Speech Production and Language Learning of Special and Normal Children in Two Nursery and Primary Schools in Osun State, Nigeria

Abosede Adebola Otemuyiwa, Joseph Ayo Babalola University, Nigeria

Abstract
Human development begins through the vast pool of transmitted experiences by care-givers and parents, hence, pass down sociocultural values to the younger generation. This study explores psychological and practical aspects of language learning by children with speech impairments and normal children in order to do a comparative analysis in Osun State, Southwest Nigeria. This study hypothesized that learners perform better when assisted by adults, teachers and more informed peers in the teaching and learning of language generally and specifically the English Language. Learner/teacher autonomy and motivation for language learning were considered since independence and interdependence cannot exist without each other. The sources of data for this study were voice and video recordings of speech impaired students and normal students from two Nursery and Primary schools in Osun State, Southwest Nigeria. Two schools (1 handicapped school and 1 normal children school) from the state and 10 participants from each school were randomly selected. Literary texts and pictorial books were used to examine the participants using both the qualitative and quantitative descriptive approaches. A Tape recorder was used to record the voices and some were recorded using video recorder. This study reveals significant roles played by social interaction (interdependence) and level of integration of emotions into the classroom on both sets of learners. The power of collaboration and comprehension ability level of the two sets of children were also revealed.

Keywords: Interdependence, Special Children, Interaction, Language learning, Performance

iafor

Introduction

Lev Vygotsky was a Seminal Russian Psychologist known for his sociocultural theory. It is one of the foundations of constructivism. Sociocultural theory emphasizes the central role of social relationships and culturally constructed artifacts in organizing thinking. Importance of Vygotsky Sociocultural theory to education is in its concept of a Zone of Proximal Development (a level of development attained when children engage in social behaviour). ZPD also relates to the differences between what a learner can do without help and what he/she can do with help. Teachers can use social interaction as a guide to child's development. 'Play' which also removes boredom in learning is found in the sociocultural theory. It builds relationships and relationships build language. (tykeTALK). Play develop vocabulary, listening skills and social skills. It originates as actual relationships between individual. (p. 57). Vygotsky believes that it was by using private speech that a child's biological instincts were made into culturally acceptable ways of acting. By aging, children private speech change and increase. But through relationships with older people that are capable, they get information and use it in their private speech. So, it is glaring that Vygotsky is of the opinion that children use the support given to them by others to assist their ways of thinking and acting.

Vygotsky's theory relates the roles of social interaction. According to a group of researchers headed by Neuroscientist Patricia Kuhl,(2012) 9 months old American infants that listened for less than five hours to Mandarin in Chinese spoken by native Mandarin speakers were able to distinguish phonetic elements of that language. In addition to this, another study was conducted using well recorded audio tapes and videos played for some other American infants. It was discovered that the infants could not distinguish phonetic units of the language. This was published in the Proceedings of National Academy of Sciences (PNAS) that the first demonstration of phonetic learning from natural exposure to language when it is produced by human enhances language learning through social interaction than exposure to tape recorders and videos. Kuhl, in another study says, "There is an extraordinarily high association between how clearly a mother speaks and how well her baby distinguishes speech sounds, and this is ability critical to language learning. Social interaction helps learners to organize their thoughts, reflect on their understanding and find gaps in their reasoning. (Okita, 2012).

The level of integration of emotions into the classroom reveals the product of learning. Learning by emotions provides the learners with the opportunity to explore strategies for coping with challenging complex social emotional situations by experiencing the associated emotional dynamics. It is facilitated by use of role play and synthetic characters. It should be noted that apart from the fact that the social and emotional learning have considerable importance for non-academic outcomes such as safety, coexistence, mutual understanding, it also plays a vital role in improving academic performance because it leads to cognitive development. (Hall & Hall, 2012) On social influence and the emergence of cultural norms, Mas et al (2012) are of the opinion that interaction partners grow more similar in opinions, values and behaviours. This might be as a result of some factors such as imitation, direct persuasion by each other, arguments, exposure to common external influences such as social groups with compulsory norms to be adhered to.

