



## EFFECTS OF LEARNERS' GENERATED QUESTIONS ON READING COMPREHENSION ACHIEVEMENT OF MALE AND FEMALE PUPILS IN URBAN PRIMARY SCHOOLS IN ANAMBRA STATE

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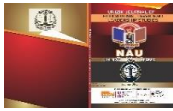
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### ABSTRACT

*The purpose of this study was to determine the effect of learners- generated questions on male and female pupils' reading comprehension achievement in urban primary schools in Anambra state. One research question and one hypothesis guided the study. The design used in the study was quasi-experimental design involves non-randomized control group pre-test, post-test, non-equivalent control group with an experimental group receiving treatment. The study was conducted in primary schools in Anambra State. The population of the study comprised all the 37,190 primary five pupils (19202 males and 17988 females) in the 1068 public primary schools in Anambra state for 2020/2021 academic session. The sample size for the study consisted of 200 (88 males and 112 females) of primary five pupils drawn from four intact classes. 101 pupils for experimental group (42 male and 59 females) and 99 pupils for control group (46 male and 53 females). Purposive sampling technique was used to draw 40 public primary schools while simple Random sampling was used to draw four intact from the forty public primary schools in the area of the study; two schools each from Awka south L.G.A and two from Anaocha L.G.A. The researcher used Reading Comprehension Achievement Test (RCAT) instrument for collection of data in this study. Three experts validated the instrument, the RCAT, lesson plan with the title of the study, purpose, scope, research questions and hypotheses before distribution. Two from Early Childhood and Primary Education, and one from Measurement and Evaluation, all in Faculty of Education, Nnamdi Azikiwe University Awka. The validators examined the items, language and ascertained the extent to which the languages were clear and items suitable for responses. In establishing the reliability of the instrument, the researcher conducted a pilot study with 25 primary school pupils in Enugu State. The obtained scores were used to estimate the reliability co-efficient of the instrument using Kuder Richardson (k-R-20) and will be yielding a reliability index of 0.91". The experiment lasted for 6 weeks. The extraneous variables which could have affected the result of the study were effectively controlled. The data were analyzed using mean and standard deviation as well as ANCOVA. The Mean and Standard Deviation were used to answer the research question while Analysis of Covariance (ANCOVA) was used to test the null hypotheses at (0.05) level of significance. The extraneous variables were controlled by the ANCOVA from the dependent variables. The study revealed that male primary school pupils improved in their achievement score when learners' generated question was used than their female counterparts. Part of the recommendations was that learner generated questions should be used in teaching other subject especially science subjects in various school locations*

**keywords:** Learners' Generated Questions; Reading Comprehension; Achievement; Male Pupils; Female Pupils; Urban Primary Schools.



## **Introduction**

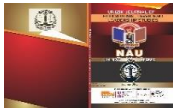
Early years of a child's education is the foundation of education, where children are prepared for post primary education. According to the National Association for Education of Young Children (NAEYC, 2010) learning experiences acquired during early years leave long lasting impression in the life of a child. This early year of learning begins formally in primary schools where the pupils receive primary education.

Primary school education is education given to children between 6-11 years and above (FRN, 2013). Primary school education as the foundation laying level of education in nations of the world improves the mini structural framework on which the quality of other levels of education is anchored, Ogunode et al (2021). Children go to primary school to learn how to read and write; which is the formal environment where education takes place. Anisiobi, wadi and Ushang (2023) opine that basic education is the foundational level where pupils acquire basic numeric and literacy skills. The objectives of primary education as specified in Nigeria National Policy on Education (NPE,2013) are: to inculcate permanent literacy and numeracy, and ability to communicate effectively; to lay a sound basis for scientific and reflective thinking; to give citizenship education as a basis for effective participation in and contribution to the life of the society; to mould the character and develop sound attitude and morals in the child; to develop in the child the ability to adapt to the child's changing environment; to give the child opportunities for developing manipulative skills that will enable the child function effectively in the society within the limits of the child's capacity and to provide the child with basic tools for further educational advancement, including preparation for trades and crafts of the locality. A child exposed to primary education stand a chance to gain literacy which is more of reading and writing.

