
RESEARCH ARTICLE

Multimodal Approaches in the Competency of Listening and Speaking Skills among Grade 1 Learners in Kenya

Rose Ambiyi Masinde¹ ✉ Lucy Mandillah² and David Barasa³

¹²³Department of Language and Literature Education, Masinde Muliro University of Science and Technology

Corresponding Author: Rose Ambiyi Masinde, **E-mail:** masinde.rose@yahoo.com

ABSTRACT

Implementation of the use of multimodal approaches in teaching listening and speaking skills has remained elusive. Mastering listening and speaking skills in the English language in the early years of learning plays a critical role in the achievement of Second Language (L2) learning and continuous cognitive and meta-cognitive development among learners. Consequently, researchers who examine the best approaches to use in teaching listening and speaking skills agree that proper identification, description and use of multimodal approaches have a bearing on achieving competencies in listening and speaking skills. However, teachers of the English language have shown less engagement in the identification and usage of multimodal approaches while teaching listening and speaking skills. As a result, studies show that over 70% of learners in lower primary schools in Kenya cannot fully express themselves in the English language. It is against this background that this paper attempts to elucidate how the identification, description and use of multimodal approaches by teachers of English can aid in the effective teaching of listening and speaking skills during classroom interaction. The paper further highlights the bottlenecks that teachers of the English language go through while trying to use multimodal approaches in a classroom with learners with multiple learning styles. The study was conducted among selected primary schools in Western Kenya. Stratified sampling was applied to source for respondents who included Grade 1 teachers of English and 7 Curriculum Support Officers from the same zones. Primary data was sourced from 75 primary schools' teachers of English. Questionnaires, observation schedules and interviews were used to elicit data. Findings revealed that proper identification, description and use of multimodal approaches motivated teachers of English to design and use multimodal approaches during classroom interaction. However, the findings also revealed that some teachers of English were not aware of the importance of identification and use of the right multimodal approaches played in the classroom. The paper advocates for teacher training in proper identification, description and implementation of multimodal approaches for effective teaching of listening and speaking skills among Grade one learners.

KEYWORDS

Competency Based Curriculum; Listening; Speaking; Teaching approaches

ARTICLE INFORMATION

ACCEPTED: 01 September 2023

PUBLISHED: 11 September 2023

DOI: 10.32996/ijels.2023.5.3.7

1. Introduction

English language Teaching has evolved through the ages, with many teaching approaches being designed. Competency in listening and speaking skills is key in moulding learners who are progressively ready to master the English language skills (Suwalska, 2021). The ability of a learner to achieve this competency is hinged on the effectiveness of the choice of suitable approaches that teachers of English use during class interaction (Laadem & Makena, 2022). One approach that extant scholars hype is the multimodal approach (Loerts, 2013; Wang, 2021; Jewitt, 2009). This is because this approach amalgamates diverse approaches and uses them as a whole, thus catering for learners of different learning styles (Gardner, 2020). According to Laadem & Makena (2019), exploiting semiotic modes beyond verbal messages enhances the learners' awareness and facilitation of listening and speaking skills. The use of multimodal approaches in teaching listening and speaking skills is effective when teachers of English identify, describe and use

the multimodal approaches appropriately (Laadem & Makena, 2019). It is against this premise that this paper explores the identification, description and use of multimodal approaches for effective teaching of listening and speaking skills among Grade one learners in selected schools within Western Kenya.

Firmansyah (2021) opines that the identification and use of multimodal approaches in the teaching of a target language are important stages of learning and comprehending a particular language. Firmansyah (2021) further observes that the early introduction of diverse approaches in the lives of a learner may be linked to their success in the acquisition of a language later in their lives.

In Kenya, for example, English, being recognized as the main language of instruction in all institutions of learning, needs to be introduced to the learners with the ultimate aim of mastering it. According to the language policy in education in Kenya, English is taught as a subject from Pre-Primary One (PP1), and it is also a medium of instruction from Grade 4 going forward (Otunga, 2011; Jewitt, 2009). On this account, English in Kenya is an official language used for instruction in upper primary, secondary and tertiary institutions. English language is used in parliament, churches, courts and other areas where an official language is required to transact business. National examinations at all levels of education are written in English, with the exception of the Kiswahili paper.

In line with this, Barasa (2005) argues that this language needs to be taught initially with a professional touch because once learners begin to interact with it, they do it throughout their lives; hence, their successes or failures in classrooms depend on how quickly they can master the English language. This means that teachers of English need to identify, describe and use sufficient multimodal approaches in their teaching. Many studies have been conducted to explore the best approaches to use in the teaching of listening and speaking skills. However, few of these studies delve into the identification, description and use of multimodal approaches. As a result, Jewitt (2003) argues that teachers of English are ignorant in so far as identifying the right approaches to teaching listening and speaking skills is concerned. Furthermore, none of the studies has been carried out in Western Kenya. Often times, the nexus between the identification, description and use of multimodal approaches and comprehension of English listening and speaking skills entwines to ensure achievement and competency (Laadem & Makena, 2019).

Listening and speaking skills, according to (2018), are a basis upon which a learner's communication competence in every subject is hinged. To achieve this task, teachers of English in Grade 1 in Kenya need to skillfully equip themselves with the knowledge that can harness a learner's learning styles efficiently. This is because there is no mode or teaching approach used in isolation that can sufficiently yield comprehension of the English listening and speaking skills competence in English language (Wang, 2021). In contrast, learners have to grapple with the acquisition of English language listening and speaking skills - yet for most learners, it is the first time they encounter such a language (Borg, 2014; Barasa, 2016). Likewise, Zandieh and Jafarigohav (2012) resonate that learners experience difficulties in the language due to limited opportunities to interact with the target language outside class, and as a result, retention cannot be well facilitated. This brings about a conclusion that is twofold: Firstly, identification and description of multimodal approaches will direct teachers of English in selecting sufficient approaches to apply during classroom interaction. Secondly, multimodal approaches need to be used in the classrooms to effect competence in listening and speaking skills, specifically for learners with multiple learning styles.

According to Thembi and Hugo (2022), there exists a disparity between what teachers assume they may have instructed and what learners comprehend, as proved when tests in the form of examinations or other assessment indicators are administered to them to measure their achievement. Teacher educators sometimes find it nearly impossible to design a curriculum that can work comfortably for every individual learner (Kaur & Ganapathy, 2014). The questions that teachers of English are faced with are: How do they identify and describe tasks that would directly address each learner's learning styles? Can they sufficiently amalgamate the learning and teaching constructs to result in impactful comprehension of listening and speaking skills and improve academic achievement? What learning styles and multimodal approaches can be identified and adapted in lower grades to ameliorate the learners' conception and comprehension of English listening and speaking skills? Many studies have been carried out in the area of competence in the teaching of listening and speaking skills, but there is continued proof that extant scholars have not been able to address all concerns.

