Gender DIFFERENCE IN ACHIEVEMENT AND INTEREST OF STUDENTS EXPOSED TO Gender DIFFERENCE IN ACHIEVEMENT AND INTEREST OF STUDENTS EXPOSED TO AND TEXT-BASED COMPUTER ASSISTED INSTRUCTION

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Abstract: This study was designed to investigate gender difference in the achievement and abstract of students in Blocklaying, Bricklaying and Concreting was a student to the students in Blocklaying and Concreting was a student to the student of students in Blocklaying, Bricklaying and Concreting was a student to the student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying, Bricklaying and Concreting was a student of students in Blocklaying and Student of students in Blocklaying a student of students in Blocklaying a student of stud Abstract: Inis study in Blocklaying, Bricklaying and Concreting using Videotaped and Text-based interest of students in Blocklaying (CAI). Quasi-experimental design of the students of the st ^{mterest of structure} Assisted Instruction (CAI). Quasi-experimental design of pre-test, post-test group was Computer Assisted from Niger state constituted the population and the population of the state of structure. Computer Assisted and Niger state constituted the population specifically, 93 students from adopted. 190 students from A (Videotaped CAI) while 97 students constituted the adopted. 190 students from A (Videotaped CAI) while 97 students constituted the treatment for group B treatment group A (Videotaped CAI). Two research questions and two multiple students for group B Teatment group A. Two research questions and two null hypotheses were developed to guide the Text-based CAI. Two research questions were Riochlawing Divide the set of the instruments for data collection were Riochlawing Divide the set of (Text-based Char). (Text-based Char) and collection were Blocklaying, Bricklaying and Concreting study. The instruments for data collection were Blocklaying, Bricklaying and Concreting study. Ine main and Concreting and Concreting and Concreting Achievement Test (BBCAT) and Blocklaying, Bricklaying and Concreting Interest Inventory Achievement was validated by five aroust for Achievement was validated by five expert from Industrial and Technology Education (BBCII). The instrument was validated by five expert from Industrial and Technology Education (BBCII), The Bederal University of Technology, Minna. The reliability coefficient of BBCAT was Department, Federal University Product Mount C Department, 1 de version Product Moment Correlation while, the internal consistency of found to be 0.96 using found to be 0.92 using foun found to be 0.83 using Cronbach Alpha. Mean and standard deviation was the BDC11 mean and Standard deviation was used to answer the research questions while Analysis of Covariance (ANCOVA) was used to test the hypotheses at 0.05 level of significance. The study revealed that male students taught BBC with videotaped CAI had higher mean scores than female students taught with Videotaped CAI in BBCAT. The study also revealed that, female students taught BBC with text-based CAI had higher mean scores than male students taught with Text-based CAI in BBCAT. However, female students taught BBC with Videotaped CAI had higher mean scores than male students taught with Videotaped CAI in BBCII. Consequently, the researcher recommended that the National Board for Technical Education should consider it necessary in the curriculum content adaptation to computer assisted instructional strategies for teaching BBC at technical colleges in the next review of the curriculum.

Keywords: Achievement, Computer-Assisted, Gender, Instruction, Video

1. INTRODUCTION

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Gender difference has been an increasing issue over the year. The difference in academic achievement of male and female is a crucial matter to the educationists. Over the years, there has been a growing concern about the role of women in the, economic, scientific and technological development of the nations. This concern has been expressed to assume the prominent role of women in vocational and technical education in Nigeria today. The term gender according Owodunni and Ogundola (2014) is socio-cultural and is built based on the biological expectations of the individual on the basis of being a male or female. Wall (1997) viewed gender as the natural difference between men and women, which dictates on their occupational choice. Based on the foregoing therefore, gender could be defined as a cultural or societal way of ascribing attribute which differentiates feminine from masculine. Gender can be seen or