Holec (1981) defines learner's autonomy as the ability to take charge of one's own learning. Benson (1997) describes learner's autonomy in three versions. They are technical version, psychological version and political version. He further explains that technical version of autonomy allows successful acquisition and implementation of a set of skills and techniques outside the classroom context, the psychological version is the capacity consisting of both attitudes and abilities and the political version places emphasis on control over learning process and content. Smith (20003), recorded two methodologies as 'weak' and 'strong' for learners' autonomy to be achieved as given by Lizzie Pinard in work titled "30 things to enhance your teaching-learner autonomy and metacognition" in *International House Journal of Education and Development.* Pinard was of the opinion that the 'weak' transmission of behaviours and strategies with the language learner while the 'strong' is described as becoming appropriate methodology and this focuses on teachers and learners working together to identify and develop learners individual and collective capacities for independent learning.

In addition to the scholars mentioned above, other scholars such as Penila (2010), Appel and Lantolf (1994), Yazdanpanah & Khanmohammad (2014) have at one time or the other researched into social interaction, children relationships with adults, cognitive development, collaboration, effects of culture on language learning, internalization of speech, effects of caregivers on language learning just to mention but a few. All the scholars have dealt with language learning using various educational theories.

Related Theories

Social learning theory posists that people learn from one another via observation, imitation and modeling. It encompasses attention, memory and motivation. Social constructivism was created as a response to behaviourism (an educational approach based on what can be directly seen. It focuses on stimulus and response. Constructivsm relates to behaviourism in that a child learns better when with the teacher or with better peers or with adults which summarizes to a kind of conditioning also, behaviourist believed that behavior can be explained by conditioning: operant (gives an individual change in his or her behavior due to consequences attached to the particular behaviour) and classical conditioning. They do not believe in inherited behaviours. They believe that babies are born with a blank slate or empty mind. Some of the behaviourists are B.F Skinner, Ivan Pavlov, Edwine Thorndike to mention but a few. Today, behaviorism ideas are used in cognitive-behaviourial therapy which helps people deal with anxieties, phobias and various types of addiction.

Statement of the Problem

Sociocultural theorists of language learning operate from the assumption that there is an intimate relationship between culture and mind and that all learning is first social then individual (Schmitt 2002, p. 122). Culture socially acquired knowledge. This is passed down to individual through our first language at childhood. It is acquired without conscious awareness. These theorists emphasize the interpretation of the social, cultural and biological elements. Researchers like Lantolf (2000), Swain (2000) and Ohta (2000) have worked on second language acquisition using Vygotsky 1987 for their analysis in other to negotiate meaning during interaction. This study is out to answer the following questions: i. what are the psychological and practical

factors of language learning by children with speech impairments and the normal children, ii. how are learners'/teachers autonomy and motivation for learning enhanced by independence and interdependence, iii. What are the roles played by social interactions among the pupils in the selected schools, iv. What is the level of integration of emotions into the classroom; v. how does the power of collaboration reveal the comprehension ability of the two sets of learners; vi. What is the relationship between culture and mind?

Methodology

This section gave details on how the data was collected and how the analysis was carried out.

Sample Size
Two infant classes from two of the Nursery and Primary schools participated in the study. 10 pupils in Nursery 2 were examined in the normal school while 10 pupils were also examined in the special school. The name of the special school is St. Mary Rehabilitation Centre, Ipetumodu, On State and the normal school is Joseph Ayo Babalola University Staff School, Ikeji-Arakeji, Osun State. To control for teacher effects, the researcher chose two teachers, one teacher to five pupils in each of the schools.

Method of Data Collection
The data for the study were collected from a prescribed book for Nursery two titled *I can Read 2,* Third Edition, (2013) by M.O Eluwa, M.J. Chimah, R.O Chijioke. The book was published by Lean Africa. Pages 1- 6 of the book were photocopied for each of the participants.

Research Instrument
The research instruments were a tape recorder and a video recorder to record the performance of the participants. Questionnaires were administered to the teachers to respond to.

Reliability and Validity of Research Instrument
The research instruments are reliable and valid because it allows the researcher to listen to and watch many times to be able to grasp correct information during the analysis.

