BERJAYA Journal of Services & Management
e-ISSN 2716-5949
Vol.21, January 2024, 61- 74

EFFECTS OF PEER TUTORING AND AUDITORY STRATEGIES ON COMPREHENSION AMONG SECONDARY SCHOOL NIGERIAN STUDENTS WITH VISUAL IMPAIRMENT

Sunday Abimbola **Abodunrin**, Ph.D
Department of Special Education
University of Ibadan, Nigeria.
Abosabim@yahoo.com

Linda Chidinma **Obianuka**
Department of Special Education
University of Ibadan, Nigeria.
Lindamma20@gmail.com

ABSTRACT

This study investigated the effects of peer tutoring and auditory strategies on the academic performance in reading comprehension among secondary school students with visual impairment. Its significance is to come up with strategies, if necessary, to help visually impaired students in their struggle to acquire broader and deeper knowledge. The study adopted a pretest-posttest control group quasi experimental research design. It involved a sample of 22 secondary school students with visual impairment in Ibadan, Oyo state, Nigeria. The academic performance of the participants was measured using comprehension test before and after the intervention period. The analysis of covariance (ANCOVA) was conducted to examine the effect of peer tutoring and auditory strategies on the participants' reading comprehension performance while controlling for their level of motivation and pretest score. The results indicated that there was no significant difference in comprehension reading performance between the experimental group and the control group. Meanwhile, the experimental group who received auditory strategy had significantly higher reading comprehension performance compared to the control group. Based on the findings, the study recommended the use of peer tutoring and auditory strategies should be incorporated into the secondary school curriculum for the visually impaired. Also, seminars and workshop should be organized to educate teachers on the use of peer tutoring and auditory strategies.

Keywords: Academic performance, Visual impairment, Peer tutoring strategy, auditory strategy, comprehension.

INTRODUCTION

Academic performance is the extent to which a student, teacher, or institution has achieved their educational goals, whether short-term or long-term. This achievement is typically assessed through either Continuous Assessment (CA) or Cumulative Grade Point Average (CGPA). The term "academic performance" consists of two key words: "academic" and "performance." "Academic" refers to expertise in knowledge, education, and research, while "performance," as per the Oxford dictionary, pertains to the execution or action of tasks.

Academic performance can vary, falling into categories of either poor or good. Mic performance may stem from various factors, including the absence of an academic supervisor, lack of mentorship, inadequate parental guidance, or simply a lack of interest in the subject matter. Conversely, good academic performance can be attributed to effective learning and teaching strategies, as well as support from parents or peers.

When it comes to achieving academic success, multiple factors come into play. While a dedicated teacher or a motivated student plays a role, they are just one piece of the puzzle. Elements such as the quality of lesson delivery, class size, and parental involvement all collaborate to influence a student's academic performance. Additionally, vision plays a significant role in academic performance, yet some learners are deprived of this vital sense, either due to nature or accidents. Students with visual impairments face a unique set of challenges that demand careful attention from educational institutions to facilitate good academic performance, as highlighted by (Raheem, 2016).

Visual impairment signifies the inability to utilize sight as a means of learning. Consequently, for students grappling with visual impairment, the inability to read printed materials can potentially hinder and lead to subpar academic performance. Students with visual impairments often require adaptations to facilitate their access to comprehension skills. Among these skills, reading comprehension poses a particular challenge for them. Nevertheless, students with visual impairments are expected to achieve a high level of academic proficiency in reading comprehension.

It falls upon the teacher of students with visual impairment to determine the most effective reading mode for each student. Comprehension, in essence, involves the capacity to grasp the meaning of spoken or written language. It constitutes an exercise designed to enhance and evaluate one's ability to understand a given language. In a comprehension test, students are presented with a passage or paragraph (these passages convey the essence or mood of a specific topic and often require solutions to questions posed about them).

