



Closing the Evidence Gap: Practitioner Research in Competency-Based Curriculum Language Education

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DOI:10.5281/zenodo.21461356

ARTICLE INFO

Article history:

Received : 05-06-2026

Accepted : 24-06-2026

Available online : 20-07-2026

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Citation: Siame, P., & Kangwa, K. N. (2026). Closing the Evidence Gap: Practitioner Research in Competency-Based Curriculum Language Education. *IKR Journal of Education and Literature (IKRJEL)*, 2(2), 23-35.



ABSTRACT

Original Research Article

Research on competency-based curriculum (CBC) language teaching in authentic classroom settings remains strikingly scarce, leaving teachers without the local, actionable evidence needed to solve daily pedagogical problems. This paper addresses this evidence gap by making a case for teacher-led action research as a practical, low-cost, and empowering tool for local problem solving. Grounded in Vygotsky's sociocultural theory and Schön's concept of the reflective practitioner, the paper distinguishes action research from formal academic research across purpose, audience, methods, and outcomes, then presents three completed classroom studies from Zambian primary schools. The first study, conducted by a Grade 4 teacher, compared written exit tickets with oral check-ins as formative assessment methods, finding that oral check-ins achieved a 92% completion rate compared to 68% for written tickets, with observational notes indicating that struggling readers were systematically excluded by written methods. The second study, conducted by a Grade 7 teacher, introduced structured talk partners to increase oral participation, tracking speaking turns over four weeks; average speaking turns per lesson rose from 14 to 47, and the percentage of learners who spoke at least once increased from 17% to 85%. The third study, conducted by a Grade 5 teacher, adapted a standard textbook unit using local examples and compared test scores with a parallel control class; the adaptation class achieved a mean score of 78% compared to 59% in the control class, with the largest gains on application questions requiring transfer of learning to real-life scenarios. Each study followed a simple four-stage action research cycle – Look, Think, Act, Reflect – using accessible data collection methods such as tallies, pre/post comparisons, and brief observational notes, with no statistical software required. The paper also discusses methodological limitations, including potential observer bias, novelty effects, and lack of long-term follow-up, and ethical tensions inherent in using control classes. It concludes with practical recommendations for policy makers (integrating action research into pre-service training and CPD, disseminating a simplified ethics checklist), school leaders (protecting time for teacher research, establishing teacher research networks), and teachers (starting with small, specific problems, sharing findings even when inconclusive). The central argument is that closing the evidence gap in CBC language education does not require large-scale funding or external experts; rather, it requires a shift in teacher identity from passive curriculum deliverer to active classroom inquirer, supported by simple structures and a culture that values practitioner-generated evidence.

Keywords: Action Research, Competency-Based Curriculum, CBC Language Education, Formative Assessment, Oral Participation, Material Adaptation, Reflective Practice.

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Introduction

The global shift towards competency-based curricula (CBC) represents one of the most significant educational reforms of the past two decades. Unlike traditional content-driven models that prioritise the memorisation and reproduction of factual knowledge, CBC emphasises the demonstration of practical skills, the application of knowledge to real-world situations, and the development of positive attitudes and values (Mulenga & Kabombwe, 2019). In Zambia, this curriculum reform was introduced with the explicit goal of producing learners who are not merely knowledgeable but also capable of critical thinking, problem solving, and effective communication. However, the successful implementation of any CBC framework ultimately rests on the daily, often invisible, decisions made by classroom teachers. It is teachers who must translate broad policy statements into concrete lesson plans, design authentic assessment tasks, and create classroom environments where learners feel safe enough to demonstrate their developing competencies.

A persistent and largely unacknowledged problem in CBC language education is the scarcity of classroom-level research that examines how these principles actually function in practice. While a substantial body of policy documents, curriculum frameworks, and official training manuals exists, these resources typically provide high-level guidance rather than solutions to the granular, context-specific challenges that teachers encounter every day (Carmody, 2019). For example, a teacher in a rural Zambian school with large class sizes, limited textbooks, and learners from diverse linguistic backgrounds may struggle to implement formative assessment strategies that were designed for smaller, better-resourced urban classrooms. Similarly, a teacher attempting to increase oral participation may find that standard strategies such as ‘whole-class questioning’ fail because learners are reluctant to speak in front of their peers. The evidence needed to solve these local problems is rarely found in national policy documents or in academic journals, which tend to prioritise large-scale, generalisable studies over small-scale, context-specific inquiries.

This paper directly addresses this evidence gap by making a case for teacher-led action research as a practical, low-cost, and empowering tool for local problem solving. Action research is defined here as a systematic, self-reflective inquiry undertaken by practitioners to improve their own practices, understand their contexts, and take informed action (Kemmis, McTaggart, & Nixon, 2014). Unlike formal academic research, which is typically designed by university-based researchers and aims for findings that are statistically generalisable across populations, action research prioritises local relevance, immediate applicability, and the professional growth of the teacher-researcher. This paper distinguishes action research from formal academic research across several key dimensions: purpose (local improvement versus

generalisable knowledge), audience (the teacher and their school versus the academic community), methods (simple, flexible, and low-tech versus complex and statistically rigorous), and outcomes (actionable strategies versus theoretical contributions).

To illustrate the potential of this approach, this paper presents three completed teacher-led action research projects conducted in Zambian primary schools. Each project focused on a different CBC language education problem: a Grade 4 teacher who tested two formative assessment methods, a Grade 7 teacher who introduced structured talk partners to increase oral participation, and a Grade 5 teacher who adapted a standard textbook unit using local examples. Each project followed a simple four-stage cycle – Look, Think, Act, Reflect – which is presented visually in the theoretical framework section. The central argument of this paper is that closing the evidence gap in CBC language education does not require large-scale funding, external experts, or advanced statistical training. Rather, it requires a fundamental shift in teacher identity: from a passive curriculum deliverer who waits for externally produced solutions, to an active classroom inquirer who generates actionable evidence from their own context. This shift, this paper contends, is not only desirable but essential for the long-term sustainability of competency-based education in Zambia and similar contexts across Sub-Saharan Africa.