Method of Data Analysis
Three tests were conducted on the participants. The first data tested the participants reading ability with (assisted) and without (unassisted) teachers, and their writing ability. The second data tested the participants' ability to match pictures with letters while the third data tested their painting/colouring ability. After the conduction of the tests, the researcher collected the papers from the participants for scoring. The papers were gone through and scored accordingly. The scores were then put on a table in order to really catch the glimpse of the analysis correctly. The tables were then represented on figures in order to get a clearer view of the analysis for discussion.

Data Analysis and Discussion
Table 1: Bio-data of the participants

	SCHOOL A (SPECIAL SCHOOL)										SCHOOL B (NORMAL SCHOOL)									
PUPIL	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
SEX	F	F	F	F	F	M	M	M	F	M	M	M	M	F	M	F	F	F	M	F
AGE	17	14	16	15	20	11	13	11	19	12	4	4	4	4	4	5	4	5	5	4

In the special school, six females and four males randomly selected. Their age range was between 11 and 20 while in the Normal school, four females and six males were randomly selected and their age range was between 4 and 5. It was discovered here that there was a wide difference between the age range of the special children and that of the normal children. The lowest age of the normal children was 4 years, while the lowest in the special school was 11 years. On the other hand, the highest age of the normal children was 5 years, while it was 20 years in the special school. The cause for this is obviously because of the psychological problems that the pupils in school A have. These have led to their lateness in enrolment in school, mental retardation and poor performance by some of them in the tests administered on them.

Questionnaires were giving to the teachers in both schools to elicit some information on socialcultural effects on their students

Below are the results:
Table 2: The Results of Teacher's Responses to the Questionnaires in the two schools

QUESTIONS	SCHOOL A (SPECIAL SCHOOL)		SCHOOL B (NORMAL SCHOOL)	
S/N	YES	NO	YES	NO
1. Does social interaction plays significant role in speech impaired and normal children?	9	1	9	1
2. Do their relationships with adults, teachers, and peers add to their knowledge?	9	1	10	0
3. Do these relationships with above mentioned groups allow cognitive development of normal children speech production and speech impaired children.	8	2	10	0
4. Does collaboration has any power in facilitating meaning constructions in both sets of students generally.	7	3	9	1
5. Does problem shared with teachers and adults waste time?	2	8	0	10
6. Can culture be displayed through speech and	8	2	9	1

writing to mediate the social environments?				
7. Does internalization of speech and writing increase the level of thinking in both sets of children?	8	2	6	3
8. Does internalization of speech help students to play active role in learning?	8	2	8	1
9. Is it true that the caregivers and parents start human developments and transmitted experiences of individuals?	7	3	9	1
10 Can sociocultural theory improve linguistic comprehension?	8	2	8	2
11. Can this theory reveal the level of comprehension of ability of the two sets of children?	9	1	9	1
TOTAL	83	26	87	21

Looking through these responses from the teachers of the pupils from the two selected schools, it was discovered that it corroborates most of the findings of past researchers on the subject matters discussed in the questionnaire. In school A (special school), 83% of the teachers' responses are positive while in School B (normal school), 87% of the teachers' responses are positive and in line with other scholars' findings.