Elleman and Oslund (2019) state that reading comprehension is one of the most difficult cognitive activities to teach, measure, and research. Jannah and Syahropi (2022) highlight that pupils' lack of ability to comprehend the material makes it difficult for them to understand the text's meaning and context. Various elements impact pupils' reading comprehension abilities, including vocabulary, reading strategies, interests, and genre, as noted by Banditvilai, (2020). A reader becomes an active participant in creating an interaction with the writer of the text by predicting, analyzing, summarizing, and using other reading strategies (Ali & Razali 2019). Francois (2016) thus states that by doing so, internal comprehension processes are made explicit and students gain metacognitive knowledge of how and how to implement particular strategies to aid in their understanding of texts". In reading comprehension, readers use different strategies. The difference in strategy is due to differences in attitudes and cognitive styles that the reader has in responding to the information in the reading text. In primary schools in Nigeria and Anambra State in particular, teachers use different teaching method to help pupils learn.

Teaching method refers to the style of instructional delivery adopted by a teacher for teaching. Shofoyeke (2014) opined that teaching methods can be defined as practical application of teaching principles based on the nature of the subject and their learning needs. However, most primary school teachers in Anambra state seem to use conventional teaching method for teaching. Most of the methods are conventional in nature.

Conventional teaching method is a method that is practically used by most teachers in Nigeria to impart knowledge to learners. It is basically a teacher-centered teaching method that pays little or no attention to the learners because teachers' intention is to cover the scheme of work, whether the learners understand the subject or not. Menakaya et al (2022) noted that apart from



being teacher centered, the conventional teaching method appears not to activate student's prior reading knowledge of reading. This type of teaching strategy requires little or no critical thinking. It makes provision for limited information, because as long as there are no adequate interactions between teacher and learners, knowledge or experiences are not appropriately shared within them. Conventional teaching method is an instructive process because the teacher gives all the information, required. For Ruiz, Mintzer, and Leipzig in Igbo, Apeh and Ojonugwa (2020), in conventional method, the learners are extrinsically motivated by the desires to get good grades, please the teacher and to acquire rewards. It is basically pencil, paper, board, chalk and textbooks representation. This is supported by Achuonye (2015), who observed that conventional method is very prevalent in primary schools in Nigeria. The reason for utilizing conventional teaching methods includes: it saves time, permits flexibility, adaptability and versatility. Despite the reasons for utilizing the method, it has some disadvantages.

In conventional method, learners are more passive than been active, the cooperation and interactions between the teachers and the pupils are minimal. Yap (2016), stressed that in conventional teaching method, instructor initiate discussions in the classroom and focus exclusively on knowing the content in textbooks and notes. The author added that this method of teaching limit the room for more creative thinking and also rarely consider individual difference. Similar to this Feider and Silverman cited in Farha (2016) argued that conventional teaching method makes pupils uninterested in class, discouraged, bored and do poorly in test. These short comings of the conventional method have led to some innovative teaching strategies such as learners generated question strategy.

The learner- generated questions serve useful functions for learners and are also useful to teachers for prompt reflective thought and pupil's engagement. Learners generated question is a process in which learner ask questions and attempting to expand existing knowledge of the topic. It has been pointed out that the strategic asking and answering questions while reading helps pupils with difficulties engaged with text in ways that good readers do naturally, thus improving their active processing of text and their comprehension. Similarly, Taboada and Guthrie, (2004) define learners-generated question as information within a topic or domain and relies on assessing what is known and what is unknown about a topic and opine that learner-generated questions is one of the essential skills encapsulated by the interactive approach instruction; which entails posing an array of questions about the subject of a text to be read, and seeking answers to such questions from the reading process.

Dubin (2016) stated that consistent application of learner-generated questions adds value by making lessons more active, participatory and engaging. In this study therefor learners generated questions are questions learners generate to assist them get more understanding and insight of what they read.