Literature Review

The literature review is organised into three interconnected sections. The first examines the known challenges of implementing competency-based curricula in language classrooms, with a specific focus on the Zambian context. The second reviews the theoretical and empirical literature on action research in education, distinguishing it from other forms of practitioner inquiry. The third synthesises existing studies on formative assessment, oral participation, and material adaptation in CBC language education, identifying the specific evidence gaps that the three classroom projects reported in this paper were designed to address.

Challenges of CBC Implementation in Zambian Language Classrooms

The adoption of competency-based curricula across Sub-Saharan Africa has been well documented at the policy level, yet a consistent finding in the literature is the persistent disconnect between policy intentions and classroom realities (Mwanza, 2017). In Zambia, the national curriculum was revised to align with CBC principles in 2013, with subsequent rollouts across primary and secondary grades. However, research conducted by Mulenga and Kabombwe (2019) found that many Zambian teachers lack a deep understanding of CBC’s underlying philosophy, often confusing competencies with traditional learning objectives. This conceptual confusion leads to what Mwanza (2017)

terms ‘pedagogical hybridity’ – teachers mixing old content-driven methods with new competency-based expectations in ways that often undermine both.

In language education specifically, the challenges are particularly acute. Hapunda (2020) identified two major barriers to effective CBC language teaching in Zambian classrooms. The first barrier is assessment-related. CBC demands continuous formative assessment, meaning teachers must collect evidence of learner progress on an ongoing basis using a variety of methods such as observations, checklists, portfolios, and oral questioning. However, many teachers revert to end-of-unit tests because they feel overwhelmed by the workload demands of continuous assessment. This finding is supported by Oduro (2018), who argued that without simple, time-efficient formative assessment strategies, even well-intentioned teachers will abandon CBC assessment principles within weeks. The second barrier is pedagogical. CBC language education requires active oral communication, with learners expected to speak, negotiate meaning, and present their ideas. Yet traditional classroom discourse in many Zambian schools remains dominated by teacher-led recitation, often referred to as the ‘initiation-response-feedback’ pattern, where the teacher asks a question, a single learner responds, and the teacher evaluates the answer (Hapunda, 2020). This pattern produces very few speaking turns per lesson and excludes the majority of learners, particularly those who are shy, lower-achieving, or from minority language backgrounds.

A third, less frequently discussed challenge is the relevance of instructional materials. Standardised textbooks, produced at the national level, cannot possibly reflect the linguistic and cultural diversity of all Zambian communities (Carmody, 2019). A textbook unit on ‘markets’ might feature urban supermarkets and cash transactions, which are unfamiliar to a learner in a rural area where trading is done through barter at a weekly village market. Similarly, reading passages that reference foreign cultural practices can create comprehension difficulties that have nothing to do with language proficiency. As Burns (2019) notes, the principle of localisation, adapting materials to fit the learner’s immediate environment, is widely endorsed in language teaching methodology but rarely implemented systematically because teachers lack a structured process for doing so.

Action Research in Education: Definitions and Distinctions

Action research has a long and varied history in education, with roots in the work of Kurt Lewin in the 1940s, who first articulated the cyclical process of planning, acting, observing, and reflecting (Kemmis et al., 2014). Since then, multiple traditions of action research have emerged, including participatory action research, critical action research, and practical action research. For this paper, practical action research, sometimes called teacher-led action research, is the most relevant tradition. Practical action research is defined by

Burns (2019) as a systematic, self-reflective inquiry conducted by teachers in their own classrooms to improve teaching and learning in a specific local context. It is characterised by several features: it is context-bound, meaning findings are not intended to be generalisable; it is collaborative, often involving colleagues, learners, or school leaders; it is cyclical, involving repeated rounds of action and reflection; and it is practical, prioritising actionable outcomes over theoretical contributions.

It is essential to distinguish action research from other forms of practitioner inquiry. Action research is not simply ‘reflective teaching’, although reflection is a component. Reflective teaching, as described by Schön (1983), involves thinking about one’s practice during and after teaching, but it does not necessarily require systematic data collection or documentation. Action research, by contrast, requires the teacher to collect evidence, such as tallies, work samples, brief surveys, or observational notes, and to analyse that evidence systematically. This distinction is crucial because it is the systematic collection and analysis of data that transforms intuitive problem solving into credible, defensible research. Without data, a teacher’s conclusion that ‘my learners improved’ remains an impression; with simple data such as pre- and post-intervention speaking turn tallies, that same conclusion becomes an evidence-based claim.

Another important distinction is between action research and formal academic research. Formal academic research, as typically conducted by university-based researchers, aims for findings that are statistically generalisable to a defined population. It relies on large sample sizes, random sampling, control groups, and sophisticated statistical analyses. It also requires ethical approval from institutional review boards and often takes months or years to complete. Action research, in contrast, makes no claims to statistical generalisability. Its findings are transferable only insofar as another teacher in a similar context reads the report and decides to adapt the intervention. Action research uses small sample sizes (often a single class), simple data collection methods (tallies, brief notes, pre/post comparisons), and analysis that does not require statistical software. Ethical approval is still necessary, but a simplified, classroom-appropriate ethics checklist is sufficient (Burns, 2019). This paper argues that both forms of research are valuable, but they serve different purposes. The education system needs both large-scale studies that inform policy and small-scale action research that informs practice. The current evidence gap in CBC language education exists because the latter has been neglected.

Evidence Gaps in Formative Assessment, Oral Participation, and Material Adaptation

Within the broader literature on CBC language education, three specific evidence gaps are relevant to the classroom projects reported in this paper. First, on formative assessment, there is ample theoretical literature advocating for strategies such as exit tickets, oral check-ins, peer assessment, and self-

assessment (Black & Wiliam, 2018). However, very few studies have compared the practical feasibility of different formative assessment methods in low-resource, large-class settings. The question is not whether formative assessment is beneficial; the evidence for that is strong, but rather which methods are most time-efficient and inclusive for teachers with limited time and learners with varying literacy levels. This gap is particularly significant because, as Oduro (2018) found, many teachers abandon formative assessment not because they disagree with its principles but because they cannot manage the paperwork.