2. Literature review

Identification, description and the use of multimodal approaches in teaching English listening and speaking skills are fundamental for the learners' achievement in English (Phelippe et al., 2020). According to Philippe et al. (2020), multimodal literacy, which gained prominence in the 21st century, was invented as a result of the urge for the teachers of English to creatively discover approaches that were both learner active and learner centered. Based on this, they identified approaches that comprised elements of print, visual, aural, images and design. This was precisely because the assessment of the learners' listening and speaking skills is basically pegged on meta-language skills, which are achieved during teaching with multimodal approaches (Suwalska 2021). According to Wang (2018) and Jewitt (2009), the achievement of listening and speaking skills is directly connected to the identification of the

most potent categories of multimodal tools which provide comfortable access to education and an alternative to traditional print text and verbal teaching. Based on this position, Philippe et al. (2020), Cope and Kalantis (2015), and Smith (2010) examined the productivity of the identified multimodal approaches in addition to other teaching approaches and realized that the inclusion of the former provided a paradigm shift in the provision of teaching listening and speaking skills in present times. They also noted that this inclusion fundamentally activated the learners' listening and speaking skills. The present study explores the presentation of the identified multimodal approaches with a view of bridging the linguistic gap that exists in the learner's acquisition of listening and speaking skills among Grade 1 learners.

In Sweden, Spiteri & Chang (2020) investigated factors that hindered learners from acquiring listening and speaking skills in primary schools. They discovered that most primary school teachers of English did not understand the potential that lay in the use of multimodal approaches while teaching listening and speaking skills. Thus, they did not sufficiently identify and use the correct multimodal approaches during teaching due to ignorance. Similar findings were reported by Lukas et al. (2022); these Indian researchers conducted studies on teachers of English. Their aim was to find out how teachers of English identified and used multimodal approaches in teaching EFL. They discovered that it was really challenging for those teachers to be trained in the use of multimodal approaches. Furthermore, they realized that most of the teachers were reluctant to apply multimodal approaches in their classrooms. The study further established that there was a need for the teachers of English to establish a clear way of developing multimodal practices as well as designing a road map for future EFL teaching and training. The study, which mainly targeted both pre-service and in-service teachers of English, also discovered that most of those teachers were hesitant to blend multimodal approaches with conventional approaches during instruction. This greatly hindered the learners from gaining competency in listening and speaking skills. This study hyped the inclusion of correct identification and the use of multimodal approaches. The underlying question in these studies was whether exposure to the multimodal approaches influenced the way the learners would acquire listening and speaking skills and accelerate competency in listening and speaking skills. They concluded that teachers of English needed to be exposed to approaches as this would enable them to teach listening and speaking skills efficiently.

Spiteri & Chang's (2020) discovery of teachers yields another point of view that emanates from the side of the teachers- ignorance. With these revelations, the authors above introduce two points that seem to emanate from distinct directions: these are; ignorance and reluctance. The former highlights the fact that the teachers have knowledge of the existence of the multimodal approaches but are reluctant to put them into use. The present study extends the above discussions by interrogating the two phenomena- ignorance and reluctance. Thus, it should not be a matter of conjecture as to whether the teachers of English are not aware of the existence of these approaches or whether they are aware of their existence but do not consider them during instruction.

3. Methodology

The study adopted a cross-sectional descriptive research design with both quantitative and qualitative paradigms (mixed method). Primary data was sourced from 75 public and private primary schools in Western Kenya. Stratified sampling was employed to identify teachers of English and their pupils in Grade 1 as well as 7 Curriculum Support Officers (CSO'S). This was to ensure that the population was grouped into homogenous subsets that bore similar characteristics. The study adopted a stratified sampling technique to select 75 primary schools in the four counties of Western Kenya, namely Kakamega, Bungoma, Busia and Vihiga (Orodho et al., 2016). Categories of various primary schools were stratified as follows: Public rural (30), public urban (15), private rural (15), and private urban (15). This will followed by the stratification of 75 Grade 1 teachers of English and 7 Curriculum Support Officers (CSO's) according to their school categories and regions, respectively. This ensured representation in data collection, which was in line with Saunders et al. (2018) concept of saturation and value information.

Three instruments of data collection were used, namely, questionnaire, observation schedule and interview. The reliability of the instruments was tested using Cronbach's alpha. According to Shemwel et al. (2015), Cronbach alpha is the most common measure of internal consistency (reliability) in terms of how closely related those items are. It is expressed as the function of the number of the test items and the mean of every item. Table 1 below explains the criteria for judging Cronbach's alpha.

Table 1 Criteria for Judgment of Cronbach Alpha

Cronbach's Alpha	Internal Consistency
α 0.9	Excellent
0.8 less a less than 0.9	Good
0.7 less a less than 0.8	Acceptable
0.6 less a less than 0.7	Fairly acceptable
0.5 less a less than 0.6	Poor
A less than 0.5	Unacceptable

Shemwel (2015) cautions against the use of a bigger number of items because they inflate alpha's value while a smaller range value implodes it. The value of the alpha indicates the % of the reliable variance. In the current study, for example, if the computation of the alpha is 0.90, it implies that 90% of the variance is reliable. This means that 10% is error variance. This study used Cronbach's alpha coefficient, where the level of reliability of the data instruments was determined using the SPSS package. Table 2 provides a summary of Cronbach's alpha coefficients obtained by the researcher in the present study.

Table 2: Reliability Analysis of the Instruments

Instruments	Items Tested	Cronbach's Alpha	Verdict
Questionnaire	31	0.75	Acceptable
Observation Schedule	10	0.85	Good
Interview Schedule	4	0.9	Excellent

Source: Designed by the authors based on the research data (2021-2022)

In Table 2 above, the results show that the data collected and the instruments applied for data collection were above the minimum threshold for internal consistency based on the judgment criterion advanced by (Shemwel, 2015). Data was triangulated during the analysis, whereby data generated from questionnaires was analyzed quantitatively, whereas data generated from observation schedule and Key Informant Interviews (KII) were analyzed qualitatively.

Before carrying out any study, an assessment of the normality of the data is required; this study carried out a normalcy assessment to ascertain its normalcy (Orodho et al. 2016). In this study, normality tests were conducted to test whether the data was consistent with a normal distribution. In this regard, the Kolmogorov-Smirnov test and Shapiro-Wilk test were applied. The Shapiro-Wilk test was thought appropriate. This is because for a small sample size (less than 50 samples), while Kolmogorov-Smirnov test has been used for a sample size of more than 50. The sample for this study was 75.

For both tests, the hypothesis:

H_0 : Data is Normally Distributed

H_1 : Data is not Normally Distributed

3.1 Decision Rule:

When the p-value is less than the level of significance, say 0.05, the null hypothesis is rejected.

The Shapiro Wilk test was used to ascertain the level of significance in the variations that were obtained when a questionnaire was administered to Grade 1 teachers of English with the 31 items. The Questionnaire, being a Likert scale, the mode was applied to determine the way the respondents' responses would be distributed. Similarly, qualitative analysis involved in-depth presentations of the results of the data obtained from the interviews and the classroom observation.

