JRIIE Journal of Research Innovation and Implications in Education
Center for Research Implications & Practice

Website: www.jriiejournal.com ISSN 2520-7504 (Online) Vol.10, Iss.2, 2026 (pp. 504 - 521)

Influence of Imitation of Cartoons on Speech Proficiency among Children Aged 4 – 8 Years in Nairobi County, Kenya

Doreen Munyasili Sikolia[1] Ruth N. Otunga[2] & David Kessio[3]
[1,2] Department of Curriculum, Instruction and Educational Media School of Education
[3]Department of Educational Management & Policy Studies
Moi University, Kenya
Email: sikoliad@gmail.com

Abstract: *In Kenya, English is the official language and medium of instruction, yet many learners struggle with comprehension and effective communication due to low speech proficiency. These challenges often lead to anxiety, poor academic performance, and social isolation. Early interventions are therefore essential for strengthening foundational language skills. Evidence shows that animations can enhance speech proficiency among children aged 4 to 8 years by encouraging imitation of cartoon characters, which reinforces vocabulary, sentence structure, and expressive language. This study examined the influence of cartoon imitation on children's speech proficiency. It adopted a positivist research philosophy and an experimental research design. The target population comprised public and private primary schools in Nairobi County implementing the Competency-Based Curriculum. Participants were assigned to experimental and control groups, with pre-test and post-test assessments used to measure changes in speech proficiency. Primary data was collected using speech proficiency assessment tools, a cartoon assessment tool, and an interview guide. Qualitative data from in-depth interviews with teachers of Grades 1 to 4 were analysed thematically and presented narratively. Quantitative data were analysed using descriptive and inferential statistics. Descriptive statistics generated speech proficiency scores for both groups, while a paired samples test was conducted on the difference scores. The study found that imitating cartoon characters' speech, gestures, and expressions positively influenced children's language skills. Verbal imitation strengthened vocabulary and sentence structure, while non-verbal mimicry enhanced expressive communication. The study recommends that educators and therapists integrate structured cartoon-based imitation activities to promote spontaneous sentence construction, pronunciation accuracy, and expressive communication.*

Keywords: *Imitations, Cartoons, Speech proficiency, Verbal Expressions, Role-Playing, Physical Movements*

How to cite this work (APA):

Sikolia, D. M., Otunga, R. N. & Kessio, D. (2026). Influence of Imitation of Cartoons on Speech Proficiency among Children Aged 4 – 8 Years in Nairobi County, Kenya. *Journal of Research Innovation and Implications in Education, 10*(2), 504 – 521. **https://doi.org/10.59765/rp6284**

1. Introduction

Around the world, English language is widely recognized as an international language of communication, owing to the increasing rate of globalization and the development of an online world without borders (Klinmalee, 2022). In the international economy and global culture, English has been adopted as the main language of communication. English

is also considered the most important and widespread form of information exchange or communication in teaching subjects, such as economics, education, technology, engineering, science, and business. As observed by Sajana (2018), the learning of the English language is normally at two levels, which include the receiving level and the sending level. The receiving level involves reading and listening skills, while the sending level involves writing and speaking skills. In the current digital era, the learning of language does not take place in classrooms only or with the assistance of adults. Today, many children enjoy watching cartoons and attempt to imitate their language (Klinmalee, 2022).

Cartoons are an effective teaching strategy that supports both the affective and cognitive dimensions of learning. They consist of moving visual representations made up of sequential images accompanied by sound and other effects, which enhance children's engagement (Salih, 2017). Through motion, color, and dialogue, cartoons capture children's attention and encourage identification with characters, leading to imitation of speech patterns, intonation, and expressions. This imitation process enhances motivation, stimulates imagination, and supports higher-order thinking skills. Cartoon dialogue is typically simple, complete, and repetitive, making it easier for children to imitate sentence structures, pronunciation, and vocabulary within meaningful contexts. As a result, children acquire functional language that can be applied in real-life communication.

In different parts of the world, the use of cartoons has been found to influence the speech proficiency of children. In Benin, Egounleti, Hindeme, and Sonou (2018) established that 75% of the teachers recognize that the use of cartoons is an efficient way of improving the children's listening, speaking, reading, and writing abilities. In addition, Shazia, Rabia, and Zubair (2017) established that imitation of cartoons led to a high level of language acquisition and cognitive development. Similarly, Alghonaim (2020) found that imitations of cartoons improve speech proficiency, and children improve their pronunciations by watching TV cartoons in Saudi Arabia. Children who were imitating cartoons were able to overcome the pronunciation problems that many Arab speakers experience.

In the People's Democratic Republic of Algeria, Bekheda (2019) observed that the use of cartoons positively influenced children's language and behavior in the first and second years of learning, with learners frequently imitating cartoon characters' speech, expressions, and actions, thereby reinforcing language acquisition. In a different study, Borzekowski, Lando, Olsen, and Giffen (2019) argue that educational media intervention using an animated cartoon program, like Akili and Me, in Rwanda had a significant effect on content and language use. In Nigeria, Ikwuka and Ubah (2020) indicate that cartoons are available and utilized for teaching the English language in primary schools. The use of cartoons among children aged between 4 and 10 years led to an improvement in speech proficiency in terms of fluency of speech and vocabulary.

In Kenya, the viewership of cartoons has increased considerably in the last two decades due to the increasing penetration of the internet and the emergence of digital gadgets such as mobile phones, tablets, and smart televisions. Njiiri (2019) found that there is an emerging pattern of heavy television viewership tendencies as most of the children watch television cartoons for over four hours during weekends and holidays. In addition, Njiiri (2019) established that television cartoon programs in terms of viewership patterns, imitation of characters, and cartoon programs' content have an influence on language use among children. However, despite evidence linking cartoon viewership and imitation to general language use, there is limited empirical research in Kenya that specifically examines how imitation of cartoons influences speech proficiency among children aged 4–8 years, particularly within the context of Nairobi County.

1.1 Statement of the Problem

Proficiency in English is critical in Kenya, as it serves as both the official language and the primary medium of instruction in educational institutions. Mastery of English involves listening, speaking, reading, and writing with comprehension while adhering to syntactic and morphological rules. Competence in the language is essential for learners to successfully complete assignments, exams, and assessments, as well as to participate in academic discussions. Beyond academic performance, effective language use incorporates vocal elements such as intonation, rhythm, and clarity, which enhance comprehension and communication skills. Despite its importance, many learners fail to attain adequate English proficiency at an early age, which hinders their ability to perform academically and socially. In particular, learners who struggle with English may experience reduced participation in class discussions and difficulty expressing ideas, highlighting the need for early interventions that can strengthen speech proficiency and facilitate the holistic development of communication skills.