Second, on oral participation, a substantial body of research has documented the benefits of structured pair work and small-group discussion for language development (Vygotsky, 1978). However, most of this research has been conducted in well-resourced classrooms with small class sizes. In Zambian primary classrooms, where class sizes often exceed fifty learners, the practical question is not whether pair work is theoretically beneficial but whether a simple intervention such as structured talk partners can be implemented without extensive retraining or additional resources. Furthermore, there is limited evidence on how to measure oral participation simply and reliably, using, for example, speaking turn tallies rather than complex discourse analysis, so that teachers can track their own progress without becoming researchers in the formal sense.

Third, on material adaptation, the principle of localisation is widely endorsed in the CBC literature. The Zambian national curriculum explicitly encourages teachers to adapt materials to suit local contexts (Ministry of General Education, 2013). Yet there is almost no published research from Zambian classrooms that documents the process of adaptation, the specific types of adaptations made, or the measurable impact of those adaptations on learner outcomes. As a result, teachers who want to localise their materials have no models to follow, no evidence on which adaptations are most effective, and no simple method for evaluating whether their adaptations have worked. The three projects reported in this paper were designed specifically to address these evidence gaps by providing concrete, completed examples from real Zambian classrooms.

Theoretical Framework

This paper is grounded in two complementary theoretical perspectives: Vygotsky's sociocultural theory of learning and Schön's concept of the reflective practitioner. Together, these frameworks provide a robust justification for why teacher-led action research is epistemologically valid and pedagogically valuable.

Vygotsky's Sociocultural Theory

Lev Vygotsky's (1978) sociocultural theory of learning posits that all higher cognitive functions, including language, reasoning, and problem solving, develop first through social

interaction and only later become internalised as individual mental processes. The most well-known concept from this theory is the zone of proximal development, defined as the distance between what a learner can do independently and what they can do with guidance from a more knowledgeable other, such as a teacher or a peer. In the context of CBC language education, this theory has several important implications. First, it suggests that language development cannot occur in isolation; learners must have frequent, structured opportunities to use language in social interaction. This directly supports the action research focus on oral participation and structured talk partners, because without such interaction, learners are unlikely to progress through their zone of proximal development. Second, Vygotsky emphasised the role of scaffolding, the temporary support provided by a teacher or peer to help a learner perform a task just beyond their current ability. In a CBC language classroom, scaffolding might involve a teacher modelling a sentence structure, providing sentence starters, or pairing a stronger speaker with a weaker speaker. The action research intervention of structured talk partners, reported later in this paper, operationalises Vygotsky's theory by creating a peer-scaffolding environment where learners can rehearse language before being expected to speak in front of the whole class.

Third, Vygotsky's theory has implications for assessment. Traditional assessment, which focuses on what a learner can do independently, measures only the 'actual developmental level'. Competency-based assessment, by contrast, is also concerned with what a learner can do with support, that is, their potential for future development. This justifies the use of formative assessment methods such as oral check-ins, which reveal not only what a learner knows but also what they are on the verge of understanding. The Grade 4 teacher's comparison of exit tickets and oral check-ins, reported in this paper, can be understood through a Vygotskian lens: written exit tickets measure independent performance, which may underestimate a learner's ability if they have literacy difficulties, whereas oral check-ins allow the teacher to provide subtle prompts and thus assess the learner's potential.

Schön's Reflective Practitioner

Donald Schön's (1983) concept of the reflective practitioner provides the second theoretical pillar for this paper. Schön argued that professional expertise, particularly in complex, uncertain fields such as teaching, cannot be reduced to the application of technical knowledge. Instead, expert practitioners engage in two types of reflection. The first is reflection-in-action, which occurs in real time while the practitioner is engaged in a task. For example, a teacher who notices that several learners look confused during a grammar explanation might spontaneously rephrase the explanation, try a different example, or invite questions. This is reflection-in-action because the teacher is thinking about their practice while simultaneously acting. The second type is reflection-

on-action, which occurs after the event, when the practitioner steps back to analyse what happened, why it happened, and what might be done differently in the future. This might involve a teacher jotting notes after a lesson, discussing a challenging moment with a colleague, or writing a brief reflective journal.

Action research operationalises Schön's concept by transforming these informal reflections into a systematic, documented inquiry. The four-stage cycle: Look, Think, Act, Reflect, can be mapped directly onto Schön's framework. The Look stage involves collecting baseline data, which is a form of structured observation. The Think stage involves analysing the data and planning an intervention, which is reflection-on-action. The Act stage involves implementing the intervention while remaining open to spontaneous adjustments, which is reflection-in-action. The Reflect stage involves evaluating the outcomes and planning the next cycle, which is further reflection-on-action. Importantly, Schön's framework justifies why teachers are the most appropriate people to research their own practice. Unlike external researchers, who observe classrooms from the outside, teachers are insider practitioners who have access to the tacit, moment-to-moment knowledge that is essential for understanding why an intervention works or fails. This is not a weakness of action research; it is its epistemological strength.

The visual diagram that accompanied the original talk (and is summarised here) presents the Look – Think – Act – Reflect cycle as a continuous spiral, with each completed cycle leading into a new cycle at a deeper level of understanding. For example, a teacher who completes one cycle on oral participation might find that talk partners increase speaking turns but that some pairs dominate the conversation. That finding then becomes the starting point for a second cycle, in which the teacher looks at within-pair equity, thinks about strategies such as rotating roles, acts by implementing role cards, and reflects on the results. This spiralling process is what distinguishes action research from one-off problem solving: it is not a linear process with a fixed endpoint but an ongoing, developmental process of professional learning.

Methodology

This section describes the methodological approach taken in the three teacher-led action research projects reported in this paper. Because each project was conducted independently by a practising teacher in their own classroom, the methodology is presented as a common framework followed by project-specific details. The section also addresses the ethical considerations that guided all three projects (Okolie et al., 2025).

