

Reading–Writing Interdependence Among Kenyan Secondary School Learners: Evidence for Shared Linguistic Competence

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Abstract: *The relationship between reading and writing has attracted considerable attention in Applied Linguistics because both skills are believed to rely on common linguistic and cognitive resources. However, empirical evidence from (ESL) contexts in Sub-Saharan Africa remains limited. This study examined reading–writing interdependence among Kenyan secondary school learners to determine whether the two skills reflect shared linguistic competence. A convergent parallel mixed methods design was employed involving 75 Form Three learners and 10 teachers of English drawn from five public secondary schools in Embu West Sub-County, Kenya. Quantitative data were collected using a reading comprehension test, a writing proficiency task while qualitative data were generated through semi-structured interviews with teachers. Quantitative data were analysed using descriptive statistics and Pearson's Product-Moment Correlation Coefficient. Qualitative data were analysed thematically. The findings revealed a strong positive relationship between reading comprehension and writing proficiency. Teachers similarly reported that learners who demonstrated a deeper understanding of texts generally produced more coherent and better-developed written responses. The study contributes evidence from an underrepresented African ESL context and supports pedagogical approaches that integrate reading and writing instruction.*

Keywords: reading comprehension, writing proficiency, reading–writing interdependence, shared linguistic competence, literacy development, English Second Language.

INTRODUCTION

Reading and writing occupy a central position in second language learning because they enable learners to access knowledge, construct meaning, and communicate ideas effectively. Success in many

academic settings depends largely on learners' ability to understand written texts and express themselves coherently in writing. Although these skills are often taught and assessed separately, growing evidence suggests that they are closely interconnected and may draw on many of the same linguistic resources (Grabe & Zhang, 2013; Graham et al., 2020). From an applied linguistic perspective, reading and writing are both meaning-making processes. Reading involves more than recognising words on a page; learners must interpret ideas, establish relationships among concepts, draw inferences, and evaluate information. Writing similarly requires learners to organise ideas, select appropriate linguistic forms, establish coherence, and communicate meanings to an audience. Consequently, the two skills appear to depend on overlapping knowledge of vocabulary, syntax, discourse organisation, and inferential reasoning.

Research conducted in different contexts has consistently reported positive relationships between reading and writing abilities. Learners who read extensively often develop stronger vocabulary, greater awareness of text organisation, and better control of written discourse (Graham et al., 2018). Likewise, writing activities can deepen comprehension because they require learners to reorganise and articulate meanings derived from texts (Shanahan, 2016).

Despite these findings, relatively little empirical work has examined reading–writing interdependence in African ESL contexts. In Kenya, studies have frequently investigated reading difficulties and writing challenges independently, with comparatively less attention given to the relationship between the two skills. Moreover, previous studies have often relied on overall literacy scores, providing limited insight into how particular dimensions of reading correspond to specific aspects of writing. The present study addresses these gaps by examining the relationship between reading comprehension and writing proficiency among Kenyan secondary school learners. More specifically, it investigates whether relationships observed at literal, inferential, and evaluative levels provide evidence for shared linguistic competence.

Reading and writing are closely related literacy skills that are essential for academic success in secondary education. However, reports on English language performance in Kenya continue to indicate that many learners experience difficulties in both reading comprehension and composition writing, particularly in interpreting ideas, making inferences, developing arguments, and expressing themselves coherently in writing. While these challenges suggest a possible connection between the two skills, reading and writing are often taught and assessed as separate components of the English curriculum. In addition, most previous studies have examined the two skills independently, resulting in limited understanding of how they interact in multilingual English as a Second Language (ESL) contexts such as Kenya.

Although international research has reported positive relationships between reading and writing, comparatively little empirical evidence exists from Sub-Saharan Africa, and even fewer studies have explored this relationship beyond overall literacy scores. Consequently, it remains unclear whether literal, inferential, and evaluative dimensions of reading correspond to similar dimensions in writing among Kenyan secondary school learners. This gap limits both theoretical understanding of shared linguistic competence and the development of instructional approaches that integrate reading and writing. The present study therefore sought to examine reading–writing interdependence among secondary school learners in Embu West Sub-County, Kenya, and to determine whether the relationship between the two skills provides evidence of shared linguistic competence.