4. Results and Discussion

In this study, the respondents were required to identify and describe the various multimodal modes they applied in their day to day teaching of listening and speaking skills during different stages of their teaching. For instance, they were asked which multimodal approaches they applied while clarifying language patterns and introducing new strands, just to mention but a few. Their responses were presented in subsequent tables.

Table 3: Types of Multimodal Approaches Identified, described and Used by Teachers of English

Statement	Aural	Aural/ reading	Aural/ visual	Aural/ writing	Reading	Visual/ reading	Visual	Reading/ writing	Visual/ writing	Writing	Aural/ kinaesthetic	Kinaesthetic	Kinaesthetic/ visual
Clarifying or verifying language pattern	3(4)	1(1.3)	38(50.7)	-	4(5.3)	4(5.3)	20(26.7)	-	1(1.3)	1(1.3)	2(2.7)	1(1.3)	-
Introducing new language items, e.g vocabulary.	11(14.7)	5(6.7)	23(30.7)	2(1.5)	6(8)	1(1.3)	13(17.3)	4(5.3)	-	3(4)	2(2.7)	2(2.7)	3(4)
Teaching the practice of language structures	8(10.7)	3(4)	1(1.3)	2(1.5)	27(36)	7(9.3)	11(14.7)	3(4)	2(2.7)	2(1.5)	1(1.3)	9(12)	2(2.6)
Teaching images and sounds	7(9.3)	4(5.3)	13(17.3)	-	6(8)	-	19(25.3)	4(5.3)	2(2.7)	3(4)	-	11(14.7)	8(10.7)
Reviewing the oral work that was learnt	15(20)	9(12)	2(2.7)	-	14(18.7)	-	9(12)	3(4)	-	7(9.3)	3(4)	14(18.7)	3(4)
When reciting poems or miming	8(10.7)	2(2.7)	6(8)	2(2.7)	19(25.3)	4(5.3)	6(8)	1(1.3)	1(1.3)	5(6.7)	3(4)	24(18)	2(2.6)
Polishing and revising oral items	12	3(4)	6(8)	-	10(13.3)	4(5.3)	21(28)	4(5.3)	-	10(13.3)	1(1.3)	5(6.7)	3(4)

Carrying out repetition to reinforce	13	1(1.3)	8(10.7)	1(1.3)	17(22.7)	4(5.3)	10(13.3)	6(8)	2(2.6)	5(6.7)	2(2.7)	5(6.7)	2(2.6)
Asking the learners to describe different items	9(12)	1(1.3)	8(10.7)	2(2.7)	9(12)	2(2.7)	18(24)	5(6.7)	1(1.3)	5(6.7)	2(2.7)	9(12)	4(5.3)
Overcoming limitations in a speaking lesson	10(13.3)	3(4)	8(10.7)	-	7(9.3)	6(8)	-	5(6.7)	1(1.3)	1(1.3)	3(4)	13(17.3)	2(2.6)

Source: Designed by the authors based on the research data (2021-2022)

In Table 3 above, the teachers of English identified and described multimodal approaches they utilized during interaction at different times during classroom interaction. The study further revealed that teachers of English hardly utilize kinesthetic multimodal approaches during interaction. Based on the above results, we conclude that although teachers of English were able to identify and describe the multimodal approaches used in the teaching of listening and speaking skills in the classroom, they relied on just a few approaches during classroom interaction. These results portray a skewed amalgamation of multimodal approaches. For instance, kinesthetic approaches are not largely identified, implying that learners who depend on kinesthetic approaches for comprehension of English and speaking skills are disadvantaged. Rafiq (2018) posits that teachers need to plan activities that suit every stage of their lessons. He asserts that kinesthetic activities are suitable for the learners during the various stages of lesson development because they appeal to the learners’ needs. However, evidence from the data indicated no substantial use of the aforementioned multimodal approaches. In contrast, teachers of English leaned more toward the visual, multimodal approaches while ignoring other aspects of the same.

According to the study outcome, 23 participants (30.7%) rated a combination of aural and visual approach as the most utilized approach, while the combination of visual and reading 1 participants (1.3%) was the least approach utilized. Results from the table above revealed that the most used approach when introducing the new language items was the use of aural and visual multimodal tools. These results are similar to the ones recorded during the observation schedule. However, in the observation schedule, visual approaches surpassed aural ones by a greater margin. Gardner (2020), in his book about the theory of multiple intelligence, discourages teachers from a skewed inclination toward multimodal approaches during teaching. Gardner argues that by doing so, the teachers tend to over emphasize some learning styles while totally ignoring other learning styles.

On the other hand, (Firmansya (2020) found out that children who are exposed to visual approaches will have significantly good prowess in pronunciation, articulation and communication. Firmansya (2018) also concurs that visual approaches elicit components and concepts that are invisible and difficult to integrate into their mental model. Arguably, learners tend to easily depict visual information that otherwise cannot be comprehended verbally, thus aiding both pupils with high and low learning styles. However, Gardner (2020) opines that there are those unique learners who belong to a category that requires a balanced application of multimodal approaches. Thus, overreliance on visual multimodal alone does inhibit these unique learners.

In order to find out the multimodal approaches which were identified, described and used by the respondents in the various school categories, the teachers were asked to enumerate the multimodal approaches they utilized in their day to day teaching. The results are shown in table 4 below.

Table 4: Use of Multimodal Modes by the Teachers in the Various School Categories

Multimodal Mode	Public Rural		Public Urban		Private Rural		Private Urban	
	Freq	%	Freq	%	Freq	%	Freq	%
Text books	30	100	15	100	15	100	15	100
Posters	5	27	3	20	2	13.3	1	6.7
Pictures/ Photographs	25	83	14	93.3	13	86.7	15	100
Charts	23	77	15	100	12	80	14	93.3
Maps	0	0	0	0	0	0	0	0
Models	4	13	3	20	3	20.0	4	46.7
Images	1	3	0	0	1	6.7	0	0
Realia	18	60	8	53.3	6	40	9	60
Portraits	0	0	0	0	0	0	0	0
Drawings	26	87	13	86.7	12	80	14	93.3
Graphs	0	0	0	0	0	0	0	0
Illustrative diagrams	20	66.7	12	80	12	80	14	93.3
Colours	14	47	13	8	7	46.7	9	60

Source: Designed by the authors based on the research data (2021-2022)

The results in Table 4 indicate that teachers of English wholly identify, describe and use learners' and teachers' course texts as their main mode of teaching (100%). Further, the use of drawings, pictures/ photographs, charts, and realia follows in that order (87%), (83%), (77%), and (60%). To resolve the research problem that sought to conceptualize the blending of multimodal approaches, the researcher queried the use of multimodal approaches with regard to the use of maps, portraits and graphs. The results showed that in as much as they use visual, multimodal approaches, teachers of English have not identified maps, portraits, and graphs as modes of teaching and hardly ever use them.

