

EFFECT OF AUDIO-VISUAL LEARNING TOOLS ON BASIC SOCIAL SKILLS ACQUISITION AMONG PRESCHOOLERS IN NSUKKA LOCAL GOVERNMENT AREA, ENUGU STATE

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Abstract

The study investigated the effect of audio-visual learning tools on acquisition of basic social skills among preschoolers in Nsukka Local Government Area, Enugu State. The purpose of the study was to compare the basic social skills acquisition of preschoolers taught using audio-visual learning tools with those taught using the traditional method (chalk and talk). Two research questions and two hypotheses guided the study. The study adopted pretest-posttest control group quasi-experimental design. The population of the study comprised 787 Early Childhood Education 3 preschoolers in 115 public primary schools in the LGA. The sample size for this study is 68 respondents purposely drawn from 2 public schools. The instrument used for the study was a researcher designed instrument titled Preschoolers' Basic Social Skills Acquisition Rating Scale (PBSSARS). The instrument was validated by three experts and reliability was determined using the inter-rater reliability method, which assesses the agreement between two independent raters who observed and scored the same set of preschoolers using the PBSSARS. The scores obtained from the two raters were analyzed using Cohen's Kappa coefficient, a statistical measure suitable for assessing the level of agreement between raters beyond chance. The result yielded a Cohen's Kappa reliability coefficient of 0.83, indicating a high level of internal consistency and agreement between raters. Mean and Standard Deviation were used to answer the research questions and Analysis of Covariance (ANCOVA) was used to test the hypothesis at 0.05 level of significance. The findings of the study revealed among others that preschoolers taught using audio-visual learning tools had better basic social skills acquisition than those taught using the conventional method (chalk and talk). It was recommended among others that teachers and caregivers should incorporate audio-visual learning tools into classroom activities to enhance preschoolers' basic social skills.

Key words: Audio-Visual learning tools, basic social skill acquisition, preschoolers

Introduction

Early years have long been recognized as the foundational level for lifelong learning and character building. It is at this stage that children are expected to acquire basic social skills that will help them to make and maintain healthy relationships, communicate effectively and perform better in school. However, this essential skill is lacking among most preschoolers as studies have reported deficiencies in cooperation, sharing, empathy, communication and other competencies in Nigerian early childhood education settings (Obijiofor, Ugwele & Onyenwe, 2024). The lack of these skills is a source of concern for parents, teachers, and other stakeholders in education. The observed high prevalence of poor basic social skills acquisition among preschoolers is evident in their struggle to interact appropriately with peers, take turns, manage tantrums, follow social norms and rules, share toys and other play materials, and communicate effectively, among others. United Nations Children's Fund (UNICEF, 2020) has asserted that in most countries, at least 1 in 5 children lack confidence in their basic social skills to make new

friends, show empathy, share with others, collaborate and start conversations, among others. The issue is also prevalent in Enugu State, where Okechukwu, Nnodim, Dike, Onyekachi and Ikeja (2022) found that more than 46% of children are reported to have low basic social skills. Therefore, this research is essential to enhance basic social skills acquisition among preschoolers.

Preschoolers are children enrolled in early childhood education settings where they begin to develop important skills such as cognitive, language, motor, and social skills through play. Preschoolers are typically five years olds who are enrolled in pre-primary education programmes where they acquire basic social skills through interactions with parents, teachers, peers and significant others (Ifelunni & Ngwoke, 2026). UNESCO (2024) defines preschoolers as children typically between the ages of three and five before they enter formal primary school. It is the period before they are eligible for primary education. In this study, the definition of preschoolers by Ifelunni & Ngwoke (2026) was adopted. The acquisition of basic social skills by preschoolers plays an essential role in their overall development.

At this stage, children are naturally inquisitive and show a strong desire to explore and understand the world around them. Their learning is most effective when it takes place through play, interaction, and direct engagement with their environment. According to National Association for the Education of Young Children (NAEYC, 2020), children in this age group learn actively by participating in meaningful experiences. Similarly, Papalia and Martorell (2021) explain that preschoolers begin to develop important skills such as language, reasoning, and curiosity. Additionally, Berk (2022) observes that they also start to demonstrate early thinking and problem-solving abilities. Children at the preschool level display distinctive developmental traits. They are often lively, imaginative, and highly responsive to activities that involve movement, touch, and experimentation. All these meaningful experiences may be hampered if they do not adequately acquire basic social skills.