The article aims at achieving the following objective. Firstly, it seeks to explore the relationship that exists between learners' reading comprehension and writing proficiency, and finally, it explores the extent to which this relationship reflects shared linguistic competence among the secondary school students in Embu West Sub-county.

Theoretical Framework

The study is anchored in Cummins' (1979, 2000) Common Underlying Proficiency (CUP) model. The theory proposes that language skills are supported by a shared reservoir of cognitive and linguistic resources. Although originally formulated to explain transfer across languages in bilingual settings, the model has important implications for literacy studies because it suggests that different language skills may depend on common underlying abilities. Applied to the present study, the theory implies that reading comprehension and writing proficiency may reflect shared competencies such as vocabulary knowledge, inferential abilities, discourse awareness, and higher-order thinking skills.

Once a learner comprehends these aspects of language, they develop a tendency to map them onto other language skills. Consequently, improvement in one skill supports improvement in another. The hypothesis posits that learners develop language skills better when they are taught together. This relates very well to this study in its quest to show the relationship between improvement in reading skills and its consequent effect on improved writing skills. Learners do this by using the knowledge gained in their reading comprehension activities to write well. This theory therefore help to explain the relationship between reading comprehension and writing ability among secondary school students in Embu West Sub-County.

METHODOLOGY

Research Design

The study employed a convergent parallel mixed methods design (Creswell & Creswell, 2023). Quantitative and qualitative data were collected concurrently, analysed separately, and integrated during interpretation. The quantitative strand established the relationship between reading comprehension and writing proficiency, whereas the qualitative strand provided contextual explanations of the observed patterns through teachers' experiences and perceptions.

Participants and Sampling

The study was conducted in public secondary schools in Embu West Sub-County, Kenya, where English functions primarily as a second language. Participants comprised 75 Form Three learners and 10 teachers of English drawn from five secondary schools representing boys', girls', and mixed school categories. Schools were selected through stratified sampling to ensure representation of different school types. Learners were selected through simple random sampling, while teachers of English were purposively selected because of their direct involvement in literacy instruction.

Research Instruments

Three instruments were used for data collection: a reading comprehension test, a writing proficiency task, and semi-structured interviews. The reading comprehension test assessed learners' abilities at literal, inferential, and evaluative levels. The writing task required learners to produce a 300–350-word composition linked to the reading passage and was assessed using an analytic rubric covering literal representation, inferential development, and evaluative construction. Semi-structured interviews

explored teachers' perceptions of the relationship between reading and writing, instructional strategies used to integrate the two skills, and challenges experienced during literacy instruction.

Validity and Reliability

The instruments were reviewed by specialists in English Language Education to establish content validity and ensure alignment with the study objectives and theoretical constructs. A pilot study involving eight Form Three learners and two teachers from a school outside the study area was conducted to refine the instruments and administration procedures. The learner questionnaire achieved acceptable internal consistency, with Cronbach's alpha exceeding the recommended threshold of .70 (Taber, 2018). To enhance scoring consistency, predetermined marking rubrics were used for the reading and writing tasks.

Data Collection Procedures

Data were collected through face-to-face sessions conducted in the participating schools. Learners completed the reading comprehension test, writing task, and questionnaire, while teachers participated in individual semi-structured interviews. Interviews were audio-recorded with participants' consent and supplemented with field notes.

Data Analysis

Quantitative and qualitative data were analysed separately before being integrated during interpretation. Quantitative data obtained from the reading comprehension test and writing task were first coded and entered into the Statistical Package for the Social Sciences (SPSS) Version 26. The data were then screened for completeness and accuracy before analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were computed to provide an overview of learners' performance in reading comprehension and writing proficiency.