Gardner (2020) and Halliday (1978) attempts to investigate academic changes that may occur when certain type of multimodal approaches are applied in teaching English. He concludes that teachers who ignore certain types of intelligence in learners not only provide an unfairly skewed environment for the learners but also make learners feel inadequate due to their inability to master the content being taught (Gardner, 2020). Based on this realization, this study concludes that some learners' manifestations of low self- esteem may emanate from the teachers' inability to correctly blend the multimodal approaches in line with the learners' learning styles.

Reports from the interviews indicated that teachers of English were not inclined to use graphs and maps due to the fact that graphs and maps are specific field oriented and, therefore, may not have been relevant in the teaching of listening and speaking skills. Arguably, though, the teachers could use their own creativity to find out how these types of multimodal approaches can be applied during classroom teaching. According to Firmansyah (2021), textual modes of teaching alone are not sufficient to activate the skills of listening and speaking skills, which engage the learners in correcting pronunciation and responding to stress and intonation effectively. Since the multimodal approaches mainly delve into a representation of understanding and the manifestation of meaning through diverse forms of multimodal approaches (Firmansyah, 2021), it is not enough for teachers of English to focus on texts or pictures alone during instruction in the teaching of listening and speaking skills.

In public rural schools, besides the use of textbooks, teachers used pictures/photographs and charts (83% and 77.0%, respectively). However, in Public urban schools, they mainly used charts (100%) and Pictures/photographs (93.3%). In private rural schools, teachers used Pictures/ photographs (86.7%), charts (80%) and drawings (80.0%). The result showed that in Private urban schools' preferred multimodal mode was picture/ photographs (100%), charts (93.3%) and drawings (93.3%).

Based on the above results, the study concluded that all the primary school categories applied almost similar multimodal approaches during class interaction. Thus, there was not much disparity in the use of multimodal approaches in all the primary school approaches.

5. Observation Results on the Identification and Usage of Multimodal Modes

The study used a non-partisan observation checklist to establish the use of multimodal approaches to teaching English to Grade 1 learners in Western Kenya. The results are shown in subsequent Tables.

Table 5 a: Observed Lesson Strand Areas in Public Rural Schools

Lesson	Lesson Strand	Specific Learning Experience.
1	Attentive listening	The learners to listen to conversation
2	Pronunciation & Vocabulary	Learners discrimination of sounds
	Attentive listening	Learners respond to non-directional instructions.
4	Language structures & functions	Learners' polite use of the verb "to be."
5	Attentive listening	Learners practice correct sitting posture
6	Pronunciation & Vocabulary	Make sentences with girls, bed, pen, chalk, table...
7	Pronunciation & vocabulary	Identify minimal pairs, e.g., measure, pleasure
8	Language structure & functions	Describe people using the verb "to be"
9	Language structure & functions	Discuss people in their environment
10	Language structure & functions	Practice a language game of gratiny
11	Attentive listening	Identify objects by painting.
12	Pronunciation & vocabulary	Identify new words from picture stories.
13	Pronunciation & vocabulary	Practice good eye contact
14	Attentive listening	Listening to conversations
15	Attentive listening	Give simple instructions and obey by miming
16	Language structure & functions	Repeat sentence structures from a poem
17	Pronunciation & vocabulary	Practice distinguishing similar sounds in response to picture cues.
18	Pronunciation & vocabulary	Listen to audio and repeat sounds pronounced.
19	Pronunciation & vocabulary	Listen to audio recording & mimic
20	Attentive listening	Demonstrate turn taking by being quiet when others are talking
21	Pronunciation & vocabulary	Identify word with sounds: - /p/, /b/, /t/, /d/, /z/, /s/, /ts/, /dz/
22	Pronunciation & vocabulary	Listen to audio and pronounce sounds
23	Language structure & functions	Make sentences with real singular and plural objects.
24	Language structure & functions	Construct sentences about actions demonstrated by learners.
25	Pronunciation & vocabulary	Say words beginning with common sounds
26	Language structure & functions	Describe themselves using short sentences
27	Language structure & functions	Make sentences with objects like doors, chairs, black board
28	Attentive listening	Listening to conversations
29	Language structure & functions	Make sentences using pronouns
30	Language structure & functions	Make sentences with singular and plural items

Source: KICD Curriculum Design 2019

From Table 5a above, a total of 30 lessons were observed in the teaching of listening and speaking skills. Out of the thirty lessons observed, 8 out of 30 teachers (26.6%) taught the strand 'attentive listening'; 11 out of 30 (36.7%) teachers taught 'pronunciation and vocabulary' while 11 out of 30 (36.7%) teachers taught 'language structure and functions'. These were the required strands that teachers of English were supposed to teach the learners in Grade 1 in listening and speaking skills as stipulated in the curriculum design (KICD, 2019).

The main reason for the researcher's observation was to find out whether the teachers of English created any learning opportunities to occupy the learners with the various multimodal approaches to improve the teaching and learning of listening and speaking skills as they had stipulated in their teacher questionnaires. This is because Bukoye (2019) indicated that most teachers displayed paucity in the manipulation of multimodal approaches during teaching. Results from observation showed that in as much as some teachers of English displayed substantial usage of these approaches, the majority of the teachers were not creative enough to engage their learners on multimodal approaches. This study, therefore, supports Bukoye's argument. Results obtained from this data confirmed that teachers of English required a rule governed model to aid them in the teaching of listening and speaking skills in order to distribute the multimodal approaches in line with the learners' learning styles.

Table 5b: Observed Lesson Strand Areas in Public Urban Schools

Lesson	Lesson Strand	Specific Learning Experience.
1	Pronunciation & Vocabulary	Pronounce words as modelled by the teacher
2	Language structure & functions	Make sentences in present continuous tense
3	Attentive listening	Learners are shown demonstrations and pictures on correct sitting postures
4	Attentive listening	Learners practice correct sitting posture
5	Pronunciation & Vocabulary	Practice good eye contact, facial expressions
6	Language structure & functions	Make sentences using the words bat, book, dog...
7	Language structure & functions	Tell their daily routines in group pairs
8	Pronunciation & Vocabulary	Recitation of rhyming words like hare, hair
9	Pronunciation & Vocabulary	Get meanings of new words by looking at pictures
10	Attentive listening	Give simple commands and obey by acting and miming.
11	Language structure & functions	Demonstration in relation to gender, number
12	Language structure & functions	Use pronouns in simple sentences
13	Pronunciation & Vocabulary	Get meaning of new words, pictures, story
14	Language structure & functions	Demonstration in relation to gender
15	Pronunciation & Vocabulary	Identify minimal pairs /z/, /s/, /ts/ & /dz/

Source: KICD Curriculum Design 2019

From Table 5b, a total of 15 lessons from public urban schools were observed. Out of these lessons, 3(20%) were from the 'attentive listening' strand, 6(40%) were from the 'language structure and functions strand', while 6(40%) were from the 'pronunciation and vocabulary' strand. Most of the activities that were observed from the field seemed to replicate in all the school categories. For instance, the isolation of selected multimodal use was observed in all the school categories apart from a few schools where observation testified to a few blends of the existence of kinesthetic multimodal approaches.

