A significant challenge emerged regarding mother tongue identification, particularly where children whose home languages differed from the dominant community language (often Twi in Ga communities) had become more accustomed to the community language and could not recognize their indigenous languages as "theirs." Teachers often had to rephrase questions multiple times, asking "What language does mummy or daddy speak at home?" to obtain accurate responses.

Some learners showed strong confidence in expressing their thoughts and abilities, while others remained shy when interacting with strangers and required teacher mediation to feel comfortable. Most pupils demonstrated awareness of their strengths in specific areas like drawing or singing, though this self-recognition often needed adult guidance and encouragement.

## 2. Self-Management

Self-management abilities varied considerably across the region. Only a small number of pupils demonstrated effective emotional control when provoked - for example, in a particular class one pupil consistently refused to retaliate despite multiple provocations, instead reporting issues to the teacher. However, the majority immediately fought back when hit by peers, showing limited emotional regulation.

Most learners exhibited organizational skills, knowing where to place belongings like bags and books, and some took initiative in classroom activities. Notable examples included pupils starting recitations during leisure time that encouraged classmates to join, and in one class a child quickly grabbing a mop to clean up spills without being asked.

Regarding self-discipline, many pupils followed classroom rules not from understanding their purpose but because they were required to do so. When teachers did not actively enforce rules through vocal reminders or consequences, misbehaviour often continued. Some concerning

behaviours included leaving classrooms without permission and poor care of borrowed materials like pencils and crayons.

### 3. Social Awareness

Social awareness varied significantly among learners. Some pupils demonstrated clear understanding of others' perspectives, with examples including children expressing friends' ideas to teachers and recognizing classmates' particular strengths. Empathy was evident when pupils comforted crying peers or helped struggling classmates with assignments.

Gratitude expression required assessment through indirect methods, as natural demonstrations were limited. When given gifts or treats, most children said "thank you" when prompted, though this was not consistently spontaneous. Understanding of classroom rules as tools for fairness and learning (rather than arbitrary restrictions) was developing but not universal.

The cosmopolitan nature of Greater Accra was reflected in pupils' interactions, with children from diverse ethnic backgrounds (Ga, Akan, Ewe, Hausa, Dagomba) playing and learning together harmoniously without apparent discrimination based on cultural differences.

### 4. Relationship Skills

Pupils demonstrated positive peer relationships overall, with systematic sharing activities revealing that every learner had established friendships. Communication abilities varied, with some children expressing ideas clearly while others, particularly those with special educational needs, showed distorted communication patterns that received limited specialized support.

Most learners worked well in collaborative group activities and could ask for help when needed, whether from teachers or peers. However, a significant weakness was resistance to negative peer pressure - many children followed inappropriate peer suggestions, such as dangerous play behaviours that resulted in falls or injuries. Conflict resolution typically required adult intervention, as pupils rarely resolved issues independently. While friendships were strong, the skills needed to navigate disagreements constructively were still developing.

### 5. Responsible Decision-Making

It was observed that, curiosity emerged as a universal trait, with learners eagerly approaching visitors with questions and showing enthusiasm for learning new concepts. Some pupils demonstrated problem identification skills and thoughtful decision-making, while others acted impulsively without considering consequences.

Examples of responsible decisions included suggesting appropriate games to friends and helping with classroom maintenance. However, many pupils in the 4-5-year age range showed limited awareness of how their actions affected others, often making choices based on immediate desires rather than thoughtful consideration. The tendency to follow peer behaviours without reflection was common, indicating that while natural curiosity was strong, the development of critical thinking and consequence awareness required continued support and guidance.

### 6. Classroom Support for Culturally Responsive Teaching

## Positive Elements

- Some teachers incorporated local songs in Ga and Twi into lessons, creating cultural connections for learners.
- Bilingual interactions between teachers and pupils occurred during certain lesson periods, supporting multilingual development
- A few schools displayed local images and scenery on classroom walls, providing visual cultural references
- Local counting materials like stones were occasionally used in numeracy lessons
- Physical space organization promoted collaborative learning through appropriate seating arrangements

## Barriers

- Predominant use of foreign-oriented flashcards, labels, and wall materials lacking local cultural representation
- Limited use of traditional games, with most play activities involving imported toys and foreign entertainment (like Cocomelon videos)
- Absence of systematic community connections, traditional storytelling, or elder involvement in learning activities
- Most inscriptions and visual aids used English exclusively, with very few schools implementing bilingual labelling systems
- Teaching materials predominantly reflected Western contexts with limited integration of Ghanaian cultural references

## Key Teacher Observations

### Languages Used in Classroom

Teachers predominantly used a bilingual approach combining English with Twi, regardless of the local community language. In Ga-dominated communities, teachers surprisingly relied more on Twi than Ga for local language instruction, creating a disconnect with community linguistic needs.