Munin University-eJournal of Interdisciplinary Research (AU-eJIR) or sex-equity in education. ^{genue}, tremenue especially in sciences, technology and social sciences. Notably among destine achievement especially in sciences, technology and social sciences. Notably among destine achievement phenomenon of sex or sex-equity in education. sender of students especially in sciences tenter to the study of the personal factors for the sciences tenter to the study of the personal factors for the science tenter tenter to the study of the personal factors for the science tenter ten , sind students could be a contributory factor to their achievement and interact in the students could be a contributory factor to their achievement and interact in the students could be a contributory factor to their achievement and interact in the students could be a contributory factor to the students achievement and interact in the students could be a contributory factor to the students achievement and interact in the students could be a contributory factor to the students achievement and interact in the students could be a contributory factor to the students achievement and interact in the students achieves a contributory factor to the students achieves achieves a contributory factor to the students achieves a contributory factor to the students achieves achieves a contributory factor to the students achieves a contributory factor to the students achieves achieves achieves achieves a contributory factor to the students achieves achieve Junto of students of the specially in sciences, technology and social sciences. Noteshired of achievement entered of the phenomenon of the science state of achievement entered of the phenomenon of the science state of the social sciences.

creation of sea included to adulthood. As such, the subordination can be changed or ended from childhood to adulthood are better at mental manimulation of sea included that the boys are better at mental manimulation. Onversion of sex impotence in the society by providing unequal opportunities for males and creation of sex impotence to adulthood. As such, the subordination can have the subordination can be subordination can among summented that differences exist between male and female students' achievements. This been documented that differences of male and female students' achievements. This been documented to proportion of male and female '----' Osokoya (registed in schools is one of the issues in the current debate all over the world as it has among students in schools exist between male and formalized that differences exist between male and formalized that differences exist between male and formalized the second scheme the world as it has a second scheme the scheme the scheme the scheme the second scheme the scheme the second scheme the scheme the scheme the scheme the second scheme the influence with the pointed otherwise. However, gender difference in academic achievement Osokoya (2007), reported otherwise. However, gender difference in academic achievement option of the issues in the current data. gender psychologiate that gives them what we consider as typical male and female characteristics. Renefit proversion of the same and that it is a gender psychological difference at birth for male and female are the same and that it is a gender psychological that gives them what we consider as twnicel more inclusion. $r_{\rm phase k}^{\rm construction}$ stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images which may $r_{\rm phase k}^{\rm construction}$ (2005) stated that the boys are better at mental manipulation of images (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys are better at mental manipulation (2005) stated that the boys at the boys at the boys at the boy been under the attributed to proportion of male and female intake in technical colleges may perhaps be attributed to proportion of male and female intake in technical colleges Ash. (2002), The vement. Contrarily, Fagbemi, Gambari, Oyedum and Gbodi (2004), and influence on achievement otherwise. However, gender difference in the second se ^r, they are sturk, (2005) and Gambari, (2010) reported that gender has no significant Ash. (2005), Basturk, Contrarily, Fagbemi. Gamhari Oroston. onucbunwa (2000) observed that sex-related problems have contributed greatly to the Onucbunwa impotence in the society by providing unequal opportunities of the society by providing under the society by providing under the society opportunities of the society by providing under the society opportunities of the society by providing under the society opportunities opportunities of the society opportunities opportunities opportunities opportunit

interest of students in BBC programme using videotaped and text-based computer assisted of the students is paramount. Gambari, (2004) maintained that the use of videotaped and text end, ways of improving teaching and learning that will facilitate greater achievement and interest instruction in technical colleges. the use of videotaped and text-based CAI will also improve the teaching and learning of BBC based CAI has been found to have the potential of improving learning in Physics. It is hoped that facilitate and sustain interest in learning with the use of appropriate teaching approaches. To this teaching and learning will have a greater difference that will stimulate both male and female other field of study, very little or no consistent result has emerged from the study on gender The problem of this study therefore, is to determine the gender difference in achievement and they have some degree of interest in such subjects. According to Bolarin, teachers have to CAL However, Bolarin (1998) maintained that learners will learn better in subjects or courses if achievement and interest scores; and these are important aspects of the videotaped and text-based asisted instruction. Menn (1993) stated that provision of adequate instructional techniques for difference in the achievement and interest in BBC with videotaped and text-based computer Though the use of computer assisted instruction has help in developing students' interest in

^{1,1} Purpose of the Study

- 2 To determine the difference of gender on students' achievement in BBC when taught ^{Using} videotaped and text-based CAI.
- To determine the difference of gender on students' interest in BBC when taught using videotaped and text-based CAL

^{1,2} Research Questions

- What is the difference in the achievement of male and female students in BBC when taught using videotaped and text-based computer assisted instruction?