Table 3: Test Scores

| PUPILS	TEST 1 SCORES		TEST 2 SCORES		TEST 3 SCORES	
	SCHOOL A	SCHOOL B	SCHOOL A	SCHOOL B	SCHOOL A	SCHOOL B
	ASSISTED BY TEACHERS					
1	08	08	12	12	05	05
2	07	07	12	12	06	06
3	05	10	12	12	07	08
4	05	07	12	09	06	07
5	07	08	12	11	08	08
	UNASSISTED BY TEACHERS					
1	07	04	02	10	05	05
2	05	07	05	05	05	06
3	05	05	11	09	07	08
4	06	05	02	10	08	05
5	08	04	12	10	08	05
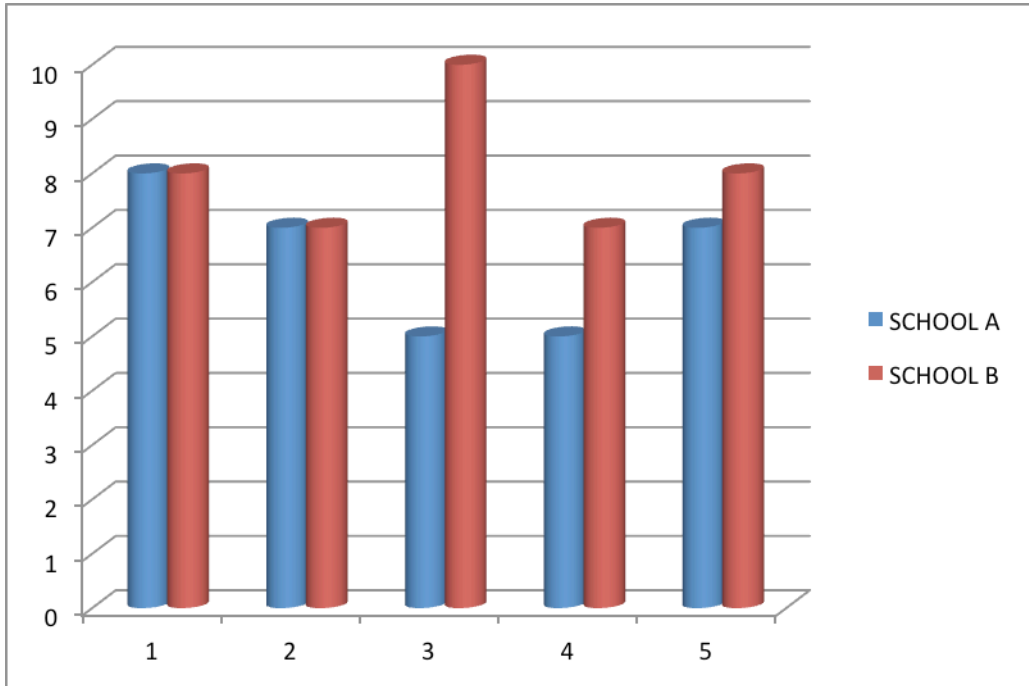
FIGURE 1: TEST 1 SCORES (ASSSISTED BY TEACHERS)

The first test conducted on the pupils was to test their reading and writing ability. They were given the English alphabets from A- Z to be read, after which they were to identify the capital and the small letters of the alphabets and later write them in the spaces provided in the book/paper. The results revealed that the first and the second pupils had rhyming scores in the two schools while the remaining three pupils in school B (normal) performed better than their counterparts in school A (special). Though both sets of pupils were assisted by adults and their teachers, but the result revealed that the psychological state of the health of the pupils in the special school affected their performance.
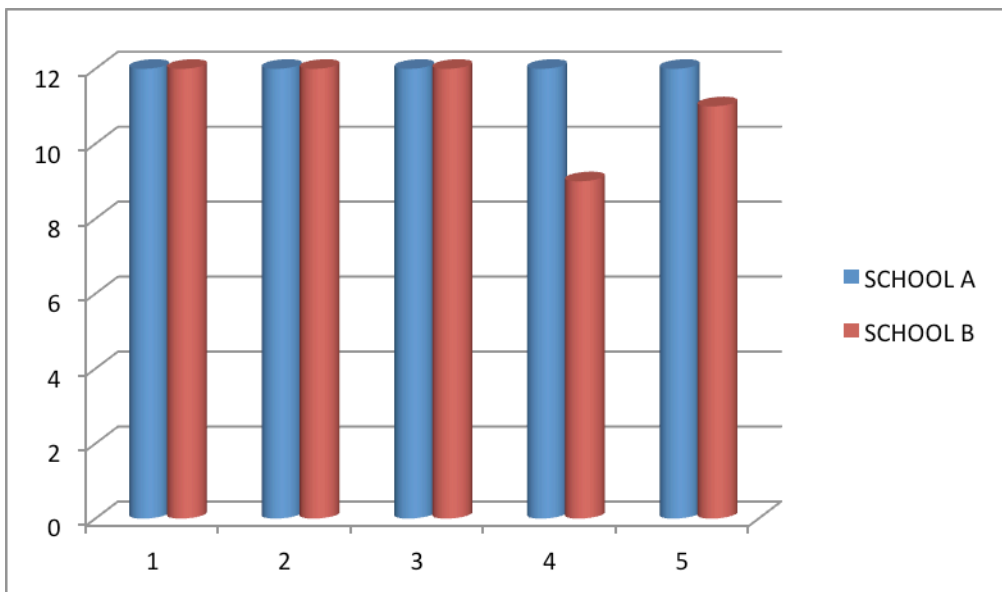
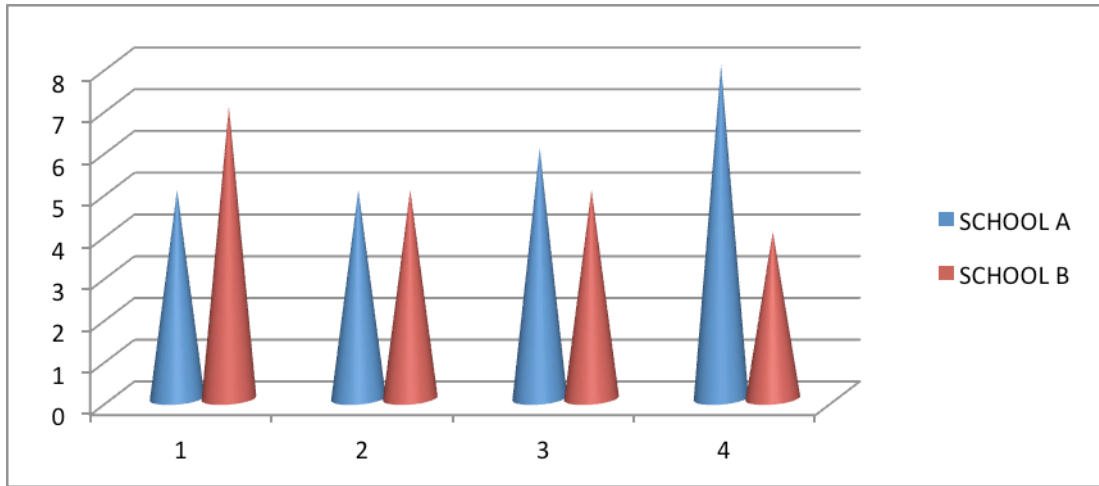**FIGURE 2: TEST 2 SCORES (ASSISTED BY TEACHERS)**