Shakurnia, Aslam and Bijanzadeh (2018) carried a study on effect of question generation activity on students' learning and perception. The study adopted quasi-experimental design with experimental group and control groups. Pre-test and post-tests were used for data collection. Two classes of midwifery students (N=62) participated and were randomly assigned to two different groups. One class was selected as the experimental group (n=32) and the other class was considered as the control group (n=30). The experimental group's students were asked to write questions covering different topics of the syllabus components taught during 15 weeks from February 2016 to May 2016. They were asked to write, answer and explain their multiple-choice



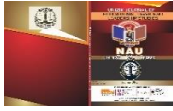
questions (MCQs). The students' performance in immunology course was compared between the two groups at the end of the semester. After their final exam, we asked them to fill in a questionnaire on their views about this activity. The data were analyzed by independent t- test using SPSS software, version 18. Results showed that question writing by students has been found to promote learning when it is implemented as a part of the teaching curriculum in immunology course; therefore, this activity could be effective in improving the students' learning. The reviewed study is related to the current study in the sense that the two studies investigate effect of question generation and adopts quasi –experimental design. Dissimilarity between the two studies is that the reviewed adopts independent t- test using SPSS software, version 18 for data analysis and the study was conducted in Jundishapur, Ahvaz, Iran; while the current study adopt mean and standard deviation to answer research questions and ANCOVA for data analysis. Also, the study was conducted in Awka South LGA and Anaocha LGA, Anambra State. The essence of this innovative teaching method is to improve pupils' achievement in school.

Achievement refers to the accomplishment, attainment or expertise gained following a period of study, training or practice. Tuckman, in Eneh (2015) said that achievement is the realization of one's potential in an activity or task. Achievement is the degree of success or accomplishment in a given area of endeavour and a score on an achievement test. According to Dorgu and Igbojinwaekwu (2016) achievement in academics is the score or grade pupils obtain after a period of academic exercise and assessment. Similarly, Eneh (2015) refers to achievement as success in activities after personal effort has been invested on a goal-oriented exercise. The word achievement is mostly used to measure success in different endeavors such as business, arts, education etc. Bossaert, Doumen, Buyse and Verschueren (2011) defines achievement as success in meeting short- or long-term goals after a programme or activity. This means that academic achievement is built on a child's consistency towards learning. Okpala and Okigbo (2021) define academic achievement as total of a learner's performance in a given standard test over specified time period of time. In the context of this study, achievement means success in any discipline or given academic area. Pupils' achievement in school could be affected by gender and location.

Gender is a socially constructed role, behaviors, activities, and attributes that a given society considers appropriate for men and women. Myers (2012) defines gender as the characteristics, whether biological or social; influenced by which people define male and female. Menakaya et al (2022) define gender as a social attribute designated to an individual as male or female. The term gender in this study simply refers to male and female. The researcher also observed that gender plays significant roles in aspects of reading comprehension to comprehend. Identifying gender as a factor in reading comprehension, Pradani (2021) established that, female folks are much good in reading than the male folks. Odual (2013) argues that while the male pupils are displaying superiority in arithmetic, the female has mathematics phobia but are naturally good in language. Odunuga (2017) presses that it might be difficult to correct this ill among the female gender because these limitations may take its root from the genetic make-up of the female gender. Genetic makeup battles with environment as Junaid (2015) supported the claim and insist that females are doing better in reading than males.

Nneoma (2012) examined the academic performance of male and female upper basic students taught literacy activities using the conventional teaching technique in reban towns of Ohafia L.G.A of Abia state. The study adopted the quasia-experimental survey design. The population of the study comprise of 2,079 students in upper basic students in 33 selected basic





schools in urban towns of Ohafia. Purposively, two intact class were selected for the study. The intact classes comprise of male and female students: one for experimental group, the other as control group. The experimental groups were 21 female and 16 males while the control group were 24 female and 13 male students respectively. Instrument for data collection was questionnaire titled students performances test in English comprehension (SPTEC). It is a comprehension passage where students are to read and fill in gaps. The questionnaire was validated by three experts. Twenty-five minutes was allotted for the exercise. Each correct answer has 3 marks. Mean, standard deviation and ANCOVA was used to analyze data for the study. Findings show that based on the use of the conventional method, female students performed academically better when the results were examined. Both male and female students reached an average mean from 2.50 but female students had higher mean scores than male students. Based on the findings, it was recommended that content of the curriculum should include learning activities that would ensure equal participation of male and female students to ensure that the gaps between male and female students in terms of academics were filled. It was also recommended that teachers should also encourage male student's participation in learning activities to help them benefit more from instructions and thus, compete with female students both in internal and external assessments. The above study is related to the present study because both adopted the quasia-experimental design. Both studies also focus on reading comprehension with particular reference to male and female students. However, both studies differ in locations and years they were carried out.

