

A Semiotic Analysis of English Language Animations for Grade Three Primary School Learners under Kenya's Competency-Based Curriculum

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Abstract

This study focuses on a Semiotic Analysis of English language animations embedded in the Kenya Institute of Curriculum Development's iCloud platform for primary school educational purposes under the new Kenyan Competency-Based Education. The study is informed by linguistic, visual, and cognitive multimodal frameworks that guide the analysis of meaning-making in English language animations under the Competency-Based Curriculum. The objectives of the study were to analyse the semiotic elements in animations and their effectiveness in enhancing communicative functions and to evaluate how visual and auditory components contribute to comprehension. The study is anchored in a descriptive research design and qualitative study approach. Purposive and convenience sampling were used to select nine animations from the Institute's platform, ensuring relevance to the Competency-Based Curriculum within practical time and access constraints. Data was collected through semiotic analysis and documentation of visual and linguistic components, while thematic analysis was applied to interpret the data. The findings indicate that colour, gaze, and auditory cues enhanced learners' understanding and engagement. In particular, the use of green in environmental elements symbolically conveyed life, growth, and vitality, reinforcing young learners' perception of nature as nurturing and life-sustaining. Key recommendations from the study include enhancing the design of animations to further support the communicative functions, improving the use of culturally relevant symbols and context-specific imagery in animations to improve communication skills among grade three learners.

Keywords: Animations, communication, competency-based curriculum, English language, primary school.

INTRODUCTION

Empirical research on the use of dynamic audio-visual learning materials in education demonstrates that learners are more likely to gain a deeper conceptual understanding of the content from video than from texts alone (Baggett, 1984; Mayer, 2002, 2003; Mayer & Moreno, 2002). During the learning process, studies have shown that pre-schoolers acquire knowledge more effectively when learning materials are presented in formats that utilise both visual and auditory sensory channels simultaneously (Mayer, 2001). Content presented in video form is also more memorable than text-based instruction (Jonassen, Peck, & Wilson, 1999).

Since 2007, the Bureau for Development of Education (BDE) in Kenya has integrated digital content into the curriculum across subjects and levels, resulting in the digitisation of 513 subjects by 2009. Much of this content, particularly in science, incorporates multimedia elements such as animations, video, audio, text, and images. While this expansion reflects significant progress in digital learning resources, it also highlights the need to evaluate not only the quantity of digital materials but also their quality and their capacity to facilitate meaningful learning (BDE, 2012).

This study focuses on multimedia content designed for Grade Three learners. At this stage, children tend to represent ideas through action-based segments that can easily be connected to the concept they intend to express. Their drawings often contain numerous elements linked to a particular idea, although these elements gradually reduce as they grow older and their conceptual focus becomes clearer. What children draw and the symbols they use reveal not only how they think but also how they interpret visual representations (Clyde, 2003).

Grade Three represents a critical developmental and pedagogical transition within the Kenyan education system. Under the Competency-Based Curriculum (CBC), it marks the final year of lower primary education. From a cognitive perspective, learners at this stage, typically aged eight to nine years, are transitioning from “learning to read” to “reading to learn.” During this period, learners rely heavily on multimodal resources where the balance between visual cues and textual information becomes essential

for meaning-making (Mayer, 2020). Furthermore, this stage is formative for learners’ social identity development. By focusing on Grade Three, the study captures a critical moment when semiotic clarity and equitable representation in instructional materials can significantly influence both academic progress and social development (Jewitt et al., 2016).

Bezemer and Kress (2016) argue that in digital learning environments, different modes such as images, sound, and text work together to shape how learners construct meaning. For Grade Three learners, this multimodal interaction is particularly important because they still rely heavily on visual elements to connect new ideas to their everyday experiences. What learners see in illustrations and animations does not merely reflect their thinking but also shapes how they interpret and identify with the learning content.

However, within the context of Kenya’s Competency-Based Curriculum, which is still in its implementation phase, animations developed by the Kenya Institute of Curriculum Development (KICD) have not been critically examined for their semiotic effectiveness. Understanding how learners interpret linguistic and symbolic messages embedded in these animations is essential for ensuring that the materials achieve their intended communicative and educational functions. Without systematic analysis, there is a risk that these digital resources may contain semiotic mismatches between visual, auditory, and textual elements, potentially confusing learners rather than supporting their comprehension.

This concern highlights an important gap in existing scholarship and practice. Although digital animations are increasingly used as instructional tools, little empirical attention has been given to how their semiotic elements influence learners’ comprehension and meaning-making processes, particularly among early primary learners within the CBC framework. If these issues remain unaddressed, the anticipated benefits of the Competency-Based Curriculum may be undermined by digital content that unintentionally creates barriers to effective communication and equitable learning.

Against this background, this study examines the semiotic construction of English language animations

developed for Grade Three learners within the CBC framework. Specifically, the study analyses the semiotic elements used in selected animations and investigates their effectiveness in enhancing communicative functions among learners. It also evaluates how the visual and auditory components embedded in these animations contribute to learners' comprehension and meaning-making processes. By examining these aspects, the study seeks to provide insights into the effectiveness of animation-based learning materials in promoting communicative competence and improving learning outcomes among Grade Three learners.

METHODOLOGY

Research Design

This was a descriptive research design utilising a qualitative method. The approach used was Halliday's semiotic approach, which was used to analyse the meanings of signs and symbols, investigate the level of reality, the level of representation, and the level of ideology found in English Language Animations for Grade Three learners.

Population and Sampling

The target population comprised all the grade three English animations approved by the Ministry of Education (MoE) for teaching grade three learners in Kenya's primary schools. The accessible population was nine English Grade 3 recommended animations by the Kenya Institute of Curriculum Development (KICD) and approved by the MoE for teaching English to grade three learners in Kenya's primary schools. All nine formed the census sample for this study, consistent with the purposive sampling method.

Data Collection Method and Instruments

Data for this study were retrieved from the Kenya Institute of Curriculum Development (KICD) iCloud platform. Specifically, the researcher purposively sampled nine animations from the "Interactive Digital Content" tab, under "English Activities Grade Three." These selected animations were chosen because they specifically focused on core language competencies: Listening, Speaking, Reading, and Writing.

Once the animations were downloaded, a systematic multimodal observation was conducted. This process involved viewing each video while simultaneously

referencing a theoretical framework table (the documentation guide). This juxtaposition allowed the researcher to identify and categorise the five modes, linguistic, visual, audio, gestural, and spatial, immediately as they appeared in the digital content. By using this structured table during the observation phase, the researcher ensured that no semiotic element was overlooked, providing a consistent foundation for the subsequent analysis.

To ensure the depth and accuracy of the data, each animation was watched and listened to at least three times. During these sessions, the researcher paused the animations to take descriptive notes and transcribe character utterances into text. For the visual analysis, a specific screenshot protocol was used: whenever a significant visual mode appeared, such as a specific gaze, a symbolic colour, or a spatial arrangement between characters, the animation was paused, and a screenshot was captured. For each of the nine animations, an average of four to six key screenshots were selected based on their relevance to the study's objectives. These images were then organised into tables and analysed using Kress and Van Leeuwen's (2006) grammar of visual design, as structured by the documentation guide.

To strengthen the reliability and trustworthiness of this qualitative analysis, the study employed a repeated coding strategy. The researcher revisited the captured screenshots and transcriptions multiple times to ensure that the initial interpretations remained consistent with the theoretical categories. Additionally, the analysis followed a "peer-debriefing" style approach, where coding categories were cross-checked against established semiotic literature to reduce subjective bias. This systematic revisiting of the data helped maintain consistency across the nine different animations.

Regarding ethical considerations, although this study did not involve human participants, it adhered to high academic standards. The research utilised publicly accessible, curriculum-approved materials, and ethical integrity was maintained through the objective reporting of findings and the proper acknowledgement of KICD as the source of the materials. By treating digital content with the same level of confidentiality and academic honesty as one

would a human subject, the study ensures that the findings are both credible and ethically sound.

