



The Effects of the Drawing-series Instructional Package on Nigeria Junior Secondary Schools Art

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Abstrak

Kondisi menjemukan siswa-siswi di Sekolah Menengah Pertama (SMP) telah diasosiasikan dengan kelangkaan teks dan biaya pembelajaran yang mahal. Oleh karena itu, penting bagi guru untuk mengadaptasi perangkat-perangkat pengajarannya. Penelitian ini menggunakan eksperimen semu untuk mengetahui efek penggunaan Drawing-series Instructional Package dengan membandingkan pra dan post-test menggunakan Drawing-series Instructional Package (DIP) dan Test Instrument of Drawing-series (TID). Hasil penelitian ini menunjukkan bahwa tidak ada perbedaan signifikan dalam capaian belajar siswa mengacu pada DIP dan kategori gender siswa tidak juga memengaruhi kinerja atau capaian belajar siswa. Berdasarkan temuan penelitian ini, DIP disarankan untuk dikembangkan dan digunakan dalam pembelajaran mata pelajaran kriya di sekolah-sekolah di Nigeria.

Abstract

The tedious condition of Arts Students in Nigerian Junior Secondary School has been attributed to the inadequate text and soaring cost of existing ones. Therefore, it is important for instructors to adapt their teaching tools. This study used a quasi-experimental to determine the effect of using Drawing-series Instructional Package by comparing the pre and post-test results using Drawing-series Instructional Package (DIP) and Test Instrument of Drawing-series (TID). Ninety students were involved as samples of this research in two groups of the experimental class and the control class. The result showed that there was no significant difference in students' performance based on DIP and student gender had no effect on student performance. According to the finding of this research DIP is recommended to be developed and used in teaching handicraft subjects in Nigerian schools.

INTRODUCTION

Creativity varies in individuals and it exhibits through skills, ability, and aptitude. Creativity also activates and motivates individuals in expressing one view and taught through utilizing diverse media and styles. A style can be in verbal such as language and poetry (Makokha & Wanyonyi, 2015). It can also be expressed through the movement of individuals on stage like acting or performing in the theatre and music such as singing. Creativity has been linked with technology because the creativity of man that of yesterday is strongly built on today technology. In essence, the uniqueness of both creativity and technology in individual promotes purposive and fruitful citizen of high reputation, useful members of the community. It was on this that individual's learners develop the principle of creativity on which the craft is built (Akodu, 2004; Lawton, 2007).

Like other craft taught on the school curriculum, Calabash has its origin from the Irese quarter of the Oyo Empire and prominent among the traditional craftsman of Oyo town in South-west Nigeria. The fall of old Oyo brought the craft into the limelight (Adewumi, 2017). The production of Calabash carving was of two groups: soaking, scraping, engraving, and covering with chalk. While the other involves painting, and engraving (Usman, Odewumi, Obotuke, Apolola, & Ogunyinka 2014). The designs on the decorated calabash are zoomorphic, anthropomorphic, abstract and alphabets. These are possible through the drawings on the calabash.

Previous studies have defined drawing in different ways. For example, the study of Hope (2008) defined drawing as the involvement of various activities of man with different media and materials which is finally used to promote communication. Ring (2001) explained that the word drawings mean the physical marks made through either inscriptions or cuttings with some detailed sharpened tools or objects on the surface of physical things. To denote and offer messages that can be interpreted by many in diverse ways. Also, Brooks (2003) described drawing as a clear mark produces with a medium on a specified surface and object, the inscriptions are otherwise terms as a universal lingo. In the same vein, Pérez-Gómez and Pelletier, (2000) submitted that drawing is a starting point for creativity in visual arts and the likes. Drawing brings into existence the beauty of life and reality of ideas and design through different artistic manipulations of different media.

Although, drawing entails one's full concentration and involvement in the dynamic manipulation of the individual hand, brain, and material through strokes of lines to exhibiting self-expressions. It is also the most well-known language for all designers. A medium of creative expression in a diverse way. Unique method of discovering different creative strokes of lines from either from virtual and real space (Dee, 2008; Russet, 2017).