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METHODOLOGY Underlight was adopted for the study. Quasi-Experimental research design was considered to the difference between the independent and a study of the stablishes the difference between the independent and a study for the stablishes were acciminate between the independent and a study for the stable between the independent and a study for the study of the stable between the independent and a study for the study of the stu ^{from} riate necessary. Intact classes were assigned to treatment group A and B in order not to any he normal classes. The design of the study is as shown: In the second design specifically the pre-test, post-test, non-equivalent control of the study. Quasi-Experimental research design was adopted for the study. Quasi-Experimental research design was adopted to the difference of th

icht-hased CAI: OI Videoniafred CAI: O1 X1 O2 Videoniafred CAI: O1 X2 O2

n pre-test for both groups

or post-test for both groups

Notice and the set of Or Prostruction for videotaped computer assisted instruction

The independent variables consisted of videotaped and text-based computer assisted

http://www.ins.while, the dependent variables were achievement and interest

Colleges are accredited by NBTE and have the necessary facilities for the research work The study was conducted in all the technical colleges in Niger State. Niger state Technical

colleges in Niger State, Nigeria. 159 Male and 31 Female) of BBC students for 2014/2015 session in all the seven (7) technical The target population for the study comprised of 190 National Technical Certificate (NTC) II

⁹⁷NTC II (80 Male and 17 Female) BBC students. students while, the total number of students for treatment group B (Text-based CAI) comprised comprised 93 NTC II (79 Male and 14 Female) Blocklaying, Bricklaying and Concreting dass (male and female). The total number of students in treatment group A (Videotaped CAI) Bussa were school in treatment group B. Each class comprised the number of students in that Mamman Kontagora Technical College, Pandogari; and Government Technical College, New Government Technical College, Eyagi Bida; Federal Science and Technical College, Kuta; proup B. Schools in treatment group A include: Suleiman Barau Technical College, Suleja; sudents to treatment group A and 4 technical colleges of NTC II BBC students to treatment Government Technical College, Minna and Government Technical College, Kontagora while Simple random sampling technique was used to assign 3 technical colleges of NTC II BBC

 $h_{\text{Red} \text{ on five point rating scales. This includes Strongly Agreed (SA) = 4, Agreed (A) = 3,$ $\frac{\text{Multiple}}{\text{based}} = \frac{1}{2}$ items developed by the researcher (BBCII) developed by the researcher based on the topic treated. The BBCAT consisted of 40 Achievement Test (BBAT) and Blocklaying, Bricklaying and Concreting Interest Inventory The instrument for data collection was Blocklaying, Bricklaying and Concreting

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resulter were comments and suggestions were used in the final modification of the final modifica Result for the instruments and suggestions were used in the final modification of the instrument. MET: Their comments subjected to face validation. Religing were considered experts because they hold Doctor of Philosophy (PhD) degree and religing were considered research studies in Technical Vocational Education and the instrument. These is the studies in the second different research studies in the second vocational Education and suggestions were second to the second to the second vocation of the second vocation and suggestions were second vocation and the second vocation of the second vocation and the second vocation and vocation vocation and vocation were second vocation and vocation and vocation vocation and vocation and vocation vocation and vocation v Ac¹¹ University for the suitability, clarity and ambiguity of Education Minna. The validat and the suitability, clarity and ambiguity of statement or items and to relevant but were not included in the internation of add any items that are relevant but were not included in the internation of add any items that are relevant but were not included in the internation of add any items that are relevant but were not included in the internation of add any items that are relevant but were not included in the internation of a statement of the suitability. pushered to check for the suitability, clarity and ambiguity of statement or items and any items that are relevant but were $f'_{plastreed}(D) = 2$, Strongly Disagreed (SD) = 1 and Undecided (UD) = 0. The BBCAT and Ministry of Technology, Minna and Ministry of Technology Education in the plastreed of Technology, Minna and Ministry of Technology Education in the plastree of t Mulion University-e Journal of Interdisciplinary Research (AU-eJIR)

The expert cluster of the lesson, the age of the students was in line with the topics and lesson plans, duration of the lesson, the age of the students was in line with the topics and lesson plans, duration of the lesson plans are selected. industrial and that the procedure/format of the lesson plan was followed, to ascertained the the expert ensured that lesson, the age of the students was in line with the procedure the the age of the students was in line with the students was in l The lesson procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the lesson plan was followed to construct the procedure/format of the procedure/format of the lesson plan was followed to construct the procedure/format of VP'' VP'' The lesson plan was subjected to face validation by the three lecturers from the Departments The lesson plan dechnology Education and the Department of Science Education

content selected.