Kenya's cultural and linguistic diversity, with over forty-two ethnic groups each possessing distinct dialects, makes English acquisition a challenge for many children, as it is largely a second language. Research indicates that the period between ages 4 and 8 is critical for language acquisition, as children can absorb vocabulary and sentence structures more rapidly than at later stages. Early

interventions that engage children in enjoyable and interactive ways can significantly enhance language development. One promising approach is the use of cartoons, which provide visually rich, context-driven, and dialogue-focused content that children can imitate. Studies in other countries have shown that children who engage with cartoons demonstrate improved vocabulary, pronunciation, fluency, and overall speech confidence. However, there is a notable gap in research within Kenya regarding the impact of cartoons on children's speech proficiency, particularly through imitation, which is a natural and effective method for reinforcing language skills at a formative age.

Although the benefits of cartoons for language learning are acknowledged internationally, few studies have explored their formal use as a pedagogical tool in Kenyan schools. Moreover, limited attention has been given to the link between early English proficiency and the development of soft skills, including communication, confidence, and social interaction. Many learners in Kenya, including secondary school and university students, continue to face challenges in English mastery, leading to social isolation, anxiety, and low academic performance (Bataza, 2015; Kithinji & OHirsi, 2022). By focusing on imitation of cartoons, children can actively reproduce dialogue, intonation, and vocabulary, which strengthens speech proficiency in a culturally engaging and enjoyable manner. This study aims to fill this gap by examining how imitation of cartoons can enhance speech skills among Kenyan children aged 4 to 8, providing evidence that could inform teaching practices, curriculum design, and educational policies to promote early language acquisition and effective communication skills.

1.2 Research Hypotheses

The following were the null hypotheses that were tested in this study:

$H_0$1: Imitation of cartoons has no significant influence on speech proficiency in children;

$H_0$2: There are no statistically significant difference in the speech proficiency scores between the experimental group who use animations and the control group who do not use animations.

2. Literature Review

2.1 Influence of Imitation of Animations on Speech Proficiency in Children

The imitation of animations can have both positive and negative influences on speech proficiency in children. Children often imitate the language and dialogue they hear in animations (Bekheda, 2019). If the animations feature rich and varied vocabulary, this can contribute to vocabulary acquisition and expansion, which can enhance speech proficiency. By imitating the speech patterns and sounds of animated characters, children can practice their pronunciation skills (Trota, Cabeltis & Ligan, 2022). This can be particularly helpful if the animations feature clear and correct pronunciation. However, if children imitate animations with incorrect pronunciation or grammar, it can lead to the reinforcement of incorrect speech patterns. This may negatively affect their speech proficiency and require corrective interventions (Shazia, Rabia & Zubair, 2017).

For instance, Shazia, Rabia and Zubair (2017) examined the impact of imitations of cartoon programs on children's language in Pakistan. The study made use of a qualitative research approach and focused on mothers and siblings of school going children of the age between 5 and 12 years from Islamabad. The results indicated that children not only imitate their language but also imitate their favorite character with most of them imitating Tom & Jerry. They used to play like them with their siblings and peers, they actually love the fun and friendship bond between them and that attracts the most to the young minds. In addition, Bekheda (2019) examined the impact of imitating cartoons on children's language in Middle School Benbernou Mohamed's First- and Second-Year Pupils in Mostaganem and the results indicated that most of the children imitated characters and scenes they watched in cartoons. They mainly imitated songs, dances and conversations, which helped their speech proficiency.

In India, Aditya and Suri (2020) studied the effect of cartoon programs on language of children with a specific focus on imitation of cartoon characters. The study adopted an interview method, and the sample size was 100 (50 Parents and 50 Children). The results indicated that cartoons had a strong impact on children because around 70% of children behaved like their favourite cartoon characters after watching television or they tried to imitate or copy their actions. Among Filipino Preschoolers, Trota, Cabeltis and Ligan (2022) examined the influence of watching and imitation of English cartoons on English language acquisition. The results revealed that preschoolers' English language acquisition was affected by imitation of English cartoons. The results also indicated that children imitate a native-like pronunciation, accent, diction, and even the character's behaviors. Aside from excellent pronunciations, exposure to English cartoons helped children to learn new words or vocabularies, learn how to construct a complete sentence, ask questions, and use them in the appropriate context.

In another study conducted in India, Bose and Philip (2019) examined effects of cartoon shows imitation on children

from the perspective of the parents. The study made use of a quantitative research approach and the results indicated that young children ability to imitate an action of other is a crucial mechanism for social learning that is for earning new knowledge. The ability of children to imitate is important because it tells us about the knowledge that the child already possess. In Lebanon, Beaino (2021) examined the effect of cartoons on Lebanese children aged between 3 and 10. The data gathering process was possible through a survey that was filled by 222 mothers from all over Lebanon, having children aged between 3 and 10 years. The findings indicated that imitating cartoon characters was very common among the kids. The positive effect of cartoons imitation included improvement in language proficiency in terms of articulation, vocabulary, grammar and fluency.

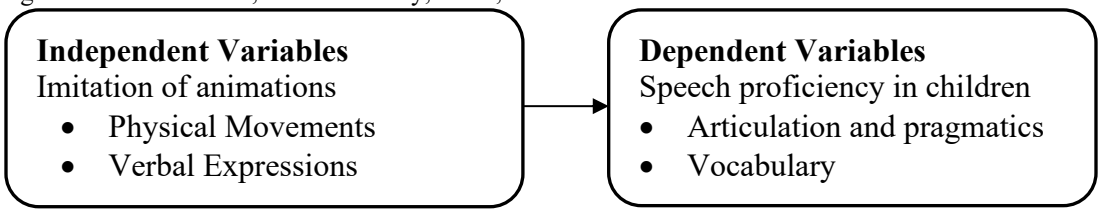
2.2 Theoretical Framework

This study was anchored on the Affective Filter Hypothesis. It introduced hypothesis as part of the comprehensive theory of second language acquisition, which encompasses several interrelated principles and hypotheses. The hypothesis suggests that learners' emotional and affective states can act as a filter that either facilitates or impedes language acquisition (Corpuz, 2020). According to the Affective Filter Hypothesis, a low affective filter indicates a positive emotional state, such as feeling relaxed, motivated, and confident. In this state, learners are more receptive to language input and are more likely to effectively acquire and internalize new language knowledge. On the other hand, a high affective filter indicates a negative emotional state, such as anxiety, stress, or self-consciousness (Mokhtari, Strebel & Crevecoeur-Bryant, 2020). When the affective filter is high, learners may experience difficulty in language acquisition as the negative emotions hinder their ability to process and internalize the language input.