FINDINGS AND DISCUSSION
Linguistic Semiotic Analysis (Ideational Metafunction)

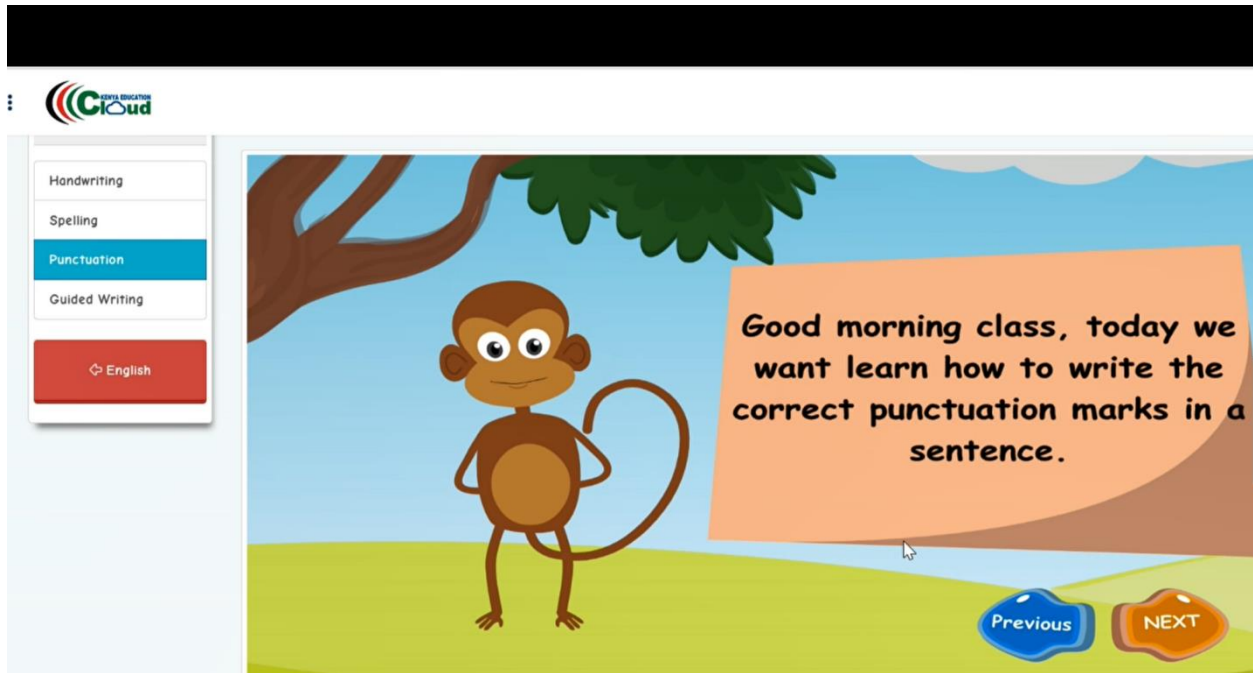


Figure 1: Cover Image of the Grade Three Guided Writing Animation

Figure 1 illustrates a cover image of the Animations for English Grade Three Guided Writing: Punctuation; we have a monkey in front of a tree, and on the right, it highlights texts about the topic to be covered.



Figure 2: Female Teacher Leading a Grade Three English Guided Writing Lesson

Figure 2 illustrates a female teacher standing in front of the class, playing two significant roles in this scene. Through the dialogue, she is leading the class in an

English lesson activity. (English Grade Three Guided Writing; Punctuation).



Figure 3: Teacher Leading a Grade Three English Lesson as a Learner Reads Aloud

Figure 3 illustrates a teacher standing at the front of the classroom leading an English lesson, while a learner reads aloud the sentence, “Amina’s book is torn.”

Role of Teacher, Student, and School

The female teacher standing in front of the class is playing two significant roles in this scene. Through the dialogue, she is leading the class in an English lesson activity, using a real-life situation and tying it to the traditional classroom environment. She is also playing the role of a mother figure, trying to help the young learners understand the language. The teacher involves the learners practically by selecting one of them to read the English text aloud. The connotation of the dialogue in the scene represents that the role of a typical teacher and school role would be in guiding the learners, while the learners in the classroom are obedient in their eagerness to volunteer to participate and to learn.

The connotation of the components of literacy in the dialogue is that the ability for the learners to read and interpret an English text is what society values in the educated learners at the present time; the learner should be able to clearly pronounce the said text by

practising the repeated text. The appreciation for reading a text aloud and the necessity for discussions and analysis of the text is a powerful way for the teacher to engage the Learners and call upon their attention.

In writing, information is given about how to punctuate sentences. Here, the image of the woman standing in front of the classes symbolises that she is a teacher; learners can relate to this through past memories through the images they have interacted with since joining school. The gendered depictions, such as the portrayal of a teacher as female and the learners as attentive, support interaction dynamics that mimic real-life educational settings, fostering inclusivity and familiarity. This approach aligns with Kress & Van Leeuwen's (2006) emphasis on visual social semiotics in reflecting cultural dynamics. Teaching as an occupation is mostly associated with females in the sampled animations, as indicated in the linguistic signs analysis. The visual, therefore, affirms the linguistic findings where females are portrayed as teachers.

Early childhood education is commonly viewed as a continuation of parental nurturing. Since caregiving

roles are often depicted as feminine in many cultures, animators may choose female characters to represent this idea of guidance and care, making young audiences feel comforted and engaged with familiar figures. The animations are often used at home by mothers with the aim of creating a soft, friendly environment that appeals to young viewers. Female teachers can embody qualities like warmth and patience, which animators might find effective in portraying an inviting and gentle learning atmosphere for children.

While analysing the learning environment the signifier which is the visual element like a chalkboard and signified, a chalkboard could be discussed not only as a classroom object but as a symbol of knowledge and tradition in Kenyan education system, where in a traditional classroom setup we have a chalkboard and chalk, with the color of the chalk usually attributed to a white colour with the chalkboard being black. A learner in a basic education class will usually learn that a chalkboard should always be black.

In analysing the texts within the dialogue box, the learners in the animations are being taken through a

lesson on punctuation. Figure 4.2 above, when the teacher says, “Amina's book is torn”, there are no punctuation marks, but in Figure 4.3, when the pupil in class replies, “Amina’s book is torn,” ideally, the representation of Amina’s book as "torn" implicitly conveys social and cultural assumptions about responsibility and gender. In the Kenyan context, the name Amina immediately anchors the animation in a specific sociocultural reality, particularly within coastal or Muslim communities. This makes the content relatable for Grade Three learners, yet it also raises questions about the subtle messaging involved. By linking Amina specifically to a torn book, the narrative risks encoding a gendered subtext of neglect.

Applying Halliday and Matthiessen’s (2014) ideational metafunction, we can see how these representational choices aren’t just neutral grammar; they’re social signifiers. In many Kenyan classrooms, the state of one’s books is a direct reflection of academic discipline and personal responsibility. When a female character is paired with damaged materials, it may unintentionally reinforce stereotypes about girls and a lack of care, turning a simple sentence into a hidden lesson on gender and accountability.

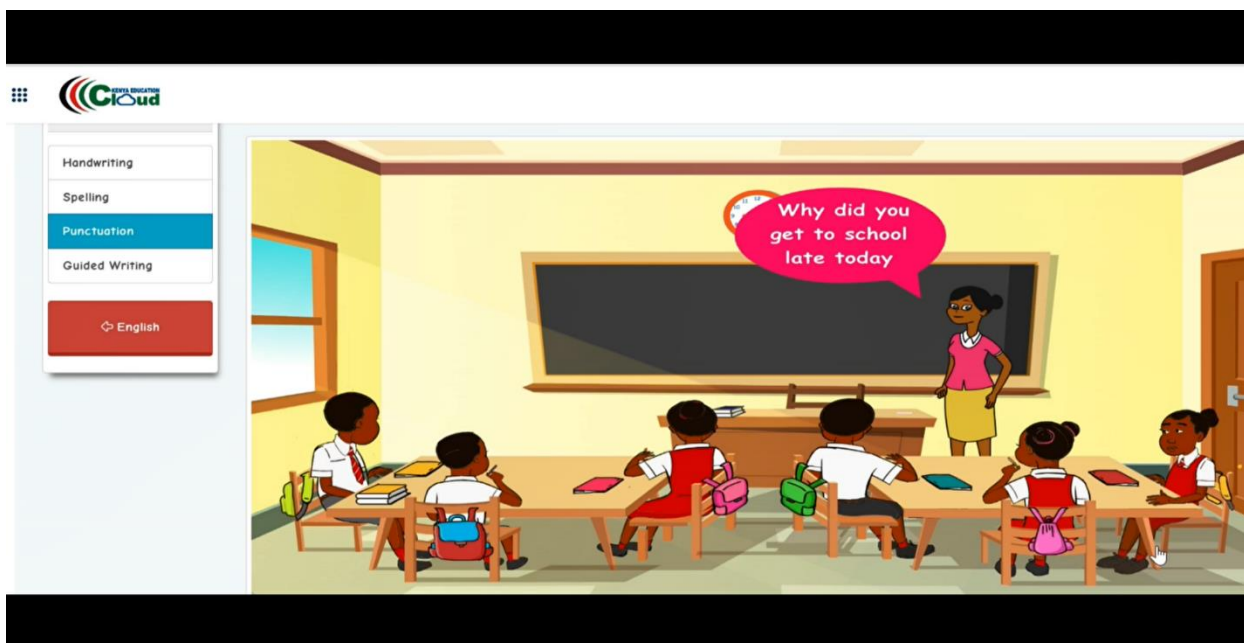


Figure 4: Teacher Guiding Learners to Punctuate a Sentence in a Grade Three English Lesson

Figure 4 illustrates a teacher standing in front of the classroom leading an English lesson on Punctuation; she reads out a text to the class: “Why did you get to

school late today?” The learners are to respond by putting punctuation marks on the sentence.



Figure 5: Learner Responding to the Teacher by Adding Punctuation Marks to a Sentence

Figure 5 illustrates a learner responding to the teacher's questions by adding punctuation marks to the text, "Why did you get to school late today?"

In Figure 4 and Figure 5, when the teacher says "Why did you get to school late today" there is no any punctuation marks but in Figure 4.5 when the pupil in class replies "Why did you get to school late today?", ideally the learner has to look clearly into the video to realize that a question mark has been added at the end of the sentence. It is believed that the use of the statement is attributed to its frequent use by teachers when they ask learners why they got to school late or early. To examine the learner's communicative functions, the utterances of the teacher and the learner were coded by referring to Haslett (1983), who utilised Tough's coding system and Hwa-Froelich et al. (2007). The above texts fall under Tough's Communicative function of Reasoning, where the text is used to identify a problem or a solution to a problem.