To examine the relationship between the two literacy skills, Pearson's Product-Moment Correlation Coefficient was calculated using the composite reading and writing scores. Additional correlational analyses were conducted to determine the relationships between corresponding literacy constructs, namely literal comprehension and literal representation, inferential comprehension and inferential development, and evaluative comprehension and evaluative construction. The strength and direction of the correlations were then interpreted in relation to the study objective and theoretical framework. Qualitative data from the teacher interviews were audio-recorded, transcribed verbatim, and read several times to achieve familiarity with the data. Following Braun and Clarke's (2006) thematic analysis procedures, meaningful segments of text were first assigned initial codes. Related codes were subsequently grouped into broader categories and themes reflecting teachers' perceptions of reading–writing relationships and classroom literacy practices. Finally, the qualitative themes were compared with the quantitative findings to identify areas of convergence and divergence and to provide contextual explanations for the statistical patterns observed in the study.

RESULTS

Overall Relationship between Reading Comprehension and Writing Proficiency

Before establishing the relationship between reading comprehension and writing proficiency, the study first examined learners' overall performance in the two literacy skills. Table X presents the descriptive

statistics for the composite reading and writing scores. These statistics provide a preliminary indication of learners' literacy abilities and form the basis for the subsequent correlational analysis.

Table 1: Relationship between Reading Comprehension and Writing Proficiency

Variable	Mean	SD
Reading comprehension	11.80	2.91
Writing proficiency	11.30	3.02

The findings revealed a strong positive relationship between reading comprehension and writing proficiency ($r = .74$, $p < .001$). Learners who performed well in reading generally achieved better results in writing. Further analyses showed strong relationships between corresponding literacy dimensions.

Table 2: Relationships across Literacy Constructs

Reading Construct	Writing Construct	r
Literal comprehension	Literal representation	.742**
Inferential comprehension	Inferential development	.761**
Evaluative comprehension	Evaluative construction	.813**

$p < .01$

The statistical findings in Table 2 indicate strong positive relationships between each reading construct and its corresponding writing construct, demonstrating that performance in specific reading aspects closely mirrored performance in parallel writing tasks. Qualitative data from teacher interviews corroborated these statistical patterns, providing contextual depth to how these shared cognitive processes manifest in the classroom.

Literal comprehension was strongly correlated with literal representation ($r = .742$, $p < .01$). Learners who could accurately identify explicitly stated information in a text were generally able to reproduce and communicate those ideas effectively in writing. Although strong, this was the lowest correlation among the three pairs. Teachers noted that while basic comprehension gives students a starting foundation, writing still introduces additional mechanics, such as grammar, spelling, and sentence structure that can impede a student's ability to clearly transcribe what they have understood.

Inferential comprehension and inferential development also exhibited a strong positive relationship ($r = .761$, $p < .01$). Learners who were able to read between the lines, identify implied meanings, and make logical connections within a text tended to elaborate and develop ideas more effectively in their writing. Data from the teacher interviews reinforced this finding as one teacher explained:

"When learners fail to understand implied meanings in a passage, the same difficulty appears in their writing because they struggle to expand and connect ideas."
(Respondent 2)

This qualitative insight illustrates how cognitive gaps in reading comprehension translate directly into structural and conceptual limitations in written discourse. The strongest relationship was observed

between evaluative comprehension and evaluative construction ($r = .813$, $p < .01$). Learners who critically analyzed, judged, and evaluated text-based ideas were significantly more likely to produce writing characterized by critical reflection, justified opinions, and well-developed arguments. This was affirmed by another teacher remarking:

"Learners who analyse what they read critically usually have more ideas to discuss and explain in composition writing." (Respondent 8)

The strength of this correlation, combined with teacher observations, underscores that higher-order literacy processes rely heavily on a shared pool of cognitive and linguistic resources.