This study utilized the Affective Filter Hypothesis to examine the influence of imitation of cartoons on speech proficiency among children aged 4 to 8 years in Kenya. The hypothesis posits that learners' emotional states significantly influence language acquisition, with lower anxiety and higher motivation facilitating better learning outcomes. Imitation of cartoon characters provides a relaxed and enjoyable context in which children practice speech, intonation, and vocabulary without fear of correction or failure, thereby lowering their affective filter. When children imitate familiar and entertaining characters, they become more willing to speak, which enhances confidence and reduces anxiety. In addition, the engaging visuals, repetitive dialogue, and positive emotions associated with cartoons increase motivation and encourage active imitation of speech patterns, creating a supportive learning environment that enhances speech proficiency and overall language acquisition.

2.3 Conceptual Framework

Figure 1 shows the relationship between the independent variable and the dependent variable in the study. The independent variable is imitation of animations, and the dependent variable is speech proficiency in children between the age of 4 and 8 years.



3. Methodology

The study adopted a positivism research philosophy to investigate how the use of animation influences speech proficiency in children between the ages of 4 and 8 years in Kenya. In addition, an experimental research design used because it enables establishing of causal relationships by systematically varying conditions and measuring the resulting effects. In this study, some of the students aged between 4 and 8 years watched selected cartoons for a specific period of time (experimental group) and the other group (control group)did not watching cartoon for a specific period of time. The two groups were involved in pre-test assessment and post-test assessment to assess their scores before and after the experiment.

The study focused on all public and private schools in Nairobi City County using the CBC system of education. There are 225 public primary schools and 330 private primary schools in Nairobi City County using the CBC system of education. The study used purposive sampling to select schools in the low- and middle-income areas within Nairobi County. Purposive sampling was used because the study targets a specic subgroup thus allowing the author to select the exact age cohorts that required the intervention. The study utilized 3 constituencies in low-income areas (Kibra constituency, Mathare Constituency and Ruaraka Constituency) of Nairobi City County and 3 constituencies in middle-level income areas of Nairobi City County (Kasarani Constituency, Langata Constituency and Roysambu Constituency). In each of the constituencies, 2 public schools were selected where one was used as an experiment group and the other was used as a control group. In addition, 2 private schools were selected where one was used as an experiment group and the other was used as a control group. The unit of observation in these schools was children in PP1 (4 years), PP2 (5 years), Grade 1 (6 years), Grade two (7 years) and Grade three (8 years).

Table 1: Distribution of Selected Schools

Constituency	Primary Schools		Total
	Public	Private	
1. Kibra constituency	2	2	4
2. Mathare Constituency	2	2	4
3. Ruaraka Constituency	2	2	4
4. Kasarani Constituency	2	2	4
5. Langata Constituency	2	2	4
6. Roysambu Constituency	2	2	4
Total	**12**	**12**	**24**

The study made use of primary data which was collected by use of speech proficiency assessment tools, cartoon assessment tool and an interview guide. A cartoon assessment tool was used to systematically evaluate children's exposure to cartoons and the characteristics of the animated content they watch, such as language use, themes, and viewing patterns. It helped assess how cartoon viewership relates to developmental outcomes, particularly speech and language skills. Key informant interviews were used for gathering insights and perspectives from teachers regarding the use of animation and its impact on speech proficiency in children. In this study, the key informants were teachers in all the 24 classes in both the experiment group and the control group.

There are several speech proficiency assessment tools, which include English as a Foreign Language (TOEFL), Oral Proficiency Interview (OPI), International English Language Testing System (IELTS) and Test of Spoken English (TSE) among others (Emperador-Garnace, 2021). However, this study used an International English Language Testing System (IELTS). IELTS is a widely recognized and accepted English proficiency test that evaluates the speaking, listening, reading, and writing abilities of non-native English speakers. The speech proficiency assessment tool (International English Language Testing System) was used to collect data from students before and after the experiment.

During the pre-test, the researcher administered a speech proficiency assessment to all participants to establish baseline speech levels before exposure to cartoons. The experimental group was then introduced to animation as a teaching tool, with television screens and selected cartoon programmes. "Peppa Pig" was used for PP1 and PP2 learners due to its slow, repetitive everyday vocabulary in clear British English, while "Martha Speaks" was assigned to Grade 1–3 learners for vocabulary expansion and contextual word learning. Learners watched cartoons for one hour daily over one month. The control group received no cartoon exposure. After one month, the same speech proficiency assessment was administered to all participants to measure post-intervention outcomes.

The process of data collection was preceded by obtaining an authorization letter from Moi University. Besides, a permit was obtained from the National Commission for Science, Technology, and Innovation (NACOSTI). This was then followed by a visit to the Ministry of Education to seek for permission to conduct the study in the selected schools. Afterwards, the researcher visited individual schools to discuss with the head teachers the appropriate timelines of conducting the study. Informed consent from parents or legal guardians of the participating children were obtained. This was done be developing and informed consent form clearly explaining the purpose, procedures, potential risks, benefits, and voluntary nature of the study. The children were given the form to take to their parents. Only students whose parents provided signed consent forms were allowed to participate in the study.

The researcher then conducted a pre-test assessment, which was followed by provision of television sets for the experimental group. The teachers were requested to allow the children to watch the selected cartoons for a period of one month. After one month a post-test assessment was conducted in both the control and experimental groups. The researcher also booked appointments with the teachers in charge of PP1, PP2, Grade 1, Grade2 and Grade3 classes for face-to-face interviews.

Qualitative data was analyzed using thematic analysis and the results were presented in a narrative form. Quantitative data was analyzed by use of descriptive and inferential statistics. Descriptive statistics, such as frequencies, percentages, mean and standard deviation, were used in summarizing and presenting data in a meaningful way. Descriptive statistics were also used in the calculation of speech proficiency scores of each of the students in both the pre-test and post-test assessment. The difference in speech proficiency scores for each participant was also calculated by subtracting the pre-test score from the post-test score. These difference scores reflected the change in speech proficiency for each child.

A paired samples t-test was performed using the difference scores. The t-test assessed whether the mean difference in speech proficiency scores is significantly different from zero. This indicates whether the use of animation had a significant impact on speech proficiency. After the results are obtained, the t-value and associated p-value obtained from the paired samples t-test was interpreted. If the p-value is less than the predetermined significance level of 0.05, a statistically significant difference in speech proficiency between the pre- and post-intervention measurements exists (Kumar, 2019). A significant result suggests that the use of animation has an influence on speech proficiency in the studied population.

4. Results and Discussion

4.1 Background Information

The background information provides a demographic and contextual overview of the study participants, focusing on variables that could influence children's speech proficiency. These include gender, age, school category, academic grade, geographic distribution, and study group (case vs. control), offering essential insights into the characteristics of the sampled population.