Classroom observation further displayed prolonged moments of sheepish indecisiveness over which multimodal approaches to apply in particular situations. According to Gardner, teachers of English need to differentiate instruction and vary their teaching approaches because the learners display varied levels of intelligence (Edutopia, 2009). He argues that teachers who develop varied intelligences while suppressing others are ignorantly practicing discrimination against the learners who display strength in those intelligences (ibid).

From the observation, learners displayed multiple intelligences that teachers of English seemed to be unsure of how to cope with. As a result, only a handful of learners seemed to comprehend the instruction that was being displayed in some classrooms. Gardner (2020) here suggests the provision of diverse resources to be displayed in the classrooms.

Table 5c: Observed Lesson Strand Areas in Private Urban Schools

Lesson	Lesson Strand	Specific Learning Experience.
1	Attentive listening	Listening to conversation
2	Pronunciation & Vocabulary	Identify words which have the taught sounds
3	Language structure & functions	Make sentences using bats, doors, chairs...
4	Pronunciation & Vocabulary	Construct sentences using words with the taught sounds /k/, /ae/, /z/
5	Pronunciation & Vocabulary	Construct sentences using words with the taught sounds /k/, /ae/, /z/
6	Language structure & functions	Talk about things around the-this is a girl, boy, door, chair...
7	Language structure & functions	Making sentences in plurals and singulars
8	Attentive listening	Identifying objects by pointing orally,
9	Attentive listening	Practice correct sitting posture
10	Pronunciation & Vocabulary	Identify minimal pairs
11	Language structure & functions	Make sentences on pictures using singular and plural nouns
12	Language structure & functions	Engage in simple question and answer dialogue

13	Attentive listening	Learners showed demonstrations and pictures. Listen to audio pronunciation of sounds /z/, /dz/, /s/
14	Pronunciation & Vocabulary	Identify minimal pairs
15	Attentive listening	Give simple commands and obey by miming.

Source: KICD Curriculum Design 2019

According to the results in Table 5c above, a total of 15 teachers of English teaching Grade 1 were observed during the listening and speaking skills lessons. Out of these lessons, 5 out of 15 (33.3%) were teaching the strand 'attentive listening'; 5 out of 15 (33.3%) taught 'pronunciation vocabulary, while 5 (33.4%) taught 'language structure and function. The above primary schools belonged to the private urban school category. Similar observations were noted in this category of schools. The researcher concluded that teachers of English across all four stratum displayed similar strengths and challenges.

Table 5d: Observed Lesson Strand Areas in Private Rural Schools,

Lesson	Lesson Strand	Specific Learning Experience.
1	Attentive listening	Practice correct sitting postures
2	Pronunciation & Vocabulary	Name words that have sounds /p/, /b/, /f/, /v/
3	Language structure & functions	Describe themselves in short sentences
4	Language structure & functions	Describe people using the verb "to be."
5	Language structure & functions	Talk about things around them, e.g. chair, table
6	Attentive listening	Learners shown demonstrations and, pictures and photos, models on correct sitting postures.
7	Pronunciation & Vocabulary	Pronounce words by.....
8	Pronunciation & Vocabulary	Recitation of hymn words
9	Language structure & functions	Introduce themselves politely
10	Pronunciation & Vocabulary	Distinguish similar sounds in groups
11	Attentive listening	Identify objects by painting orally
12	Language structure & functions	Describe themselves in short sentences
13	Attentive listening	Demonstrate rules of turn taking by being quiet when others are talking
14	Attentive listening	Give simple commands & obey by acting
15	Pronunciation & Vocabulary	Get meanings of new words by looking at pictures from a story and demonstration.

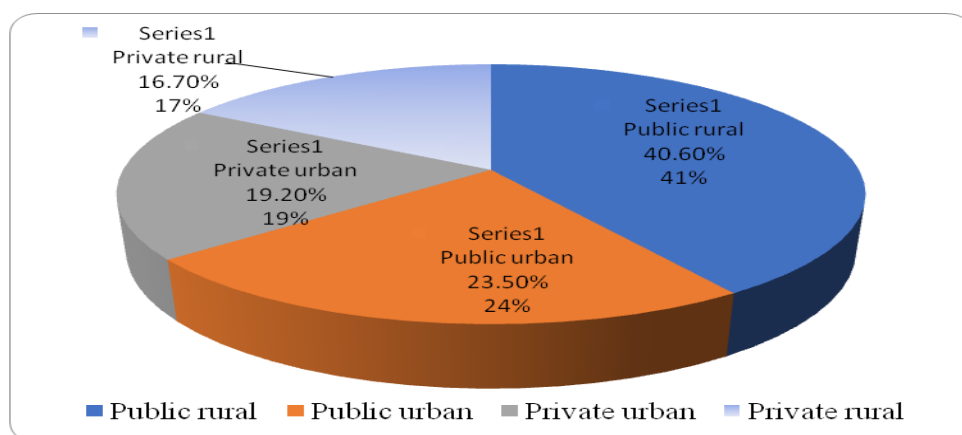
Source: KICD Curriculum Design 2019

From Table 5d above, a total of 15 lessons from the private rural school category were observed. Out of those schools, 'attentive listening' was taught in 5 (33.3%) schools; 'pronunciation and vocabulary' was taught in 4 (26.7%) schools, while 'language structure and functions' was taught in 6 (40%) schools. Listening and speaking skills strands were observed in all the schools' categories listed above in tables 5a, 5b, 5c, and 5d. A total of 75 lessons were observed in the classes where the teachers of English had been made to fill out the questionnaire. These were the laid down strands that teachers of English were supposed to teach as stipulated in the curriculum design (KICD, 2019). Table 6 below displays the total strands investigated.

Table 6: Number of lessons investigated

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Attentive listening	21	28.0	28.0
	Pronunciation and vocabulary	27	36.0	64.0
	Language structures	27	36.0	100.0
	Total	75	100.0	100.0

A total of 30 teachers of language from public rural schools were observed to ascertain how best they were able to identify and use the multi-modal approaches in teaching listening and speaking skills. From the public urban, private rural and private urban, 15 teachers of English were investigated respectively. Results obtained during observation showed that teachers' application of multimodal approaches was balanced. Thus, teachers from both categories of schools faced similar conditions when it came to their implementation. Figure 1 shows the distribution of learners in terms of percentages in different school categories.

**Figure 1: School Categories Observed in the Study**

The results in Figure 1 above show the distribution of the various school categories. In this regard, analysis of the teachers' questionnaires generated revealed that some teachers effortlessly described and used visual, multimodal approaches largely Table 6 ([87%, 83%, and 60%]). For instance, during observation, diagrams, pictures, photos, and drawings dominated some classroom walls, unlike some multimodal approaches such as models, portraits and maps, which were minimally seen in the classrooms. The results observed are consistent with the ones obtained through the teacher's questionnaires, rubric analysis and interviews with Curriculum Support Officers (CSO's).