In the animations about the use of punctuation, there is no mention of which kind of symbol or sign alludes to a particular punctuation; therefore, it makes it hard for the learner to comprehend and understand or even recall which symbol relates to a particular punctuation, its name and why that particular symbol is being

placed at the particular position in the text or sentence. The addition of a question mark at the end of the phrase reflects that the phrase is a question, while the addition of a full stop at the end of the phrase indicates that it is a statement and symbolises the end of the sentence. According to Halliday (1974), categorisation of communicative function, a question is categorised as heuristic, where the learners are being taught to use the English language as a means to investigate reality or to question.

In this study, Kress (2004) highlights that in a clause containing both male and female names, the name that appears first indicates a closer connection to that individual and suggests higher importance compared to the subsequent name. This observation supports the notion that the positioning of nouns or pronouns referring to males and females within a phrase, clause, or sentence can convey gender bias. Corbett (2006) notes that grammatical gender is a morpho-syntactic feature found in many languages, where nouns are categorised into classes known as 'genders'. Thus, the use of nouns can reflect gender based on the writer's choice of words. Additionally, gender representation in linguistic signs can be influenced by the selection of specific words, such as adjectives, nouns/noun phrases, and verbs. At the syntactic level, word order can indicate semantic and social hierarchies to readers

or listeners (Hegarty, Mollin, & Foels, 2016; Kesebir, 2017). Consequently, mentioning a woman before a man is interpreted differently from mentioning a man before a woman, resulting in biased representation favouring the first mentioned. The analysis of the ideational metafunction was carried out under the following aspects:

In this study, the visibility of pronouns was assessed based on third-person singular and plural pronouns: she, he, his, her, hers, him, them, their, and they. Reflexive pronouns, which indicate that the doer of the action is affected by the action, were also factored in, revealing how gender is represented in the selected nine animations being studied. The designers of the animated content used a woman as a teacher and girls being prominent when it depicted their response to what the teacher was asking in class, as shown in Figure 3 above.

Interaction between Text Resources

The KICD cloud platform that hosts the animations has an interactivity that enables the learner to select a topic under each section. The words in the text boxes are presented in the same order as they appear in the

text, which makes the words relatively easy to find. The illustrations given in each section are clearly connected to the writing on the same page, and they can therefore support a reader who is unfamiliar with the content of the text. However, the illustration of the punctuation marks can hardly support a reader who is unfamiliar with a particular punctuation mark and where the symbol/sign is to be placed.

Use of Traditional Stereotypes in Gender Representation

The study also analysed gender attributes as an aspect of gender representation. Gender attributes may mirror the realities in the traditional African society or can closely reflect the realities in people's lives at a particular period of time (Mustapha, 2012) and space. The analysis of gender representation in terms of gender attributes focuses on the way women and men are depicted in the animated content.

Hallidayan (1978) SFL theory was used in analysing the dialogues. The analysis of the social context within which gender is represented reveals how gender is constructed within the animations.

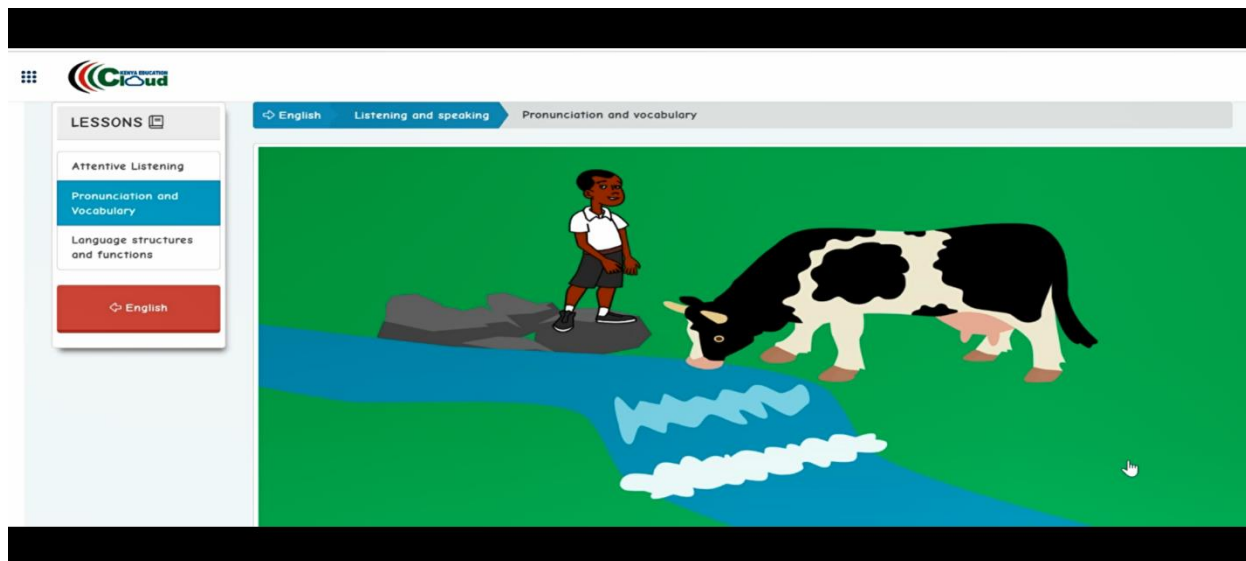


Figure 6: Juma Standing Next to a Cow Drinking Water

Figure 6 illustrates a boy by the name Juma, next to him is a cow drinking water.



Figure 7: Illustration of a Girl, Amina, Slipping on a Banana Peel and Falling to the Floor

The animations and illustrations depicted in three out of the nine animations that were analysed revealed a number of implicit values. Examples are the traditional roles that boys and girls are given in the illustration, as the teachers and learners are in class. In Figure 6, we have the following frame with accompanying narration: “What is Juma doing?”, “Juma is giving water to the cows.” Traditionally Boys are known to be the ones to herd the cows, the ones who are to take the cows to the stream so that they can drink water. In the African setting, particularly in Kenya, the men are the ones who are given the duty to care for the cows in the community.

In Figure 7 above, “Amina Cried when she slipped on the floor and fell down. ‘Please stop crying and be careful always, her mother told her. The use of the mother in the text has been derived from the general traditional knowledge that Mothers are always caring and are the most concerned when it comes to the well-being of their children. The use of a girl in the animation when she stepped on a banana peel, slipped, fell and cried depicts the girl as weak. The general notion or knowledge that we have derived from the traditional community is that Women are generally weak individuals.

When Amina is shown crying after a fall, the animation isn’t just depicting a physical reaction; it is constructing a specific type of vulnerability. Crying functions as a potent semiotic marker of emotional exposure, and as Kottler (1996) suggests, it acts as a form of “paralanguage”—communicating distress even without words. By visually emphasising her tears, the animation heightens the emotional stakes, which, according to Cornelius and Lubliner (2003), is a powerful social signal designed to elicit empathy and caregiving.

In this context, the English language is utilised to fulfil Halliday’s Personal communicative function, where the act of crying serves as a semiotic tool to express the self and assert an individual identity. However, this expression is heavily mediated by gendered social norms. Research dating back to the 1980s and cited extensively in more recent reviews (e.g., Cornelius & Labott, 2001; Vingerhoets et al., 2000) suggests that female tears are viewed with significantly more social tolerance than those of men. While people often perceive male crying as inappropriate, they tend to view women’s tears as more acceptable, often triggering a prosocial impulse to offer sympathy and assistance.

A common social-psychological explanation for this disparity is that crying is seen as a direct violation of traditional masculinity (Bekker & Vingerhoets, 2000). For many men, the avoidance of crying is a conscious choice driven by the fear of appearing weak (Lombardo et al., 2001; Ross & Mirowsky, 1984). As Fischer (1993) argues, masculinity is frequently synonymous with the display of power and assertiveness. Consequently, men are more likely to express "powerful" emotions like anger, while women who may be less socially pressured to demonstrate

dominance report higher levels of emotional expressions that signal vulnerability or powerlessness, such as crying (see Bekker & Vingerhoets, 2001).

Ultimately, the communicative function of expressing emotion remains deeply bifurcated. For men, emotional expression is often framed through the lens of competency and social skill. For women, however, these same emotions remain tied to stereotypical notions of femininity, vulnerability, and a perceived loss of control (Fabes & Martin, 1991).