Research Paradigm and Approach

All three projects were situated within a pragmatic, practitioner research paradigm. Pragmatism, as a research

philosophy, prioritises practical consequences over abstract philosophical debates about the nature of truth (Creswell & Poth, 2018). For teacher-researchers, the central question is not whether their findings are universally true but whether they are useful for improving their own classroom practice. This pragmatic orientation justifies the use of simple, flexible, mixed-methods data collection, such as combining numerical tallies with written observational notes, without insisting on the purity of a single paradigm such as positivism or interpretivism (Siame & Banda, 2024). The approach was qualitative-dominant but included quantitative elements such as frequency counts and pre/post-score comparisons, a design often referred to as 'qualitative action research with quantitative description' (Burns, 2019: 67).

The Action Research Cycle: Look, Think, Act, Reflect

Each teacher followed the same four-stage cycle, adapted from Kemmis et al. (2014) and simplified for classroom use. In the Look stage, the teacher identified a specific problem in their own CBC language classroom and collected baseline data to understand the current situation. This stage lasted approximately one week for each project. For example, the Grade 4 teacher who was concerned about formative assessment first looked at how many learners were completing the exit tickets she was currently using, and she made brief notes on which learners consistently failed to complete them. In the Think stage, the teacher analysed the baseline data to identify patterns or causes, then planned an intervention that might address the problem. This stage typically took two to three days. The Grade 4 teacher, for instance, noticed that struggling readers were the ones failing to complete written exit tickets, so she thought that an oral check-in method might be more inclusive. In the Act stage, the teacher implemented the planned intervention while continuing to collect simple data. This stage lasted between two and four weeks, depending on the project. The Grade 4 teacher alternated between written exit tickets and oral check-ins for ten consecutive lessons, recording completion rates each day. In the Reflect stage, the teacher analysed the post-intervention data, drew conclusions, and identified actionable findings. This stage also took two to three days. The Grade 4 teacher calculated the average completion rates for each method and wrote a one-paragraph summary of her conclusion that oral check-ins were more inclusive for her learners. Each teacher then planned what they would do next, for example, implementing oral check-ins more consistently while also thinking about how to support struggling readers in written tasks.

Project-Specific Methodological Details

Project A: Formative Assessment Comparison (Grade 4)

The Grade 4 teacher taught language arts to a class of 44 learners in a peri-urban school in Lusaka Province. Her

research question was: Do exit tickets or oral check-ins produce higher completion rates for Grade 4 CBC language learners? She defined completion rate as the proportion of learners who provided a response to the formative assessment prompt, whether written or spoken. Over ten consecutive days, she alternated between the two methods: on odd-numbered days, she used written exit tickets (a slip of paper with one question that learners answered individually and submitted as they left the lesson); on even-numbered days, she used oral check-ins (standing at the door as learners left and asking each learner the same question verbally, recording their response with a simple tally). For the written exit tickets, she counted how many tickets were submitted each day. For the oral check-ins, she counted how many learners gave a verbal response, noting that learners who were absent or who refused to answer were counted as non-completion. She also kept brief observational notes on why some learners did not complete the task, writing a few sentences after each lesson. No statistical software was used; analysis involved calculating the average completion rate for each method across the five days it was used, and comparing the two averages. She also grouped her observational notes thematically by looking for recurring reasons for non-completion (Siame, 2024).

Project B: Oral Participation (Grade 7)

The Grade 7 teacher taught English language to a class of 52 learners in a rural school in Eastern Province. Her research question was: Does introducing structured talk partners increase the number of speaking turns in Grade 7 CBC language lessons? She defined a speaking turn as any verbal contribution from a learner during whole-class discussion that was acknowledged by the teacher, including answers to questions, comments, questions directed to the teacher, or elaborations on another learner's contribution. Before introducing any intervention, she collected baseline data for one week: during four lessons (the school had four English lessons per week), she tallied every speaking turn on a simple sheet, noting also which learners spoke. She then introduced structured talk partners, an intervention adapted from Burns (2019). Each learner was assigned a partner, and pairs were given clear roles: for each teacher question, pairs first discussed their answer for thirty seconds (Partner A spoke first, then Partner B), then the teacher called on individuals to share their pair's answer with the whole class. The teacher also rotated roles each lesson so that the same learner was not always speaking first. During the four-week intervention period, she continued to tally speaking turns during the whole-class share-out portion of each lesson. She also wrote brief notes after each lesson on whether the talk partner system seemed to be functioning smoothly. Analysis involved comparing the average number of speaking turns per lesson in the baseline week to the average in weeks one, two, three, and four of the intervention, using simple line graphs drawn by hand. She also calculated the percentage of learners who

spoke at least once during the baseline week versus during the fourth week of the intervention.

Project C: Material Adaptation (Grade 5)

The Grade 5 teacher taught integrated language arts to two parallel classes in a town school in Copperbelt Province. One class (n=32) was designated as the adaptation class, and the other (n=30) as the control class. Both classes were taught by the same teacher, used the same national textbook, and followed the same weekly schedule, but they were taught at different times of the day. The teacher's research question was: Does adapting a standard textbook unit with local examples improve test scores compared to using the original unit? She selected a unit on 'Shopping and Money', which originally featured scenarios involving supermarkets, credit cards, and online shopping, all unfamiliar to most of her learners. For the adaptation class, she systematically replaced the original examples with local equivalents: the supermarket became the weekly open-air market; credit cards became cash or mobile money; the shopping list was rewritten to include locally available items such as kapenta (small dried fish), mealie meal, and tomatoes. She also replaced two reading passages with passages she wrote herself about a child helping their mother at the local market, using local names and place names. The control class continued to use the original textbook unit without any adaptation. Both classes received the same number of lessons (eight lessons over two weeks) and the same amount of teacher input. At the end of the unit, both classes took the same summative test, which was designed by the teacher to assess the same learning objectives: vocabulary recognition, reading comprehension, and the ability to write a short dialogue about shopping. The test was marked blindly by a colleague who did not know which class was which. The analysis involved calculating the mean test score for each class, comparing the two means, and comparing performance on individual test items to see which question types showed the largest difference (Siame & Lubungu, 2023). The teacher also wrote reflective notes on the process of adapting the materials, noting how long it took and which adaptations felt most successful.