 $p_{0,6}^{\text{perfoulut}}$ and 0.83 respectively. This signifies that the items were good enough for the study sudents in weeks. The reliability coefficient of the BBCAT and BBCII items obtained was period of two weeks. This signifies that the items were and a signifies that the signifies that the items were and a signifies that the sitems were signifies that the signifies that the signifies tha sublity using school. The test-retest was carried out in two separate administrations within a sudents in the school. The reliability coefficient of the RRCAT and RRCAT Technical version in the school. The test-retest was carried out in two second population of 30 sability is in the school. The BBCC, Orozo, Abuja which did not form part of the study. This was to determine its Technical College, the test-retest reliability coefficient on randomly community is the test-retest reliability coefficient on randomly community community is the test-retest reliability coefficient on randomly community communit The BBCAT and BBCII was pilot tested on BBC NTC II students of Federal Science and

dependent variables (achievement and interest) of each of the groups after the treatment. (achievement and interest) before the treatment and a post treatment data for each of the before the treatment. The exercise provided the baseline data on the dependent variables BCAT and BBCII to obtained students scores on gender difference on achievement and interest Insurance of the students of the researcher then marked the answer sheets of the agreed or disagreed with items in BBCII. The researcher then marked the answer sheets of the agreed or disagreed with items in the second on and a students of the agreed of the answer sheets of the agreed of the agr mament groups in their respective schools. The students indicated the degree to which they mament groups in their respective schools. The mananthan the degree to which they The BBACT and BBCII were administered by BBC teachers as pre-test and post-test to both

any f value that was greater than probability level (p 0.05) was accepted. (SPSS) Software version 20. The f value and probability level (p 0.05) was used for decision. significance. The results obtained were analyzed using Statistical Package for Social Science of Covariance (ANCOVA) was used to test the hypotheses formulated at 0.05 level of Mean scores was used to answer the research questions to determine the gender difference on sudents' achievement and interest in BBC using videotaped and text-based CAI, while Analysis Interfore, any f value that was less than probability level (p 0.05) was considered rejected and

³, RESULTS AND DISCUSSION

^{taught using} videotaped and text-based CAI? What is the difference in the achievement of male and female students in BBC when

Videotaped CAI and Text-based CAI in the Achievement test in Blocklaying, Bricklaying and Table 1: Pre-test and Post-test Mean Scores of Male and Female Students Taught with Concreting.

Text-based CAI

Videotaped

CAI

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Dion University		Pre-test	Post- test	$\frac{\text{Mean}}{\overline{x}}$	Ν	Pre-test X	$\frac{\text{Post-test}}{\overline{x}}$	Mean Gain X
Male	79 14	43.83 43.00	\overline{x} 59.62 54.14	15.79 11.14	80 17	58.02 58.88	62.01 69.00	3.99 10.1

Result presented in Table 1 shows that the male students taught BBC with videotaped CAI Result presented in 15.79 while, the female students taught BBC with videotaped CAI Result presented in Autor of the time the male students taught BBC with videotaped CAI had a mean gain of 15.79 while, the female students taught BBC with videotaped CAI had a main of 11.14. Meanwhile, male students taught BBC with text-based CAI had a ^{Nev} a mean gain of 15.77 while, the remain students taught BBC with videotaped CAI had a mean gain of 11.14. Meanwhile, male students taught BBC with text-based CAI had a mean gain deal gain of the female students taught BBC with text-based CAI had a mean gain of the text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain of the female students taught BBC with text-based CAI had a mean gain back taught BBC with text-based CAI had a mean gain back taught BBC with text-based CAI had a mean gain back taught BBC with text-based CAI had a mean gain back taught BBC with text-based CAI had a mean gain back taught BBC with text-based CAI had a mean gain back taug p_{a}^{a} p_{a ¹³⁹⁹ while the termine of the male perform better than female in BBCAT using ext based CAI had a mean gain of 10.12. The result indicates that the perform better than the male in BBCAT using videotaped CA while, female students perform better than the male in BBCAT using ext-based CAI. Hence, while, a difference attributed to gender on Achievement of students toucht DI while, female students percent of students the male in BBCAT using ext-based CAI. Here is a difference attributed to gender on Achievement of students taught Blocklaying, there is a difference of stude of Achievement of stude gricklaying and Concreting with videotaped and text-based CAI.