Further, results revealed that the use of pictures in all the school categories stimulated the learners' conceptions of vocabulary during the listening and speaking skills lessons. For instance, in lesson 6 in the public rural school category, observation from the sub-strand "Pronunciation and vocabulary" required learners to pronounce the given vocabulary correctly. The 'learning experience' demanded that the learners identify and name a series of common nouns such as *bed, girl, ball, chair, table, board*, just to mention but a few, and construct sentences using the said nouns. The respondent provided pictures of the objects above and asked the learners to identify them using the list of words she had written on the board and construct sentences. Some learners were quick to identify them and easily constructed sentences using the nouns, while others struggled to identify and construct sentences. However, a few learners were not able to identify the objects displayed.

Here, the researcher thought that had the respondent included aural multimodal approaches where the learners listened to recorded sentences and watched the real objects; this lesson would have achieved its objectives. Unfortunately, this did not happen, and therefore, learners of different intelligences were disadvantaged. Similarly, from the interview session with the Curriculum

Support Officers (CSO's), it was confirmed that teachers of English in Grade 1 heavily relied on photographs and pictures in the learners' texts to teach listening and speaking skills (oral work). In the words of one of the CSOs,

You know the teachers' workload is heavy, so they find it convenient to use the multimodal approaches, which are easily accessible and readily available to make their work less tedious but convey message or effect teaching to the learners. Therefore, pictures and photographs are mostly used as teaching aids used for teaching Grade 1. (Seveni, H., Personal Communication, 12 August, 2022).

From these sentiments, it can be deduced that teachers of English overly rely on the visual, multimodal modes because they are readily available. It also implies that the use of pictures was precisely useful in enabling the learners to infer the meaning of new words, especially during the vocabulary lessons. These sentiments were also supported by O'Halloran (2011), who observed that diverse multimodal approaches assist learners through visual communication rather than the lecture approach. Likewise, Hashim (2018), Mulenga & Kabombwe (2019) resonate that the use of pictures, diagrams, and drawings accelerates the learners' skills of inference in listening and speaking. They argue that teachers largely narrow themselves to the use of pictures and photographs, especially those that are found in their learners' course texts, because they are readily available. They then minimally source for drawings and diagrams which they feel are relevant to them.

Similar observations were noted in Lesson 13, 18 and 21 (public rural), 15 (public urban), 4 and 5 (private urban) and 2 & 8 (private rural). In all these lessons, it was noted that the application of the aural aspect of multimodal modes was far below average, with participants explaining that the aural and audio-visual multimodal modes were not locally available and that getting to consolidate them during instruction sometimes wasted a lot of time in these lessons. The following sounds were to be articulated and later on used in constructing sentences: /p/, /b/, /t/, /d/, /z/, /s/, /dʒ/, /ʒ/, /ei/. In the suggested learning experiences, the learners were supposed to pronounce the sounds by taking turns as modelled by the audio record (KICD, 2017, P. 198).

In this lesson, rather than using the recorded sounds from the native speakers, participants pronounced the sounds to the learners. Observation detected that some teachers failed to articulate words like 'measure' and 'pleasure' correctly. This scenario hampered the learners from receiving the correct pronunciation of the above sounds. This assertion implies that failure by the teachers of English to use multimodal modes appropriately in every context is likely to hinder the learners' achievement in the teaching and learning of listening and speaking skills.

For instance, teachers mistakenly interchanged sounds /p/ and /b/, /t/ and /d/. Further, there was no clear distinction between the sounds /z/ and /dʒ/, thereby conditioning the learners to adopt incorrect pronunciation. Consequently, in lesson 8 (public urban) and lesson 13 (private urban), participants were equipped with audio-visual materials and the sounds in the said lessons were pronounced appropriately by the native speakers. In this regard, learners were able to capture the correct pronunciation and effortlessly construct sentences from the sounds above. In this context, teachers sufficiently identified and used the correct multimodal modes, which resulted in effective lessons.

The study, therefore, establishes that failing to apply the aural and kinesthetic multimodal modes denied learners the opportunity to link the sounds and their correct pronunciation. However, teachers who took their time to organize and facilitate their learners with correct multimodal approaches enabled their learners to competently articulate the sounds with much ease. These assertions corroborate views expressed by Hashim (2018) regarding the great sufficiency of the use of the oral aspect of the multimodal approaches.

Similarly, Eskoz and Elola (2019) and Albahiri and Alhaj (2020) opined that teachers of English need to gap up the known knowledge from unknown knowledge by exposing the learners to fundamental multimodal approaches that would effectively guide them to conjecture what to expect in the ongoing lessons to the known knowledge. These sentiments reiterate those documented by Halliday (1978) in the theory that guides this study, which posits that the active process of interaction between ESL Learners and multimodal tools actuate the English learning process in their own contexts.

6. Description and Usage of Multimodal Approaches Used in Teaching of Listening and Speaking Skills in Grade One in Primary Schools in Western Kenya

Six multimodal approach categories were aggregated to determine the extent to which teachers applied the audio (aural), visual, ICT, symbols and semiotics. The out-put was scaled into four main categories of 'always', 'sometimes', 'rarely'. The mode from every category was also included. In this regard, the teachers who 'always' use multimodal approaches with each category were deemed to be very consistent with using the multimodal approaches. Those who 'sometimes' were deemed to be consistent with the use of the multimodal approaches, while those who said 'rarely' were deemed not to be consistent with the use of the multimodal approaches. A comprehensive summary of their description and use is shown in Table 7 below.