The second test conducted was to test their ability to match items with their initial letters in the spellings of the pictures/items. Here, the results were almost the same. They are represented on FIG 2. They were very brilliant results for the pupils in the two schools. This might not only be because of the fact that they were assisted but for the fact that it looks like play. According to Vygotsky, the Zone of Proximal Development (ZPD), the results revealed that the potential for cognitive development of the pupils is high in both schools. It also revealed a level of development attained in the pupils' engagement in social behaviour.
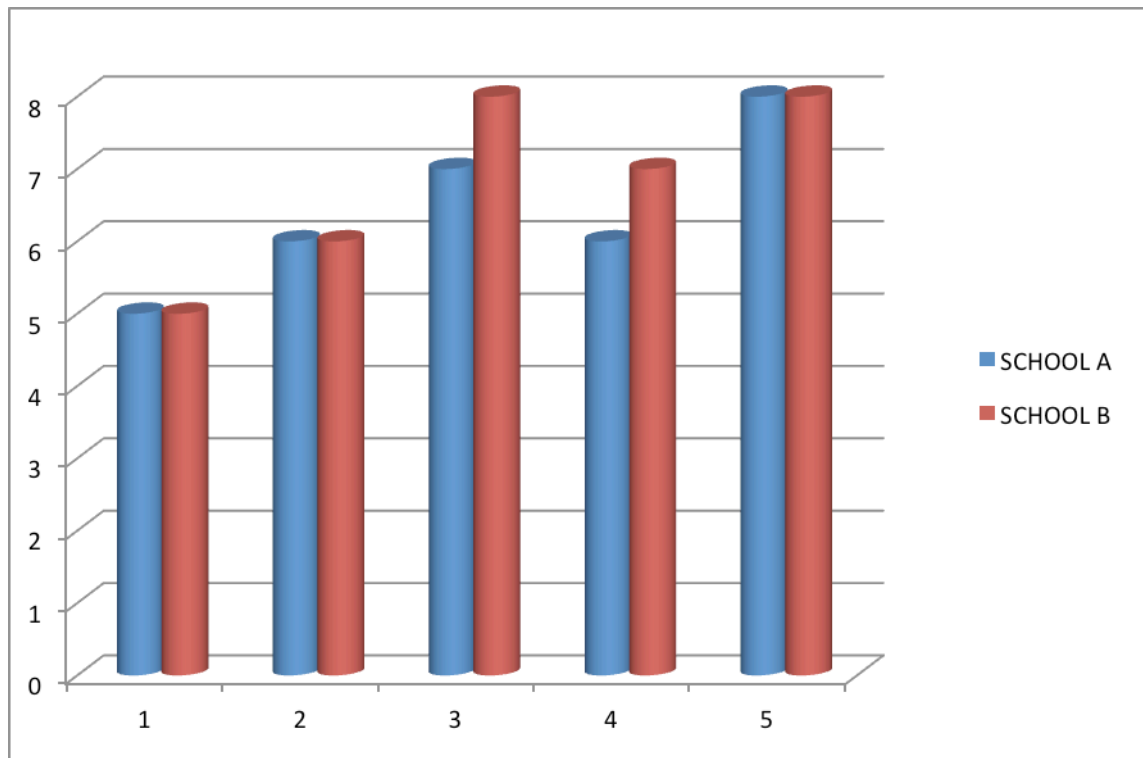
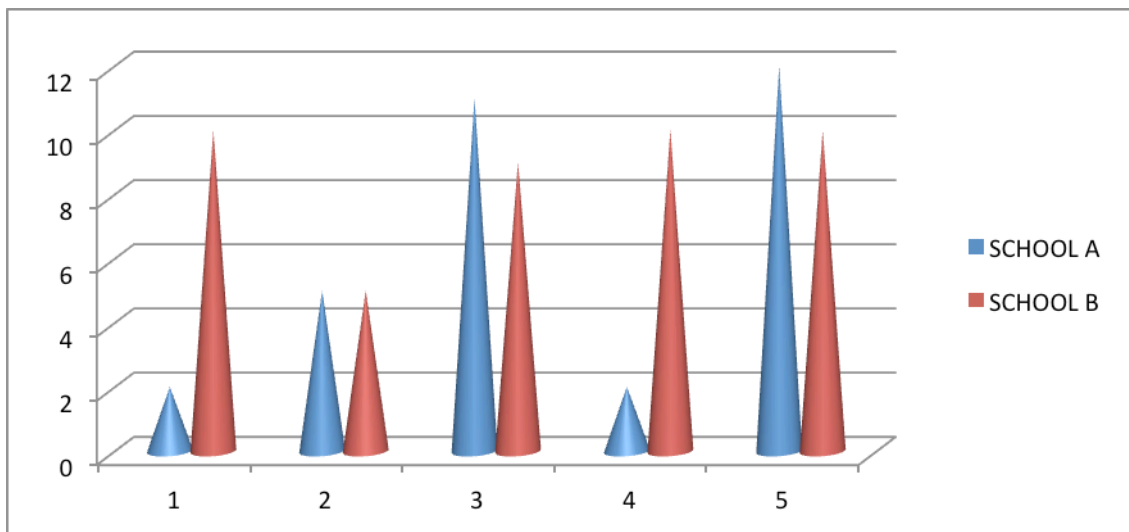**FIGURE 3: TEST 3 SCORES (ASSISTED BY TEACHERS)**