What is the difference in the interest of male and female students in BBC when taught using videotaped and text-based CAI

Table 2: Pre-test and Post-test Mean Scores of Male and Female Students Taught BBC Table 2. In All and Text-based CAI in Blocklaying, Bricklaying and Concreting Interest videotaped CAI and Text-based CAI in Blocklaying, Bricklaying and Concreting Interest

1	Ideolap			1	nvontory				
					TEX	G-BASEI) CAI		
/	VID	EOTAPE	D CAI				est Post-te	st Mean Gai	n
_		Pre-test		t Mean	Gain P	-	× –	• -	
Gen	der N	FIC-test	r —	\bar{x}	X		x 91.61	5.61	
	x	x	x 90.40	-0.20	80	86.00		202	
Mal	» 79	90.60			17	77.76	86.35	8.59	
	4	89.57	92.50		17) (-	an coorec		
Fem	ale 14		× 7	1 - nof c	tudents	$\mathbf{x} = \mathbf{M}\mathbf{e}$	an scores		

N = Number of students.

The result presented in Table 2, shows that the male students taught BBC with videotaped CAI had the mean negative gain in the male students' interest inventory of -0.20 while, female students taught BBC with videotaped CAI had a mean gain in the female student's interest inventory of 2.93. Meanwhile, the male students taught BBC with text-based CAI had a mean gain in the male interest inventory of 5.61. Also, female students taught BBC with text-based CAI had a mean gain to be 8.59 in the interest inventory. The result shows that female students perform better than the male students taught BBC with videotaped CAI in BBCII. The result further indicated that female students perform better than the male students' taught BBC with lext-based CAI in BBCII. Hence, there was significant difference attributed to gender on the interest of students taught BBC with videotaped and text-based CAI in favour of female.

3.1 Hypotheses

Hol: There is no significant difference between the achievement mean score of male and female students in BBC taught with videotaped and text-based CAI.

Here is no significant interaction difference of treatment given to students and their gender there is no significant interaction the Blocklaying. Bricklaying and Communication the Blocklaying and Communication of the Blocklaying and Here is mean scores in the Blocklaying. Bricklaying and Concreting Achievement with respect to their mean scores in the Blocklaying. mining Liniversity-elournat of interturnetprimary research (AU-eJIR)

2 alysis of Covariance (ANCOVA) for Test of Significance of Treatment, Gender and any single on Students Achievement in Blocklaying, Bricklaying and Concreting

		f F < .05	at sig. of	*Significant at sig. of F < .05	Corrected Louan
			189	31991.242	Total
			190	740446.000	EHO
		161.562	185	29889.034	Treatment*Genuci
.010	0.310	1019.495	-	1019.495	(icine di
013	8.982	1451.087	-	1451.087	prest
	160.9	14.650	-	14.650	Interior
764	. 109	124.276	_	124.276	Contra
181	286.239	46245.504	-	46245.504	Source Model
000	3.253	525.552	4	2102.208	
318.	F	Square	df	of Sougres	In Ultra
		Mean	y selector and an and sense in the service of the set	Tome III Sum	able 3 Apair on Students Active Sum
			5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

no significant gender differences between the achievements mean scores of male and female with a significance of F at .76 which is greater than .05. The result on table 3 shows that there is therefore, accepted at .05 level of significance. Hence, there is no significant difference of gender students when taught using videotaped and text-based CAI in BBCAT. The null-hypothesis is students' achievement in BBC. The Table revealed that the F-calculated value for gender is .091 on the mean achievement scores of students taught with text-based \widetilde{CAI} . The Data in Table 3 shows the F-calculated values for treatments, gender and interaction on

students taught BBC with videotaped and text-based CAI. implies that there was a difference of treatment attributed to gender on the achievement of was rejected. Hence, there was significant interaction difference of scores on BBCAT. This was a significant interaction difference of treatment and gender. Therefore, the null hypothesis value of 6.31 with significance of F at .013 which is less than .05. This result implies that there Result on Table 3 shows the interaction difference of treatments and gender has F-calculated

Hoy. There is no significant difference between the difference of gender (male and female) on

Inventory. their gender with respect to mean scores on Blocklaying, Bricklaying and Concreting Interest Hot. There is no significant interaction difference of treatments given to students' and students interest in BBC.