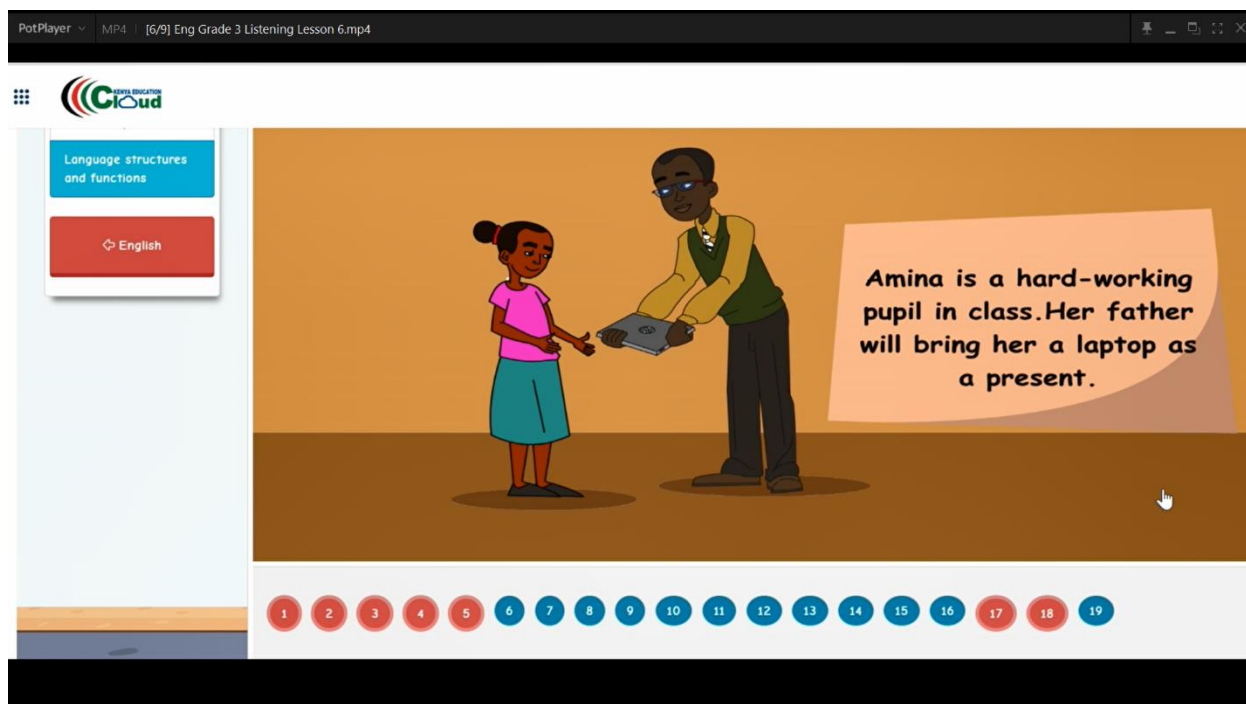


Figure 8: Illustration of a Girl, Amina, Receiving a Laptop as a Gift from Her Father

The animated sequence, as captured in the frames of Figures 7 and 8, appears to rely on traditional gendered tropes to convey concepts of future time and effective communication. This stereotypical positioning is particularly evident in Figure 8, which depicts a father presenting a laptop to his daughter. Such imagery reinforces the paternal "provider" archetype and further suggests a narrative of unique paternal attachment.

This gendered division of agency is sustained in the subsequent frame, as illustrated in Figure 9 below, which shows a group of boys engaged in a game of

football while the girl is relegated to a stationary observer. This visual arrangement aligns with the findings of Carroll and Kowitz (1994), whose study revealed that female characters in educational media are frequently excluded from roles depicting them as active or "busy." Instead, they are often portrayed as decorative or passive figures. By positioning the girl as a spectator to the boys' physical activity, the animation inadvertently mirrors these historical trends, suggesting a social hierarchy where physical agency is coded as masculine and passivity as feminine.

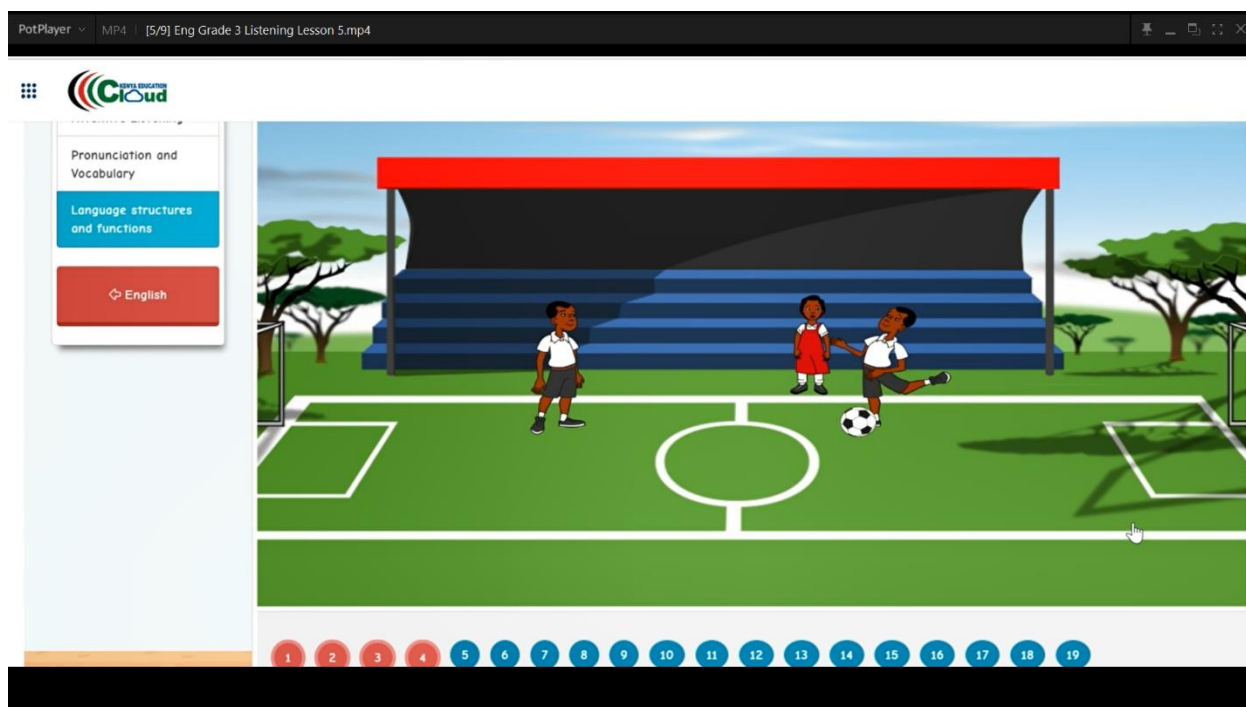


Figure 9: Illustration of Two Boys Playing Football While a Girl Watches from the Sideline

From the transcribed word in the animations, the word "clean" in the text "Amina puts on a clean dress when going to church," not only implies hygiene but often suggests a social standard of appearance, especially for women, that is tied to virtues such as purity, respectability, and social acceptance. In many cultures, cleanliness in women is positively marked and becomes a reflection of inner qualities, such as goodness and propriety.

The term "dress" in the text "Amina takes a glass of water after eating" itself acts as a gendered signifier. Dresses are traditionally feminine garments, which can semiotically suggest nurturing, demureness, and social conformity to expected gender roles. This conforms to socially constructed roles that often emphasise attractiveness, modesty, or suitability for women, echoing findings from Porreca (1984), who observed that adjectives used to describe women in texts were often related to appearance.

Additionally, the act of "taking a glass of water" after eating might implicitly reflect cultural norms that expect women to engage in careful, restrained consumption. Unlike a man, who might be stereotyped as consuming more heartily, Amina's actions reflect traditional gender expectations around

food and behaviour, where femininity is often associated with small portions or careful consumption.

The phrase "Going to church" is a phrase with its own significant symbolic weight. For many, church is a setting that mandates respect and reverence, and the "clean dress" emphasises cultural ideals around appearing "presentable" in a sacred space. Amina's choice to dress carefully when attending church aligns with social norms that associate women's respectability with appearances, especially in religious or formal settings. This has broader implications on how society expects women to prepare and present themselves when they enter public or sacred spaces, enforcing an association between femininity, appearance, and piety.

By framing Amina's actions in a way that aligns with traditional feminine virtues, the text highlights how language can subtly influence perceptions, shaping readers' assumptions about gender roles. This echoes Porreca's analysis of textbook language, which found that adjectives describing women often reinforce a narrow image tied to attractiveness or behaviour considered "appropriate" for women.

The stereotypical representations highlighted in Figures 6 through 9 align with established research in diverse contexts, which suggests that female roles remain predominantly tethered to the domestic sphere while male roles are situated in the public domain. This mirrors Mustapha's (2012) observation of a distinct gender disparity between the domestic and social realms. However, even when both genders are represented within the home, the nature of their labour differs significantly. As Mineshima (2008) notes in an analysis of EFL textbooks, the domestic burden is rarely equitable; while both may appear in household settings, women are disproportionately depicted

performing repetitive manual tasks such as dishwashing, cleaning, and cooking.

The findings of the current study further corroborate these trends. In the analysed material, women have been depicted as primarily responsible for the immediate daily requirements of the household, including childcare, cleaning the household, and meal preparation. By consistently depicting women in these nurturing and caregiving roles, the animation reinforces a narrow social script that equates womanhood with domesticity and caretaking.