4.2 Constituencies and Schools' Categories

The study sought to capture geographic diversity across Nairobi County as well as the categorization of the schools. As shown in Table 2, the participating schools in the study were drawn from six constituencies within Nairobi County. The relatively even distribution across constituencies ensured geographic diversity and enhanced the generalizability of the study findings within urban settings.

In addition, the participating children were almost evenly distributed between public and private schools. Specifically, 978 children (48.4%) were drawn from public schools, while 1,044 children (51.6%) were from private schools. This balanced representation across school categories provides a comprehensive view of the speech proficiency outcomes in both public and private educational settings, enhancing the robustness and comparability of the study's findings.

Table 2: Constituencies and Schools' Categories

Categories	Frequency	Percent
Constituencies		
Kasarani Constituency	389	19.2
Roysambu Constituency	287	14.2
Langata Constituency	315	15.6
Ruaraka Constituency	342	16.9
Kibra constituency	349	17.3
Mathare Constituency	340	16.8
Total	**2022**	**100.0**
Schools' Categories		
Public	978	48.37
Private	1044	51.63
Total	**2022**	**100.00**

4.3 Demographic Information of the Children

The study sought to understand the gender distribution, age as well as the grades of the participants. Table 3 indicates that out of the 2,022 participants, 964 (47.7%) were male and 1,058 (52.3%) were female, reflecting a relatively balanced sample with a slight majority of females. In addition, the children in the study were distributed across seven age categories: 3 years (2.4%), 4 years (14.8%), 5 years (19.4%), 6 years (19.6%), 7 years (21.3%), 8 years (21.5%), and 9 years (1.1%), indicating that the majority of participants were between 4 and 8 years old, providing a focused representation of early childhood ages targeted in the study. In addition, the children in the study were distributed across five academic levels: PP1 (15.9%), PP2 (19.8%), Grade 1 (21.3%), Grade 2 (21.6%), and Grade 3 (21.4%), indicating a balanced representation across early childhood and lower primary education.

Table 3: Gender Distribution of the Children

Demographic Characteristics	Frequency	Percent
Male	964	47.7
Female	1058	52.3
Total	**2022**	**100.0**
Age (Years)		
3 Years	48	2.4
4 years	299	14.8
5 Years	392	19.4
6 Years	396	19.6
7 Years	431	21.3
8 Years	434	21.5
9 Years	22	1.1
Total	**2022**	**100.0**
Grades		
PP1	322	15.9
PP2	401	19.8
Grade 1	430	21.3
Grade 2	436	21.6
Grade 3	433	21.4
Total	**2022**	**100.0**

4.4 Influence of Imitation of Animations on Speech Proficiency

The study sought to determine the influence of imitation of cartoons on speech proficiency in children.

4.4.1 Physical Movements and Speech Proficiency

The study assessed whether imitating physical movements from cartoons had an impact on children's speech proficiency. As shown in Table 4, 85.3% of the children (n = 848) demonstrated such physical movement imitation, while 14.7% (n = 146) did not.

Table 4: Physical Movements and Speech Proficiency

	Imitation of physical movements	N	%	Mean	Std. Deviation	Std. Error Mean
Speech Proficiency	No movement	146	14.7	25.22	4.809	.398
	Movement	848	85.3	30.40	4.770	.164

To determine the effect of physical movement imitation from cartoons on speech proficiency, the study compared the mean scores between children who engaged in such movements and those who did not. As presented in Table 5, children who imitated physical movements had a significantly higher mean speech proficiency score of 30.40 (SD = 4.770), compared to a mean score of 25.22 (SD = 4.809) for those who did not engage in such movements. The results from the Independent Samples t-test in Table 4.24 confirm that this difference is statistically significant ($t = -12.098$, $df = 992$, $p < .001$), with a mean difference of -5.177. This suggests that children who physically engage with cartoon content may experience improved speech proficiency, likely due to the embodied reinforcement 2of language and expression.

Table 5: Independent Samples Test for Physical Movements and Speech Proficiency

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Speech Proficiency	Equal variances assumed	2.979	.085	-12.098	992	.000	-5.177	.428
	Equal variances not assumed			-12.029	197.329	.000	-5.177	.430

4.4.2 Verbal Expressions and Speech Proficiency

Repeating phrases or quotes from cartoons, such as catchphrases like "Let's go!" or "I'm ready!, can reflect the internalization and use of language learned through animated content. As shown in Table 6, a majority of the children (81.4%, n = 809) were observed using verbal expressions inspired by animations, while 18.6% (n = 185) did not exhibit this behavior.

Table 61: Verbal Expressions and Speech Proficiency

	Verbal Expressions	N	%	Mean	Std. Deviation	Std. Error Mean
Speech Proficiency	No verbal Expressions	185	18.6	24.28	5.239	.385
	Verbal expressions	809	81.4	30.86	4.221	.148

The study examined whether repeating cartoon phrases is associated with differences in speech proficiency. As demonstrated in Table 7, the mean speech proficiency score among children who used verbal expressions was significantly higher at 30.86 (SD = 4.221) compared to 24.28 (SD = 5.239) among those who did not. The results in Table 6 show a statistically significant difference

between the two groups, with t(992) = -18.233, p < .001, and a mean difference of -6.579. This finding indicates that children who engage in verbal repetition of cartoon phrases tend to have stronger speech proficiency, suggesting that verbal mimicry from cartoons may be a valuable tool for reinforcing expressive language development.

Table 7: Independent Samples Test for Verbal Expressions and Speech Proficiency

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Speech Proficiency	Equal variances assumed	42.253	.000	-18.233	992	.000	-6.579	.361
	Equal variances not assumed			-15.940	241.493	.000	-6.579	.413

4.4.3 Role-Playing and Speech Proficiency

The study explored whether engaging in cartoon-based role-playing influences children's speech proficiency As shown in Table 8, a large majority of children (83.9%, n = 834) engaged in role-playing based on cartoons, while 16.1% (n = 160) did not.

Table 8: Role-Playing and Speech Proficiency

	Role-Playing	N	%	Mean	Std. Deviation	Std. Error Mean
Speech Proficiency	No role playing	160	16.1	24.84	5.487	.434
	Role playing	834	83.9	30.56	4.491	.156

To assess the impact of cartoon-based role-playing on children's speech proficiency, the study compared mean scores between those who engaged in such activities and those who did not, as detailed in Table 9. The mean speech proficiency score for children who participated in role-playing was significantly higher at 30.56 (SD = 4.491), compared to 24.84 (SD = 5.487) for those who did not engage in such imaginative activities. As indicated in Table 9, the Independent Samples t-test revealed a highly significant difference between the two groups (t = -14.186, df = 992, p < .001), with a mean difference of -5.711. This confirms that children who role-play characters from cartoons tend to demonstrate higher speech proficiency. The findings suggest that role-playing may be an effective means of reinforcing language acquisition through active and creative expression.