^{0.05} level of significance ^{Using videotaped} and text-based CAI in BBCII. The null-hypothesis was therefore accepted at ^{significant} difference between the mean scores of male and female students when taught BBC significance of F at .882 which was greater than .05. This result shows that there was no students' interest in BBC. The Table revealed that F-calculated value for gender is .022 with a The result in Table 4 shows the F-calculated values for treatments, gender and interaction on

				189	22569.495	Corrected Total
				190	1080/84.000	Total
			107.714	TOU		EIIOI
			107 71 /	185	19927.133	Error
8	.158	2.007	216.177	1	216.177	Treatment*Gender 216.177
õ	.000	.071	7.667		1.00/	Treatment
2	.88	.022	2.395	-	2.393	Gender
0	.790	20.446	2202.275		C17.7077	preInterest
0	.000	205.015	22083.030		22083.030	Intercept
	.000	6.133	660.590	4	2042.362"	Corrected Model
Sig.		F	df Square	df	of Squares	
			Mean		Type III Sum	
C						
		KINVIIV AILU				

Table 4: Analysis of Covariance (ANCOVA) for Test of Significance of Treatment, Gender and Interaction on Students Interest in Blocklaving, Bricklaving and Concreting

*Significant at sig. of F < .05

interaction difference of treatments given to students on their gender with respect to their mean Table 4 also shows that interaction difference of treatments and gender has F-calculated value of on their gender with respect to their mean scores on BBCII Hence, there was no significant interaction difference of treatments and gender given to students scores on BBCII. The null-hypothesis was therefore accepted at 0.05 level of significance. 2.00 with significance of F at .158 which was greater than .05. Hence, there was no significant Hence, gender has no significant differences on students' interest in BBC. The result on

3.2 Discussion of the Findings

students' achievement in BBC. This finding confirmed that there was statistically no significant revealed no significant difference between the main difference of gender (male and female) on difference between the mean achievement scores of male and female students in BBC, which female student taught BBC with text-based CAI had higher mean scores than male students in higher mean scores than female students taught BBC with videotaped CAI in BBCAT. However, videotaped and text-based CAI revealed that male students taught BBC with videotaped CAI had difference between the videotaped CAI achievement of male and female students in BBC. BBCAT. Analysis of covariance was employed to test the hypothesis on the significant studies with the self – instructional computer – based package, implying that the instructional difference in the performance of students that were exposed to CAI package (t=0.34, df=58 package was gender friendly. Also, finding of Nakaka and Okwo (2013) show no gender ^{no significant} difference between the mean scores of male and female students taught social is in line with findings of Fagbemi, Gambari, Oyedum, Gbodi (2004) who reported that their was Hence, there was no difference attributable to gender on student achievement in BBC. This result videotaped and text-based but however, the finding was on computer assisted instruction ^{noted} that gender has no significant influence on achievement. Although, this was not in p<0.05). This is in line with the opinion of Ash (2005), Basturk (2005) and Gambari (2010) who Findings on the difference of gender in students' achievement in BBC when taught using