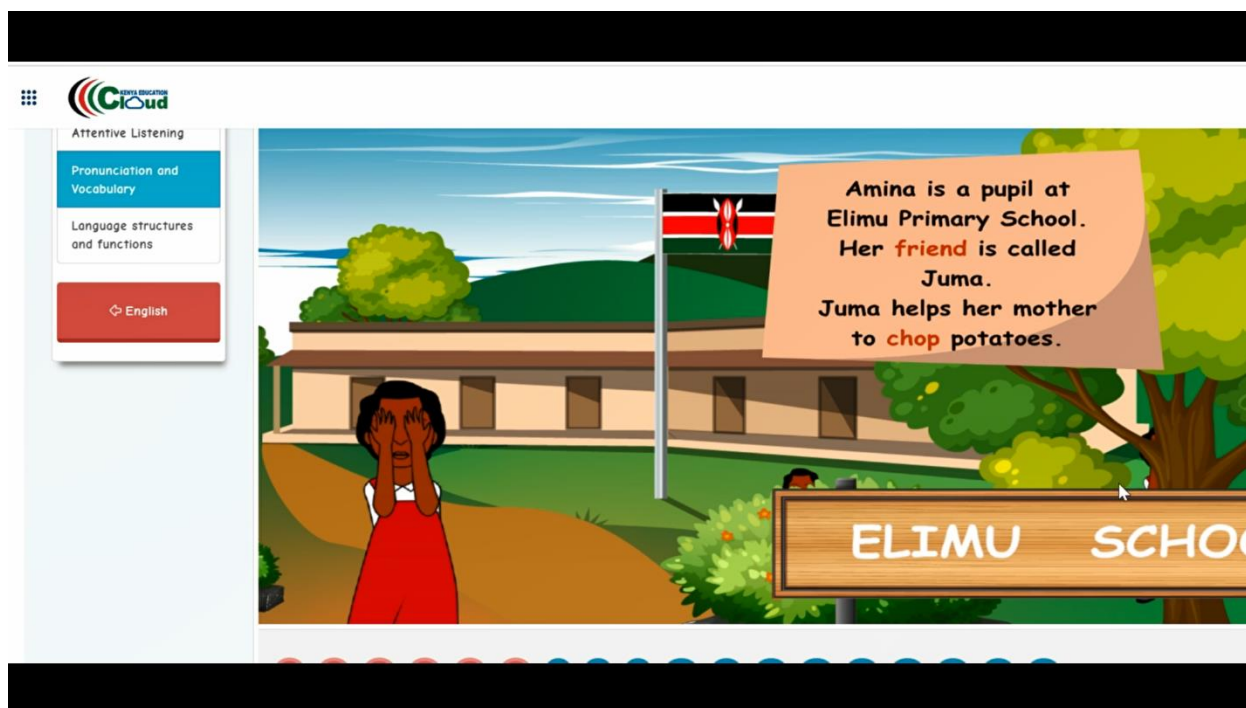


Figure 10: Illustration of a Girl Covering Her Face with Her Palms in Front of Elimu School

In Figure 10, the animation introduces Amina as a pupil at Elimu Primary School. By visualising the school's entrance, the researcher establishes a specific sociocultural and educational environment defined by institutional space-markers. A prominent feature of this setting is the signpost bearing the name "Elimu", a Swahili term for "education", alongside the Kenyan national flag.

As semiotic markers, national flags are imbued with deep psychological significance; they represent a nation's core values, condense historical memory, and embody national identity (Butz, 2009; Schatz & Lavine,

2007). Within the school environment, the flag serves as a potent symbol used to cultivate a sense of nationalism among learners. This institutional nationalism is typically manifested through official and ceremonial practices, such as the singing of national anthems and the ritualistic flying of the flag. Consequently, the school environment becomes a site for fostering national pride and patriotism, often intertwined with broader ideologies of national identity and belonging (Kosterman & Feshbach, 1989; see also Schatz et al., 1999).

Social Identity Theory (Tajfel & Turner, 1979) presents a strong theoretical foundation for the argument that increased national identification by association with the national flag reinforces individuals' positive but not negative emotions in order to maintain a positive social identity. This is what the National flag in the animations is used to depict; the learner is able to identify their identity and associate with the animation as being Kenyan.

The transcription associated with Figure 10, which states, "She always smiles when she is playing hide-and-seek with her friends at their primary school," offers a significant point of semiotic analysis. The use of the smile as a persistent trait carries deep cultural connotations, often symbolising joy, friendliness, and approachability. However, such representations can reinforce rigid societal expectations that require girls

to perform constant pleasantness and warmth. In many Kenyan contexts, smiling is culturally ascribed to femininity and is frequently conflated with kindness, nurturing, and sociability.

Across many Kenyan communities, girls and women are socially conditioned to be emotionally expressive and nurturing. Consequently, the attribution of a perpetual smile in educational media shapes how learners internalise gender roles. By frequently depicting female characters as consistently happy or smiling, these texts risk reinforcing a narrow ideal of femininity, one that prioritises being "perpetually positive and supportive." This focus on emotional performativity may inadvertently sideline or diminish other complex attributes essential for development, such as assertiveness, critical inquiry, or leadership.

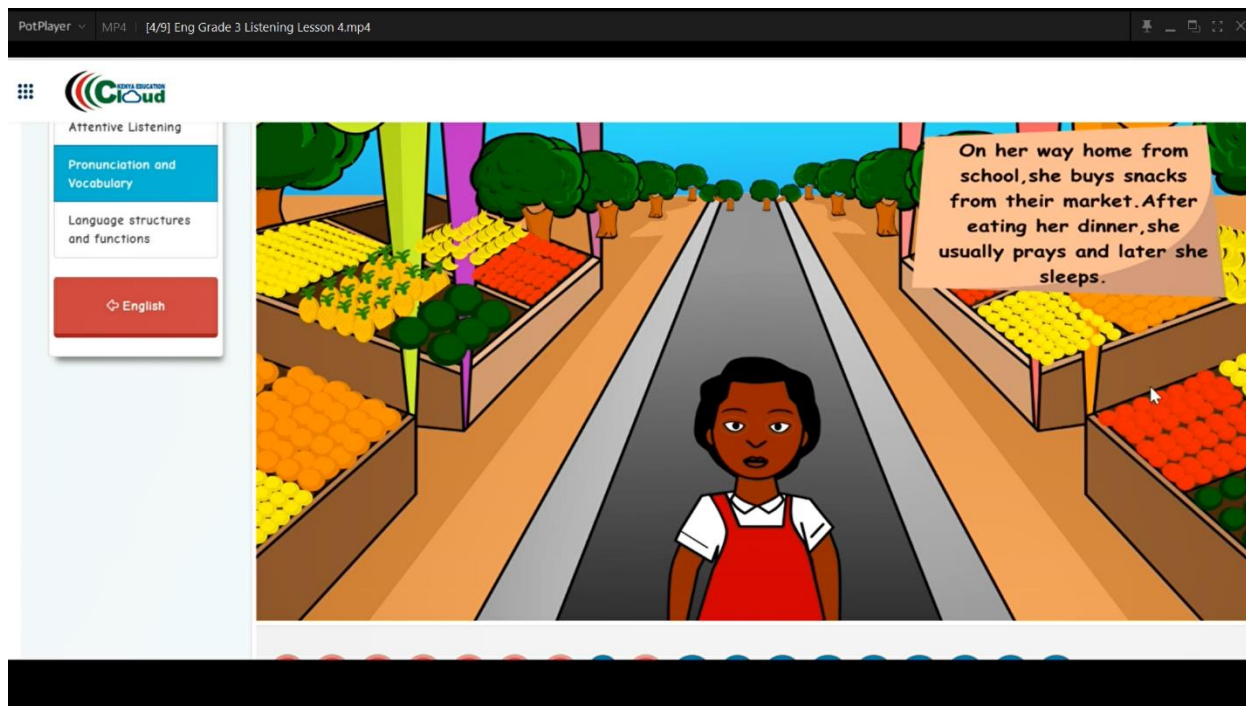


Figure 11: Illustration of a Girl Walking in a Market with Grocery Stands on Both Sides

Figure 11 illustrates a young girl walking through a market, accompanied by the transcription: "On her way home from school, she buys snacks from the market." In many Kenyan and broader African traditional contexts, the market is a gendered space, often associated with the domestic responsibilities of women and girls. The visual cues in Figure 11 reinforce this setting through a vibrant palette: red signifies

tomatoes, orange denotes oranges, yellow represents bananas, and green indicates avocados. However, a significant semiotic dissonance exists between the text and the illustration; while the text mentions the purchase of "snacks," the visual evidence depicts only fresh produce. This mismatch suggests a lack of alignment between the instructional narrative and its visual representation.

The setting itself, characterised by stalls built along a black-surfaced road, serves as an authentic reflection of the Kenyan landscape, where informal markets are typically situated adjacent to main transit routes. This accurately communicates the sociocultural reality of a Kenyan market to the learner.

Across the animations transcribed for the Guided Writing and Listening skills modules, pronouns are frequently paired with both positive and negative personality adjectives. Interestingly, female characters

are consistently associated with traditionally "positive" but restrictive adjectives such as "loving" and "decent." While these may seem favourable, in a critical sense, they can be viewed as limiting when they reinforce passive gender roles. This finding aligns with research by Kobia (2009) and Mukundan and Nimehchisalem (2008), which suggests that while women are often tied to nurturing traits, men are more frequently portrayed through negative or aggressive personality attributes.