One of the fundamental skills for life-long learning during preschool years is the acquisition of basic social skills. These skills are essential for preschoolers to make and maintain friendships, cooperate and communicate effectively with others (Ifelunni & Ngwoke, 2026). According to Gresham and Elliott (2020), basic social skills encompass a broad range of learned behaviours that facilitate positive social interactions and relationships. In the context of this study, basic social skills are crucial for preschoolers to function appropriately in the society and succeed academically. Skills such as communication, cooperation, empathy, turn-taking, and emotional regulation are considered fundamental outcomes of quality early childhood education. These skills play a significant role in influencing preschoolers' ability to form and maintain relationships, as well as succeed academically and socially in later years. Scholars emphasize that early social skills are strongly linked to later academic achievement and overall development, making it a central goal of preschool education (Shaddad & Jember, 2024). However, the observed poor acquisition of basic social skills may be associated with the instructional strategy used in most early childhood classrooms, often relying on the traditional method (chalk and talk).

Traditional method (chalk and talk) of teaching seems to play crucial roles in preschoolers' acquisition of basic social skills. According to Ashaver and Igyuve (2013) the current teaching method in Nigerian schools is the traditional method (chalk and talk). Pretorius (2025) defines the traditional teaching method (chalk and talk) as an approach where the teacher does most of the talking while learners mainly listen, memorize and take notes. Additionally, Ciofi and Scandurra (2021) describe the traditional teaching method

(chalk and talk) as one where the teacher writes on the blackboard while talking to help learners assimilate new information and take notes effectively. This method is teacher dominated with knowledge being transmitted through oral explanations and the chalkboard while learners passively receive information. In the context of this study, traditional method (chalk and talk) is where the teachers' voice and chalkboard are the focal point while learners listen and take notes. However, this method has not produced the desired result, leading the Federal Republic of Nigeria (FRN, 2014) to advocate for a more child-centred approach to teaching.

In an ideal preschool setting, teaching and learning processes are expected to be interactive, engaging, and developmentally appropriate. Young children learn best through play, observation, imitation, and active participation in meaningful experiences. Hence, the FRN (2014) advocates that the main method of teaching at this level should be through play. Consequently, instructional strategies employed in preschool classrooms should be child-centered, multisensory, and capable of stimulating basic social skills acquisition. The integration of diverse sensory channels —visual, auditory, and tactile, — has been identified as a powerful approach to enhancing learning outcomes in young children. Exposure to multisensory learning environments has been shown to improve attention span, comprehension, and memory retention, thereby supporting holistic development (Zou, Xie, & Wang, 2018). In recent years, rapid advancements in technology have introduced innovative teaching tools into early childhood education. Among these are audio-visual learning tools, which combine sound and visual elements to create engaging and meaningful learning experiences.

Audio-visual learning tools can actively engage both the teacher and the learner in the learning process. According to Kwegyiriba, Mensah and Ewusi (2022) audio-visual learning tools improve the quality of learning experiences because concepts are easily presented and comprehended when words are complemented with images and animations. These tools such as pictures, charts, maps, globes, diagrams, flannel graphs, and sound-recordings, stimulate the senses of sight and sound, offering a variety of experiences that promote self-activity in children (Ifelunni, Chukwuemeka-Nworu, Ugwu, Ibiam, Ezema, & Okeke, 2018). Audio-visual learning tools reinforce spoken or written words with concrete images providing rich perceptual experiences that form the basis of learning (Roul, 2014). In this study, audio-visual learning tools are instructional materials and technologies that combine sight and sound to enhance teaching, learning and basic social skills acquisition among preschoolers.

Audio-visual learning tools such as videos, animations, digital storytelling, educational television, and interactive media, appeal to children's natural curiosity and enhance their understanding of abstract concepts. These tools are particularly effective in modeling behaviours and social interactions, thereby supporting the development of social skills. Research indicates that audio-visual media can significantly improve children's language abilities, which are closely linked to social interaction and communication (Intisari, Yusran, Heni, & Husnul, 2025). Additionally, Ifelunni, Chukwuemeka-Nworu, Ugwu, Ibiam, Ezema, & Okeke, (2018) found a significant difference in the mean performance of pupils taught pre-literacy skills with audio-visual materials compared to those taught with conventional method in pre-primary schools in favour of those taught using audio-visual materials. Another study also indicated that young children exposed to audio-visual aids had improved social skills helping them to adjust better in the society (Muzamil, 2023). All of these findings highlight the significant role played by audio-visual learning tools in the education of young children.