mun which BBC is one of it. unnion University-eJournai or interdisciplinary Research (AU-eJIR) analysince of generice between the difference of gender (male and female) on students' interest in difference that the observed difference in the mean interest scores of mala and a students' interest in the mean interest scores of mala and a students' interest in the mean interest scores of mala and a students' interest in the mean interest scores of mala and a students' interest in the statistically significant. This finding Buildents was not ching approach adopted in the teaching a course will not discriminate between students any good teaching of it. significant. This finding may be so because Gambari (2010) noted pool teaching approach adopted in the teaching a course will not discourse of it Jiliciant diller that the observed difference in the mean interest scores of male and female) on students' interest significant finding may be so because Gambour' (male and female plants was not statistically significant. This finding may be so because Gambour' (not statistically approach adopted in the terms) students' interest in BBC. The result revealed no het ble to gene was used to test the hypothesis on the significant difference in the and female) students' interest in BBC. The recult and female and female of gender (male and female) students of covariance between the difference of maniference in the manifest in the the difference of manifest in the the test of the test the difference of the test in test in the test in test in test in test in the test in ¹^{dequir} ¹^{dequir</sub> ¹^{dequir} ¹^{dequir</sub> ¹^{dequir} ¹^{dequir} ¹^{dequir} ¹^{dequir} ¹^{dequir</sub> ¹^{dequir} ¹^{dequir</sub> ¹^{dequir} ¹^{dequir</sub> ¹^{de}}}}}}</sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup></sup> Filmed and two than female students in BBCII. This indicates that there is a difference video for the interest of students taught BBC with video tanged C, and the interest of students taught BBC with video tanged to test the hypothesis and the video tanget of the hypothesis and the students the hypothesis and the video tanget of the hypothesis and the hypothesis and the students the hypothesis and the video tanget of the hypothesis and the hypoth Findings on the constant of students taught RDC and there is a different students taught revealed that male students taught BBC with videotaped CAI had findings and text-based than female students in BBCII. This indicates that there is a different students taught RDC are not the interest of students taught RDC. findings on the difference in gender on students' interest in BBC when taught using findings on the difference in gender that male students taught BBC with with with findings and text-based CAI revealed that male students taught based with with with findings on the difference in gender on students' interest in BBC with with with the findings on the difference in gender on students in the students taught based with with with the findings of the difference in gender on students in the students taught based with with the students in the st

sudents if they have some degree of interest in such subjects, therefore, teachers have subjects or courses if they have in learning with the use of option and sustain interest in learning with the use of option. to faction. Even though the academic achievement of male was higher assisted instruction. Even though the academic achievement of male was higher as the computer assisted instruction or the achievement of the achievement of the action of th subjects of appropriate teaching approaches such the use of appropriate teaching approaches such to facilitate and sustain interest in learning with the use of appropriate teaching approaches such the facilitate and sustain instruction. Even though the conduction and lear-vascu CA1 nad help in developin sudents, interest in studying BBC. Bolarin (1998) maintained that learners will learn better in sudents, interest if they have some degree of interact in more will studius of the use of videotaped and text-based CAI had help in developing and lext-based that increase in studying BBC. Bolarin (1998) maintained that increase in studying BBC. adequate insert of the videotaped and text hand the second of the videotaped will stimulate both male and female interest; and these are important aspects of the videotaped will stimulate CAI. Therefore, the use of videotaped and text hand to the videotaped will stimulate the text of the videotaped and text hand to the videotaped will stimulate the videotaped and text hand to the videotaped will stimulate the videotaped and text hand to the videotaped will stimulate the videotaped and text hand to the videotaped will stimulate the videotaped and text hand to the videotaped will stimulate the videotaped and text hand to the videotaped will stimulate the videotaped and text hand to the videotaped will stimulate the videotaped and text hand to the videotaped will stimulate the videotaped and text hand text hand to the videotaped will stimulate the videotaped and text hand text interest in verticinal techniques for teaching and learning will have a greater difference that adequate instructional and female interest; and these are immomentations. Therefore, motivated by the computer based instruction which may have lead to increased the same way motivated. This finding confirmed the view of Menn (1002) 41-41-41 by the same way both sexes. Therefore, this finding might be due to the fact that both male and female students were in Therefore, motivated by the computer based instruction which and the students were in

man unit of the significantly. Therefore, utilizing videotaped and text-based CAI may be favourable in BBC as it significantly. Inomina which lands to condaminate the second state of the as une work female in both treatment groups, the achievement of both sexes improved that of female in this increase of the sexes improved that the transforment in the second sec as in the sective learning which leads to academic achievement and interest of students in BBC.

4. CONCLUSION

computer assisted instruction. This implies that videotaped and text-based CAI are not gender bias. The study further revealed that text-based CAI is more effective in enhancing students' interest of students in blocklaying, bricklaying and concreting using videotaped and text-based The study revealed that there was no significant gender difference in achievement and

interest in BBC than videotaped CAI.

5. RECOMMENDATIONS

The following recommendations are made based on the content of the paper. BBC teachers should adopt the appropriate teaching approaches such as the videotaped and text-based computer assisted instruction that will facilitate and sustain achievement

- Equal opportunity should be provided for males and females from childhood to adulthood
- 2 to curtail the differences in achievement and interest in course of study.
- S assisted instructional applications that will facilitate effective and efficient teaching and State Ministries of Education (SME) should equip the schools with necessary computer learning of RRC main widestaned and text-based CAI at technical college level.

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