Table 7: Frequency Distribution of the Multimodal Approaches Used

Multimodal approach	Mode	Always	Rarely	Sometimes	Skewness
a) Audio- music					
Recorded Voice	2	8(10.7%)	25(33.3%)	42(56.0%)	-0.207
Sound Effects	1	30(40)	21(28%)	24(32%)	0.228
(b) Visual – Textbooks					
	1	72(96%)	1(1.3%)	2(2.7%)	5.754
Graphics	2	8(10.7%)	21(28.0%)	46(61.3%)	-0.083
Photographs and pictures	1	58(77.3%)	5(6.7%)	12(16.0%)	1.891
Images	1	45(60.0%)	13(17.3%)	17(22.7%)	0.915
Illustrations	1	66(88%)	1(1.3%)	8(10.7%)	2.932
Diagrams	1	69(92.0%)	6(8.0%)		3.160
Posters	1	58(77.3%)	5(14.7%)	6(8.0%)	1.862
Charts	1	68(90.7%)	1(1.3%)	6(8.0%)	3.509
Maps	2	11(14.7%)	11(14.7%)	53(70.7%)	0.000
Models	2	11(14.7%)	15(20.0%)	49(65.3%)	-0.009
Realia	1	39(52.0%)	4(5.3%)	32(42.7%)	0.639
(c) ICT: Internet					
	1	36(48.0%)	14(18.7%)	25(33.3%)	0.560
AURAL-Audio tape	3	15(20.0%)	35(46.7%)	25(33.3%)	-0.508
Audio recorder	1	27(36.0%)	22(29.3%)	26(34.7%)	0.124
Radio broadcasts	2	15(20.0%)	21(28.0%)	39(52.0%)	-0.107
Phones	1	53(70.7%)	11(14.7%)	11(14.7%)	1.344
(d) Voice					
	2	12(16.0%)	20(26.7%)	43(57.3%)	-0.686
Portrait	3	5(6.7%)	39(52.0%)	31(41.3%)	-0.686
Drawings	1	63(84.0%)	5(6.7%)	7(9.3%)	2.412
(e) Symbols- Token					
	1	51(68.0%)	8(10.7%)	16(21.3%)	1.326
Signs	1	43(57.3%)	15(20.0%)	16(21.3%)	0.802
Representations	1	46(61.3%)	10(13.3%)	19(25.3%)	1.029
(f) Semiotics – Signs					
Gestures	1	68(90.7%)	7(9.3%)	-	2.853
Winks	1	62(82.7%)	1(1.3%)	12(16.0%)	2.168
Raising hands	1	72(96.0%)	-	3(4%)	4.791
Clapping hands	1	74(98.7%)	-	1(1.3%)	8.660
Signals	1	62(82.7%)	2(2.7%)	11(14.7%)	2.320
Cues	1	66(88%)	2(2.7%)	7(9.3%)	3.045

Source: Designed by the authors based on the research data (2021-2022)

Information in Table 7 above was captured using the mode because it was a Likert scale data- in Likert data, we cannot use the mean as a measure of central tendency as it has no meaning (Orodho et al. 2016). Based on the above, the analysis yielded a computed mode of 2, which suggested that the use of audio (aural) was only sometimes used by the teachers. Therefore, it means that teachers of English moderately utilized the ‘music and sound effect’ in their teaching of listening and speaking.

Further, following the nature of responses in Table 7, four revelations come out clearly: Firstly, the majority of the teachers of English in Grade 1 are fully aware of the existence of multimodal approaches. From the way they responded to the questionnaires, only six of the teachers (6[8.0%]) did not have an idea of certain multimodal approaches that were enlisted. This means that the rest of the teachers (67[94%]) had an idea of the identification and use of multimodal approaches. The second indication was that the least described and used multimodal approaches as indicated are the use of music, recorded voice, graphics, portraits, audio-tape and radio broadcast. All the above-mentioned approaches are in the category of the aural modes. According to many scholars, aural approaches are least used in the classrooms (Ord, 2021; Bukoye, 2019).

These researchers posit that even though the use of video clips, mobile pictures and the internet are important in 21st-century literacy learning, they are less utilized in the classrooms. Similar observations were noted during classroom observation. During the interviews, the researcher asked the CSO’s if there was a way that these teachers could be made aware that multiple approaches

benefit all learners. The CSO's said that due to the nature of the teachers' workload, it was almost impossible for them to get time to design the aural multimodal approaches when they could easily replace them with the visual approaches.

Thirdly, from Table 7, a high number of teachers investigated used either the teachers' or learners' texts. Teachers also had their walls painted with diagrams, pictures, illustrations and diagrams. These revelations are similar to those observed by scholars who say that teachers used more visual, multimodal approaches put together. Scholars like (Hashim, 2018; Albahiri and Alhaj, 2020; and Midin *et al.* 2018) assert that visual, multimodal approaches are fundamental in the realization of meaningful learning in the classrooms.

Fourthly, the use of (ICT) internet, projectors and other computer hardware did not occupy center stage in the minds of the teachers investigated. Investigation results reveal that out of (75[100%]) of the teachers, only (36[45%]) used the internet. Of those teachers, (25[33.3%]) 'sometimes' used while (14[18.7%]) rarely used the gadget. This is worrying because literacy in the 21st Century is defined as the ability to read and write and also use the internet effectively. Further, the CBC curriculum in Kenya aims at creating a 21st century learner who is aligned and equipped with the holistic literacy competence that regards ICT knowledge as key (Thaseem & Kareema, 2018).

7. Conclusion

The objective of the study was to investigate the identification, description and use of multimodal approaches in the teaching of listening and speaking skills in primary schools in Kenya. The findings of this study indicated that Even though teachers of English were able to identify, describe and use multimodal approaches in the teaching of listening and speaking skills, their use in the classroom was skewed to merely applying visual, multimodal approaches during class interaction. The study also found that the use of graphics, maps, portraits and models were minimally utilized even though they belonged to the category of the visual, multimodal approaches. Some teachers of English displayed ignorance in sufficient blending of diverse multimodal approaches to cater for learners with different and multiple learning styles. Further, the results indicated that the successes and challenges in all the school categories (rural public, rural private, urban public and urban private) were almost the same. The study was limited to the skills of listening and speaking, thus disadvantaging the skills of reading and writing. Owing to the above findings, the study recommended that there was a need for a rule-governed system of administering multimodal approaches during classroom interaction. Thus, a rule governed model would direct teachers of English on a balanced criteria of blending the various aspects of multimodal approaches that would seek to guide the teachers in the use of multimodal approaches. This would ensure that learners with multiple and different learning styles were catered for during classroom interaction for the improvement of English language competence.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

- [1] Albahiri, M.H., & Alhaj, A. A., (2020). Role of visual elements in spoken English.Discourse; Implication for YouTube Technology in EFL classrooms. *The electronic library*, 38, 531-544. <https://doi.org/10.1108/EL-07-2019-0172>.
- [2] Barasa, D., (2016). Iteso's language repertoire and use patterns. *Multilingualism in the global South and beyond*, 3, (4), 6-8.
- [3] Barasa, P. L., (2005). *English language teaching in Kenya: Policy, training and practice*. Eldoret: Moi University Press.
- [4] Borg, S. (2014). A tool for promoting and understanding researcher development. *The research Journal* 5 (2), 156-177.
- [5] Bukoye, O. R., (2019). Utilization of instructional materials as tools for effective academic performance of students: Implication for counselling Doi:103390/proceedings 22111395P.P.I
- [6] Cope, B. and Kalantis, M., (2015). "An introduction to the pedagogy of multi-literacies," in *a pedagogy of multi-literacies teaching by design*. Editors. B. Cope, and M. Kalantis. (Hampshire Palgrave Macmillan), 1-36.
- [7] Edutopia, (2009). *Howard Gardener on multiple intelligences*.<https://www.edutopia.org/video/howard-gardener-multiple-intelligences>
- [8] Firmansyah, Mochamad Bayu. (2021). Multimodalitas model pembelajaran psikologi sastra (T. D. D. Khatulistiwa (ed.); 2021st ed.). *Delta Pijar Khatulistiwa*. <https://scholar.google.com/scholar?cluster=1282301966492539759 hl=en&oi=scholar>
- [9] Gardner, H., (2020). *A synthesizing mind: A memoir from the creator of multiple intelligences theory*. Cambridge, MA: The MIT Press.
- [10] Halliday, M. A. K., (1978). *Language as a social semiotic: The social interpretation of language and meaning*. London: Arnold.
- [11] Hashim, H. (2018). Application of technology in the digital era education. *International journal of research in counselling and education*, 2, 1-15. <https://doi.org/10.24036/00229002>.
- [12] Jewitt, C., (2003). Re-thinking and assessment: Multimodality, literacy and computer mediated learning. *Assessment in education*, 10, (1), 84-102.