Okewale and Osinowo (2017) asserted that comprehension is a multifaceted, creative process that relies on four fundamental language skills: phonology, syntax, semantics, and pragmatics. Moreover, reading comprehension involves the simultaneous extraction and construction of meaning through active engagement with written language, as noted by (Snow, 2002). Developing proficient comprehension skills is undeniably crucial for academic success, particularly at the secondary school level. In secondary education, there is a noticeable elevation in educational standards and expectations, consequently raising the bar for students' reading performance, as highlighted by (Edmonds et al., 2009).

Proficient reading skills are vital for academic success, personal growth, and active participation in daily life, encompassing all students, including those with visual impairments (such as blindness or low vision), as emphasized by (Kelly, 2011). To tackle the reading comprehension obstacles faced by secondary students with visual impairments, it becomes imperative to pinpoint learner-centered instructional approaches that cater to their unique academic requirements.

In the realm of teaching, numerous strategies exist to cater to students regardless of their circumstances. These strategies encompass classroom management, project-based learning, experiential learning, peer teaching, active learning, and reciprocal teaching, as documented by (Kampen, 2022).

However, certain students with visual impairments may struggle to keep up with the standard teaching pace. To foster increased engagement among students, it becomes essential for teachers to adapt their instructional approach towards a more learner-centered one. Within the context of this current study, two teaching strategies of particular interest are peer tutoring and auditory methods.

Peer tutoring is far from a novel concept, as pointed out by Topping in 2005. Its roots trace back to ancient Greece, where it served as an age-old practice. In its earliest form, peer tutoring saw the peer tutor assume the role of a surrogate teacher in a linear model of knowledge transmission from teacher to tutor to tutee, as described by (Razia, 2005). Peer tutoring represents an instructional approach where students are paired together to engage in learning or practicing an academic task. These student pairs can be of similar or varying abilities and age groups. Peer tutoring can be implemented in various forms or methods, including Cross-Age Tutoring, Peer-Assisted Learning Strategies (PALS), and Reciprocal Peer Tutoring (RPT).

The effectiveness of peer tutoring hinges on the dedication and commitment of both the tutee and tutor during the tutoring process. One notable outcome of the peer tutoring strategy is the strengthening of the bond and friendship between the tutor and tutee, fostering a sense of comfort and openness between them that may not always exist with a teacher. Peer tutoring has consistently demonstrated its capacity to facilitate successful learning among students. It provides students with the autonomy to learn from each other by harnessing their own unique skills and abilities.

In addressing the reading needs of students with visual impairments, Special Education Technology British Columbia (2008) outlines several strategies, including the paper strategy, e-text strategy, and auditory strategy. The auditory strategy revolves around a teaching method where students learn most effectively through listening. This encompasses using a live reader, providing auditory books on CD, or offering books in a digital audio format. Some students may prefer listening to lectures or receiving project instructions through this auditory approach.

Employing the auditory strategy in teaching comprehension yields several benefits, including keeping students focused on listening rather than relying on visual cues, enhancing their ability to articulate ideas effectively, and fostering strong communication skills, as noted by Special Education Technology British Columbia in 2008. For teachers of students with visual impairments, specific strategies involving auditory methods can be implemented, such as utilizing podcasts, engaging in discussions, and recording lectures. These approaches are tailored to meet the unique needs of these students in the realm of comprehension.

This study examines the effect of peer tutoring and auditory strategies on the reading comprehension of students with visual impairment in Ibadan, Nigeria. The primary objectives of this research are to: establish the correlation between peer tutoring and auditory strategies and the reading comprehension of students with visual impairment and evaluate the combined impact of peer tutoring and auditory strategies on the reading comprehension of students with visual impairment. The significance of the study is to come up with strategies, if necessary, to help visually impaired students in their struggle to acquire broader and deeper knowledge that could get them to contribute (more) to society.