The third test conducted was to test the pupils' ability to do a very good art work by painting some pictures in the set book. In fact, the results are almost the same. The differences in the performance are very keen. Three of the pupils in each of the schools have the same score while the remaining two from each of the school have just one mark as difference. The results revealed that language learning operates from the assumption that there is an intimate relationship between culture and mind and that all learning is first social and then individual (Schmitt 2002, p. 122). Sociocultural theorists emphasize the integration of the social, cultural and biological elements.
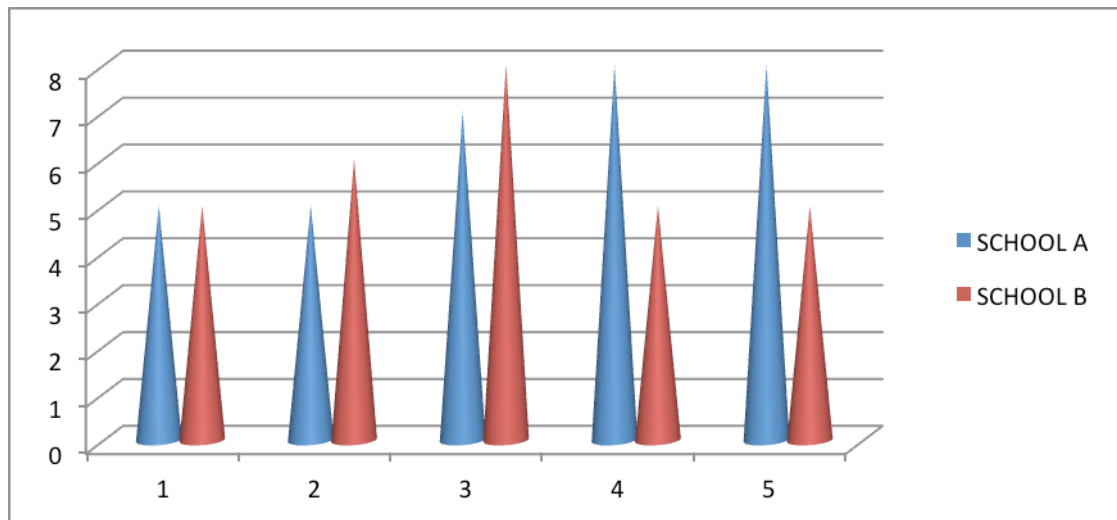
FIGURE 4: TEST 1 SCORES (UNASSISTED BY TEACHERS)