The language ratio varied by school location and student population. Urban schools (like Michel Camp) prioritized English over local languages as learners demonstrated greater English proficiency. A concerning pattern emerged where teachers unfamiliar with the local Ga language relied on pupils or colleagues for translation, creating classroom dynamics that sought of undermined instructional effectiveness.

### Language and Community Strategies

While teachers used local languages, Twi dominated across all schools regardless of community language preferences. This created challenges in Ga communities where the appropriate local language was underutilized. Bilingual visual aids and labels were rare, with most schools relying exclusively on English text.

Traditional storytelling was largely absent from classroom practices. When stories were told, they typically used foreign content in English rather than local narratives, representing a significant missed opportunity for cultural transmission and engagement.

### Cultural Integration Strategies

Very limited integration of traditional games like ampe in formal instruction, though these activities occurred naturally during break times. Most classroom play activities used foreign-manufactured toys and games that didn't reflect Ghanaian heritage.

It was observed that there is minimal evidence of systematic community engagement through guest visits, field trips, or local expert involvement in classroom activities. Schools operated largely independently from their surrounding communities.

Limited use of traditional crafts or culturally-themed activities. While some artwork was displayed, most classroom decorations featured foreign images and characters rather than local cultural representations.

### Learning Environment Design

Most classrooms were well-organized with round tables promoting collaborative learning. Seating arrangements generally supported peer interaction and group work, though some schools suffered from overcrowding that limited movement and individual attention.

Basic materials were available but lacked cultural relevance. Most teaching aids used foreign imagery and contexts. Local materials like stones for counting were occasionally used, but systematic integration of culturally appropriate resources was rare. Some schools relied heavily on foreign educational videos and songs.

### Teaching Methods

Teachers employed call-and-response methods, though predominantly in foreign languages rather than local languages. Circle time was used more for phonics instruction than community building. Peer teaching occurred informally but wasn't systematically facilitated by teachers.

Observation also revealed emphasis on respect for elders and appropriate greetings, though primarily conducted in English rather than local languages. Community-focused lessons about local occupations and social roles were present but not deeply integrated with cultural practices.

### Gender Equity and Inclusive Practices

It was evident that there is strong evidence of gender equity in participation, with teachers ensuring balanced involvement of boys and girls in activities, questioning, and leadership roles. Seating arrangements consistently reflected gender balance and equal opportunity provision.

However, learners with special educational needs received insufficient differentiated instruction and support. While some schools attempted inclusive practices, systematic approaches to supporting diverse learning needs were generally lacking. Teachers used different local languages

to praise pupils but did not consistently rotate leadership responsibilities or incorporate technology to enhance inclusive learning opportunities.

Summarily, the Greater Accra region baseline data reveals significant linguistic and cultural complexity that creates both opportunities and challenges for culturally responsive practices. While teachers demonstrate commitment to inclusive practices and some local language use, the predominance of Twi over local community languages (particularly Ga) represents a mismatch between educational delivery and community linguistic needs.

## **4.7 Summary of Baseline Findings for each Research Question**

The following are the summary of findings for each research question;

### **1. Current State of Culturally Responsive Teaching Practices (CRTP)**

Key Findings:

- Limited Implementation: Only 11.6% of classrooms demonstrate broad CRTP uptake (≥8/11 domains scored high)
- Language Integration Strongest: Language and communication (A1) shows 40% frequent implementation - the strongest CRTP area
- Cultural Practices Largely Absent:
  - Traditional storytelling: 87.4% never observed
  - Traditional games: 88.7% never observed
  - Community connections: 93.9% never observed
  - Cultural arts/crafts: 92.6% never observed
- Variations by Context:
  - Urban vs Rural: Rural areas show slightly better CRTP implementation (53.8% vs 41.0% high-fidelity domains)
  - Regional Differences: Control schools outperform treatment schools in CRTP baseline (61.4% vs 47.6% high-fidelity domains)
- Teacher Capacity: Only 24.5% of teachers demonstrate high familiarity with local culture