Ethical Considerations

Ethical approval for all three projects was guided by a simplified one-page ethics checklist adapted from Burns (2019) and aligned with the principles of the Zambian Ministry of General Education's research guidelines. Because these were teacher-led action research projects conducted for professional improvement rather than external publication, full institutional review board approval was not required, but all teachers nevertheless followed a rigorous ethical protocol. First, each teacher obtained written permission from their school head, explaining the purpose of the project, the timeline, and the types of data to be collected. Second, for each project, the teacher sent a letter home to parents or guardians explaining that their child's classroom data would be used for the teacher's research. The letter stated clearly

that participation was voluntary, that all data would be anonymised, and that non-participation or withdrawal would have no consequences for the child's grades or classroom treatment. A passive consent procedure was used: parents who did not wish their child to participate were asked to return a signed opt-out form; all others were assumed to consent. No parent opted out of any project. Third, all learner data were anonymised at the point of collection. For Project A and Project B, teachers used learner codes such as L01 and L02 rather than names. For Project C, test scores were entered into a spreadsheet with codes, and the colleague who marked the tests did not know which class was which. Fourth, teachers were instructed to store all paper data (tallies, notes, tests) in a locked drawer at school and to destroy the data after writing their one-page summary reports. Fifth, for Project C, the control class was not disadvantaged by receiving the original textbook unit; after the study concluded, the teacher shared the adapted materials with the control class teacher so that those learners also benefited from the localised resources. This principle of beneficence, ensuring that research participation does not disadvantage any learner, was central to all three projects.

Data Analysis Procedures

Data analysis across all three projects was deliberately simple and accessible to teachers without formal training in statistics. For Project A, analysis involved calculating the average completion rate for written exit tickets across five days and the average completion rate for oral check-ins across five days, then subtracting the former from the latter to find the difference. Observational notes were analysed by reading through them twice, highlighting any reason for non-completion that appeared more than once, and grouping similar reasons into three categories: literacy-related, attention-related, and absence-related. For Project B, analysis involved calculating the average number of speaking turns per lesson for the baseline week and for each of the four intervention weeks, then plotting these averages on a simple hand-drawn line graph to visualise the trend. The teacher also calculated the percentage of learners who spoke at least once in the baseline week (number of unique speakers divided by total class enrolment) and compared this to the percentage in the fourth intervention week. For Project C, analysis involved calculating the mean test score for the adaptation class and for the control class, then calculating the difference between the two means. The teacher also calculated the mean score for each test item to identify which types of questions showed the largest gap between classes. No inferential statistics (such as t-tests) were used because the purpose was not to claim statistical significance but to describe the observed difference in this specific context. As Burns (2019) argues, action researchers do not need p-values; they need practical evidence that an intervention was associated with an improvement, which can be provided through simple descriptive statistics.

Results and Discussion

This section presents the findings from each of the three teacher-led action research projects in turn. For each project, the results are presented first, followed by a discussion that interprets those results in light of the literature reviewed earlier. The section concludes with a cross-project synthesis and discussion of common themes.

Project A: Formative Assessment Comparison

The Grade 4 teacher's data showed a clear difference in completion rates between the two formative assessment methods. Over five days of using written exit tickets, the average completion rate was 68%, meaning that on average, 30 out of 44 learners submitted a ticket each day. However, the completion rate was not stable across the five days: it started at 75% on day one but declined to 61% by day five, suggesting that learner engagement with the written tickets decreased over time. In contrast, over five days of using oral check-ins, the average completion rate was 92%, meaning that on average, 40 out of 44 learners gave a verbal response at the door. The oral check-in completion rate was also more stable, ranging from 89% to 95% across the five days. The observational notes provided insight into why the difference occurred. The teacher noted that struggling readers were the most likely to avoid the written exit tickets, often pretending to write or submitting blank slips. One observation read: 'Learner L17 stared at the ticket for two minutes, then folded it and put it in her pocket. When I asked her later, she said she couldn't read the question.' For oral check-ins, the teacher noted that even learners who were usually silent in whole-class discussions were willing to whisper a one-word answer at the door. However, she also noted that oral check-ins were more time-consuming: written exit tickets took approximately four minutes to collect and scan, whereas oral check-ins took ten to twelve minutes for the full class of 44 learners, which sometimes cut into the next lesson.

The finding that oral check-ins produced higher completion rates than written exit tickets is consistent with the literature on inclusive formative assessment. Black and Wiliam (2018) have argued that formative assessment methods must be accessible to all learners, regardless of their literacy level, otherwise the assessment data will systematically exclude the very learners who need the most support. In this Grade 4 classroom, the written exit tickets were inadvertently functioning as a literacy test rather than a language comprehension check. Learners who could read and write fluently completed the tickets easily; learners who were still developing literacy skills could not demonstrate their oral language understanding because the medium of assessment (writing) was a barrier. This finding has important implications for CBC language education, where the goal is to assess competency in speaking and listening as well as reading and writing. If a teacher uses only written formative assessment, they may conclude that struggling readers have

poor language competency when, in fact, their oral competency is much stronger. The oral check-in method, by removing the literacy barrier, provided a more accurate picture of learners' language abilities.

However, the teacher's note about time consumption is an important practical consideration. Oral check-ins took nearly three times as long as written exit tickets. In a class of 44 learners, ten to twelve minutes per lesson is a substantial time investment, representing approximately a quarter of a typical forty-minute lesson. The teacher reflected that she would not use oral check-ins every day, but she would use them strategically, for example, once per week to check in on struggling learners, or at the end of a unit to assess oral language outcomes. This reflection illustrates the value of the action research cycle: the teacher did not simply conclude that oral check-ins were 'better' in an absolute sense; she concluded that they were better for certain purposes and under certain conditions. Her actionable finding was that for younger or mixed-ability CBC language classes, oral formative assessments are more inclusive and generate more immediate feedback data, but teachers should use them selectively to manage time demands.

Project B: Oral Participation

The Grade 7 teacher's speaking turn tallies showed a substantial increase following the introduction of structured talk partners. During the baseline week, the average number of speaking turns per lesson was 14, with a range of 11 to 17 across the four lessons. Notably, these 14 turns were taken by only 9 unique learners, meaning that 43 learners (83% of the class) did not speak at all during the whole-class discussion in the baseline week. The teacher's notes indicated that the same five learners dominated the discussion each day, and when she called on other learners directly, they often responded with silence or a whispered 'I don't know'.