Figure 12: Illustration of a Girl Carrying a Doll

As illustrated in Figure 12, Amina is depicted holding a doll, a visual shorthand for childhood play and innocence. This is positioned in direct contrast to the aunt's baby, which symbolises the tangible realities of responsibility and nurturing. This juxtaposition serves a dual purpose: first, it introduces learners to the conceptual distinction between reality and

imagination, a foundational element of critical thinking, and second, it reinforces traditional gender roles. By associating the female character with a doll, the animation perpetuates the cultural expectation that links girlhood to nurturing behaviours and future domestic roles.

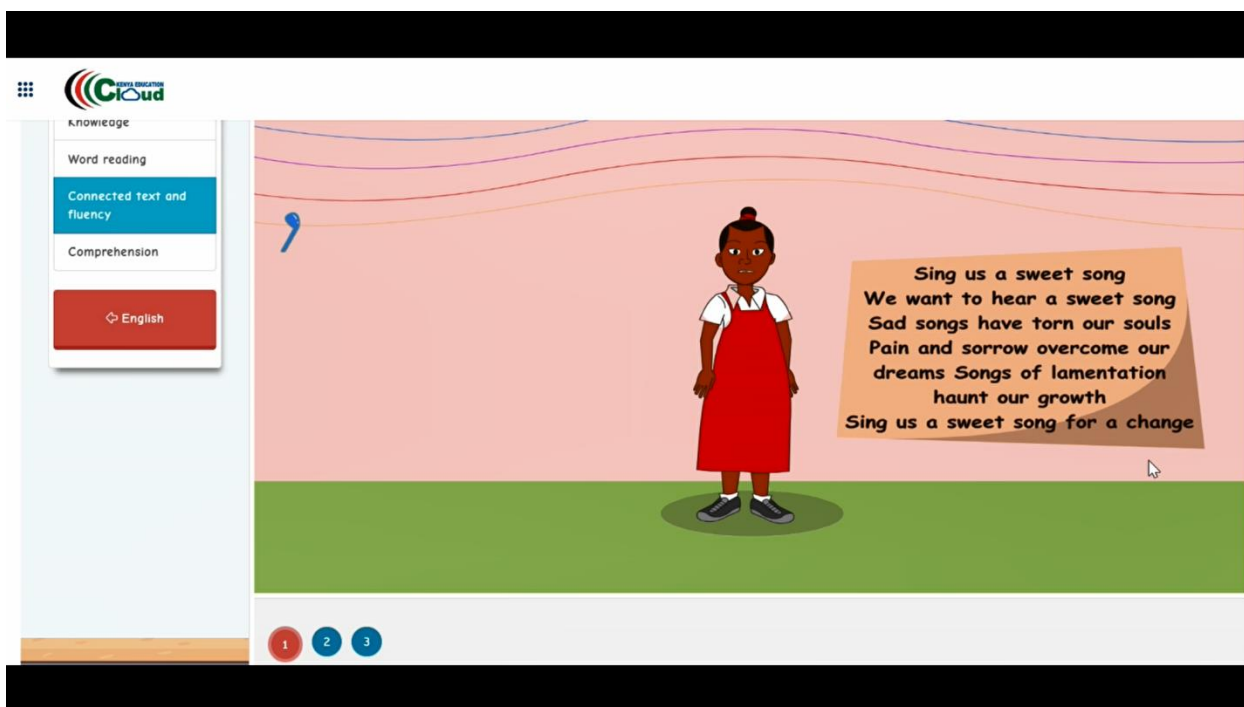


Figure 13: Illustration of a Girl Singing, Depicted by Musical Signs

In Figure 13, the animated texts show how to read words fluently. The animation shows the description of the little girl reciting a poem while dressed in a red dress and a white shirt. In the same frame, we have music illustration, depicting a poem or a song and the notion. The choice of a girl to recite the poem alluded to the African belief that girls are the ones who have sweet voices and usually like singing.

In the transcription of the second part—Animation for Grade Three English: Reading Lesson—the phrase “In your granny’s day, people used to say” establishes a traditional connection. It brings to life a past of which the learner is unaware, where stories and folklore served as tools for discipline and moral instruction. The mention of a thief taking away crying boys represents a cultural belief where fear acts as a deterrent to guide behaviour, symbolizing authority and control through storytelling. These statements were intended to deter children from immoral acts, while the thief in the poem symbolizes an external threat or the fear of the unknown and disobedience.

The thief, according to how children understand, is a bad person in a community, and a thief is generally depicted as someone who takes away other people’s possessions without returning them; therefore, in this

case, a thief can be seen as a representation of any external danger that threatens the safety of the child. In a broader sense, it symbolises the anxieties parents or caregivers face regarding their children’s safety and well-being.

The repeated line “No thief shall have you my best of joys” acts as an affirmation of the caregiver’s commitment to protect the child. The repetition emphasises steadfastness and emotional depth, highlighting the strength of the bond between the speaker and the listener.

The reference to “crying boys” or the addressed “my best of joys” emphasises the innocence and vulnerability of children. It reflects how stories and warnings are used to instil lessons while simultaneously acknowledging the preciousness and value of the child. In an African society a child is so precious and needs protection from the family. Traditionally boys are not supposed to cry and if the boys are depicted to be crying is a show of a vulnerable situation.

The line “Oh, this I sing” signifies that the poem itself could be a lullaby traditionally meant to calm and reassure a child that he or she is safe. Singing implies a

loving and protective act, further reinforcing the nurturing aspect of the relationship. The poem in the transcription is drawn from a traditional society of cautionary tales used in many African cultures to impart lessons and instil behaviour in children. These tales often use figures like thieves, monsters, or other threats to teach obedience and caution.

The poem's lines, "She could control my take and break my doubts," suggest that nature holds the power to guide and provide clarity by displaying the strength of nature. However, this is contrasted with later lines that depict Mother Earth being harmed, "Cut, crush her. A machine is set to slice her", showing how Mother Earth, in this case, the environment, is vulnerable to human exploitation and destruction. The poem encourages the learners to be responsible for the environment.

Through symbolism, the imagery of cutting and crushing symbolises human actions that exploit and damage nature, portraying industrialisation and mechanisation as agents of harm. The "machine" represents technology and industrial progress, which, while powerful, leads to the degradation of the natural world. The repetition of "She could control my take and break my doubts" emphasises her nurturing and supportive nature, which contrasts with the harsh, impersonal treatment described in the later lines.

The repeated line "She could control my take and break my doubts" serves as a refrain that underscores

the protective and stabilising power of nature. Repetition reinforces this idea and contrasts with the subsequent, more violent imagery to show the shift from peace and control to chaos and harm.

By use or personification, the poem taps into the deep cultural and ecological respect that many Kenyan communities have for nature. However, the lines about harming her depict the modern reality of environmental degradation due to human activity. The poem serves as a call for the learners to reflect on their relationship with the environment. It highlights the idea that while nature supports and nurtures humanity, it is not invulnerable. The destructive imagery serves as a warning that human actions have consequences.

Figurative Language

There is figurative language in the selected animations in the reading lesson transcribed above. The animation contains an abundance of figurative language, not least metaphors, perhaps due to a presumption that the reader will be supported through connections to everyday experiences. However, such usage can also be potentially challenging. The text says that such anthropomorphisms, as they are called, are known to create challenges for learners, since the learners sometimes mistakenly perceive natural phenomena as actually having intentions and feelings (Danielsson et al., 2018; Tibell & Rundgren, 2010).

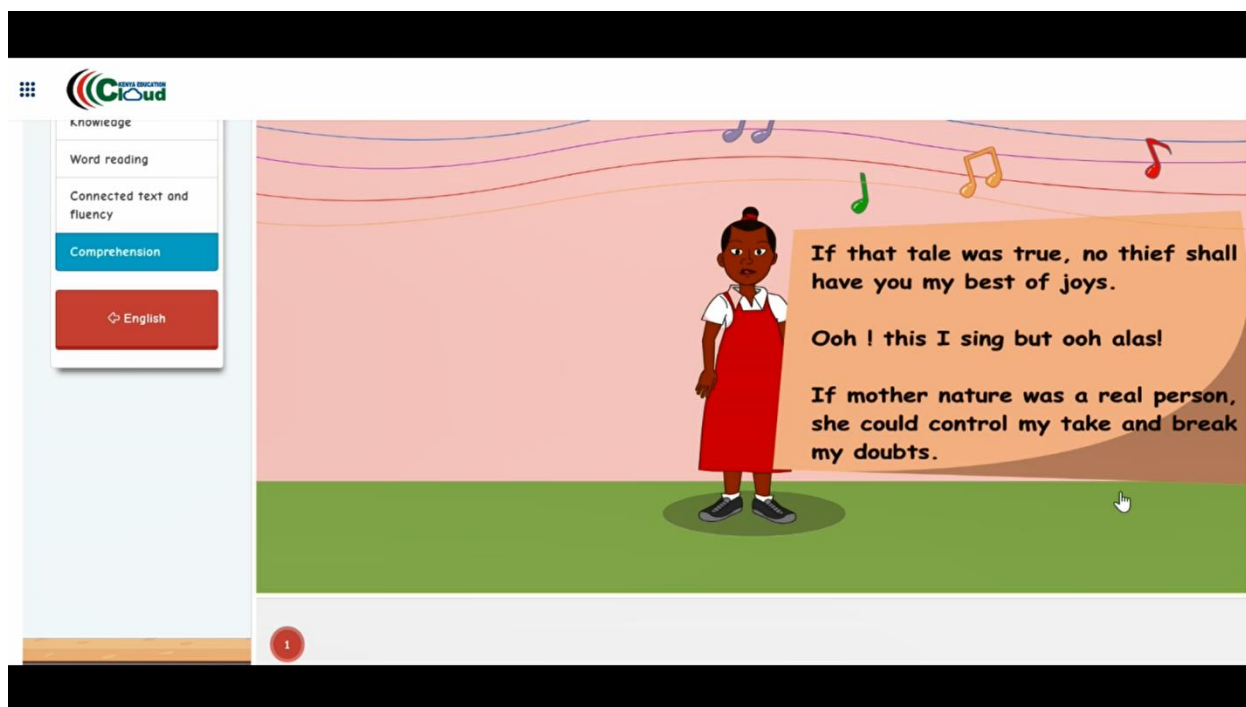


Figure 14: Illustration of a Girl Singing, Depicted by Musical Signs

In Figure 14 above under the animations that covers the topic of comprehension, and the transcription of the Reading Lesson; Comprehension we have the following Phrase “If Mother nature was a real person, she could control my take and break my doubts”, The phrase personifies Mother Nature, in this case attributing human characteristics to the natural world by suggesting she could be a real, conscious entity capable of action and influence.