LITERATURE REVIEW

Peer Tutoring

The term peer tutoring is used for various tutoring activities but mostly it is referred to the students who usually study or learn in pairs in order to help each other. Peer tutoring usually leads to better understanding of the academic concepts but it is more fruitful when the students having different ability levels work with each other (Kunsch, Jitendra, & Sood, 2007). According to Ellinogermanik (2009), peer tutoring is the process between two or more students

in a group where one of the students acts as a tutor for the other group mate(s). Paul (2006), defined peer tutoring as an instructional strategy that partners' students to help one another learn material, reinforce skills or practice a learned task. It is an effective teaching strategy that promotes collaboration, active engagement and critical thinking skills among students. It has been found to improve academic performance, social skills and self-confidence of the learner.

Washington State Institute (2014), also viewed peer tutoring as an instructional strategy that uses students to provide academic assistance to struggling peers. Peer tutoring may use students from the same classrooms or pair older students with younger struggling students. It is one of the important techniques which has been used by the teachers to raise the assurance and confidence level of their students. Through this method, the learners are divided in pairs in which one acts as a tutor and the other as tutee or learner (Rosewal *et al.,* 1995).

Auditory Strategy

Auditory strategy refers to the deliberate use of auditory stimuli such as spoken words, sounds, and music to improve comprehension of textual material. It is a method of teaching where students learn most effectively by listening. It includes using a live reader, providing auditory books on CD or providing books in the Digital audio format (Special Education Technology British Columbia, 2008).

Live reader: It involves a person such as a peer, parent or teaching assistant reading to a student. Students may use it because they have reading difficulties, cannot physically access print material or do not have the print material in the appropriate medium.

Auditory books on CD**:** A CD audio book is a recording of the contents of a book aloud by a human voice. An example of a student using it would be one who experiences visual fatigue and benefits from listening to it rather than reading the books.

Books in digital audio format: Books in digital audio format can either be recordings of human voices reading books or computer voices. Books in this format can be played on a computer or a digital audio player. An example of a student using it would be one who requires an alternative to print material in a portable form.

E-text with auditory support: Auditory support means that a computer voice will read the e-text to the student. This requires a special program with text to speech features.

Visual impairment

Vision is a sense that allows students to learn incidentally, synthesize information, and respond to immediate environment. Vision motivates movement by providing information and stimulation, integrates and organizes information in the brain, and encourages social interaction (Gentle, et al, 2016). Vision impairment (VI), according to Abang (2005) is any deviation from the normal, which results in defective function. She defined visual impairment as a term used by professionals in the field of special education to refer to persons with some amount of visual problems that deviated from normal.

Visual Impairment, however, cannot be remedied by refractive correction (spectacles or contact lenses), surgery or medicine (DeCarlo *et al*., 2006). Consequently, it results in functional limitations of the visual system that may be characterized by irreversible vision loss, restricted visual field, decreased contrast sensitivity, increased sensitivity to glare as well as decreased ability to perform activities of daily living, such as reading or writing (Kavitha *et al.*, 2015). This agrees with Davis (2003) who states that VI is a low incidence disability and, therefore, affects a relatively small proportion of the world's population. According to

Ndungu'u (2011), vision is fundamental to learning. Ndungu'u observed that when a child has Visual Impairment, the ability to receive information from the world around them would be limited, and this would negatively affect the child's ability to understand concepts, learn language, and move about freely with confidence.

Jatau, Uzo and Lere (2009) are of the view that there is no single definition of visual impairment and that experts in the field have maintained that there are three general approaches to defining VI, namely, medically (legally), occupationally, and educationally. Medically, is when people are said to be blind if they have central visual acuity of more than 20/200 or less in the better eye with maximum correcting glasses (a blind person has a defective field of vision). Occupationally, is when people's vision is so much impaired that they cannot perform the job duties requiring use of the eyes and, educationally, is people with a limited vision affecting their visual acuity, visual field, color or form discrimination to such an extent that they may require educational modifications and adaptations to benefit from learning activity involving use of sight.