Notwithstanding growing awareness of the potential benefits of audio-visual learning tools, their integration into early childhood classrooms remains limited due to factors such as inadequate resources, lack of teacher training, and insufficient emphasis on technology-supported pedagogy. This view is supported by Nomlala, (2025). The persistence of these challenges highlights a clear discrepancy between the expected outcomes of early childhood education and the actual experiences of many preschoolers. However, the continued reliance on traditional teaching methods and the underutilization of innovative instructional tools suggest that acquisition of basic social skills is not being fully achieved. Consequently, there is a gap between the expected level of basic social skills acquisition among preschoolers and the actual outcomes observed in classroom settings.

Furthermore, the theoretical underpinning for the use of audio-visual tools in education is primarily the cognitive theory of multimedia learning by Richard E. Mayer (2001) which suggests that children process information more effectively when it is presented using both words (audio) and pictures (visuals). When children are exposed to visual and auditory representations of positive social behaviours, they are more likely to internalize and replicate such behaviours in real-life situations. Contemporary studies on social-emotional learning highlight that media-based instruction can play a crucial role in helping children develop self-awareness, relationship skills, and responsible decision-making abilities. This observed benefit of audio-visual learning tools from this theory could depend on preschoolers' gender.

Gender refers to the socially constructed social, behaviours, identities, and attributes that are considered appropriate for either males or females. Gender according to Ifelunni (2019) is the roles expected from learners based on being male or female. According to Ifelunni and Ngwoke (2026) gender refers to roles and characteristics considered appropriate based on assigned roles of being a boy or girl in schools. In this study, gender refers to attributes that make one to be considered male or female. Many studies report gender differences in basic social skills acquisition during the preschool years. Empirical evidence has shown gender differences in basic social skills among young children. Naumann, Bayer, Kirst, van der Meer, & Dziobek (2023) found that audio-visual interventions improved basic social skills among preschool children but noted no gender variations. Another study by Akobi, and Okeke, (2023) stated that edutainment videos, an aspect of audio-visual approaches enhance participation and observable behaviours among preschool children, though gender differences are statistically insignificant. In addition, Akinwale (2015) found no significant difference in the mean achievement of male and female students taught using audio-visual materials among Junior Secondary Schools in Katsina LGA.

Moreover, while there is increasing global interest in integrating technology into early childhood education, there remains a significant gap between theoretical knowledge and practical implementation. According to Onuoha and Chukwueke (2023) many schools lack the necessary infrastructure and professional support required to effectively incorporate audio-visual tools into their teaching practices. As a result, the potential benefits of these tools in enhancing basic social skills acquisition are not fully realized (Yusufi, Saad, Mamman, & Adesokan, 2024). Additionally, existing studies have largely focused on cognitive and language outcomes, with relatively limited attention given to the specific impact of audio-visual tools on basic social skills development among preschoolers. It is against this backdrop that this study seeks to investigate the effects of audio-visual learning tools on preschoolers' basic social skills acquisition in Nsukka LGA,

with a view to determining whether the adoption of such tools can bridge the gap between current practices and the desired acquisition of basic social skills among preschoolers.

Purpose of the Study

The general objective of the study is to assess the effect of audio-visual learning tools on preschoolers' basic social skills acquisition in Nsukka Local Government Area, Enugu State. Specifically, the study sought to determine the;

1. mean basic social skills acquisition scores of preschoolers taught using audio-visual learning tools and those taught using traditional teaching method (chalk and talk) in Nsukka Local Government Area.
2. mean basic social skills acquisition scores of male and female preschoolers in Nsukka Local Government Area.

Research Questions

The following research questions guided the study:

1. What are the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those taught with traditional method (chalk and talk) in Nsukka Local Government Area?
2. What are the mean basic social skills acquisition scores of male and female preschoolers in Nsukka Local Government Area?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance:

- H₀₁:** There is no significant difference in the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those who were taught with chalk and talk method in Nsukka Local Government Area.
- H₀₂:** There is no significant difference in the mean basic social skills acquisition scores of male and female preschoolers in Nsukka Local Government Area.