Moreover, Abiodun and Akinde (2014) expressed that drawing is human's product of creativity which is originated from instinctive curiosity and it often links with the Palaeolithic period of man as the source. Their sketches which are made from lines on the caves, from the blood of animals and charcoal from wooden are for magical purposes. Drawing is very important in learning and it cuts across all disciplines. It is a foundation in which all subjects on the school curriculum are laid in sequence. It is a method through which learning of basic texts and figures are commenced. It is also a communicator of fresh ideas, new concepts are spread in learning (Lowenfeld & Brittain, 1987; Van & Garner, 2005; Odewumi, 2015).

The importance of drawing has been highlighted by researchers. For example, Anning and Ring (2004) mentioned that drawing serves as a tool in developing creativity in pre-primary school children through naive communication with fun. That is why the benefit attached to drawings in education generally shows that drawing has brought tremendous improvement to the teaching and learning of pupils from the cradle. Elom (2014) noted that drawing is a compass that shows artists, engineers, technicians, and electricians' direction. Tabrizi (2009) confirmed drawing as a therapy for kids with specific growth concern. Sobel (1998) posited that drawing enhances conceptual assimilation in technology, sciences, and creative arts. Ainsworth (2006) expressed that drawing develops creative originality in an individual through scribbling and movement of the hand on paper. Moreover, drawing serves as a stabilizer of emotional and cognitive skills in learners. It also encourages and fosters emotional balanced in teaching and learning especially in clinical medicine, widen the scope of child's horizon in instruction (Okorie, 2001; Edwards, 2006; Hutchison, 2007; Hope, 2008).

A review of empirical studies on drawing and learning revealed among others that drawing is an essential rudiment to contemporary

technologists, artists, and scientists (Sweller, 2001; Zwaan, 2004). A source of proficiency for the acquisition of knowledge, about detailed objects of resemblance (Van & Garner, 2005). Drawing is a medium of expression for pre-school pupils. A means of preserving pictures, memories, and images for instructional purposes (Leopold et al., 2007). Drawing trains judicious use of both the eyes and hand towards an object. It facilitates easy learning acquisition through details instructional of lines and drawings media (Mayer, 2001; Frisch, 2006; Seeley & Kozbelt, 2008). Drawings with pen and wash with postal colours on white cardboard produces significant illustrations of illusion for the beginners (Zhang & Linn, 2008). The drawing media is of paramount importance to stimulate and provide the necessary arena from inspiration (Van & Garner, 2005).

In essence, Carney and Levin (2002) explained that the pre-primary school children drawings carry different messages and with different interpretations (Kozbelt, 2001) and better understanding (Chan & Zhao, 2010). The study of Rein Have and Toorn, M. van den (2012) submitted that drawing is an integral part of the education of pre-school children, the author further stressed that drawing is more functional in teaching and learning of children early arts. Likewise, the study of Elisha (2014) expressed that drawing is a core discipline in Technical Colleges. In the same vein, Sara (2012) examined utilization of drawing media for teaching different techniques of drawing in childhood, the author concluded that family and interpersonal relationships are of unique independence to child learning of skills in drawing.

On drawing and gender, Danko-McGhee and Slutsky (2003) submitted that child drawings depict all manners of gender identity along with their dressings and exhibit gender in different provoking traits. Striker (2001) added that a good instructor's role as a mentor and as well as a guidance triggered the interest of female learners over the male counterpart in drawing of a replica self-portrait of a different line from different drawing media. In other words, Hawking (2002) explicated that drawing bring forth gender uniqueness in male and female. This results in the individual depicting self-portraits in diverse ways. Hope (2008) concluded that both male and female are bold with free-handed drawing and judicious manipulating of drawing media for passing messages to one another. In essence, this is to note that the teacher's role is

of paramount in drawing classes.

Savoie and St-Pierre (2012) mentioned that drawing allows the female students to depict their daily domestic activities in visual forms and exhibits the drawing for their colleagues to view and appreciate. In the same vein, the male student creates a funny drawing that depicts the old man and woman with different traits and actions with coloured pencils. Taylor, Branscombe, Burcham, and Land (2011) described the boys' caricature lines in drawings as the most detailed actions, such as violence, danger, and suspense. Also, Wright (2007) concluded that drawing has an influence on gender especially on the aspect of what they visualize, imagine, and know. It is imperative to the teachers to guide the curiosity in the children to elicit positive drawing of repute through different instructional packages.