- [13] Jewitt, C., (2009). Deficient approaches to multimodality. In C Jewitt (ed.). The Routledge. *Handbook of multimodal analysis*, 1st edition. (London Routledge): 28-39.
- [14] Kaur, S., & Ganapathy, M. (2014). Multi literacies in Education: Concept and Focus. In S. Kaur & S. Abdul Manan, *Contemporary Perspectives in English Language Studies: Linguistics and Literature 1st* (ed.), pp. 152-167. Penang: Universiti
- [15] K.I.C.D., (2017). *Lower primary level curriculum designs, Volume 1 Kiswahili, literacy and indigenous languages English activities*. Kenya Institute of Curriculum
- [16] K.I.C.D., (2019). *Competency Based Curriculum, Teacher's Handbook for English Activities, early year's education*. Kenya Institute of Curriculum Institute.
- [17] Laadem, M. & Makena, H., (2022). Multimodal pedagogies in teaching English for specific purposes in higher education; Perceptions, challenges and strategies. *International journal on studies in education*, 1, (1), 488-496, doi:10.46328/ijonse.
- [18] Loerts, T. S., (2013). "Multimodal Literacy Learning Opportunities in One Grade Six Classroom: Possibilities and Constraints" (PhD thesis). Electronic Thesis and Dissertation Repository 1735 retrieved from <https://ir.lib.uwo.ca/etd/1735> interaction. *J. Socioling.* 20, 1, 336–366. doi: 10.1111/josl.1_12177
- [19] Lukas, B., & Yunus, M., (2022). ESL teachers' challenges in the implementation of e-learning during Covid-19. *International journal of learning, teaching and educational research*, 20, 330-348. Doi:10.26803/ijlter.20.2.18
- [20] Mondada, L. (2016). Challenges of multimodality: Language and the body in social interaction. *Socioling.* 20, 336–366. doi: 10.1111/josl.1_12177J.
- [21] Mudin, D. K., Eng, H. S., Rahman, M., Ibrahim, P., & Jopony, M. (2018). Industrial revolution 4. 0: *Universiti Malaysia Sabah Perspective. E3S Web of the conference*, 48, article No. 03005. <https://doi.org/10.1051/e3sconf/20184803005>.
- [22] Mulenga, I. M. & Kabombwe, Y. M. (2019). Competency-Based Curriculum for Zambian primary and secondary schools: Learning from theory and other countries in the world. *International journal of education and research.* 7 (2), 117-130.
- [23] Ordu, B. U., (2021). New challenges to education: Lessons learnt from around the world BCES conference books. *Sofia: Bulgarian comparative education society* 19, (6), 210-216.
- [24] O'Halloran, K., (2011). "Multimodal discourse analysis: In K. Hyland and B. Paltridge (eds.). *Companion to discourse*. London: Continuum: 120-137
- [25] Orodho, A. J., Khatete, I., & Mugiraneza J. P. (2016). *Concise statistics: An illustrative approach to problem solving*, Kanezja Publisher. Nairobi.
- [26] Oskoz, A., & Elola, I., (2019). Digital stories: Bringing multimodal texts to the Spanish writing classroom. *ReCALL; The Journal of Eurocal Cambridge*, 28, (3), 326-342.
- [27] Otunga, R. N., Isaac, I. O., and Barasa, P. L., (2011). *A handbook for curriculum instruction*: Moi University Press.
- [28] Phelippe, S., Alexis, D., Petros, L., Penagotis, P., Jullen, P., Gidas, C., & Duzan, H, (2020). Multimodal teaching, learning and training in virtual reality: A review and case study. *Virtual reality and intelligent hardware*, 2, (5), 421-442. Doi: 10.1016/j.virin.2020.07.008.
- [29] Rafiq, K. R. M., & Hashim, H. (2018). Augmented reality game (ARG), 21st century skills and ESL classroom. *Journal of education and learning studies*, 1, 29-34. <https://doi.org/10.32698/0232>.
- [30] Saunders, B., SIM, J., Kingston, T., et al., (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Qual Quant*, 52, 1893-1908. <https://doi.org/10.1007/S11135-017-0574-8>.
- [31] Shemwel, J.T., Chase, C., & Schwartz, D. L., (2015). Seeking the general explanation: A test of inductive activities for learning and transfer. *Journal of research in science and technology*, 52, (1), 58-83. Doi:10.1002/tea.21185.
- [32] Smith, H. A. (2010). Peircean theory, psychosemiotics, and education. In I. Semetsky, (Ed.). *Semiotics education experience*, 2, (3), 37-45. The Netherlands: Sense Publishers.
- [33] Spiteri, M., Chang Rundyren, S. N., (2020). Literature review on the factors affecting primary teachers on the use of digital technology. *Tech Know Learn*, 6, (25), 115-128. <https://doi.org/10.1007/s10758-018-937X>
- [34] Suwalska, A. (2021). "The last education change in Finland- its dimensions and multi-literacy teaching."60, 199-216. Doi:14746/Se.2021. 1, (6), 60-11.
- [35] Thaseem, W., & Kareema, M. I., (2017). Implication of multimedia Audio-visual aids. In the *English language classroom*. 7th International Symposium, p. 7-8. https://www.researchgate.net/publication/322499103-implicatio_of_multimedia_audiovisual_aids_in_the_English_language_classroom/download.
- [36] Thembi, P. & Hugo, A., (2022). Difficulties in teaching grade 3 learners with reading problems in full-service schools in South Africa. *African journal of disability*, 11, (4), 1-9.
- [37] Wang, H., (2018). "A case study of English language learners' multimodal composition and identity representation. *Dissertation Georgia* <https://doi.org/10.1080/08975930.2020.1881422>. *State University*, 3, (7), 256-270. https://scholarworks.gsu.edu/mse_diss/6t.
- [38] Wang, G., (2020). A multimodal course design for intercultural business communication *J. Teach. Int. Bus.*, 31, 214-237. <https://doi.org/10.1080/08975930.2020.1881422>.
- [39] Zandieh, Z., and Jafangoha, M., (2012). The effects of hypertext gloss on comprehension and vocabulary retention under incidental and intentional learning conditions. *English Lang Teach*, 50, 60-71. Doi:10.5539/ELT.V5N6P60.