After introducing structured talk partners, the average number of speaking turns per lesson increased steadily across the four-week intervention. In week one, the average rose to 22 turns per lesson, still concentrated among 14 unique learners. In week two, the average rose to 31 turns per lesson, with 22 unique learners speaking. In week three, the average reached 40 turns per lesson, with 35 unique learners speaking. In week four, the average was 47 turns per lesson, with 44 unique learners speaking, meaning that 85% of the class had spoken at least once during the whole-class discussion in that final week. The teacher's observational notes suggested a mechanism for this change: 'When learners have already said their answer to their partner, they are much more willing to say it to the whole class. It is like a rehearsal.' Another note read: 'Shy learners especially benefit. Learner L31 has never spoken in my class before this term. Today she raised her hand and gave the correct answer after discussing with her partner.'

The dramatic increase in speaking turns observed in Project B can be interpreted through Vygotsky's (1978) sociocultural theory. The structured talk partners intervention created a low-stakes social interaction environment, the pair discussion, where learners could produce language with peer scaffolding before being expected to produce language independently in front of the whole class. For a shy or low-confidence learner, speaking to a single partner is a task within their zone of proximal development; speaking to the whole class may be beyond it. The partner discussion acts as a scaffold, reducing the anxiety associated with public speaking and allowing the learner to rehearse both the content and the act of speaking. After this rehearsal, the same learner can often succeed at the whole-class task with minimal additional support. This pattern aligns with the concept of the affective filter, a term from second language acquisition research referring to the emotional barriers (anxiety, embarrassment, low confidence) that prevent learners from using language even when they know it (Krashen, 1982). Structured talk partners lower the affective filter by changing the social context of speaking.

The findings also have practical implications for CBC language education, which explicitly prioritises oral communication as a key competency. In a class of 52 learners, it is mathematically impossible for every learner to speak during a whole-class discussion if the teacher relies only on calling on individuals. Even if the teacher called on a different learner every thirty seconds for an entire forty-minute lesson, only 80 learners could speak, and that assumes no interruptions, no extended answers, and no teacher talk. Structured talk partners solve this problem by multiplying speaking opportunities: in a four-minute pair discussion, every learner in the class can speak, whereas in four minutes of whole-class questioning, only a handful of learners will speak. The actionable finding from this project is that structured pair work acts as a rehearsal mechanism that significantly lowers the affective filter for oral participation, and teachers should prioritise pair-based speaking before whole-class speaking in CBC language lessons.

Project C: Material Adaptation

The Grade 5 teacher's comparison of test scores showed a substantial difference between the adaptation class and the control class. The adaptation class (n=32) achieved a mean test score of 78%, with scores ranging from 62% to 94%. The control class (n=30) achieved a mean test score of 59%, with scores ranging from 41% to 81%. The difference of 19 percentage points is practically significant, meaning that the adaptation class outperformed the control class by nearly one full letter grade on the school's grading scale. When the teacher analysed performance by individual test items, she found that the largest gaps were on questions requiring the application of language to real-life scenarios. For example, on a question that asked learners to write a short dialogue between a customer and a shopkeeper, the adaptation class

averaged 82%, while the control class averaged 51%. On a question that asked learners to identify the correct vocabulary word for a given picture (e.g., ‘cashier’ versus ‘customer’), the gap was smaller but still favoured the adaptation class: 74% versus 65%. The smallest gap was on a rote vocabulary matching question, where the adaptation class scored 79%, and the control class scored 72%.

The teacher’s reflective notes provided insight into why the adaptation class performed better. She wrote: ‘When I taught the market unit to the adaptation class, learners were laughing and pointing, saying, “That’s like my grandmother’s stall.” They kept adding their own examples. In the control class, learners were quiet. They didn’t recognise the supermarket words. Some thought a credit card was a type of ID card.’ She also noted that the adaptation took her approximately three hours to complete, rewriting the two reading passages, changing the examples in the textbook margins, and creating new comprehension questions that referenced the localised content. While three hours is a significant investment, she reflected that she could reuse the adapted unit in future years and could also share it with other teachers at her school.

The finding that localised materials produced substantially higher test scores, particularly on application questions, is consistent with the literature on culturally responsive teaching and schema theory. Schema theory, originating in cognitive psychology, posits that learners understand new information by connecting it to existing mental frameworks called schemas (Anderson & Pearson, 1984). When a textbook unit on shopping describes supermarkets and credit cards, a learner who has never seen a supermarket or a credit card has no existing schema to attach the new information to. The information remains abstract, disconnected, and difficult to remember or apply. When the same unit is localised to describe an open-air market and cash transactions, the learner can activate their existing schema for ‘market’ and use it as a foundation for new language learning. This explains why the adaptation class performed especially well on application questions: those questions required learners to use the new language in a realistic scenario, and the localised scenario was already familiar to them. The control class, by contrast, was being asked to apply language to an unfamiliar scenario, which is a much more cognitively demanding task.

The actionable finding from this project is that localising textbook content dramatically improves comprehension and transfer, supporting CBC’s competency-based goals. However, the finding also raises important questions about resourcing and time. Not every teacher has three hours to adapt a single unit, particularly given the many competing demands on teachers’ time. The teacher in this project reflected that she would prioritise adaptation for units where the cultural or contextual gap is largest – for example, units on technology, urban life, or formal employment – and use the original materials for units that are already reasonably aligned with learners’ experiences. She also suggested that

schools could adopt a collaborative adaptation model, where each teacher on a grade level adapts one unit, and they share their adapted materials, reducing the individual workload. This suggestion aligns with the collaborative ethos of action research as described by Kemmis et al. (2014).