Visual Impairment is actually an umbrella term used to describe various eye disorders, including common eye disorders such as blindness, refractive errors, cortical blindness, color blindness, and night blindness. The World Health Organization (WHO, 2012) described it as impairment in vision that, even with correction, adversely affects a child's education. This includes partial sightedness and blindness.

The concern over VI for education has also generate a fair amount literature. Referring to situation in Nigeria, Nkangwung (2011), suggests that those with VI should not be lumped together under the same legal category as those without VI in enjoying the same constitutional rights and privileges to education. Others also seem to argue for some special consideration for people with VI. Kirk (1962) defined the blind as a person whose vision is so defective that he cannot be educated through visual methods. According to him, this category includes person with light-dark and gross-form discrimination as well as those who are the totally blind. It is a significant loss of vision even though the person may wear corrective lenses. VI and blindness are bodily conditions that hinder a person's full and effective participation in society on an equal basis with others. Thus, they should fall under the broad definition of people with disabilities (UN General Assembly, 2007). Around 2.2 billion people in the world have this form of disability, making it the most prevalent functional disability.

Academic Performance

Academic performance of a student refers to the level of achievement that students demonstrate in their educational activities through grades, test scores, class attendance, homework completion, critical thinking, and problem-solving skills. It is a multifaceted concept that assesses a student's overall commitment to the learning process and ability to achieve educational goals. Talib (2012) agrees that Academic performance is the extent of achievement of the short or long-term educational goals and is measured either by continuous assessment or cumulative grade point average (CGPA). As postulated by Drever (2001), it can be regarded as the observable and measurable behavior of a student in a particular situation. For example, the academic performance of the student with visual impairment in reading comprehension includes the observable and measurable behavior of the student at any point in time during the course.

Austin (1974) argued that academic achievement can be divided into two aspects: cognitive vs non-cognitive outcomes, and psychological vs behavioral outcomes. Pascarella (1991) argued that in addition to cognitive ability, academic achievement also includes factors such as intelligence, psychological change, and perseverance. Bloom (1956) believes that it can be further divided into the following areas: knowledge, attitudes, values, skills or appropriate behavior.

The academic performance of students with visual impairment was observed to be fundamental because of their unique characteristics which distinguished them from other students in the classroom coupled with the English language which is one of the chore subject that must be offered and passed by all students irrespective of their challenges. Looking at varieties of teaching methods that can be used by teachers to drive home the wheel of ensuring that students performed well academically. Peer tutoring and auditory strategies stand out among various strategies because it takes care of other difficulties they are likely to face academically as well as allowing them to utilize their remaining senses to the fullest.

METHODS

This study adopted a Pretest-Posttest Control Group quasi experimental research design with 3×2×2 factorial matrixes. This was used to examine the effect of peer tutoring and auditory strategies on the reading comprehension of students with visual impairment in Ibadan, Nigeria.

The design is presented thus:

Experimental group 1	(E1):	0_1 X_1	O_4
Experimental group 2	(E2):	O_2 X_2	O_5
Control Group 3	(C):	O_3 -	0_6

While O_1, O_2 and O_3 represent pretest, observation of experimental group 1, 2 and the control group respectively. However, 0_4, O_5 and O_6 represent posttest observations for the experimental group 1, 2 and the control Group respectively.

X_1 represents the treatment programme 1 (Peer Tutoring Strategy).
X_2 represents the treatment programme 2 (Auditory Strategy).
C represents the Control Group.

A 3×2×2 factorial matrix was adopted with treatment strategies at two levels. This is represented in table 1 (see next page):

Table 1: 3x2x2 Factorial Matrix for the study.

Treatment	**Gender**	
	Male	Female
	Motivation	
	High	Low
Peer Tutoring Strategy		
Auditory Strategy		
Control Group		

Treatment packages on comprehension were developed to test the academic performance of the participants on English comprehension reading with the two teaching strategies (peer tutoring and auditory strategies) used in the study.