Table 9: Independent Samples Test for Role-Playing and Speech Proficiency

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Speech Proficiency	Equal variances assumed	35.245	.000	-14.186	992	.000	-5.711	.403
	Equal variances not assumed			-12.394	201.856	.000	-5.711	.461

4.4.4 Mimic Cartoon Character's Facial Expressions and Speech Proficiency

The study examined the relationship between mimicking cartoon facial expressions and speech proficiency. As shown in Table 10, a large majority of children (82.0%, *n* = 815) were observed mimicking facial expressions from cartoon characters, such as exaggerated smiles, frowns, or looks of surprise and anger. In contrast, 18.0% (*n* = 179) did not display this behavior.

Table 10: Facial Expressions and Speech Proficiency

	Mimic cartoon character facial expressions	N	%	Mean	Std. Deviation	Std. Error Mean
Speech Proficiency	No facial expressions	179	18.0	25.82	5.594	.418
	Facial expressions	815	82.0	30.47	4.598	.161

The results presented in Table 10 assess whether mimicking cartoon facial expressions is significantly associated with differences in children's speech proficiency. Children who mimicked facial expressions had a higher mean speech proficiency score of 30.47 (SD = 4.598), compared to 25.82 (SD = 5.594) for those who did not. According to Table 11, the difference is statistically significant, with a t-value of -11.779, degrees of freedom = 992, and a p-value < .001. The mean difference in speech proficiency between the groups was 4.659 points. These results suggest that mimicking cartoon characters' facial expressions is positively associated with improved speech proficiency in children, possibly due to enhanced emotional engagement and imitation of communicative behaviors observed in animations.

Table 11: Independent Samples Test for Facial Expressions and Speech Proficiency

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Speech Proficiency	Equal variances assumed	29.803	.000	-11.779	992	.000	-4.659	.396
	Equal variances not assumed			-10.398	233.611	.000	-4.659	.448

The results of the study provide compelling evidence to reject the null hypothesis $H_0$2: Imitation of cartoons has no significant influence on speech proficiency in children. Across all forms of imitation assessed, physical movement, verbal expressions, role-playing, and facial mimicry, children who actively imitated cartoon characters demonstrated significantly higher speech proficiency scores than those who did not. For example, children who imitated physical movements had a mean score of 30.40, significantly higher than 25.22 for those who did not ($p < .001$). Similarly, children who repeated cartoon phrases, had a mean difference of 6.579 in speech proficiency compared to their counterparts, again statistically significant at $p < .001$.

Moreover, role-playing cartoon characters and mimicking facial expressions were also strongly associated with improved speech outcomes. Children who engaged in role-play scored 5.711 points higher than those who did not, and those who mimicked facial expressions outperformed peers by 4.659 points, with both differences being statistically significant. These findings underscore the critical role of imitation, both verbal and non-verbal, as a mechanism through which children internalize and practice new language, reinforcing the link between animated media engagement and enhanced language development. The null hypothesis is rejected, confirming that imitation of cartoons significantly influences children's speech proficiency. These findings are in strong agreement with the literature reviewed. Bekheda (2019) found that children who imitated songs, dances, and conversations from cartoons improved their speech proficiency, which aligns directly with the statistically significant gains found in this study for children who imitated physical movements and cartoon phrases. Similarly, Trota, Cabeltis, and Ligan (2022) reported that preschoolers mimicked native-like pronunciation, diction, and expressions, which mirrors the findings of improved articulation and sentence fluency among children who engaged in cartoon-based imitation in this study.

These quantitative findings were further supported by insights from key informant interviews with teachers, who consistently observed that children's imitation of cartoon characters positively influenced their speech development, both in fluency and expressiveness. The teachers observed that children often imitate cartoon characters through gestures, voice modulations, and dramatic movements during both structured learning and free play. Many children were seen adopting superhero poses, speaking in character voices, or using exaggerated facial expressions, particularly during storytelling, drama, or break time activities. These behaviors align with the study's findings,

where children who mimicked physical movement and facial expressions exhibited stronger speech proficiency. Teachers noted that these imitative acts were not isolated but frequent and often spontaneous, indicating a strong connection between what children watch and how they engage linguistically and physically. In addition to physical mimicry, verbal imitation was commonly reported. Children frequently quoted lines or catchphrases from their favorite characters, sometimes even constructing entire role-plays based on episodes they had seen. Teachers emphasized that this imitation was especially common during language-based activities, such as show-and-tell, where children were more animated and expressive. These classroom observations are in line with the qualitative findings of Shazia, Rabia, and Zubair (2017), who reported that children in Pakistan not only imitated the language used by cartoon characters but also mimicked behaviors and scenes, enhancing their language skills through spontaneous play and repetition.

The teachers overwhelmingly agreed that imitation of cartoon characters positively impacts children's fluency and accuracy in speech. They noted that children who regularly mimic cartoon dialogue tend to construct more grammatically correct sentences, use a broader vocabulary, and demonstrate improved sentence rhythm and structure. This supports the study's statistical evidence, which showed higher speech proficiency scores among children who engaged in verbal expressions and role-playing based on cartoons. Teachers pointed out that imitation encourages repetition, which reinforces memory and articulation, especially when children copy clear and expressive language used by animated characters. However, teachers also noted that the quality of cartoons matters. Exposure to well-articulated characters in educational animations often leads to improved pronunciation and grammar, while imitating poorly scripted content may introduce mispronunciations or slang. On the whole, though, the consensus was that imitation serves as a valuable language-learning tool that promotes expressive and fluent communication. As one teacher put it, *"When children imitate cartoon characters, it's like they're practicing without realizing it—they pick up how to pace their speech, where to pause, and how to sound excited or sad in the right moments."* KII15

4.4.5 Speech Proficiency

Speech proficiency was the primary dependent variable in this study and was evaluated across four core language domains relevant to children aged 4 to 8 years: articulation and pragmatics (listening), vocabulary (reading), grammar and syntax (writing), and fluency (speaking). A structured assessment tool adapted from the International English Language Testing System (IELTS) for young learners was used to measure these skills. The Speech Proficiency Assessment tool comprised four sections: Listening, Reading, Writing, and Speaking. The Listening section included 10 multiple-choice questions worth 1 mark each, totaling 10 marks, while the Reading section had 5 comprehension questions worth 2 marks each, also totaling 10 marks. The Writing section consisted of two tasks, Picture Description and Opinion Writing, each worth 5 marks, and the Speaking section included an Introduction & Interview and a description task, also worth 5 marks each, bringing the total score to 40 marks. Each section was allocated a maximum of 10 marks, contributing to a total score of 40 marks. This scoring structure enabled a standardized and comprehensive evaluation of children's overall speech proficiency.