Location is one of the factors that affect reading comprehension achievement. According to Amadi, (2018). Location' refers to the geographical setting in which a school is situated and such a setting could be rural or urban. Rural schools are located in the interior constituency of a state while urban schools are located in the township area of a state. He also stated that Rural-urban location of schools has been found to be one of the important predictors of differences in pupils' academic achievement.

Ramo, Duque and Nietos (2012) reveal that the educational achievement of rural-based students was worse than those of urban based students. This is in line with Ulo-Bethel's (2012) study, which also reveals that location had a significant influence on students' achievement in consonant clusters Conversely, Macmillan (2012) reveal that there was no significant difference in the achievement scores of urban and rural pupils Amadi, et al (2018). Macmillan (2012)'s study showed that achievement in physics was enhanced by the instructional strategy employed by the teacher, and not just only location. Macmillan further explains that despite the differences in the conditions of livelihood in urban and rural areas, the non-existence of achievement gap among students in the two locations may be because they were subjected to equal opportunities of learning physics through the use of the same instructional method. In another study that investigated the relationship between reading achievement and school location, Graham and Teague (2011) observe that rural and urban third graders have lower average achievement than their suburban counterparts. They note that the difference in average reading achievement for third graders in these three locations (rural, suburban and urban) reflect average achievement differences at the start of kindergarten. They also find that suburban pupils made greater gains in reading achievement from kindergarten to grade three than their rural and urban counterparts. With regards to the interaction effect of teaching method and location on students' academic achievement, Egbe (2015) reveals that there was a significant interaction effect of method and location on students'



achievement in English grammar. Thus, influence of gender also plays an important role in learner's academic performance and interest.

### Statement of the Problem

Observations and experiences have shown that some pupils have poor reading attitude and skills which make them become easily distracted and lack reading comprehension achievement. The researcher observed that most pupils in Anambra State have poor reading habit and ability which affects their academic achievement. This poor reading ability of pupils most times also depends on their environment, the teaching method adopted by the teachers for teaching and school location. Scholars and researchers also hold the assumption that a child's academic achievement may be greatly influenced either by the environment in which he lives, the school location and method of teaching used by the teachers for teaching. As a result of the poor reading ability, there is, therefore, the need for instructional approach that makes pupils reading comprehension achievers. It is against these backups that the researcher sought the need to examine the effect of learners- generated questions on male and female pupils' reading comprehension achievement in urban areas in Anambra state.

### Research question

What is the mean Achievement Score of male and female pupils in urban taught reading comprehension using learners, generated questions?

### Hypothesis

There is no significant difference in the achievement scores of primary school male and female pupils taught reading comprehension using taught using learner's generated questions.

### Research Method

**Research Design:** The design used in the study was quasi-experimental design involves non-randomized control group pre-test, post-test, non-equivalent control group with an experimental group receiving treatment. The design was used because the experiment was carried out on intact-classes, so as to avoid disruption of normal classes. For this reason, there was no randomization of pupils into experimental and control groups. The design is diagrammatically represented as follows:

Diagrammatical representation of the quasi-experimental design

Group	Pre-test	Treatment	Post-test
Experimental Group	O1	X1	O2

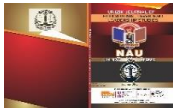
Control Group	O1	X2	O2
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Where O1 is pre-test

X1 is treatment using Learners-generated question

O2 is post-test

X2 is conventional method of teaching (No treatment)



**Area of the Study:** The study was conducted in primary schools in Anambra State.

**Population of the Study:** The population of the study comprises of all the 37,190 primary five pupils (19202 males and 17988 females) in the 1068 public primary schools in Anambra state for 2020/2021 academic session.