The study of educational technologists confirmed that educational packages is vital in promoting teaching and learning. Although using two or more senses renders learning permanent and aid their retention. According to Alabi, Emmanuel and Falode (2015), instructional packages are a detailed program of lesson, arrange in stages and sequence for proper understanding. Also, Fakomogbon, Adetayo, Oyebo, and Enuwa (2014) explained that an instructional package promotes successful teaching and learning. It facilitates and enhances knowledge acquisition in learners. In line with the above author, Tekos and Solomonidou, (2009) submitted that instructional packages are helpful gadgets for classroom instructions in schools and colleges. It supports active classroom instruction and fosters collaborative learning with instructors less effort. In essence, Soetan and Odewumi (2016) articulated that before any instructional packages can be used, it must be subjected to thorough evaluation by the experts, especially by the educational technologist. Despite that, the world is not inactive but subject to changes.

Several studies shown that educational technology products and devices are informed of packages do elicit a positive response from the learners when accompanied by the appropriate methods of content delivery. Although, great improvement and substantial achievement are recorded from the use of these technological oriented packages in learning. Educationist must alternate technological packages that are powered by electricity with others which are for alternative is not build majorly on has little or none do with in case there is a power failure or when there is a need to use such packages in less

urban cities where there is no electricity to solve the learning problems.

Empirical studies on instructional packages remained controversial among researchers' that stressed the effectiveness of instructional packages in delivery learning content. For example, the study of Falode and Onasanya (2015) confirmed the interactive package of virtual laboratory as valuable in the handling of physics in Nigeria Senior Secondary School. Also, Falode (2014) established that the package on physics concepts made up of virtual laboratory was effective among the senior secondary. In this same vein, Fagbemi, Gambari, Oyekum, and Gbodi (2011) confirmed the efficacy of computer-based packages on the discipline of Social Studies students in Niger State. Photo series instructional package of Olanrewaju (2003), Video-based package of Gambari, James, and Olubode (2013). Computer-Assisted Instructional Package of Fakomogbon, Adetayo, Oye-bode, Enuwa (2014), PowerPoint instructional package of Ofili, (2015), Slowmation package of Odewumi and Bello (2016) and Painting series instructional packages of Bello and Odewumi (2017) proved the effectiveness of these packages in learning within the JSS context in Nigeria. In the same vein, Soetan, Aboyeji and Alasan (2013) revealed the effectiveness of slide-tape multimedia package in teaching pottery in Kwara State Junior Secondary School.

In essence, instructional packages are a vital tool that moves educational content forward and is either in digital or analogue. Using instructional packages serves as an alternative solution to educational problems and in particular hitch relating to the teaching of Creative Arts. Bello and Odewumi (2017) itemized the relative problem confronting the curriculum of Creative Arts. Students' performances are not encouraging; it may be due to scarcity of relevance textbooks, bad attitude of learners toward the practical aspect of the discipline. Lack of interest in the part of the learners and finally, the detailed report of Chief Examiner in the yearly summative examination that established outrageous failure of learners in Cultural and Creative Arts. Therefore, against these, the present study provides a possible solution to fill the gap created by many studies. Although drawing cuts across all disciplines on the Junior Secondary School curriculum, it brings reality and meaningful mission to the learners. Researchers presented a richer visual Drawing-series Instructional Package (DIP) of Drawing-series invented from diffe-

rent drawing media on white half A4 papers and cards to teach creative crafts in the context of the Junior Secondary School Students.

According to the previous discussion this study aimed at finding out the disparity of students' learning attainment using Drawing-series Instructional Packages compared to the ones who use the conventional method and find out the influence of student's gender on their academic achievement when they use Drawing-series Instructional Packages. The researchers of this study raise two hypotheses, (1) there is no significant difference in the achievement of cultural creative arts learners taught using DIP and (2) there is no significant difference in the achievement of cultural creative arts from male and female students using DIP. Many of the previous research do not focused on this topic, therefore this study will contribute to the field of educational technology, especially the implementation of technological product as the part of the managing area of educational technology as a field of study and pedagogical practice.

METHOD

This research employed quasi-experimental type, made up of pre-test and post-test type of the control group. The design is of a 2x2 factorial design. The actual populace used comprises all JSS Two in Oyo Township in Nigeria. The sample employed were engaged from two purposively JSS, class two (II) a private and a government school that offers Cultural and Creative Arts as a subject, with stable instructors teaching both creative arts and visual arts, a visual and art studio and access to generating plant in case there is no supply of electricity. Ninety Junior Secondary School creative arts students were sampled: forty-five girls and forty-five boys. They were divided into two equal grouping of control groups as well as experimental groups through a simple random sampling method of division.