4.4.6 pre-and post-test comparisons

To evaluate the effectiveness of the cartoon-based teaching strategy on speech proficiency, a comparison was made between pre-test and post-test scores for both the control and case groups. The descriptive statistics presented in Table 12 summarize the speech proficiency scores of both groups before and after the intervention. For the control group, the mean score before the intervention was 16.31 (SD = 4.519), and after the intervention, it slightly increased to 16.41 (SD = 4.492). This minimal change suggests that the control group, which was not exposed to the cartoon-based strategy, did not experience any substantial improvement in speech proficiency. In contrast, the intervention (case) group had a much higher pre-test mean of 22.36 (SD = 3.688), which significantly increased to 29.64 (SD = 5.114) after the intervention. This substantial improvement indicates a strong positive effect of the cartoon-based teaching approach on the children's speech development.

Table 12: Descriptive Statistics for Pre- and post-test comparisons

	Before and After	N	Mean	Std. Deviation	Std. Error Mean
Control	Before	1028	16.31	4.519	.141
	After	1028	16.41	4.492	.140
Cases	Before	994	22.36	3.688	.117
	After	994	29.64	5.114	.162

To evaluate the impact of the cartoon-based intervention on speech proficiency, an independent samples t-test was performed to compare the mean differences between pre- and post-test scores for both the control and case groups, as summarized in Table 13. For the control group, the results, as shown in Table 4.53, indicate no statistically significant change in speech proficiency between the pre-test (M = 16.31, SD = 4.52) and post-test (M = 16.41, SD = 4.49). The t-test yielded a t-value of -0.529 with a p-value of 0.597, far above the 0.05 significance threshold. The minimal mean difference of -0.105 further confirms that the control group, which did not receive the cartoon intervention, experienced no meaningful improvement in speech proficiency.

In contrast, the case group, which participated in the cartoon-based intervention, showed a highly significant improvement in speech proficiency from pre-test (M = 22.36, SD = 3.69) to post-test (M = 29.64, SD = 5.11). The t-test result was t = -36.374, with a p-value < 0.001, indicating a robust and statistically significant difference. The mean improvement of 7.274 points demonstrates a substantial positive effect of the intervention. Although Levene's Test for Equality of Variances was significant (F = 83.527, p < 0.001), suggesting unequal variances, the results remained highly significant even under the adjusted degrees of freedom. The findings showed that the cartoon-based intervention significantly improved speech proficiency among children in the case group, with a large increase in mean scores after the intervention. In contrast, the control group showed no meaningful change, suggesting that the observed improvement is directly attributable to the intervention.

Table 13: Independent Samples Test for Pre- and post-test comparisons

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Controls	Equal variances assumed	.001	.973	-.529	2054	.597	-.105	.199
	Equal variances not assumed			-.529	2053.927	.597	-.105	.199
Cases	Equal variances assumed	83.527	.000	-36.374	1986	.000	-7.274	.200
	Equal variances not assumed			-36.374	1805.951	.000	-7.274	.200

4.4.7 Listening Scores

The study sought to compare listening scores between children exposed to cartoons as a teaching strategy and those not exposed. The descriptive statistics presented in Table 14 indicate a marked difference in listening scores between the case group (children exposed to cartoons as a teaching and learning strategy) and the control group (children not exposed to the intervention). The case group achieved a mean listening score of 7.44 (SD = 1.748), whereas the control group had a significantly lower mean score of 3.14 (SD = 1.286). With large and comparable sample sizes (994 in the case group and 1,028 in the control group), these results suggest that exposure to cartoons had a positive impact on the listening skills of young children.

Table 14: Group Statistics for the Listening Scores

	Case-Control	N	Mean	Std. Deviation	Std. Error Mean
Listening	Case	994	7.44	1.748	.055
	Control	1028	3.14	1.286	.040

The study analyzed whether the difference in listening scores between children exposed to cartoons and those not exposed was statistically significant, as detailed in Table 13. The results of the Independent Samples Test in Table 15 further confirm that the observed difference in listening scores between the two groups is statistically significant. Levene's Test for Equality of Variances yielded a p-value of 0.000, which is below the 0.05 threshold, indicating that equal variances cannot be assumed. Despite this, both

versions of the t-test (assuming and not assuming equal variances) produced very high t-values (63.171 and 62.856 respectively) and p-values less than 0.001, confirming a highly significant difference. The mean difference in listening scores was 4.301, which does not include zero. This strongly supports the conclusion that the use of cartoons significantly enhances listening skills among children.

Table 15: Independent Samples Test for the Listening Scores

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Listening	Equal variances assumed	105.975	.000	63.171	2020	.000	4.301	.068
	Equal variances not assumed			62.856	1821.859	.000	4.301	.068

4.4.8 Reading Scores

The study examined differences in reading scores between children taught using cartoons and those who were not. The descriptive statistics in Table 16 show a significant difference in reading scores between the case group (children who were taught using cartoons as a teaching and learning strategy) and the control group (children who were not exposed to the cartoon-based intervention). The case group recorded a mean reading score of 7.29 (SD = 1.773), while the control group had a considerably lower mean score of 3.02 (SD = 1.228). With similarly large sample sizes in both groups (994 in the case group and 1,028 in the control group), the descriptive data suggest that the use of cartoons may have played a major role in improving reading proficiency among the learners.

Table 16: Group Statistics for the Listening Scores

	Case-Control	N	Mean	Std. Deviation	Std. Error Mean
Reading	Case	994	7.29	1.773	.056
	Control	1028	3.02	1.228	.038

The study tested whether the difference in reading scores between children exposed to cartoons and those who were not was statistically significant. The Independent Samples Test results in Table 17 confirm that this observed difference is statistically significant. Levene's Test for Equality of Variances returned a p-value of 0.000, which is less than 0.05, indicating that equal variances cannot be assumed. Despite this, both versions of the t-test (with and without assuming equal variances) produced very high t-values (63.159 and 62.786, respectively), and the p-values are less than 0.001, indicating a highly significant difference. The mean difference in reading scores was 4.272, which does not include zero. These findings strongly suggest that the use of cartoons as a teaching strategy significantly improves reading skills among children aged 4 to 8 years.

Table 17: Independent Samples Test for the Reading Scores

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Reading	Equal variances assumed	193.328	.000	63.159	2020	.000	4.272	.068
	Equal variances not assumed			62.786	1761.164	.000	4.272	.068

4.4.9 Writing Scores

The descriptive statistics in Table 18 demonstrate a significant difference in writing proficiency between the case group (children who were taught using cartoons as a teaching and learning strategy) and the control group (those who were not exposed to the intervention). The case group achieved a mean writing score of 7.60 (SD = 1.348), while the control group had a notably lower mean score of 4.94 (SD = 1.467). With large and comparable sample sizes (994 in the case group and 1,028 in the control group), these findings suggest that the cartoon-based teaching approach may have contributed to improved writing skills among young learners.