**Sample and Sampling Technique:** The sample size for the study consisted of 200 (88 males and 112 females) of primary five pupils drawn from four intact classes in the urban areas. 101 pupils for experimental group (42 male and 59 females) and 99 pupils for control group (46 male and 53 females). Purposive sampling technique was used to draw 40 public primary schools. Simple Random sampling was used to draw four intact from the forty public primary schools in the area of the study; two schools each from Awka south L.G.A and two from Anaocha L.G.A. The purposive sampling technique was used based on the following criteria: The schools are public schools, in each of the schools, intact-class was selected. One school in Awka South L.G.A was assigned to treatment and the other was assigned to control. The choice was based on the homogenous nature of the schools, gender composition and location of the schools.

**Instrument for Data Collection:** The researcher used Reading Comprehension Achievement Test (RCAT) instrument for collection of data in this study. The instrument consists of 20 multiple choice items with options A-D. One option is correct while the remaining three are distracters. The items are the contents of the comprehension from Macmillan Brilliant Primary English book five, Titled: The visiting day page (58) and Farming page (69). Each correct answer attracted five marks, totaling 100 marks. Marking was done by the researcher. This instrument was used for dual purpose. First it was administered to the experimental group and control groups as a pre-test before the commencement of the experiment and secondly as a post-test to the experimental group after the experiment, to determine whether the academic achievement of the four groups is significant or not. Other materials that were used for this study are lesson plans for learners – generation question strategies, lesson plan for control group, and comprehension passage.

**Validation of the Instrument:** Three experts validated the instrument, the RCAT, lesson plan with the title of the study, purpose, scope, research questions and hypotheses before distribution. Two from Early Childhood and Primary Education, and one from Measurement and Evaluation, all in Faculty of Education, Nnamdi Azikiwe University Awka. The validators examined the items, language and ascertained the extent to which the languages were clear and items suitable for responses. After validators' comments that the researcher should not use the same questions asked and answered for each lesson to form pre-test and post-test questions. The corrections, were affected and the items were re-typed before distribution.

**Reliability of the Instrument:** To establish how reliable the instrument was, the researcher conducted a pilot study with 25 primary five pupils of Community Primary School Agungwu Village, Ugwuoba in Orji school Local Government Area of Enugu State which was not part of the research population. The obtained scores were used to estimate the reliability co-efficient of the instrument using Kuder Richardson (k-R-20) and will be yielding a reliability index of 0.91". This approach was used because k-R-20 is mostly suitable for multiple choice tests.

**Experimental procedure:** Introductory letter was presented for permissions from the schools' authorities to enable the researcher use their pupils and their lesson period and class teachers once in a week for 6weeks.



One week of briefing was organized for the English teachers of the sample schools used for the study. For the Experimental group, the English teacher was briefing on how pupils will use learners – generation question strategy for reading comprehension achievement. The briefing was as follows:

Familiarity with Learners- generation questioning strategy and comprehension activities. The instructional process, assessment and evaluation procedures.

Learners generating question prompts identification, interaction patterns and teachers attitudes towards the pupils was made clear to the teacher.

How to administer pre-test to the pupils used in the study and post-test at the end of the experiment period. These involves both the experimental groups and control groups.

The researcher makes use of RCAT designed for the two groups. RCAT Pre-test was administered in the first week on the selected comprehension passage for the study. Afterwards, the two groups received the same lesson based on the learners –generation questions and conventional teaching method.

At the end of the experimental period, pupils in the two groups took the same RCAT post-test which was used to know the deference in learning outcome.

Week 1: Training of the research assistants. Administering of pre-test to the two groups.

Week 2: The teacher introduced the topic of learning as learners –generation question strategies for reading comprehension achievement.

Week 3: The teacher introduced Learners-generating question prompts identification with two lines, one for question and the other for Answer after the teacher must have taught the topic; he/she can engage the pupils in a related activity.

Week 4: The teacher introduced Learners-generating question prompts identification with a stop sign, after the teacher must have taught the topic; he/she can engage the pupils in a related activity.