Methods

The study adopted pretest-posttest control group quasi-experimental design. According to Nworgu (2015) this design aims to establish cause and effect relationships as random assignment of subjects to experimental and control groups is not feasible. Instead, intact or pre-existing groups are utilized. The study was carried out in Nsukka Local Government Area and included a population of 787 ECE 3 preschoolers from 115 public primary schools in the LGA. The sample size for this study was 68 respondents purposively selected from 2 public schools. The instrument used for the study was a researcher designed instrument called the Preschoolers' Basic Social Skills Acquisition Rating Scale (PBSSARS). This instrument was validated by three experts and reliability was determined using the inter-rater reliability method. This method assesses the agreement between two independent raters who observed and scored the same set of preschoolers using the PBSSARS. The scores obtained from the two raters were analyzed using Cohen's Kappa coefficient, a statistical measure suitable for assessing the level of agreement between raters beyond chance. The result showed a Cohen's Kappa reliability coefficient of 0.83, indicating a high level of internal consistency and agreement between raters. Mean and Standard Deviation were used to answer the research questions and Analysis of Covariance (ANCOVA) was employed to test the hypothesis at a significance level of 0.05.

Results

The results were presented based on research questions and hypotheses that guided the study.

Research Question One: What are the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those taught with chalk and talk method?

Table 1: Mean and standard deviation of mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those taught with chalk and talk method

Group	Pre-test			Post-test		
	N	$\bar{x}$	SD	$\bar{x}$	SD	Mean Gain
Experimental	35	2.89	0.20	3.22	0.11	0.33
Control	33	2.53	0.30	2.74	0.09	0.21
Total	68					0.27
		2.71	0.22	2.98	0.10	

Table 1 shows that preschoolers exposed to audio-visual learning tools had a pretest mean of 2.89 with a standard deviation of 0.20 and a posttest mean of 3.22 with a standard deviation of 0.11. The difference between the pretest and posttest mean for the group exposed to audio-visual learning tools was 0.33. The control group had a pretest mean of 2.53 with a standard deviation of 0.30 and a posttest mean of 2.74 with a standard deviation of 0.09. The difference between the pretest and posttest mean for control group was 0.21. Result in table 1 also shows that the total pretest mean score for both experimental and control group was 2.71 with a standard deviation of 0.22 and a posttest mean of 2.98 with a standard deviation of 0.10. The difference between the pretest and posttest mean for the total group was 0.27. However, for each of the groups, the posttest means were greater than the pretest means with the experimental group having the highest mean gain. This is an indication that audio-visual learning tools have some effect on preschoolers' basic social skills acquisition.

H₀₁: There is no significant difference in the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those who were taught with chalk and talk method.

Table 2: Analysis of covariance of the difference in the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those who were taught with chalk and talk method.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.409 ^a	2	4.205	422.385	.000
Intercept	9.247	1	9.247	928.884	.000
Pre-test	.055	1	.055	5.517	.020
Method	4.900	1	4.900	492.271	.000
Error	1.364	65	0.010		
Total	1253.427	68			
Corrected Total	9.773	67			

a. R Squared = .860 (Adjusted R Squared = .858)

The result in Table 2 shows that with respect to the mean rating scores of preschoolers exposed to audio-visual learning tools and those of the control group, an F-ratio of 492.27 was obtained with associated exact probability value of 0.00. Since the associated probability value (0.00) is less than 0.05 set as level of significance, the null hypothesis (H₀₁) which stated that there is no significant difference in the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools

and those who were taught with chalk and talk method is rejected. Thus, inference drawn is that, there is a significant difference in the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those who were taught with chalk and talk method with preschoolers exposed to audio-visual learning tools having a higher mean in the posttest.

Research Question Two: What are the mean basic social skills acquisition scores of male and female preschoolers in Nsukka Local Government Area?