### **2. Baseline Social and Emotional Learning (SEL) Competencies**

Distribution Across Domains:

- Self-Awareness: Strongest domain (47% often/consistent observations)
- Self-Management: Mixed performance (40% positive, 24% never demonstrate)
- Social Awareness: Weakest domain (70.5% rarely/never demonstrate)
- Relationship Skills: Moderate (37.5% frequent/consistent)
- Responsible Decision-Making: Significant challenges (81.6% rarely/never demonstrate)
- Demographic Variations:
  - Gender: Males slightly higher overall SEL (2.54 vs 2.47 for females)
  - Location: Urban learners show higher SEL competencies (2.70 vs 2.38 rural)
  - Regional: Ashanti learners outperform Greater Accra (2.67 vs 2.36)



- Age Effect: Learners in Greater Accra are older on average (5.49 vs 5.00 years)

### 3. Gender Equity and Inclusion (GEI) Practices Implementation

#### Current Implementation Levels:

- Teaching Strategies: Strongest area (51.4% frequently observed)
- Classroom Organization: Strong performance (66.3% frequently observed)
- Learner Support: Moderate implementation (44% frequent)
- Assessment Practices: Mixed results (44% frequent, 36.6% never)
- Resource Utilization: Critical weakness (59.2% never observed, only 19.2% frequent)
- Key Strengths:
  - Strong commitment to inclusive instruction and equitable participation
  - Effective classroom physical environment design
  - Gender-balanced seating and activity participation

#### Major Gaps:

- Insufficient gender-inclusive materials and resources
- Limited diversified assessment strategies
- Inadequate support for learners with special educational needs

### 4. Teacher Capacity for Culturally Responsive and Gender-Equitable Practices

- Professional Qualifications:
- Early Childhood Specialization: Only 50% of degree holders and 39% of diploma holders trained specifically in ECE
- Experience: Average 9.43 years teaching at KG level, 5.04 years in current community
- Age Distribution: Significant regional variation (Ashanti teachers 27 years vs Greater Accra 42.7 years average)
- Cultural and Linguistic Competencies:
  - Language Mismatches: Critical disconnect in Greater Accra where Ga-speaking teachers are absent in Ga-dominated communities
  - Cultural Familiarity: Mixed levels across six cultural dimensions:
    - Religious practices: 89% quite/very familiar
    - Communication patterns: 85% quite/very familiar
    - Play/songs/storytelling: 52% not familiar

#### Training Gaps:

- Limited professional development in culturally responsive approaches
- Insufficient understanding of local cultural contexts
- Reliance on individual teacher improvisation rather than systematic support

## 5. Relationships Between CRTP, GEI, and SEL Outcomes

### Statistical Associations:

- Gender Equity and SEL ( $\chi^2 = 47.95$ ,  $p < 0.001$ ):
- Low KGE: 51.85% of learners show low SEL, only 1.85% achieve high SEL
- High KGE: 21.69% show low SEL, 16.47% achieve high SEL
- Clear positive correlation: Higher gender equity strongly predicts better SEL outcomes
- Cultural Responsiveness and SEL ( $\chi^2 = 15.50$ ,  $p = 0.004$ ):
- Complex relationship: Less linear than KGE-SEL association
- Low CRTP: 30.26% low SEL, 12.10% high SEL
- High CRTP: Counterintuitive results (small sample size may influence findings)

### Key Insight:

Gender equity practices appear to be prerequisite for effective cultural responsiveness, with foundational inclusive practices supporting broader cultural integration.

## 6. Challenges and Barriers to Implementation

### Systemic Barriers:

- Curriculum Inadequacy: Only few days annually allocated to cultural education
- Resource Constraints: Predominance of Western-oriented materials
- Policy Gaps: Minimal support for local language instruction despite policy directives
- Institutional Barriers:
- Teacher Deployment: Linguistic mismatches between teacher backgrounds and community needs
- Professional Development: Insufficient training in culturally responsive approaches
- Infrastructure: Overcrowded classrooms (average 52 students per class, some KG1/KG2 merged/multi-grade classes)

### Individual Barriers:

- Teacher Attitudes: Limited enthusiasm for learning local cultures, especially in cosmopolitan areas
- Parent Expectations: Strong preference for English instruction associated with intelligence and social mobility
- Cultural Competency: Variable teacher understanding of culturally responsive pedagogy
- Resource and Training Constraints:
- Material Limitations: Lack of culturally relevant teaching aids and learning materials
- Community Engagement: Minimal systematic involvement of elders, artisans, and community members
- Assessment Tools: Limited cultural contextualization in evaluation practices
- Implications for Intervention development

The baseline data and findings reveal that successful implementation of culturally responsive teaching practices requires multi-level transformation addressing teacher preparation, curriculum development, resource provision, and community engagement rather than isolated classroom interventions.