Week 5: The teacher introduced learners-generated question prompts identification with a stop sign and read aloud. After the lesson the teacher can engage the pupils in the related activity.

Week 6: In this last week the teacher administered post-test to the two groups. After the experiment, the two groups will be tested in order to obtain their understanding and reading comprehension achievement of the learning topic.

The item was scored as follows:

The total number of items was 20 in number, the pupils respond was score as five (5) when they correctly get the answer and was zero when they fail it. The comprehension Achievement score was the total number of questions correctly answered. The maximum score was hundred. (100)





### **Control of Extraneous Variables**

In order to ensure that any change in behaviour of the pupils would be as a result of training, the researcher adopted the following strategies to ensure that extraneous variables, which could affect the result of the study, were controlled:

**Experimental bias:** To avoid experimental bias, the pupils were taught by their regular teachers, to prevent the researcher from being personally involved in administering the research materials.

**Pre-testing: Pre-test,** is the act of administering research test to pupils before the commencement of a study, which may sensitize them to become aware of or suspicious of the purpose of the post-testing aspect of the experiment. Therefore, research assistants were disallowed to read the test questions.

**Teacher variable:** Errors that might arise as a result of teacher differences were controlled by organizing a pre-experimental conference for the research assistants. Separate conference was organized for teachers in the same groups. The research assistants were exposed to practical demonstration of the training strategies, especially in the use of learners-generated questions in teaching. The essence of the conference is to enable the research assistants acquire the competencies for presenting the experimental conditions, thereby establishing a common instructional standard among research assistants. The research assistants conducted the experiments in their respective schools and during normal school English periods in the timetable. The study was monitored and supervised by the researcher to ensure a uniform approach as specified in the lesson plan for each group.

**Inter-group variables:** The intact-classes were used for the study in order to eliminate the errors of non-equivalence arising from non-randomization of subjects. Analysis of covariance (ANCOVA) was used for data analysis; further corrected the non-equivalence among research subjects.

**Subject's interaction:** The researcher was not select treatment and control groups from the same school to ensure that the pupils in the treatment and control groups would not mix-up at all. This is to reduce the errors that might arise from interaction and exchange of ideas among research subjects

**Method of Data Analysis:** The data was analyzed using mean and standard deviation as well as ANCOVA. The Mean and Standard Deviation were used to answer the research question while Analysis of Covariance (ANCOVA) was used to test the null hypothesis at (0.05) level of significance. The extraneous variables were controlled by the ANCOVA from the dependent variables. For the hypothesis testing, if the p-value is less than or equal to the level of significance (0.05), then hypotheses was rejected, this shows that, the effect of the learner-generated question strategy and conventional teaching method on pupils reading comprehension achievement is significant at a certain level, however, if the p-value is greater than or equal to the level of significance (0.05), the hypothesis was accepted.



**Research question:** What is the mean Achievement Score of male and female pupils in urban taught reading comprehension using learners, generated questions?

**Table 1:** Mean Achievement Scores of male and female pupils in urban taught reading comprehension using learners, generated questions.

Group	Pretest			Post-test			diff
	N	Mean	SD	N	Mean	SD	
Male	21	8.90	11.54	21	14.25	11.66	5.35
Female	33	9.20	9.48	33	13.33	16.70	4.13

In Table 1 the result showed mean achievement scores of primary school male and female pupils in urban taught reading comprehension using learners' generated method to be 8.90 and 14.25 for pretest and post-test respectively with difference 5.35 while females had mean achievement score of 9.20 and 13.33 for pretest and post-test respectively with mean difference of 4.13. The result revealed that male primary school pupils improved in their achievement score when learners' generated question was used than their female counterparts.

### Hypothesis testing

**Hypothesis:** There is no significant difference in the achievement scores of primary school male and female pupils taught reading comprehension using taught using learner's generated questions.