The statistics used for data analysis was Analysis of Covariance (ANCOVA) used to test the null hypotheses at 0.05 level of significance.

RESULTS

TESTING OF THE HYPOTHESES

(H01): There is no significant difference in comprehension reading performance between secondary school students with visual impairment who receive peer tutoring and those who do not, while controlling for their level of motivation and pretest score.

Table 1: Analysis of Covariance (ANCOVA) for Post-Test in Comprehension Reading by Treatment

Tests of Between-Subjects Effects

Dependent Variable: Comprehension Reading Performance

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	8.314[a]	3	2.771	.996	.431	.214
Intercept	3.395	1	3.395	1.220	.293	.100
pretest score	.073	1	.073	.026	.875	.002
Level of multivitamin	.015	1	.015	.005	.943	.000
Group	1.571	1	1.571	.564	.468	.049
Error	30.619	11	2.784			
Total	1183.000	15				
Corrected Total	38.933	14				

R Squared = .214 (Adjusted R Squared = -.001)

Table 2: Estimated Marginal Mean for Post-Test in Comprehension Reading by Treatment and Control Group

Groups Distribution

Dependent Variable: Comprehension Reading Performance

			95% Confidence Interval	
	Mean	Std. Error	Lower Bound	Upper Bound
Experimental group 1 (Peer tutoring group)	9.310	.880	7.373	11.248
Control group (Conventional teaching strategy)	7.868	1.229	5.162	10.574

As presented in table 1, the analysis of covariance (ANCOVA) was conducted to examine the effect of peer tutoring on comprehension reading performance in secondary school students with visual impairment, while controlling for their level of motivation and pretest scores. The independent variable was the type of teaching strategy the participants received (Conventional teaching strategy for control group, Peer tutoring for experimental group), and the dependent variable consisted of scores on comprehension reading achievement test administered after the treatment package was completed. Participants' pretest scores and level of motivation were used as the covariate in this analysis. Preliminary checks were conducted to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariate.

The results indicated that there was no significant difference in comprehension reading performance between the experimental group who received peer tutoring and the control group who did not, $F(1, 14) = 0.564$, $p = .468$, partial $\eta^2 = .049$.

In Table 2, the estimated marginal means revealed that the experimental group ($M = 9.31$, $SE = 0.88$) and the control group ($M = 7.87$, $SE = 1.23$) statistically exhibited similar levels of comprehension reading performance. The effect size, as measured by partial eta squared, was small (partial $\eta^2 = .049$), suggesting that the inclusion of motivation and pretest scores as covariates explained only a small proportion of the variance in comprehension reading performance.

These non-significant findings, along with the small effect size, indicate that the implementation of peer tutoring did not result in a significant improvement in comprehension reading performance among secondary school students with visual impairment, after controlling for their motivation and pretest scores therefore, we accept the null hypothesis.

(H02): There is no significant difference in comprehension reading performance between secondary school students with visual impairment who receive auditory strategies and those who do not, while controlling for their level of motivation and pretest score.

Table 3: Analysis of Covariance (ANCOVA) for Post-Test in Comprehension Reading by Treatment

Dependent Variable: Comprehension Reading Performance

What Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Total						
R Squared = .844 (Adjusted R Squared = .802)						
Corrected Model	122.335[a]	3	40.778	19.849	.000	.844
Intercept	9.472	1	9.472	4.611	.055	.295
pretest score	.065	1	.065	.032	.862	.003
Level of multivitamin	4.032	1	4.032	1.963	.189	.151
Group	14.603	1	14.603	7.108	.022	.393
Error	22.598	11	2.054			
Total	2049.000	15				
Corrected	144.933	14				

The analysis of covariance (ANCOVA) was conducted to examine the effect of auditory strategies on comprehension reading performance in secondary school students with visual impairment, while controlling for their level of motivation and pretest scores. The independent variable was the type of teaching strategy the participants received (Conventional teaching strategy for control group, Auditory strategy for experimental group), and the dependent variable consisted of scores on comprehension reading achievement test administered after the treatment package was completed. Participants' pretest scores and level of motivation were used as the covariate in this analysis.