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## Annexes

### Annex I: Objective I, Culturally Responsive Teaching, Gender Equity, SEL

Baseline Level of Key SEL, Gender Equity and Culturally Responsive Teaching Indicators, by Treatment and Subgroups

| Indicator                            | Definition                                         | Aggregate                                        | Sex:<br>Female                                   | Sex:<br>Male                                 | Ethno:<br>Akan/Ga                                | Ethno:<br>Minority-<br>S                 | Ethno:<br>Minority-<br>N                 | Urban                                        | Rural                                            | Ashanti                                      | Greater<br>Accra                             |
|--------------------------------------|----------------------------------------------------|--------------------------------------------------|--------------------------------------------------|----------------------------------------------|--------------------------------------------------|------------------------------------------|------------------------------------------|----------------------------------------------|--------------------------------------------------|----------------------------------------------|----------------------------------------------|
|                                      |                                                    | Crtl /<br>Treatm<br>ent                          | Crtl /<br>Treatm<br>ent                          | Crtl /<br>Treatm<br>ent                      | Crtl /<br>Treatm<br>ent                          | Crtl /<br>Treatm<br>ent                  | Crtl /<br>Treatm<br>ent                  | Crtl /<br>Treatm<br>ent                      | Crtl /<br>Treatm<br>ent                          | Crtl /<br>Treatm<br>ent                      | Crtl /<br>Treatm<br>ent                      |
| KGE Index                            | Mean of 5<br>gender<br>equity/inclusion<br>domains | 2.00<br>(.46,<br>211) /<br>2.08<br>(.50,<br>233) | 1.99<br>(.46,<br>121) /<br>2.10<br>(.49,<br>126) | 2.01<br>(.46, 90)<br>/ 2.06<br>(.51,<br>107) | 1.98<br>(.50,<br>124) /<br>2.09<br>(.50,<br>189) | 2.05<br>(.44, 45)<br>/ 2.08<br>(.45, 21) | 2.01<br>(.38, 42)<br>/ 2.04<br>(.50, 23) | 2.28<br>(.38, 76)<br>/ 1.96<br>(.46,<br>113) | 1.85<br>(.44,<br>135) /<br>2.20<br>(.51,<br>120) | 2.04<br>(.53, 95)<br>/ 2.16<br>(.56,<br>160) | 1.98<br>(.40,<br>116) /<br>1.91<br>(.25, 73) |
| KGE High-<br>Quality<br>Domains (%)  | % of 5 domains<br>rated ≥2                         | 55.9<br>(31.7) /<br>58.4<br>(38.9)               | 55.7<br>(31.0) /<br>60.6<br>(38.4)               | 56.2<br>(32.8) /<br>55.7<br>(39.5)           | 54.8<br>(33.2) /<br>58.5<br>(39.4)               | 58.2<br>(31.3) /<br>61.0<br>(34.3)       | 56.7<br>(27.9) /<br>54.8<br>(40.1)       | 72.4<br>(21.9) /<br>46.2<br>(37.5)           | 46.7<br>(32.7) /<br>69.8<br>(36.8)               | 59.2<br>(35.7) /<br>63.4<br>(43.2)           | 53.3<br>(27.9) /<br>47.4<br>(24.2)           |
| CRTP Index                           | Mean of 11<br>CRTP domains                         | 4.12<br>(3.02) /<br>2.84<br>(1.41)               | 4.31<br>(3.32) /<br>2.74<br>(1.39)               | 3.86<br>(2.57) /<br>2.95<br>(1.42)           | 4.67<br>(3.45) /<br>2.87<br>(1.39)               | 3.68<br>(1.87) /<br>2.98<br>(1.65)       | 2.96<br>(2.17) /<br>2.46<br>(1.32)       | 4.95<br>(2.93) /<br>1.92<br>(1.07)           | 3.65<br>(2.98) /<br>3.70<br>(1.11)               | 4.18<br>(2.90) /<br>3.18<br>(1.33)           | 4.07<br>(3.13) /<br>2.09<br>(1.27)           |
| CRTP High-<br>Quality<br>Domains (%) | % of 11<br>domains rated<br>≥2                     | 61.4<br>(19.8) /<br>47.6<br>(18.4)               | 62.4<br>(19.5) /<br>46.3<br>(18.5)               | 60.2<br>(20.3) /<br>49.1<br>(18.2)           | 65.1<br>(21.0) /<br>48.7<br>(18.7)               | 58.2<br>(14.7) /<br>45.5<br>(14.7)       | 54.1<br>(18.7) /<br>40.7<br>(17.5)       | 67.9<br>(17.5) /<br>41.0<br>(19.8)           | 57.8<br>(20.2) /<br>53.8<br>(14.4)               | 60.5<br>(18.7) /<br>50.9<br>(19.2)           | 62.2<br>(20.8) /<br>40.3<br>(14.0)           |