Table 3: Mean and standard deviation of mean basic social skills acquisition scores of male and female preschoolers

Pre-test Method	Gender	n	Post-test				
			$\bar{x}$	SD	$\bar{x}$	SD	Mean gain
Audio-Visual Learning Tools	Male	37	2.90	0.21	3.24	0.08	0.34
	Female	31	2.87	0.18	3.17	0.15	0.30
	Total	68	2.89	0.20	3.22	0.11	0.33

Table 3 reveals the pretest and posttest mean and standard deviations of male and female preschoolers exposed to audio-visual learning tools. Result showed that the male preschoolers had a pretest means score of 2.90 with a standard deviation of 0.21 and a posttest mean score of 3.24 with a standard deviation of 0.08. The difference between the pretest and posttest mean score for the male preschoolers exposed to audio-visual learning tools was 0.34. Result also showed that female preschoolers exposed to audio-visual learning tools had a pretest mean of 2.87 with a standard deviation of 0.18 and a posttest mean of 3.17 with a standard deviation of 0.15. The difference between the pretest and posttest mean score for female preschoolers exposed to audio-visual learning tools was 0.30. Results in table 3 also showed that the total pretest mean score for both male and female preschoolers was 2.89 with a standard deviation of 0.20 and a posttest mean score of 3.22 with a standard deviation of 0.11. The difference between the pretest and posttest mean rating for both male and female preschoolers was 0.33. However, for both male and female preschoolers, the posttest mean ratings were greater than the pretest mean with the male preschoolers having the higher mean gain. This result showed that gender may have some effects on preschoolers' basic social skills acquisition when exposed to audio-visual learning tools.

H₀₂: There is no significant difference in the mean basic social skills acquisition scores of male and female preschoolers.

Table 4: Analysis of covariance of the difference in the mean basic social skills acquisition scores of male and female preschoolers

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.162 ^a	4	0.290	5.969	.000
Intercept	7.815	1	7.815	160.631	.000
Pre-test	0.001	1	0.001	.014	.904
Gender	0.227	1	0.227	4.674	.032
Method * Gender	0.011	1	0.011	0.216	.642
Error	6.568	65	0.049		

Total	1391.844	68
Corrected Total	7.730	67

a. R Squared = .150 (Adjusted R Squared = .125)

Table 4 shows that with respect to the mean rating scores of basic social skills acquisition of male and female preschoolers exposed to audio-visual learning tools an F-ratio of 4.67 was obtained with associated probability value of 0.03. Since the associated probability value (0.03) is less than 0.05 set as level of significance, the null hypothesis (H_{04}) which stated that there is no significant difference in the mean basic social skills acquisition scores of male and female preschoolers exposed to treatment is rejected. Thus, inference drawn is that, there is a significant difference in the mean rating scores in basic social skills acquisition of male and female preschoolers exposed to treatment.

Discussion of the Findings

The findings on Table 1 revealed that the posttest means were greater than the pretest means with the experimental group having the highest mean gain. This is an indication that preschoolers taught using audio-visual learning tools had better basic social skills acquisition than their counterpart taught using the traditional method (chalk and talk). In addition, table 2 shows that there is a significant difference in the mean basic social skills acquisition scores of preschoolers instructed with audio visual learning tools and those who were taught with chalk and talk method with preschoolers exposed to audio-visual learning tools having a higher mean in the posttest. The finding could be attributed to fact that audio-visual learning tools often encourage engagement which naturally creates opportunities for peer interaction that essentially leads to the development of basic social skills. Unlike the traditional method (chalk and talk) that is largely passive where children are expected to sit, listen and receive information.

This is in consonance with the findings of Muzamil, (2023) who found that young children exposed to audio-visual aids had improves social skills which helped them to adjust better in the society. It also resonates with the findings of Intisari, Yusran, Heni, and Husnul, (2025) whose finding indicates that audio-visual media can significantly improve children's language abilities, which are closely linked to social interaction and communication. Also, Ifelunni, Chukwuemeka-Nworu, Ugwu, Ibiam, Ezema, & Okeke, (2018) found that there was a significant difference in the mean performance of pupils taught pre-literacy skills with audio-visual materials and those taught with conventional method in pre-primary schools in favour of those taught using audio-visual materials.

From the results presented in table 3, it shows that both male and female preschoolers, the posttest mean ratings were greater than the pretest mean with the male preschoolers having the higher mean gain. This result showed that gender may have some effects on preschoolers' basic social skills acquisition when exposed to audio-visual learning tools. Table 4 shows that there is a significant difference in the mean rating scores in basic social skills acquisition of male and female preschoolers exposed to treatment. This finding may be attributed to the fact that boys at the preschool age are most times more inclined to active and expressive behaviours, as such may participate more visibly in activities that involve group responses, role-play, imitation and physical. This can make them gain more basic social skill.