“Control my take”: This metaphor implies that “Mother Nature” is a common personification of nature, focusing on its life-giving and nurturing aspects by embodying it in the form of a mother (Jelinski, 2011). From a linguistic perspective, the women-nature association can be represented with metaphorical expressions, such as “Mother Nature” (Guthrie, 1993), which has the power to influence or direct the speaker's perspective or outlook on life. The term “take” refers to their personal views, opinions, or attitudes. The use of this phrase indicates that nature’s influence is so profound that it could change how they perceive or respond to things.

“Break my doubts”: This suggests that Mother Nature has the strength to dissolve or dispel the uncertainties or fears. Here, the term “break” symbolises the act of

overcoming or eliminating doubts, emphasising nature's power to provide clarity and reassurance.

The phrase paints an image of Mother Nature as a nurturing, powerful figure who, if personified, in general, refers to the environment as a whole. The term is sometimes used in association with political and cultural ideologies such as global warming, environmentalism, and climate change. For some, it is a case of rising temperatures, rising sea levels, savage wildfires, earthquakes, tsunamis, hurricanes, the emergence of new and even ancient diseases, and the like, demonstrating that “Mother Nature” is a kind of capricious goddess who wreaks havoc throughout the earth.

This type of figurative language can evoke strong emotions, drawing on the universal idea that nature has a calming, stabilising, and empowering effect on humans. The learner is being taught to have an admiration for and reliance on nature as a source of guidance and inner peace.

Use of the Highlighting Feature in the Animations

The use of colour makes words and phrases stand out and, as such, is perhaps more memorable for students. If they can notice and reflect on their error, they may

be better able to regulate their own learning: Highlighting brightens; it tells you the words that you need to work on. For example, in the figure, we have “will” and “shall” highlighted in a different colour. The highlighting enables the learner to note down the key phrases.

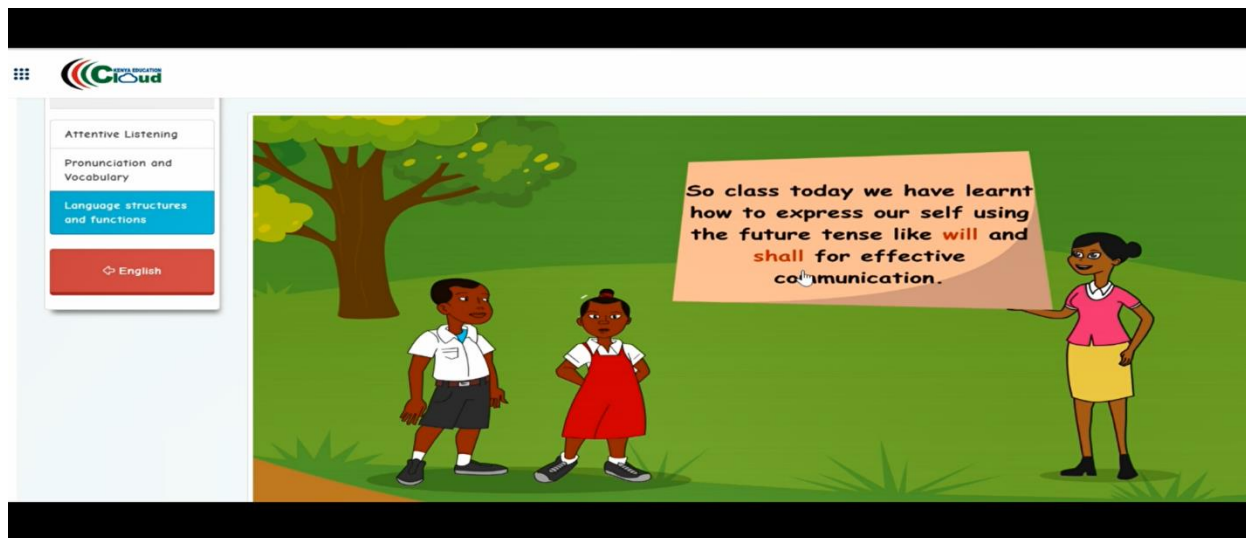


Figure 15: Illustration of Two Children Standing with the Teacher, with Activity Description between Them

Figure 15 illustrates two children, one male and the other female, standing close to the teacher. In between them is the description of the activity to be done.

Interactive Features for Engagement

Interactive Elements were incorporated within the animations through the inclusion of features such as

clickable icons, quizzes, or mini-games embedded in the animations, which were used to boost engagement and promote active learning. This aligns with the principle of multimodal learning, which, according to Mayer 2006, interactive content can enhance information retention and understanding.

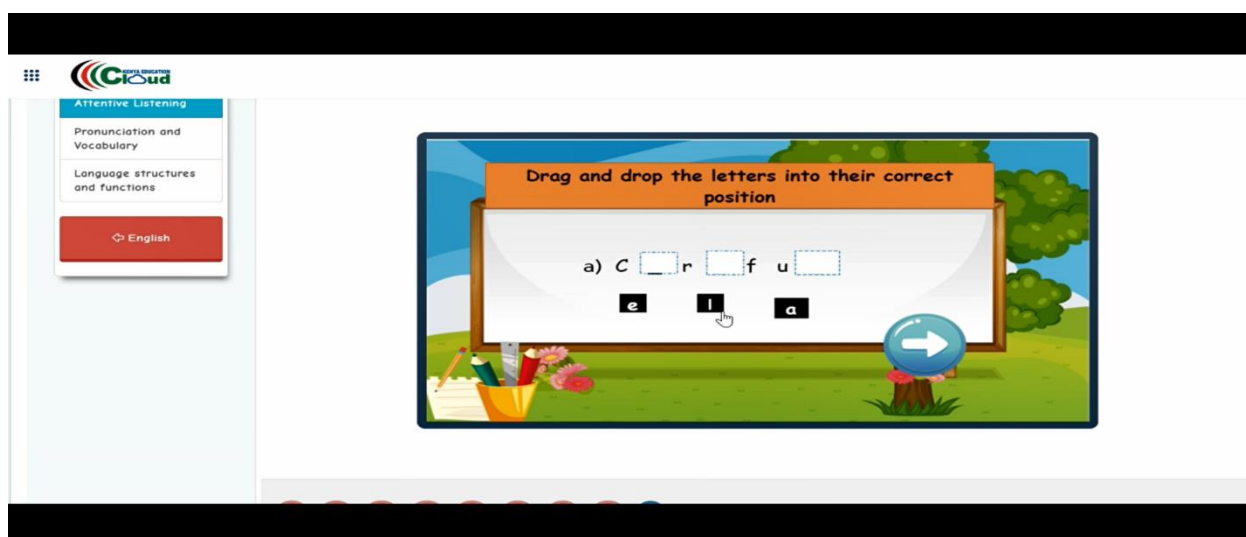


Figure 16: Illustration of a Grade Three English Animation Showing an Incomplete Text