Just like the three tests were conducted on five pupils from each of the schools assisted, the same tests were conducted on another five pupils from each of the schools unassisted. The first test results are represented on FIG 4. The differences in the scores range from 1-4 for these unassisted pupils. The results revealed that the pupils need relationship with adults and teachers so as to get information and then use it in their private speech development. This also revealed the opinion of Vygotsky that children use the support given to them by others to assist their ways of thinking and acting.

FIGURE 5: TEST 2 SCORES (UNASSISTED BY TEACHERS)

This is the second test for the unassisted pupils. The difference between the pupils from the two schools ranges from 2-8 scores. The results are represented on FIG 5. These results revealed that some level of integration of emotions is low in the classroom and in order to increase the product of learning by acquaintance, by doing, by thinking and by erasing the unnecessary things/ideas, emotions needed to be integrated. Play is another method that Vygotsky suggested to achieve some of level of integration. This enables the pupils to learn new skills through language. This method is mostly used by adults to pass down culture to the younger ones. The pupils in this category need the play way method for their performance to improve.

FIGURE 6: TEST 3 SCORES (UNASSISTED BY TEACHERS)

This test is the third one that was conducted on the pupils unassisted. The results revealed a range of 1-3 scores among the pupils between the two schools. The results are represented on FIG 6. This might be as a result of the test checking the skill of art in the individual pupils. The scores were average. Not too high and neither low. Though not assisted but because it is a play way method, the pupils enjoyed doing it. The paintings though not fine but the pupils were filled with enthusiasm in the art of painting. This fact can be supported by Mas & Kitts (2010) who were of the opinion that interaction partners grow more similar in opinions, values and behaviours because the pupils were exposed to common external influences; in this instance: painting of pictures of objects.

Conclusions

Looking through the results of this research, it is discovered that psychological factors like anxiety and emotions affected the performance of the students. In the special school, the moment the pupils saw a new face, they were anxious. This might be because of their state of health (speech impairment). This was revealed in their reading and even written tests. Though, the collection of the data was successful with the aid of their teachers. On the other hand, the pupils in the normal school were psychologically stable and even happy to undergo the exercises. Practically, 50% of the participants in special school were slow in writing and because of their speech impairments, produce the alphabets with difficulties while in the normal school, the participants did very well in both reading and writing of the alphabets even the unassisted participants performed well.

Concerning learners' autonomy, in the second and third tests, it is highly revealed in the two sets of participants that the learners were able to take charge of their learning. The technical version of autonomy according to Benson (1997) was displayed by the participants in both schools because it revealed successful acquisition and implementation of new skills and techniques especially in test two. Motivation was also enhanced by giving all that they needed to do their works. Pencils and crayons were supplied sufficiently. They were also allowed to move round in the class as they do their works. Autonomy and motivation were achieved through independence of the learners and interdependence of the learners on their teachers who were adults.