Table 18: Group Statistics for the Writing Scores

	Case-Control	N	Mean	Std. Deviation	Std. Error Mean
Writing	Case	994	7.60	1.348	.043
	Control	1028	4.94	1.467	.046

Table 19 presents the outcomes of an Independent Samples Test conducted to determine whether the observed difference in writing scores between children exposed to cartoons and those not exposed was statistically significant. The results of the Independent Samples Test in Table 18 confirm that the difference in writing scores is statistically significant. Levene's Test for Equality of Variances produced a p-value of 0.000, indicating that equal variances cannot be assumed. However, both versions of the t-test show consistent and significant results. The test assuming equal variances yields a t-value of 42.438 with 2020 degrees of freedom, and a p-value less than 0.001. The mean difference in writing scores between the two groups is 2.661, which excludes zero. These results confirm that the cartoon-based instructional strategy significantly improved writing proficiency among children.

Table 19: Independent Samples Test for Writing Scores

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Writing	Equal variances assumed	13.514	.000	42.438	2020	.000	2.661	.063
	Equal variances not assumed			42.498	2014.744	.000	2.661	.063

4.4.10 Speaking Scores

The study sought to examine the impact of using cartoons as a teaching and learning strategy on the speaking abilities of children aged 4 to 8 years. The descriptive statistics in Table 20 reveal a meaningful difference in speaking scores between the case group (children aged 4 to 8 years taught using cartoons) and the control group (those not exposed to the intervention). The case group had a mean speaking score of 7.30 (SD = 1.265), whereas the control group recorded a lower mean score of 5.31 (SD = 1.384). With large sample sizes in both groups (994 and 1,028 respectively), the data suggest that the cartoon-based learning strategy had a positive impact on the speaking abilities of the children.

Table 20: Group Statistics for the Speaking Scores

	Case-Control	N	Mean	Std. Deviation	Std. Error Mean
Speaking	Case	994	7.30	1.265	.040
	Control	1028	5.31	1.384	.043

The study sought to examine the impact of cartoon-based teaching strategies on the language skills of children. The Independent Samples Test results in Table 21 further validate this finding. Levene's Test for Equality of Variances produced a p-value of 0.004, which is less than 0.05, indicating that equal variances cannot be assumed.

Regardless, both versions of the t-test yielded consistent results. The t-value of 33.675 (equal variances assumed) and 33.726 (equal variances not assumed), along with a p-value of 0.000, confirm that the difference in speaking scores is statistically significant. The mean difference of 1.988 suggests a clear and reliable improvement in speaking skills due to the intervention. This supports the conclusion that cartoon-based teaching effectively enhances speaking proficiency in early childhood education.

Table 21: Independent Samples Test for the Speaking Scores

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Speaking	Equal variances assumed	8.213	.004	33.675	2020	.000	1.988	.059
	Equal variances not assumed			33.726	2013.659	.000	1.988	.059

4.4.11 Combined English Proficiency Scores

The study sought to examine the influence of using cartoons as a teaching and learning strategy on the speech proficiency of children. The descriptive statistics, as shown in Table 22, reveal a clear difference in speech proficiency scores between the case group (children who were exposed to cartoons as a teaching and learning strategy) and the control group (children in the same age group who were not exposed to the intervention). The case group recorded a mean speech proficiency score of 29.64 (SD = 5.114), while the control group recorded a significantly lower mean of 16.41 (SD = 4.492). With relatively equal and large sample sizes for both groups, 994 children in the case group and 1,028 in the control group, the results provide initial evidence that the use of cartoons positively influenced the development of speech proficiency among young learners.

Table 22: Group Statistics for the Combined Scores of English Proficiency

	Case-Control	N	Mean	Std. Deviation	Std. Error Mean
Speech Proficiency	Case	994	29.64	5.114	.162
	Control	1028	16.41	4.492	.140

The study sought to determine whether the use of cartoons as a teaching and learning strategy significantly enhances speech proficiency among children. The results of the Independent Samples Test, presented in Table 23, confirm that the difference in mean speech proficiency scores between the two groups is statistically significant. Levene's Test for Equality of Variances returned a p-value of 0.196, which is above the 0.05 threshold, indicating that equal variances can be assumed. Based on this assumption, the t-test produced a t-value of 61.819 with 2,020 degrees of freedom, and a p-value less than 0.001, indicating that the observed difference in speech proficiency between the groups is not due to chance. The mean difference of 13.221 points, with a 95% confidence interval ranging from 12.802 to 13.641, further supports the effectiveness of the cartoon-based instructional method. Therefore, these findings suggest that integrating cartoons into teaching significantly enhances speech proficiency among children.

Table 23: Independent Samples Test for the Combined Scores of English Proficiency

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Speech Proficiency	Equal variances assumed	1.670	.196	61.819	2020	.000	13.221	.214
	Equal variances not assumed			61.686	1968.258	.000	13.221	.214

Based on the results, we reject the null hypothesis (H_{05}) which stated that *there are no statistically significant differences at $\alpha = 0.05$ in the speech proficiency scores between the experimental group who use animations and the control group who do not use animations*. The Independent Samples t-test yielded a t-value of 61.819, with a p-value of < 0.001, which is significantly below the 0.05 significance level. This means the observed difference in speech proficiency scores, a mean difference of 13.221 points, is statistically significant and not due to random variation. Additionally, the 95% Confidence Interval (12.802 to 13.641) does not include zero, further supporting this conclusion. Thus, the null hypothesis is rejected and the study concludes that there is a statistically significant difference in speech proficiency scores between the two groups, indicating that cartoon-based instruction had a positive effect on the speech proficiency of children.

The findings of the present study are in concurrence with Sajana (2018), who noted that language acquisition begins with listening and speaking. The marked improvement in the listening and speaking domains after cartoon exposure aligns with her assertion that these are foundational language skills that benefit from auditory stimuli such as cartoon dialogue. The results also agree with Klinmalee (2022), who highlighted that children can learn vocabulary and pronunciation effectively through cartoon viewership, even without prior exposure to English. In this study, children exposed to cartoons had significantly higher vocabulary (reading) and fluency (speaking) scores, confirming this claim. In the Kenyan context, the findings are in agreement with Njiiri (2019), Kidenda (2018), and Vikiru (2013), who identified a link between cartoon content, viewership patterns, and improvements in language use. The post-test speech proficiency scores, particularly in speaking and listening, align with their conclusion that children who watch cartoons demonstrate better communication skills. Alghonaim (2020) and Ikwuka and Ubah (2020) similarly reported that cartoons enhance pronunciation and vocabulary acquisition, particularly among Arab and Nigerian children, respectively.