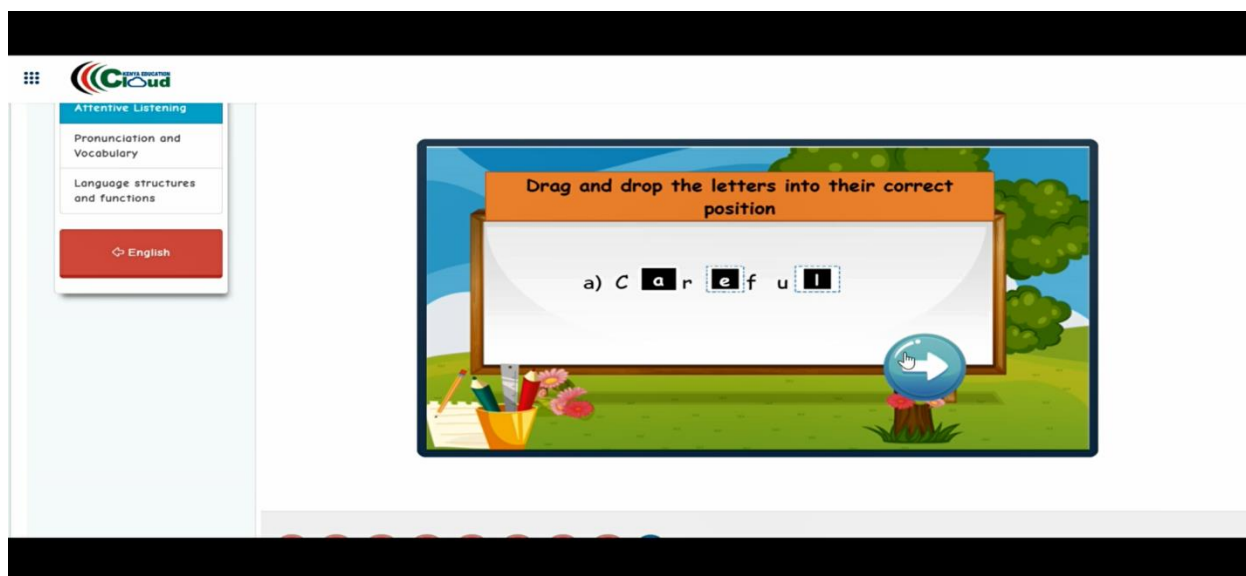


Figure 17: Illustration of a Grade Three English Animation Showing the Complete Text

As it is elaborated in Figure 16 and 17 above where learners are given alphabets to complete a word, and if the learner successfully completes the given quiz immediate feedback is provided within the animations, such as positive reinforcement or corrective prompts, to help learners understand their progress and areas for improvement. In analysing selected animations that covered the topic on attentive listening, upon the learner filling the blank spaces, it was noted that there was no accompanying audio that would complement on the feedback as Right or Wrong.

Mayer's Dual-Channel Processing principle is applied in animations through synchronised visual and auditory elements, which reduces cognitive load and supports memory retention. This aspect is reinforced by incorporating interactive elements like clickable quizzes, aligning with Mayer's Active Processing Principle, which advocates active learner engagement to promote deeper cognitive processing (Mayer, 2006).

Compositional (Textual) Analysis

General Structure and Setting; Screen Elements: Textual Elements: Typography and Layout

To evaluate how the visual and auditory components in animations contribute to comprehension and enhance communicative functions among Grade Three learners, the researcher needed to study the interaction between text resources within the selected animation. Graphics can act as topic

organisers by organising topics in a lesson and by showing relationships among topics in a lesson.

In the current study, compositional metafunction / place of positioning or location of placing was another component of the images. According to Kress & Van Leeuwen (2006), information placed on the right side of shown images is thought to be fresh information, but information placed on the left side is perceived as being old information. The components at the top are regarded as ideal or as making a promise, whilst those at the bottom are regarded as true or as facts.

In Figure 4 highlighted above, the topics are mapped to the left-hand menu. Changes in the topic on the right-hand side can be seen when the mouse is clicked over each of the graphical buttons on the left-hand menu and below to either move to the next or go to the previous lesson. Among the main design recommendations of multimedia content (on the combined use of text and images), the researcher finds the principles of multimedia learning proposed by Richard Mayer applicable.

According to Kress (2008), in regard to the interaction between the different parts of the text, a number of aspects are worth focusing on, not least in relation to spatial proximity and coherence between different types of written texts (text boxes, headings, captions, etc.) and other textual representations. The illustrations on the first frame are only loosely

connected to the introduction of the subject and the running text.

The only clear connection between the resources on that first frame is the narration, what is being said by the teacher during the introductory and the learners in class looking and listening to the teacher. For a learner with no previous experience of the subject and word being uttered by the teacher, this connection might not be clear. Also, the picture of the monkey in the first frame is not clear and how the learner is to relate to the monkey.

On the introductory frame, there is also a caption, placed between the two images: monkey, tree and illustrations of a school. For several reasons, it is possible that the “novice” will interpret the caption as part of the illustration of the Monkey and the school symbolised by buildings of schools and a flag. Apart from the assumption that the tilt of the Earth should be seen in relation to the sun, there are other potential challenges both in illustrations and writing, and in the relationship between them.

From an educational point of view, a number of aspects in this text are worth devoting attention to in the classroom. Already, the general structure of the layout and the graphical choices open up for things to discuss in the classroom, in ways that can function as a model for how to approach new texts. A starting point can be a mutual examination of illustrations and text elements on the pages. In relation to such a general overview, the teacher can point to the usefulness of benefiting from one’s previous ideas and knowledge about text resources such as introductory paragraphs, headings, text boxes, illustrations, or captions. It may be worth noting that such textual resources can be used in similar ways across texts, but also that they can have different functions in different texts.

With regard to the various illustrations, a starting point can be to try to make out what they might depict, and how the illustrations can connect to the content in question. One way of dealing with that could be to read the caption together to find out which illustration the caption relates to and how to arrive at that conclusion. For all of the illustrations that are connected to the subject content, it is important to examine how the running text and captions are

connected to the illustrations. One aspect to highlight can be what is expressed through the different resources and if they give the same (overlapping), competing, or perhaps even contradictory, information.

The nine animations that were selected have been categorised and structured into a number of chapters dealing with different topics under the English language, with the aim of letting the learners practice various aspects of the English language, such as grammatical constructions or word knowledge. The texts presented in the animated videos shown are supposed to give the students opportunities to practice constructions like “are/is wearing” and plural forms of regular nouns.

The reader is provided with information about the content areas the student is supposed to practice in the respective section. Most animated videos that have been studied have the same overall structure, with a heading given in a red text box, and with writing combined with usually drawn illustrations.

What is particularly striking in these animated videos is the ample use of dialogue, regardless of content. The text in Figures 3, 4, 5 and 6 is an example of this. This is a kind of dialogue that would hardly be heard in natural conversation; instead, it gives some kind of description of the illustration filling the introductory screen.

The screen has a communicative or social function (Kress, 2009), which shapes the relationship with the observer or listener. This is visible if we compare the screen elements in the animations. The screen does not contain any images, and the text is more lexically dense and follows a logical and cohesive structure. The visual and linguistic features ease the reading of the text and focus the reader’s attention. This is evidenced via the use of paragraphs: an introductory and longer one; topic sentences and discourse markers, for example, “on the other hand”. Coupled with its use of academic language and writing conventions such as embedded citations, it is evident that this is a scholarly piece of assessed writing.

In Figure 1, the writing is contained within a table. This is visually more appealing as it is less cluttered. It also

occupies most of the space on the page, so the reader's attention is immediately drawn to it. The use of numbers and bullet points also aids clarity. In the screencast commentary, when the tutor zooms in on the table and discusses what is written, the cursor largely remains static. Because less cognitive effort is demanded in interpreting the written word, there is less need to pinpoint specific elements. This also explains why the voice speeds up here as the information is shared by both tutor and student, so less elaboration is required.

This aligns with Mayer's (2009) cognitive theory of multimedia learning, which posits that the brain processes information in different channels: visual and auditory. In order to make sense of this information, individuals will assimilate both modes, building on their cognitive schemata. The synchronous nature of multimodal feedback, combining both visual and auditory elements, may signify less cognitive overload and result in deeper processing and learning.

CONCLUSION AND RECOMMENDATIONS

Conclusion: The semiotic analysis conducted for this study led to the conclusion that the selected Grade Three English language animations were effective in using semiotic elements to promote communicative functions. The findings indicate that the linguistic and visual signs were used to aid in fostering reasoning and personal expression. However, a critical semiotic tension was identified: while the animations are linguistically effective, they inadvertently normalise restrictive gender stereotypes during a formative stage of learner development.

Visual and auditory components were able to enhance learner engagement and comprehension, although careful balance was needed to avoid cognitive overload. The study identified specific "semiotic gaps," such as mismatches between textual cues and visual illustrations, and the use of conceptually dense metaphors that may exceed the cognitive threshold

for the grade three learners. Ultimately, while the animations are semiotically rich and pedagogically sound, their full potential is hindered by these misalignments and the lack of critical gender balancing in the narrative design.

Recommendations: Based on the findings of this study, it is recommended that the Kenya Institute of Curriculum Development (KICD) conduct a comprehensive audit of the existing animations on the iCloud platform to effectively meet the current learners' needs. Ideally, this transition should occur within the next five years to coincide with the next digital content review cycle.

To ensure that digital content is both accurate and effective, animation developers and instructional designers should adopt a "Semiotic Synchronicity Checklist." This tool would guarantee that auditory feedback, textual labels, and visual imagery are perfectly aligned, preventing the cognitive dissonance that occurs when words and pictures do not match. Furthermore, the Kenya Ministry of Education and relevant stakeholders should develop standardised multimodal design guidelines for CBC digital materials. These guidelines would provide a roadmap for designers to create animations that align with modern educational values and the core goals of the Competency-Based Curriculum.

Finally, to address language barriers and support bilingual integration, the study recommends that KICD support strategic code-switching. Instructional designers should look into integrating bilingual elements, such as using English alongside Swahili or other local languages, to support learners who are more comfortable with a blended language approach. By adopting this bilingual strategy, the curriculum can bridge existing language gaps and make digital learning more accessible to a broader range of Kenyan students.

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