Social interactions played vital roles among the participants in the selected schools. The participants were allowed to move around in the class to relate with their counterparts and their teachers in both schools. Constructivism and behaviourism are learning theories that also supports that a child learns better while with their teachers or with their better peers or with adults just like Vygotsky sociocultural theory which this study used. New skills are passed down to the younger ones in form of culture. As per the level of integration of emotions into the classrooms, the study revealed that it is not high enough, yet the participants showed a little bit of enthusiasm and that affected their performance in the third test that involves painting in the two schools. The power of collaboration revealed the comprehension ability of the two sets of participants in the two schools especially with the assisted sets. This is supported by raising children.net.au who wrote that: through relationships, children learn how to think, understand, communicate, behave, show emotions and develop social skills. This study also revealed the relationship between culture and mind. It further revealed that language and culture developed and influence each other and that the seat of language is the mind of individuals. In other words, language is processed by the mind before it comes out as speech. Alfred L. Krober (1952), an American Anthropologist also stated "that culture started when speech was available and from the beginning, the enrichment of other either one led the other to develop further". This study recommends that the government should organize seminars and workshops for teachers in the pre-primary and primary school. ii. special education teachers should attend seminars and workshops on language learning and teaching and iii, parents should spend quality time with their children. Parents are advised to set up activities for their children.

References

Benson, P. & Voller, P. (1997). Autonomy and Independence in Language Learning, Oxford University Press.

Eluwa, M.O; Chimah, M.J & Chijioke R.O (2013). *I can Read 2,* Third Edition, Publisher: Lean Africa.

Hall, L. & Hall, M. (2012). Learning by feeling In Seel N.M. (eds.) Encyclopedia of the Sciences of Learning-Springer. Boston, MA

Holec, H. (1981). Autonomy and Foreign Language Learning. Oxford, New York Pergamon Press. (First Published 1979)

Lantolf, J.P (1994). Sociocultural Theory and Second Language Learning: Introduction to the   Special Issue. *The Modern Language Journal* / Volume 78, Issue 4. Wiley Online Library.

Lantolf, J. P (2000). Sociocultural theory and Second Language learning. Oxford: Oxford University Press.

Mas, M. & Kitts, J. A (2012). Social Influence and the Emergence of Cultural Norms In Seel N.M. (eds.) Encyclopedia of the Sciences of Learning-Springer. Boston, MA

Penilla, F. (2010). Learning Foreign Language with a collaborative Web-Based task, processes and performances. Doctorates and Masters Theses, Edith Cowan University.

Spada, N. & Lightbown P.M (1999). Second Learning Acquisition in Norbert Schmitt (2002) (ed) *An Introduction to Applied Linguistics*. Hodder Education Euston Road, London NWI3BH Pp. 121-122

Swain, M. (2000). The output hypothesis and beyond: mediating acquisition through collaborative dialogue. In Lantolf, J. P (2000). Sociocultural theory and Second Language learning. Oxford: Oxford University Press; 97-114.

Ohta, A. (2000). Returning Recasts: a learner-centered examination of corrective feed-back in the Japanese Classroom. In Hall, J.K, Verplaeste, L. (eds.) The contribution of second and foreign language learning through classroom interaction Mahwah NJ. Enibawn; 47-71.

Okita, S. Y (2012). Social Interactions and Learning. In Seel N.M. (eds.) Encyclopedia of the Sciences of Learning-Springer

Yazdanpanah, M. & Khanmohammad, H. (2014). Sociocultural Theory and Listening Comprehension: Does the Scaffolding of EFL Learners improve their Listening Comprehension? Theory and Practice

Internet Sources

https://www.instructionaldesign.org/theories/social-development Retrieved on 4/3/2019

https//www.learning.theories.com>social-development Retrieved on 5/3/2019

https://www.iearning.theories.com/vygotsky.social-learning-thoery.html. Retrieved on 5/3/2019

https://ro.ecu.edu.au

https://doi.org/10.1111/j.1540-4781.1994.tb02058.x

Contact email: aaotemuyiwa@jabu.edu.ng