|                             |                                              |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |
|-----------------------------|----------------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| KGE Engagement Index        | Mean of 7 key KGE engagement practices       | 2.07<br>(0.50) /<br>2.11<br>(0.53) | 2.08<br>(0.52) /<br>2.13<br>(0.52) | 2.07<br>(0.47) /<br>2.09<br>(0.54) | 2.07<br>(0.54) /<br>2.11<br>(0.54) | 2.10<br>(0.48) /<br>2.20<br>(0.44) | 2.06<br>(0.40) /<br>2.07<br>(0.54) | 2.37<br>(0.33) /<br>2.05<br>(0.53) | 1.91<br>(0.50) /<br>2.17<br>(0.53) | 2.06<br>(0.53) /<br>2.18<br>(0.60) | 2.08<br>(0.48) /<br>1.96<br>(0.27) |
| C RTP Engagement Index      | Mean of 11 C RTP engagement practices        | 1.11<br>(0.73) /<br>0.90<br>(0.58) | 1.12<br>(0.74) /<br>0.88<br>(0.60) | 1.08<br>(0.72) /<br>0.92<br>(0.57) | 1.23<br>(0.78) /<br>0.89<br>(0.57) | 1.10<br>(0.58) /<br>1.02<br>(0.72) | 0.75<br>(0.58) /<br>0.82<br>(0.59) | 1.48<br>(0.65) /<br>0.62<br>(0.49) | 0.90<br>(0.69) /<br>1.15<br>(0.55) | 1.08<br>(0.81) /<br>0.96<br>(0.56) | 1.13<br>(0.66) /<br>0.75<br>(0.61) |
| Learner Participation Index | Mean of 5 SEL initiative/participation items | 2.50<br>(0.66) /<br>2.61<br>(0.68) | 2.47<br>(0.66) /<br>2.65<br>(0.66) | 2.54<br>(0.67) /<br>2.56<br>(0.70) | 2.46<br>(0.61) /<br>2.62<br>(0.70) | 2.57<br>(0.77) /<br>2.70<br>(0.56) | 2.51<br>(0.70) /<br>2.43<br>(0.52) | 2.70<br>(0.72) /<br>2.65<br>(0.74) | 2.38<br>(0.60) /<br>2.56<br>(0.61) | 2.67<br>(0.71) /<br>2.68<br>(0.68) | 2.36<br>(0.59) /<br>2.45<br>(0.65) |
| SEL Index (overall_SELrate) | Mean of 5 CASEL SEL domains                  | 2.21<br>(0.53) /<br>2.26<br>(0.51) | 2.22<br>(0.53) /<br>2.34<br>(0.53) | 2.20<br>(0.54) /<br>2.17<br>(0.48) | 2.21<br>(0.51) /<br>2.28<br>(0.54) | 2.23<br>(0.58) /<br>2.32<br>(0.27) | 2.20<br>(0.57) /<br>2.10<br>(0.37) | 2.37<br>(0.63) /<br>2.33<br>(0.59) | 2.12<br>(0.45) /<br>2.20<br>(0.41) | 2.31<br>(0.65) /<br>2.30<br>(0.54) | 2.13<br>(0.40) /<br>2.20<br>(0.44) |

**Table Note:** Means (SD, N) shown. Subgroups: female/male, Akan/Ga, Minority-South, Minority-North, Urban/Rural, Ashanti, Greater Accra. “Ctrl” is treatment==0, “Treatment” is treatment==1. All indicators reflect baseline classroom or learner levels prior to intervention.