This view is at variance with those of Naumann et al, (2023) who found audio-visual interventions improved basic social skills among preschool children but noted no gender variations. Corroborating this, Akobi, and Okeke, (2023) stated that edutainment video which is an aspect of audio-visual approaches enhance participation and observable behaviours among preschool children, though gender differences are statistically

insignificant. However, Akinwale (2015) found there is no significant difference in the mean achievement of male and female students taught using audio-visual materials among Junior Secondary Schools in Katsina LGA.

Conclusions

The study concludes that the use of audio-visual learning tools significantly enhances the acquisition of basic social skills among preschoolers when compared to the conventional chalk-and-talk method. Children exposed to audio-visual instructional strategies demonstrated better development in key social competencies such as cooperation, communication, sharing, and interaction. Furthermore, although male preschoolers taught with audio-visual tools appeared to exhibit higher gains in observable basic social skills than their female counterparts, this difference is not necessarily indicative of inherent gender superiority. Rather, it may be attributed to differences in engagement levels, responsiveness to audio-visual stimuli, and variations in how basic social skills are expressed and measured among boys and girls. Overall, the study affirms that audio-visual learning tools are an effective and developmentally appropriate approach for fostering basic social skills acquisition in early childhood education.

Recommendations

Based on the findings of the study, the following recommendations were made;

1. Teachers and caregivers should incorporate audio-visual learning tools into classroom activities in order to enhance preschoolers' basic social skills.
2. Government should organize seminars, conferences, workshops to train preschool teachers on the importance of audio-visual learning tools for effective basic social skills acquisition.

REFERENCES

- Akinwale, O. I. (2015). The effect of audio-visual materials in the teaching and learning of the speaking skill in junior secondary schools. *International Journal of Social Science and Humanities Research*, 3(3), 50–58.
- Akobi, T., & Okeke, C. (2023). Effect of edutainment videos on cognitive and social skills development of preschool children. In *Proceedings of the 15th International Conference on Education and New Learning Technologies*. <https://doi.org/10.21125/edulearn.2023.0184>
- Ashaver, D., & Igyuve, S. M. (2013). The use of audio-visual materials in the teaching and learning processes in Colleges of Education in Benue State, Nigeria. *IOSR Journal of Research and Method in Education (IOSR-JRME)*, 1(6), 44–55.
- Berk, L. E. (2022). *Infants, children, and adolescents* (9th ed.). Boston, MA: Pearson.
- Ciofi, C., & Scandurra, G. (2021). Very simple and inexpensive system for distance learning with the use of chalkboard. *International Journal of Emerging Technologies in Learning*, 16(9), 263. <https://doi.org/10.3991/ijet.v16i09.20017>
- Federal Republic of Nigeria. (2014). *National policy on education* (6th ed.). Lagos: NERDC Printing Press.
- Gresham, F. M., & Elliott, S. N. (2020). *Social Skills Improvement System (SSIS) Rating Scales* (2nd ed.). Bloomington, MN: NCS Pearson.
- Ifelunni, C. O. (2019). *Child labour, motivation and cognitive style as determinants of academic achievement of primary school pupils in Mathematics in South-East, Nigeria* (Unpublished Ph.D. thesis). University of Nigeria, Nsukka.
- Ifelunni, C. O., Chukwuemeka-Nworu, I. J., Ugwu, G. C., Ibiam, J. U., Ezema, V. S., & Okeke, P. M. D. (2018). Effect of audio-visual materials on pre-literacy skill