**Table 2:** Analysis of covariance between the mean achievement scores of primary school male and female pupils taught reading comprehension using learner's generated questions.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	
Corrected Model	2114.028 <sup>a</sup>	2	1057.014	3.968	.022	
Intercept	26762.293	1	26762.293	100.462	.000	
Pretest	329.083	1	329.083	1.235	.269	
Gender	1825.436	1	1825.436	6.852	.010	Significant
Error	25573.628	96	266.392			
Total	239293.000	99				
Corrected Total	27687.657	98				

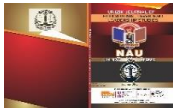
a. R Squared = .076 (Adjusted R Squared = .057)

Table 2 result shows that there is a statistically significant difference in the mean achievement scores of primary five male and female pupils' taught reading comprehension using learners' generated questions. This is because the p-value (.010) is less than the level of significant (0.05). Based on this, the null hypothesis was rejected. And the researcher concluded that there is a statistically significant difference.

### Summary of the findings

Findings of the study were summarized as follows:

1. There was an improvement among primary school pupils taught reading comprehension using learners' generated questions than those taught using conventional method.
2. There was an improvement among primary school male and female pupils taught reading comprehension using learners generated questions than those taught with conventional method.



3. There was improvement mostly among male pupils in reading comprehension using the learner's generated questions than female pupils.

### **Discussion of findings**

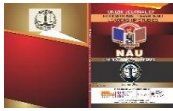
Efforts were made in this study to ascertain mean achievement scores of male and female pupils in urban schools taught reading comprehension using learners generating questions. Findings show that male primary five pupils improved in their achievement score with 5.35 mean difference when learner generated question were used than their female counterpart whose mean difference in improvement stood at 4.13. The mean score of male pupils on pre-test and post-test were 8.90 and 14.25 while mean score of female pupils on pre-test and post-test were 9.20 and 13.33 respectively. Looking at the differences, the male outperformed female pupils with 1.22 mean difference score. However, no significant difference existed. In this result, none of the reviewed studies supported this outcome unlike findings of Poswati and Aisyah (2018) in their study on student reading comprehension between male and female pupils' analytical exposition, they discovered that female pupils were more vibrant than male pupils in reading comprehension in analytical exposition text. Consequently, Nnaukwu (2016) maintained that both male and female pupils in urban schools responded positively to reading comprehension adopting the learner generated question which is against mere speculations that female pupils outperform male pupils. In this section, the male pupils slightly improved with a 0.43 lead than female pupils and it could be seen that there is difference. Hypothesis tested shows that there is a statistically significant difference in the mean achievement scores of primary school pupils in urban taught reading comprehension using conventional method and those taught using learners' generated question. This is so because, the p-value (.029) is less than the level of significant (0.05). Therefore, the null hypothesis was rejected and the researcher therefore concluded that there is a statistically significant difference.

### **Conclusion**

Based on the findings, it was concluded that learners' generated question strongly has effect on the reading comprehension achievement of male and female primary school pupils in Anambra State. It had significant effect on reading comprehension achievement of pupils in Anambra State. Both male and female pupils that were subjected to the test improved after the treatment but the males improved more when learners generated questions were used,

### **Educational Implication**

The study established that male and female pupils improved in reading comprehension using the learner generated strategy and that male pupil maintained a lead. This would mean that the boys will be good in English language, surpassing female pupils who different studies had said that they were good in mathematics. The implication is that male pupils if not challenged by female pupils, will continue the lead not only in English language but other content areas that are not related to mathematics. The curriculum of primary schools would by this, need to be restructured to bring in academic activities that would ensure that both male and female pupils participate in the same academic exposure to ensure that this perceived gap of male pupils dominating English language is filled. If nothing is done, it implies male pupils will continue the lead, performing academically better than female pupils in academic subjects that are not related to mathematics.



## Recommendations

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

1. Learner generated questions should be used in teaching English language and other subject especially science subjects in various school locations.
2. Language teachers should create learning atmospheres that are conducive for learning in order to enhance the development of pupils' learning experiences irrespective of the location of the school or gender of the learners.
3. Teachers should strive to develop themselves in knowledge-diverse instructional strategies in order to keep learners engaged and motivated throughout the learning process.
4. Primary school curriculum planners should bring in learning experiences that would ensure that male and female pupils are exposed to different activities mostly in English language to ensure that female pupils compete favourably with male pupils.

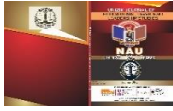
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