## Annex 2: Objective 2, Evidence Uptake, Familiarity, Practice Breadth

*Baseline Coverage and Uptake of Culturally Responsive and Gender-Equitable Teaching Practices: Disaggregation by Rurality and Region*

| Indicator Name                                   | Definition & Measurement                                                                                                                                                                                    | Treated                | Treated Urban          | Treated Rural          | Crtl                   | Crtl Urban            | Crtl Rural             | Treated Ashanti        | Treated G. Accra   | Crtl Ashanti          | Crtl G. Accra       |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|--------------------|-----------------------|---------------------|
| <b>Teacher Familiarity with Local Culture</b>    | Mean of 6 Likert-scale items: teacher's familiarity with family structures, cultural values, communication, traditions, religion, play/stories (1 = not at all, 4 = very well). Higher = more familiarity." | 2.01<br>(0.58;<br>233) | 1.95<br>(0.69;<br>113) | 2.07<br>(0.45;<br>120) | 2.02<br>(0.57;<br>211) | 2.04<br>(0.51;<br>76) | 2.01<br>(0.61;<br>135) | 2.11<br>(0.59;<br>160) | 1.81 (0.52;<br>73) | 1.98<br>(0.69;<br>95) | 2.06 (0.45;<br>116) |
| <b>% Teachers "High" in Cultural Familiarity</b> | % scoring 3 ("well") or 4 ("very well") on at least 4 of 6 domains.                                                                                                                                         | 24.5%<br>(57/233)      | 31.0%<br>(35/113)      | 18.3%<br>(22/120)      | 21.3%<br>(45/211)      | 21.1%<br>(16/76)      | 21.5%<br>(29/135)      | 26.9%<br>(43/160)      | 19.2%<br>(14/73)   | 24.2%<br>(23/95)      | 19.0%<br>(22/116)   |
| <b>CRTP Composite Practice Index</b>             | Mean of 11 CRTP domain summary scores. Higher = more broad/frequent CR practices.                                                                                                                           | 2.84<br>(1.41;<br>233) | 1.92<br>(1.07;<br>113) | 3.70<br>(1.11;<br>120) | 4.12<br>(3.02;<br>211) | 4.95<br>(2.93;<br>76) | 3.65<br>(2.98;<br>135) | 3.18<br>(1.33;<br>160) | 2.09 (1.27;<br>73) | 4.18<br>(2.90;<br>95) | 4.07 (3.13;<br>116) |
| <b>% Classrooms "Broad" in CRTP Uptake</b>       | % with ≥8/11 CRTP domains scored "high" (mean domain score ≥2)                                                                                                                                              | 11.6%<br>(27/233)      | 10.6%<br>(12/113)      | 12.5%<br>(15/120)      | 35.5%<br>(75/211)      | 38.2%<br>(29/76)      | 34.1%<br>(46/135)      | 16.9%<br>(27/160)      | 0.0%<br>(0/73)     | 23.2%<br>(22/95)      | 45.7%<br>(53/116)   |
| <b>KGE Composite Practice Index</b>              | Mean of 5 KGE domain scores (gender/inclusion). Higher = more inclusive teaching.                                                                                                                           | 2.08<br>(0.50;<br>233) | 1.96<br>(0.46;<br>113) | 2.20<br>(0.51;<br>120) | 2.00<br>(0.46;<br>211) | 2.28<br>(0.38;<br>76) | 1.85<br>(0.44;<br>135) | 2.16<br>(0.56;<br>160) | 1.91 (0.25;<br>73) | 2.04<br>(0.53;<br>95) | 1.98 (0.40;<br>116) |
| <b>% Classrooms with 3+ CRTP Routines</b>        | % using 3 or more CRTP domains scored "high" (mean domain score ≥2)                                                                                                                                         | 89.7%<br>(209/233)     | 78.8%<br>(89/113)      | 100%<br>(120/120)      | 95.3%<br>(201/211)     | 100%<br>(76/76)       | 92.6%<br>(125/135)     | 92.5%<br>(148/160)     | 83.6%<br>(61/73)   | 100%<br>(95/95)       | 91.4%<br>(106/116)  |