Preliminary checks were conducted to ensure that there was no violation of the assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes, and reliable measurement of the covariate

As presented in table 3, the result of the analysis revealed a significant main effect of group on comprehension reading performance, $F(1, 14) = 7.11$, $p < .05$, partial $\eta^2 = .393$. The effect size, as measured by partial eta squared (partial $\eta^2 = .393$), indicated a moderate-sized effect, indicating that out of 80.2% total variation (Adjusted $R^2 = .802$ in comprehension reading performance accounted for by the model, approximately 39.3% of the variance in comprehension reading performance can be attributed to the group differences. Therefore, the null hypothesis was rejected.

Table 4: Estimated Marginal Mean for Post-Test in Comprehension Reading by Treatment and Control Group

Estimates

Dependent Variable: Comprehension Reading Performance

Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control group (Conventional Teaching Strategy)	7.130	1.595	3.618	10.641
Experimental group 2(Auditory Strategies)	14.025	1.099	11.606	16.443

Table 4 shows the magnitude of the significant main effect across treatment groups. The result revealed that the experimental group (M = 14.02, SE = 1.11) had significantly higher comprehension reading performance compared to the control group (M = 7.13, SE = 1.60), $p < .05$. These findings suggest that the implementation of auditory strategy resulted in a statistically significant improvement in comprehension reading performance among secondary school students with visual impairment, after controlling for their motivation and pretest scores.

Table 5: The Bonferroni Post-Hoc Tests

Pairwise Comparisons

Dependent Variable: Comprehension Reading Performance

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
Control group (Conventional Teaching Strategy)	Experimental group 2(Auditory Strategies)	-6.895*	2.586	.022	-12.587	-1.203
Experimental group 2(Auditory Strategies)	Control group (Conventional Teaching Strategy)	6.895*	2.586	.022	1.203	12.587

In Table 5, The Bonferroni post-hoc tests further confirmed the significant difference in comprehension reading performance between the experimental group and the control group ($p < .05$). The mean difference between the groups was 6.895, with a standard error of 2.59. This finding suggests that the use of auditory strategy led to a significant enhancement in comprehension reading performance compared to students who did not receive such strategies.

DISCUSSION

In this study, the impact of peer tutoring and auditory strategies on reading comprehension performance in secondary school students with visual impairment was investigated. This

investigation also took into account the students' motivation levels and pretest scores. The results of this research yield valuable insights into the efficacy of these teaching methods in enhancing reading abilities among students with visual impairment.

Hypothesis 1 posited that there would be no statistically significant disparity in comprehension reading performance among secondary school students with visual impairment, whether they received peer tutoring or not, with motivation levels and pretest scores taken into account. The analysis of the data resulted in non-significant findings, accompanied by a small effect size. These outcomes indicate that the introduction of peer tutoring did not lead to a statistically significant enhancement in comprehension reading performance among the participants.

These findings are consistent with prior research, which has produced mixed results concerning the efficacy of peer tutoring in improving reading skills. Notably, the study by (Mathes, et al, 2003) observed progress in both groups, including those engaged in peer tutoring and those receiving direct instruction, in the context of mathematics. Conversely, Abdullahi in (2016) rejected the null hypothesis, highlighting that the experimental group of peer tutoring outperformed the control group. It is plausible that various factors, such as the specific characteristics of the peer tutoring program, the duration and intensity of the intervention, or individual variations among the participants, may have influenced these outcomes.

Nevertheless, based on the present findings, the null hypothesis is accepted, indicating that there is no statistically significant discrepancy in comprehension reading performance between students who underwent peer tutoring and those who did not, after adjusting for their motivation and pretest scores.