- development in pre-primary schools in Ebonyi State. *Journal of Research and Practice in Childhood Education*, 4, 219–234.
- Ifelunni, C. O., & Ngwoke, A. N. (2026). Impact of over-schooling on basic social skills acquisition among preschoolers in Nsukka Local Government Area, Enugu State. *Journal of Research and Practice in Childhood Education*, 10, 18–30.
- Intisari, M., Yusran, R., Heni, S. H., & Husnul, F. (2025). The effect of audio-visual learning media on language skills in children aged 4–5 years. *Al-Mudarris: Jurnal Ilmiah Pendidikan Islam*, 8(2), 397–408. <https://e-journal.iain-palangkaraya.ac.id/mdr/article/view/10019/3335>
- Kwegyiriba, A., Mensah, R. O., & Ewusi, E. (2022). The use of audio-visual materials in teaching and learning process in Effia Junior High Schools. *Technium Social Sciences Journal*, 31(1), 106–114. <https://doi.org/10.47577/tssj.v31i1.6399>
- Mayer, R. E. (2001). *Multimedia learning*. New York, NY: Cambridge University Press.
- Muzamil, H. A. H. (2023). Impact of audio-visual aids on youngster and their social adjustment at elementary school level. *International Journal of Elementary Education*, 12(3), 90–94. <https://doi.org/10.11648/j.ijeeedu.20231203.16>
- National Association for the Education of Young Children. (2022). *Developmentally appropriate practices in early childhood programs* (4th ed.). Washington, DC: Author. <https://www.naeyc.org/resources/pubs/books/dap-fourth-edition>
- Naumann, S., Bayer, M., Kirst, S., van der Meer, E., & Dziobek, I. (2023). A randomized controlled trial on the digital socio-emotional competence training Zirkus Empathico for preschoolers. *npj Science of Learning*, 8, 20. <https://doi.org/10.1038/s41539-023-00169-8>
- Nomlala, L. (2025). Audio-visual aids as a pedagogical tool to enhance listening skills in Grade 10 learners: English first additional language classes in Chris Hani West District, South Africa. *Journal of Education and Learning Technology*, 6(12), 1424–1437. <https://doi.org/10.38159/jelt.202561215>
- Nworgu, B. G. (2015). *Educational research: Basic issues and methodology*. Nsukka: University Trust Publishers.
- Obijiofor, E. O., Ugwele, N. A., & Onyenwe, C. Y. (2024). Investigating the correlation between play-based learning and social skills development in nursery school children in Southeastern Nigeria. *International Journal of Research*, 11(7), 218–233. <https://doi.org/10.5281/zenodo.13127554>
- Okechukwu, F. C., Nnodim, E. J., Dike, J. C., Onyekachi, C. C., & Ikejide, M. M. (2022). Relationship between parents' play belief and social skills development of school-aged children (6–12 years) in Enugu East LGA. *Journal of Family and Social Research*, 1(12), 50–62.
- Onuoha, J., & Chukwueke, C. (2023). Availability and utilization of audio-visual resources for teaching and learning in Government Day Secondary School, Nukkai, Jalingo, Taraba State, Nigeria. *International Journal of Knowledge Dissemination*, 1(2), 39–__. <https://ijkd.uniabuja.edu.ng/index.php/ijkd/article/view/59>
- Papalia, D. E., & Martorell, G. (2021). *Experience human development* (14th ed.). New York, NY: McGraw-Hill Education.
- Pretorius, L. (2025). *Chalk and talk vs. active learning: What's holding South African teachers back from using proven methods?* <https://theconversation.com/africa>
- Roul, S. K. (2014). Language development of preschool children: The effects of an audio-visual intervention program in Delhi. *International Journal of Instruction*, 7(1), 59–74. <https://izlik.org/JA48GS24RD>

- Shaddad, A. R. E., & Jember, B. (2024). A step toward effective language learning: An insight into the impacts of feedback-supported tasks and peer-work activities on learners' engagement, self-esteem, and language growth. *Asian-Pacific Journal of Second and Foreign Language Education*, 9, 39. <https://doi.org/10.1186/s40862-024-00261-5>
- United Nations Children's Fund. (2020). *World's richest countries grappling with children's reading and maths skills, mental well-being and obesity*. <https://www.unicef.org>
- United Nations Educational, Scientific and Cultural Organization. (2024). *Global report on early childhood care and education: The right to a strong foundation*. <https://doi.org/10.54675/FWQA2113>
- Yusufi, G. A., Saad, U. T., Mamman, J. S., & Adesokan, A. (2024). Local animated cartoon as a determinant of pre-primary school social skill acquisition in Kwara South, Nigeria. *International Journal of Academic Pedagogical Research*, 8(6), 205–209. <http://www.ijeais.org/ijapr>
- Zou, D., Xie, H., & Wang, F. L. (2018). Future trends and research issues of technology-enhanced language learning: A technological perspective. *Knowledge Management & E-Learning*, 10(4), 426–440. <https://files.eric.ed.gov/fulltext/EJ1247632.pdf>