### Annex 3: Objective 3, Capacity for Inclusion and Intersectional Coverage

*Baseline Capacity for Inclusive, Culturally and Gender-Responsive Teaching: Fidelity, Familiarity, and Intersectional Coverage by Context*

| Indicator Name                                  | Definition & Measurement                                                    | Treated                 | Treated Urban           | Treated Rural           | Ctrl                    | Ctrl Urban             | Ctrl Rural              | Treated Ashanti         | Treated G. Accra       | Ctrl Ashanti           | Ctrl G. Accra           |
|-------------------------------------------------|-----------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|------------------------|------------------------|-------------------------|
| <b>CRTP High-Fidelity Domains (% of 11)</b>     | % of CRTP domains (out of 11) rated “2” or above                            | 47.6<br>(18.36;<br>233) | 41.0<br>(19.82;<br>113) | 53.8<br>(14.41;<br>120) | 61.4<br>(19.84;<br>211) | 67.9<br>(17.47;<br>76) | 57.8<br>(20.22;<br>135) | 50.9<br>(19.19;<br>160) | 40.3<br>(13.97;<br>73) | 60.5<br>(18.74;<br>95) | 62.2<br>(20.75;<br>116) |
| <b>% Teachers w/ High CRTP Fidelity (≥8/11)</b> | % of teachers scoring “high” on ≥8 of 11 CRTP domains                       | 11.6%<br>(27/233)       | 10.6%<br>(12/113)       | 12.5%<br>(15/120)       | 35.5%<br>(75/211)       | 38.2%<br>(29/76)       | 34.1%<br>(46/135)       | 16.9%<br>(27/160)       | 0.0%<br>(0/73)         | 24.2%<br>(23/95)       | 19.0%<br>(22/116)       |
| <b>Teacher Familiarity Index</b>                | Mean of 6 Likert-scale local culture items                                  | 2.01<br>(0.58;<br>233)  | 1.95<br>(0.69;<br>113)  | 2.07<br>(0.45;<br>120)  | 2.02<br>(0.57;<br>211)  | 2.04<br>(0.51;<br>76)  | 2.01<br>(0.61;<br>135)  | 2.11<br>(0.59;<br>160)  | 1.81<br>(0.52;<br>73)  | 1.98<br>(0.69;<br>95)  | 2.06<br>(0.45;<br>116)  |
| <b>% Teachers High Familiarity (≥4/6)</b>       | % scoring 3 or 4 on ≥4 of 6 local culture items                             | 24.5%<br>(57/233)       | 31.0%<br>(35/113)       | 18.3%<br>(22/120)       | 21.3%<br>(45/211)       | 21.1%<br>(16/76)       | 21.5%<br>(29/135)       | 26.9%<br>(43/160)       | 19.2%<br>(14/73)       | 24.2%<br>(23/95)       | 19.0%<br>(22/116)       |
| <b>KGE Inclusion Practices (% of 8)</b>         | % of KGE inclusion/support domains scored ≥ 2 (out of 8)                    | 66.1<br>(32.4;<br>233)  | 65.2<br>(31.5;<br>113)  | 67.1<br>(33.3;<br>120)  | 64.9<br>(35.0;<br>211)  | 79.8<br>(24.6;<br>76)  | 56.6<br>(37.3;<br>135)  | 63.2<br>(33.8;<br>160)  | 72.6<br>(28.4;<br>73)  | 60.7<br>(44.1;<br>95)  | 68.4<br>(25.1;<br>116)  |
| <b>Comprehensive Culturally Inclusive Index</b> | Mean of CRTP, KGE, and familiarity indices (broader 'stakeholder capacity') | 2.31<br>(0.60;<br>233)  | 1.94<br>(0.44;<br>113)  | 2.66<br>(0.51;<br>120)  | 2.71<br>(1.14;<br>211)  | 3.09<br>(1.09;<br>76)  | 2.50<br>(1.12;<br>135)  | 2.48<br>(0.61;<br>160)  | 1.94<br>(0.35;<br>73)  | 2.73<br>(1.18;<br>95)  | 2.70<br>(1.11;<br>116)  |
| <b>% Classrooms with Inclusive Environment</b>  | % of classrooms with both high CRTP fidelity and ≥ 6 inclusion practices    | 0.0%<br>(0/233)         | 0.0%<br>(0/113)         | 0.0%<br>(0/120)         | 20.4%<br>(43/211)       | 21.1%<br>(16/76)       | 20.0%<br>(27/135)       | 0.0%<br>(0/160)         | 0.0%<br>(0/73)         | 24.2%<br>(23/95)       | 17.2%<br>(20/116)       |