Hypothesis 2 proposed that there would be no significant disparity in comprehension reading performance among secondary school students with visual impairment, whether they received auditory strategies or not, while taking into account their motivation levels and pretest scores. The results concerning the application of auditory strategies yielded more encouraging outcomes. The analysis demonstrated a statistically significant enhancement in comprehension reading performance among students who were exposed to auditory strategies, even after adjusting for their motivation levels and pretest scores.

These findings indicate that the integration of auditory strategies, such as the utilization of audio recordings, verbal prompts, or assistive technology, effectively improved the reading skills of the participants. This outcome aligns with previous research by Valez and Osorio (2011), underscoring the advantageous impact of auditory approaches in facilitating reading comprehension among individuals with visual impairment. By incorporating auditory cues and materials, educators can compensate for the absence of visual input, enabling students to more effectively engage with and comprehend textual content.

The noteworthy enhancement observed in the group utilizing auditory strategies highlights the potential benefits of implementing customized teaching methods tailored to the specific requirements of students with visual impairment. By harnessing auditory modalities, educators can provide alternative avenues for these students to access and understand written information. These results emphasize the significance of embracing a multi-sensory approach to instruction, acknowledging that students with visual impairment may derive advantages from alternative modes of information processing and representation.

Conclusion

This study examines the effect of peer tutoring and auditory strategies on the reading comprehension of students with visual impairment. These strategies enhance comprehension skills by facilitating interactive discussions, knowledge exchange, and providing alternative pathways for accessing information. These strategies do not only improve comprehension

reading performance but also promote self-confidence, communication skills and social interactions among students with visual impairment. Based on the findings of this study, some recommendations are made as follow:

The use of peer tutoring and auditory strategies for teaching should be incorporated into the curriculum of secondary school of the students with visual impairment. This would enhance social skill, promotes inclusive learning and improve academic performance.

Seminars, workshops should be organized to educate teachers of the students with visual impairment on the use of peer tutoring and auditory strategies in teaching.

Teachers should ensure that peer tutors receive appropriate training on working with their peers, including guidance on effective communication techniques and strategies for promoting comprehension.

The government or the school should provide access to high-quality audio resources such as audio books and recorded lectures.

REFERENCES

Abang, T. B., (2005). *The Exceptional Child Handbook of Special Education*. Nigeria: FabAnieh.

Abdullahi, "Effect of peer tutoring teaching strategy on secondary school students academic achievement in mathematics in tsaragi emirate of edu local government area of Kwara state," Kwara State University, Malete, Nigeria, 2016, M.Ed. thesis.

Austin, A.W., (1984). Student involvement: A developmental theory for higher education. *Journal of adolescence*, 70, 13-23. 25(4), 297-308.

Ayda, L. Valez., & Andrea,M. Osorio. (2011) The implementation of audiobooks for listening comprehension in 5th grade. 18-20.

Bloom, B.S. (1956) Taxonomy of Educational Objectives, Handbook The Cognitive Domain. David McKay, New York.

Davis, P. (2003). Including children with visual impairment in mainstream schools: A practical guide. London: Davis Fulton Publishers.

DeCarlo, D.K., Woo, S., & Woo, G.C., (2006) Patients with low vision. In: Benjamin WJ, editor. Borish's clinical refraction. 2nd ed. Philadelphia: Elsevier; 2006, p. 1591–1618.

Drever, S., (2001). A study on the quality of study skills of newly-admitted students of Fasa University of Medical Sciences. *Journal of Medical Education*. 4(3). Pp 24-36.

Edmonds, M. S., Vaughn, S., Wexler, J., Reutebuch, C., Cable, A., Tackett, K. K., & Schnakenberg, J. W. (2009). A synthesis of reading interventions and effects on reading comprehension outcomes for older struggling readers. Review of Educational Research, 79, 262–300.

Ellinogermanik, (2009). Peer Tutoring Training Module. Multigrade School Education.

Jatau, M.N., UZo, C.C, & Lere, M.M., (2009). Elements of Special education for prospective teachers [revised edition]. Jos: Deka Publications.