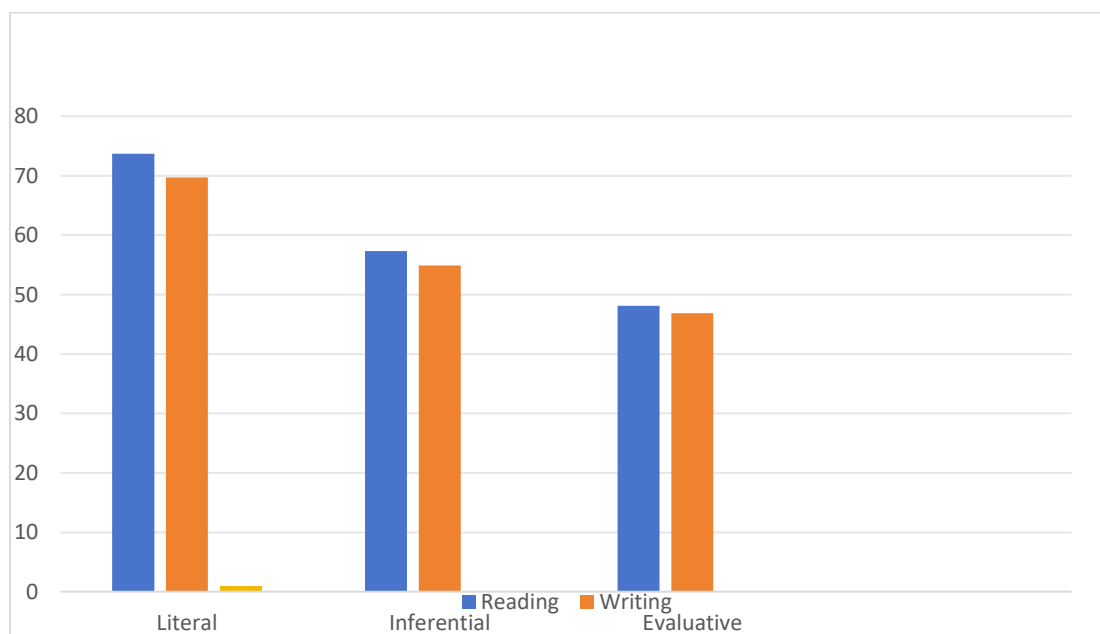


Figure 1: Performance across Literacy Constructs

The results in Figure 1 reveal a clear and consistent pattern across the two skills. Learners achieved their highest scores at the literal level, followed by the inferential level, while performance was lowest at the evaluative level. The close similarity between reading and writing percentages at each level suggests that learners experienced comparable strengths and difficulties in both domains. In particular, the drop in performance from literal to evaluative tasks indicates that higher-order literacy processes posed the greatest overall challenge.

These findings show that reading and writing abilities move together across all three literacy dimensions. The increasing strength of the correlations from literal ($r = .742$) to evaluative ($r = .813$) levels further suggests that the interdependence between reading and writing becomes more pronounced as tasks demand higher-order thinking.

Table 3: Predictive Relationship between Reading and Writing

Model	Predictor(s)	R	R ²	ΔR^2	SE
1	Reading comprehension	.742	.551	—	1.98
2	Reading comprehension + Teaching strategies	.826	.682	.131	1.68

To determine the predictive capacity of reading ability on writing performance, regression analysis was conducted (Table 3). In Model 1, reading comprehension alone explained 55.1% of the variance in writing proficiency ($R^2 = .551$, $SE = 1.98$). This indicates that more than half of the variation in learners' writing performance stems directly from their reading capabilities.

When teaching and learning strategies were introduced in Model 2, the total explained variance increased to 68.2% ($R^2 = .682$, $\Delta R^2 = .131$), while the standard error of estimate decreased to 1.68. This statistical model aligns with the qualitative findings: while reading comprehension provides the primary cognitive foundation for writing, targeted instructional strategies account for an additional 13.1% of writing variance. When analysed together, these quantitative models and qualitative perspectives demonstrate that reading and writing rely on shared linguistic competence, supporting the view that both domains draw upon unified cognitive, linguistic, and discourse-processing abilities.