5. Conclusion and Recommendations

5.1 Conclusion

The study concludes that imitating cartoon characters' speech, gestures, and expressions positively influenced children's language skills. Verbal imitation strengthened vocabulary and sentence structure, while non-verbal mimicry enhanced expressive communication. These behaviors bridged observation and speech practice, confirming that imitation through animated content is a powerful method for developing speech proficiency. Thus, encouraging children to mimic characters may be a practical approach to reinforcing language use at home and in school.

5.2 Recommendations

From the study, the following recommendations were made:

1. Imitation of animated content, both verbal and non-verbal, significantly boosts speech development.Thus,educators and therapists should encourage children to imitate cartoon characters' speech, gestures, and facial expressions as part of structured language-learning activities.
2. Role-play activities, where children take on cartoon characters' personas, can be particularly effective for stimulating narrative skills and emotional language use. As such, practitioners should intentionally create environments where imitation is embraced as a language acquisition strategy, supported by appropriate materials and guided interactions that allow children to express themselves creatively while learning speech structures.

5.3 Suggestions for Future Research

1. Future research should explore how imitation of animations impacts speech proficiency across broader geographical and socio-economic settings. Given this study's urban focus on six constituencies in Nairobi County, researchers should examine similar interventions in rural and peri-urban regions, where access to media, language exposure, and school environments differ. A specific research question could be: *How does imitation of animations vary between urban and rural children in Kenya?* This would offer insights into contextual factors that influence media effectiveness and help identify necessary adaptations for diverse environments.
2. Additionally, future studies could adopt a longitudinal design to investigate the long-term effects of cartoon exposure and imitation of animations on speech development. While the current study measured short-term gains, it would be valuable to examine whether such improvements are retained over time and how they influence later literacy outcomes.
3. A possible approach could involve tracking learners from early childhood through upper primary grades to assess continuity and retention in language skills

development. This would provide a clearer picture of the lasting value of multimedia-based teaching strategies.

References

Aditya, S. & Suri, C.S. (2020). Effect of Cartoon Programs on Language and Behavior of Children. *Palarch's Journal of Archaeology of Egypt/Egyptology, 17*(6), 5863-5879.

Alghonaim, A. (2020). Impact of Watching Cartoons on Pronunciation of a Child in an EFL Setting: A Comparative Study with Problematic Sounds of EFL Learners. *Arab World English Journal, 11,* 52-68.

Bataza, J.L. (2015). *Impacts of Incompetence in English Language on Students' Academic Performance in Secondary Schools: A Case Study of Kinondoni District Dar Es Salaam Region*. Retrieved from https://www.academia.edu

Beaino, T. (2021). *The effects of cartoons on Lebanese children aged between 3 and 10* (Doctoral dissertation, Notre Dame University-Louaize).

Bekheda, C. (2019). *The Impact of Watching Cartoons on Children's Language and Behaviors -The Case of Middle School Benbernou Mohamed's First and Second Year Pupils in Mostaganem*. Abdelhamid Ibn Badis University. Retrieved from http://e-biblio.univ-mosta.dz

Borzekowski, D., Lando, A. L., Olsen, S. & Giffen, L. (2019). The Impact of an Educational Media Intervention to Support Children's Early Learning in Rwanda. *International Journal of Early Childhood, 51*, 10-21.

Bose, M. & Philip, L. (2019). Effects of Cartoon Shows on Children: A Study from Parents Perspective. *IOSR Journal of Humanities and Social Science, 20*(6), 1-9.

Corpuz, L. J. (2020). Anime with English Subtitles: Tool in Expanding Second Language Learners' Vocabulary and Syntactic Complexity. *International Journal of Novel Research in Education and Learning, 7*(5), 1-13.

Egounleti, P.M., Hindeme, U.O. & Sonou, T.K. (2018). Examining the Impacts of Cartoons on Motivating EFL Beginner Students to Speak English Language in Beninese Secondary Schools: The Case Study of Some Secondary Schools in the Atlantic Region. *American Scientific Research Journal for Engineering, Technology, and Sciences, 50*(1), 155-180.

Emperador-Garnace, X.R. (2021). Speaking Assessments in Multilingual English Language Teaching. *The Asian EFL Journal Professional, 25*(3), 40-67.

Ikwuka, O. I. & Ubah, C. P. (2020). Availability and Utilization of Cartoons for Effective Teaching of English Language in Primary Schools in Idemili South LGA. *JSTME, 3*(2), 113-129.

Kidenda, M. C. A. (2018). Impact of Animated Cartoons on Children Aged Seven to Eleven Years in Nairobi, Kenya. *American Journal of Education and Practice, 3*(1), 10 - 32.

Kithinji, W. K., & OHirsi, A. I. (2022). Relating English Language Proficiency to Academic Performance among non-English Speaking Undergraduate Students in Kenyan Universities. *East African Journal of Education Studies, 5*(1), 66-76. https://doi.org/10.37284/eajes.5.1.560.

Klinmalee, R. (2022). A Phenomenographic Study of Teaching and Learning Ability through Cartoon Movies Animation. *Journal of Positive School Psychology, 6*(5), 3907-3916.

Kumar, R. (2019). *Research Methodology: A Step-by-Step Guide for Beginners*. New York: SAGE Publications Ltd.

Mokhtari, K., Strebel, C. & Crevecoeur-Bryant, E. (2020). The Quest for Linguistically Responsive Questioning: Using Knowledge of English Oral Proficiency Levels to Engage English Learners. *Literacy Research, Practice and Evaluation, 11*, 51-66.

Njiiri, M. W. (2019). *Foreign Television Cartoon Programs and Children's Social Behavior in Kenya.* Retrieved from http://hdl.handle.net/123456789/5222

Sajana, C. (2018). Cartoons in Language Teaching and Learning. *International Journal of Pure and Applied Mathematics, 119*(12), 2435-2450.

Salih, S. (2017). The Impact of Using Animation on Developing Fourth Year (Science Division) High School Students' Language Skills. *Anbar University Journal of Language & literature, 23*, 171-215.

Shazia, G., Rabia, A. & Zubair, A. (2017). Impact of Cartoon Programs on Children's Language and Behavior. *ILSC, 2,* 104-126.

Trota, P., Cabeltis, C. B. & Ligan, M. K. (2022). The Influence of Watching English Cartoons on English Language Acquisition: A Case of Selected Filipino Preschoolers. *Journal of Education, Language Innovation, and Applied Linguistics, 1*(2), 105-124.

Vikiru, G. (2013). *2-D Animation for Effective Communication with Children in Kenya: A Case Study of Githurai Location, Kiambu County*. Retrieved from https://ir-library.ku.ac.ke