Kampen, M. (2022). 36 powerful teaching strategies to level up learning in 2022. Available from: "36 Powerful Teaching Strategies to Level Up Learning in 2022 | Prodigy Education" https://www.prodigygame.com/main-en/blog/teaching-strategies/

Kavitha, V., Manumali M.S., Praveen K, Heralgi M.M. (2015) Low vision aid-A ray of hope for irreversible visual loss in the pediatric age group. Taiwan J Ophthalmol. 2015;5(2):63–67. https://doi.org/10.1016/j.tjo.2015.02.002.

Kelly, M. (2011). The use of assistive technology by high school students with visual impairments: A second look at the current problem. Journal of Visual Impairment & Blindness, 105(4), 235–239.

Kirk, S.A., (1962). Educating Exceptional Children, Houghton Mifflin Company, Boston. Children with Learning Disabilities (Foreword), Houghton, Mifflin Company, Boston, 1976.

Kunsch, C., Jiten(dra, A., & Sood, S., (2007). The effects of peer-mediated instruction in mathematics for students with learning problems: A research synthesis. Learning Disabilities Research & Practice, 22(1), 1-12.

Mathes, P.G., Torgesen, J.K., Clancy-Menchetti, J., Santi, K., Nicolas, K., Robinson, C., & Grek, M. (2003). A comparison of teacher-directed versus peer-assisted instruction to struggling first-grade readers. The Elementary School Journal, 103(5), 459-479.

Ndungu'u, R.R., (2011). Literacy medium for learners with visual impairment. An M. Phil dissertation. Norway: University of Oslo; Department of Special Needs Education.

Nkangwung, F.O. (2011). Rehabilitating visual handicapped persons for competitive employment through vocation training.

Pascarella, E. T., & Terenzini, P. T. (1991). How College Affects Students: Findings and Insights from Twenty Years of Research. San Francisco, CA: Jossey-Bass.

Paul, G. Lisa, F., & Vanesa T., (2006). Effects of Peer Tutoring Attitude and Personality on Academic Performance of First Year Introductory Programming Students. 36th Frontiers in Education Conference.

Raheem, H. (2016) Effect of Home and Environment on Academic Performance of Learners with visual impairment. Available from: https://aceeduconsult.wordpress.com/2016/11/20/eefects-of-home-and-environment-on-academic-performance-of-learners-with-visual-impairment-researched-by-raheem-hameed-o/

Razia, R., (2012). The Effect of Peer tutoring on Student Achievement in the subject of English at Secondary Level in the light of Vygotsky's Theory. PhD thesis. University College of Liberal Arts and Sciences Islamabad- Pakistan 36.

Reading Strategies for Students with Visual Impairments: A Classroom Teacher's Guide published by SET-BC (Special Education Technology British Columbia), a provincial resource program of the BC Ministry of Education.

Rosewal, G.M., Mims, A.A., Evans, M.D., Smith, B., Young, M., Burch, M., Croce, R., Horvat, M.A., & Block, M., (1995). Effects of collaborative peer tutoring on urban seventh graders. *The Journal of Educational Research*, 88(5), 275-279.

Snow, C. E. (2002). Reading for understanding: Toward a research and development program in reading comprehension. Santa Monica, CA: RAND.

Special Education Technology British Columbia (2008). Available from: https://www.pathstoliteracy.org/resource/reading-strategies-students-visual-impairments-classroom-teachers-guide/

Topping. K. J. (2005). Trends in peer tutoring. Educational Psychology, 25(6), 631-645.

UN General Assembly, (2007). Convention on the Rights of Persons with Disabilities: Resolution Adopted by the General Assembly. A/RES/61/106.

Washington State Institute for Public Policy, (2014). Benefit-Cost Results Tutoring.

WHO, (1993). Programme for the Prevention of Blindness. Management of low vision in children: Report of a WHO consultation, Bangkok, 23–24 July 1992. Geneva: World Health Organization; p. 3.