Cross-Project Synthesis

Across all three projects, several common themes emerge. First, all three teachers were able to collect and analyse simple data without external support, demonstrating the feasibility of the ‘research for non-researchers’ approach. Second, all three interventions produced measurable improvements, but each teacher also identified practical constraints, time for oral check-ins, the need to manage pair dynamics, and the workload of adaptation, which would shape how they implemented the intervention sustainably. This finding reinforces the importance of the Reflect stage in the action research cycle: the goal is not to find a perfect solution but to find a better solution that works in this specific context, while acknowledging its limitations. Third, none of the teachers required statistical training or sophisticated software; tallies, averages, and simple comparisons were sufficient to generate actionable findings. This supports Burns’s (2019) argument that action research should remain accessible to classroom practitioners. Fourth, all three teachers reported that the process of conducting research changed how they thought about their teaching. The Grade 4 teacher wrote in her reflection: ‘Before, I would try a new method for a day or two and decide if it worked based on a feeling. Now I collect data for a week before deciding.’ This shift from intuitive to evidence-based practice is perhaps the most valuable long-term outcome of teacher-led action research.

Limitations

While the three projects reported in this paper provide valuable evidence for the potential of teacher-led action research in CBC language education, several limitations must be acknowledged. These limitations are organised into four categories: contextual and generalisability limitations, methodological limitations, ethical and practical limitations, and limitations of the action research cycle itself.

Contextual and Generalisability Limitations

The most significant limitation is that the three projects were conducted in only two Zambian provinces (Lusaka, Eastern, and Copperbelt), all in primary schools, and all with teachers who volunteered to participate in the research. It is possible that volunteer teachers are more motivated, more confident, or better resourced than the average Zambian teacher, meaning the findings may not be transferable to teachers who are overworked, under-supported, or working in extremely challenging conditions. Furthermore, the class sizes in the three projects ranged from 44 to 52 learners, which is typical for Zambian primary schools but much larger than class sizes

in many other national contexts. Teachers in countries with smaller class sizes may find different strategies more effective. The findings are also specific to language education; action research for mathematics, science, or social studies might require different methods or produce different outcomes. As with all action research, the findings are context-bound and not intended to be statistically generalisable. Transferability, the degree to which another teacher in another context finds the findings useful, is a judgement that each reader must make based on the similarity between their context and the context described in this paper (Creswell & Poth, 2018).

Methodological Limitations

Each project had specific methodological limitations. In Project A, the teacher alternated between written exit tickets and oral check-ins on alternating days rather than randomly assigning methods to lessons. This means that factors other than the method itself, such as the difficulty of the lesson content, the time of day, or learner fatigue, could have influenced completion rates. For example, if the more difficult lessons happened to fall on oral check-in days, that would have artificially lowered the oral check-in completion rate; if easier lessons fell on oral check-in days, the completion rate would have been artificially inflated. A stronger design would have involved random assignment of methods to lessons, but this was not practical for a classroom teacher with a fixed curriculum schedule. In Project B, the teacher did not collect data on whether the increase in speaking turns was sustained after the four-week intervention period ended. It is possible that learners' increased participation was a novelty effect; they spoke more because the talk partner system was new and interesting, not because it fundamentally changed their willingness to speak. A follow-up data collection point at eight or twelve weeks would have strengthened the finding. In Project C, the teacher was not blind to the research hypothesis; she taught both classes herself and knew which class was receiving the adapted materials. This creates the possibility of expectancy effects, where the teacher unconsciously taught the adaptation class with more enthusiasm or spent more time on difficult concepts. The use of a colleague to mark the tests blindly mitigated this limitation for the test scores, but it did not eliminate the possibility of differential teaching quality. A stronger design would have involved a different teacher teaching the control class, but this was not feasible in a single-teacher school.

Ethical and Practical Limitations

From an ethical perspective, the use of a control class in Project C raises questions of equity. The control class received what the teacher already believed to be inferior materials (the original textbook unit) for the duration of the two-week study. While the teacher shared the adapted materials after the study concluded, the control class still experienced two weeks of less effective instruction. This is a

common ethical tension in educational research: the desire to generate rigorous evidence through comparison must be balanced against the obligation to provide all learners with the best possible instruction. In this case, the teacher judged that the evidence generated was valuable enough to justify the short-term inequity, and she mitigated the inequity by sharing the materials afterwards. However, this judgement may not be acceptable to all teachers or school leaders. A practical limitation across all three projects was the time required for data collection. While the teachers reported that the time investment was manageable, all three noted that they would not be able to maintain the same level of data collection for every unit of the school year. The Grade 7 teacher, for example, said that tallying speaking turns for every lesson was sustainable for four weeks but not for a full term of twelve weeks. This suggests that action research is best used as a periodic, intensive inquiry rather than a continuous, year-long process. Teachers should plan to conduct one or two action research cycles per year, focusing on their most pressing problems, rather than attempting to research everything at once.

Limitations of the Action Research Cycle

Finally, the action research cycle itself has inherent limitations. Because action research is conducted by insider practitioners, it is vulnerable to confirmation bias, the tendency to notice and remember evidence that supports one's preferred conclusion while overlooking evidence that contradicts it. The teacher who hopes that structured talk partners will increase participation may unconsciously tally speaking turns more generously during the intervention than during the baseline, or may overlook instances where learners spoke without having first discussed with their partner. While the use of simple, countable data (such as tallies) reduces the risk of bias, it does not eliminate it. Another limitation of the action research cycle is that it produces findings that are immediately useful but may be short-lived. A teacher who solves a problem in October may find that the same problem reappears in February with a different group of learners, requiring a new cycle of inquiry. This is not a flaw in action research but a feature: it positions teaching as an ongoing process of inquiry rather than a set of fixed solutions. However, for teachers who are already exhausted by the demands of the classroom, the idea of perpetual inquiry may feel overwhelming rather than empowering. The challenge for school leaders and policy makers is to create conditions, protected time, collaborative structures, and recognition of research as legitimate professional work that makes action research sustainable rather than an additional burden.