DISCUSSION

The findings support previous studies that have reported close relationships between reading and writing abilities. However, the present study extends existing knowledge in several important ways. First, the findings provide evidence from an underrepresented African ESL context, demonstrating that theories of literacy interdependence remain applicable beyond highly resourced educational settings. Second, the study suggests that reading and writing are manifestations of shared linguistic competence. Learners who demonstrated stronger comprehension abilities also showed greater proficiency in organising ideas, developing arguments, and communicating meaning in writing. This relationship points to common underlying resources such as vocabulary knowledge, inferential reasoning, discourse awareness, and higher-order thinking skills.

Third, the construct-level findings indicate that reading–writing interdependence may become more pronounced at higher levels of literacy processing. The particularly strong relationship between evaluative comprehension and evaluative construction suggests that advanced literacy abilities depend heavily on shared discourse and meaning-making competencies. These findings corroborate Cummins' notion of Common Underlying Proficiency, which conceptualises language skills as interconnected rather than independent.

The study therefore moves beyond the simple conclusion that good readers tend to be good writers. Instead, it suggests that reading and writing may be viewed as complementary manifestations of common linguistic and cognitive processes.

Implications to Research Practice

Classroom Practices

The findings highlight the value of integrating reading and writing within everyday English lessons. Rather than teaching the two skills separately, teachers should design learning activities that encourage learners to read, discuss, analyse, and write about the same texts. Approaches such as guided reading, process writing, peer review, collaborative learning, and regular formative feedback can provide learners with opportunities to develop comprehension, critical thinking, and written expression in a connected way.

School Administrators

Effective literacy instruction also depends on a supportive school environment. School leaders can strengthen the teaching of reading and writing by ensuring that teachers have access to appropriate instructional resources, well-stocked libraries, and spaces that encourage a culture of reading. Reading clubs, literacy competitions, and other co-curricular activities can further increase learners' engagement with texts. Where resources permit, digital learning tools should complement classroom instruction by expanding learners' access to reading materials and writing opportunities.

Curriculum Developers

The findings reinforce the need for a curriculum that treats reading and writing as complementary components of literacy development. Learning experiences should enable learners to progress from literal understanding to inferential and evaluative thinking while providing opportunities to apply these skills in purposeful writing tasks. Classroom assessment should likewise encourage learners to demonstrate understanding by analysing, interpreting, and responding to texts through writing rather than relying primarily on recall.

Teacher Education

Teacher preparation programmes have an important role in supporting integrated literacy instruction. Both pre-service and in-service professional development should provide teachers with practical approaches for linking reading and writing, facilitating meaningful classroom discussion, promoting critical thinking, using formative assessment effectively, and incorporating digital technologies where they add value to literacy learning. Such preparation would better equip teachers to translate curriculum expectations into effective classroom practice.

Education Policy

The findings also point to the importance of sustained policy support for literacy development in secondary education. Continued investment in teacher professional learning, school library services, and digital infrastructure would strengthen the conditions under which reading and writing are taught. Regular monitoring and instructional support can further encourage classroom practices that integrate the two skills and promote balanced literacy development across schools.

CONCLUSION

The evidence also suggests that reading and writing are interconnected manifestations of shared linguistic competence involving common lexical, inferential, and discourse-processing resources. By extending evidence on literacy interdependence to a Kenyan ESL context, the study contributes to

ongoing discussions in applied linguistics concerning the nature of language proficiency and literacy development.

Future research may build on these findings by investigating specific linguistic variables, including vocabulary knowledge, syntactic complexity, cohesion, and metadiscourse, as possible mechanisms underlying reading–writing interdependence.

Future Research

Future research should replicate the study in other counties and regions of Kenya to establish whether similar patterns are observed in different educational contexts, since generalisation may not be possible due to different geographical factors. Furthermore, intervention studies could look into the effectiveness of specific instructional approaches, including guided reading, peer review, collaborative writing, and digital literacy interventions, in improving learners' reading comprehension and writing proficiency. Future scholars could also examine the influence of learner-related factors, such as motivation, reading habits, language background, and socio-economic circumstances, on the relationship between reading comprehension and writing proficiency as well as to investigate the contribution of teachers' pedagogical knowledge, classroom assessment practices, and the integration of educational technologies to literacy instruction and learners' reading and writing development.

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