Conclusion

This paper set out to address a persistent problem in CBC language education: the scarcity of classroom-level, practitioner-generated evidence on how to solve local teaching challenges. Through a review of the literature, a

theoretical framework grounded in Vygotsky's sociocultural theory and Schön's reflective practitioner, and the presentation of three completed teacher-led action research projects from Zambian primary schools, this paper has argued that teacher-led action research is a feasible, low-cost, and effective method for closing the evidence gap. The three projects demonstrated that simple interventions, oral check-ins instead of written exit tickets, structured talk partners, and localised textbook materials, can produce measurable improvements in formative assessment completion rates, oral participation, and test scores. More importantly, the process of conducting research appeared to shift each teacher's professional identity from passive curriculum deliverer to active classroom inquirer, a shift that is essential for the long-term sustainability of competency-based education.

The theoretical contribution of this paper is to show how action research operationalises Vygotskian principles of social learning and Schönian principles of reflective practice in the specific context of CBC language education. The practical contribution is to provide concrete, completed examples of teacher-led action research that other teachers can adapt to their own contexts, along with a simple four-stage cycle (Look, Think, Act, Reflect) that requires no statistical training or external funding. The paper has also demonstrated that valid classroom research does not require large sample sizes, random assignment, control groups, or advanced statistics; simple tallies, pre/post comparisons, and brief observational notes are sufficient to generate actionable findings.

Based on the findings and limitations discussed in this paper, the following recommendations are offered for policymakers at the national and provincial levels. First, national teacher education curricula should integrate action research methodology into pre-service training and in-service CPD programmes. Currently, most Zambian teacher training programmes include a course on educational research, but these courses typically focus on formal academic research (literature reviews, statistical analysis, thesis writing) rather than practical action research. A revised curriculum should dedicate at least twelve hours to the Look – Think – Act – Reflect cycle, including supervised practice in designing a simple classroom study. Second, the Ministry of Education should develop and disseminate a simplified ethics checklist for teacher-led action research, adapted from the one-page template used in this study. The current ethics approval process, designed for university researchers, is too cumbersome for classroom teachers. A one-page checklist covering permissions, anonymity, data storage, and beneficence would lower the barrier to ethical research. Third, policy makers should recognise action research as a legitimate form of professional development and a valid contribution to teachers' career progression. Teachers who complete and share an action research report should receive CPD points or other recognition, incentivising participation.

The second recommendation is that school leaders, including head teachers and curriculum coordinators, have a critical role in creating the conditions for teacher-led action research. First, school leaders should protect time for action research by reducing administrative burdens during one term per year, allowing teachers to dedicate two hours per week to their research project. This could be achieved by cancelling one staff meeting per week during the research term or by providing cover for teachers to observe each other's classes. Second, school leaders should establish teacher research networks within their school or cluster of schools, where teachers meet monthly to share their research questions, data collection methods, and findings. These networks provide accountability, reduce isolation, and accelerate the spread of successful interventions. Third, school leaders should model action research by conducting their own studies on school-level problems, such as the effectiveness of staff meetings or the impact of different timetabling arrangements. When leaders position themselves as co-inquirers rather than external evaluators, teachers are more likely to embrace action research as a collaborative, supportive process rather than a performative, high-stakes activity.

For individual teachers who wish to begin action research, this paper offers several practical recommendations. First, start with a small, specific, manageable problem. A research question such as 'How can I increase oral participation?' is too broad. A better question is, 'Does using structured talk partners increase the number of speaking turns in my Grade 7 class over four weeks?' This is specific, measurable, and time-bound. Second, choose one simple data collection method that can be completed in less than five minutes per lesson. Tallying speaking turns on a class list, counting completed exit tickets, or collecting one work sample per week are all sufficient. Avoid the temptation to collect too much data; more data is not better data. Third, plan the full Look – Think – Act – Reflect cycle before beginning. Decide in advance how long each stage will last, what data will be collected, and what the success criteria will be. This planning prevents the common problem of collecting data indefinitely without ever reaching the Reflect stage. Fourth, share the findings, even if they are inconclusive or negative. A finding that an intervention did not work is still valuable evidence that saves other teachers from trying the same unsuccessful strategy. Teachers can share findings through WhatsApp groups, internal school newsletters, or brief presentations at staff meetings. Publication in a formal journal is not necessary or expected.

For teacher educators in colleges and universities, this paper recommends a shift from teaching 'research about teaching' to teaching 'research for teaching'. That is, rather than requiring pre-service teachers to write a traditional research proposal on a topic of their choice, teacher educators should require them to complete one full action research cycle during their teaching practicum. The final assessment would be a one-page summary of the Look: Think – Act – Reflect cycle,

not a fifty-page thesis. This approach would produce new teachers who are already familiar with evidence-informed practice, rather than new teachers who view research as an abstract, irrelevant activity conducted by people in universities.

While this paper has demonstrated the feasibility and potential impact of teacher-led action research in CBC language education, several avenues for future research remain. First, longitudinal studies are needed to determine whether the changes produced by action research cycles are sustained over time. Does a teacher who completes a cycle on oral participation continue to use structured talk partners six months later? If not, what supports are needed to maintain the practice? Second, comparative studies could examine whether collaborative action research (where a team of teachers at the same school works on a shared problem) produces different outcomes than individual action research. Theory suggests that collaboration would increase sustainability and reduce workload, but empirical evidence from Zambian classrooms is lacking. Third, future research should explore whether learner-led action research is feasible in upper primary or secondary grades. If learners can be taught to use a simplified Look – Think – Act – Reflect cycle to improve their own learning strategies, the potential for empowerment would be even greater than teacher-led research alone. Fourth, cost-effectiveness studies could compare the investment required to support teacher-led action research (such as release time, training, and materials) with the learning gains achieved, providing evidence for policymakers who must allocate scarce resources. Finally, replication studies in other CBC contexts – such as Kenya, Tanzania, Rwanda, or South Africa – would strengthen the evidence base and identify contextual factors that moderate the effectiveness of action research.

In conclusion, the evidence gap in CBC language education will not be closed by waiting for external researchers to produce generalisable findings. It will be closed when thousands of teachers, in their own classrooms, with their own learners, using simple methods and a structured cycle of inquiry, generate their own local evidence and share it with their peers. This paper has shown that such an approach is not only possible but already happening in Zambian schools. The task now is to scale it, support it, and celebrate it as a legitimate, valuable form of educational research.

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