The Package of Drawing-series Instructional Package (DIP) and the research Test Instrument of Drawing-series (TID) were the research instruments. Drawing-series Instructional Package (DIP) was fashioned by the researcher with the aid from an experienced creative art teacher, a professor of arts and a computer programmer at Ladoké Akintola University, Ogbomoso, Nigeria, and a professor of Educational Technology, from Faculty of Education, University of Ilorin, Kwara State, Nigeria. Books, internet, and resources persons were contacted to get

the courseware content suitable in line with the prescribed curriculum. Expert from the Department of Educational Technology, University of Ilorin, found that DIP meets the standard of the content, appearance, and construct.

Drawing-series Instructional Package was later tested on the junior secondary schools in Oyo. The school used for testing. The validity of the instructional package was within the population but not inclusive in the part of the schools used for the study. The constructive comments and contributions from students about the package were later judiciously gathered and put in place for further modification and final package. On experimental course of action, the aims and objectives of the study were specified, while an operational manual guide were adequately given to both the teachers and students. The students were educated to Drawing-Series Instructional Package. The treatment instrument, Drawing-series Instruction Package (DIP), was motivating, provoking and lasted for 80 minutes per week for 6 weeks, making 7 hours. It contained lessons structured into modules of five topics.

The topics of the package consisted of the following: Meaning and function of crafts, Materials and tools used in calabash craft, Techniques of producing calabash crafts, Types of calabash crafts and terminologies on calabash carving. All the topics were from the Craft aspect of the Cultural and Creative Arts Curriculum of Junior Secondary Two. The package consisted of unique drawings with different drawing media such as colour pencil, charcoal, pastel, crayon, pen, to mention but few on white A4 size cardboard and papers. The drawings were later grouped and arranged into stages, scanned and write on a Compact Disk for easy projection through the projector for the learners. The package is an active involvement of both the learner and the instructor in a learning atmosphere. Drawing-series instructional Package was developed after the systematic approach pattern of instructional development model from the original instructional study of Dick and Carrey (2005). The renowned model of instruction, that was built on the interrelationship between the curriculum content, learning, and instructions. The package was used three times on students of both private and public secondary during the earlier stage and the suggestion raised was accepted to modification of the package.

The Test Instrument of Drawing-series (TID) was utilized to determine the students'

achievement in both experimental and control groups for both the pre and post-test. This used Test Instrument of Drawing-series (TID) was 20 items of multiple-choice objective with five options from the validated (NECO) Junior National Examination Council of Cultural and Creative arts past question papers. The test instrument, as a stem was with five (5) choices lettered (A-E) as answer out of which the students were asked to pick only "one" deem fit as the correct answer. Thus, the students were asked to select the answer for each item from the given letter (A-E). The teaching for the conventional groups was done by the experienced creative arts teacher while those belong to the group of experimental was jointly educated by the researcher and a creative arts permanent teacher through the projector at a big hall in the school. The statistic of Analysis of Covariance (ANCOVA) was employed to calculate the mean scores of the students at both the pre-test and post-test, while the statistic which was t-test is used to put side by side mean from the gender variable. IBM SPSS version 21 statistics data editor was used for the analysis.

RESULT AND DISCUSSION

Here is the result of the hypotheses testing used the previous mentioned procedure. First, H_{01} : There is no significant difference in the achievement of learners taught using Drawing-series Instructional Package. To test this hypothesis, the Analysis of covariance statistics was used to compare the mean scores of students taught with drawing series and those taught without using pre-test scores as the covariates.

Table 1 The ANCOVA of achievement of learners educated using Drawing-series Instructional Package.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11.646 ^a	9	1.294	.699	142
Intercept	46.738	1	46.738	61.369	.000
Pre test	.316	1	.316	.415	.525
Post test	11.475	8	1.434		.108
Error	19.039	25	.762	.762	
Total	2585.000	35			
Corrected Total	30.686	34			

Table 1 show that F value of .762 and .108 is bigger than 0.05 alpha level. The result shows that there is no significant difference between post-test mean scores of the students educated with drawing series and those taught without drawing-series instructional package. Therefore, this null hypothesis in table 1 is accepted.

Second, Ho2: There is no significant difference in the achievement of male and female students educated using Drawing-series Instructional Package. This hypothesis is handled with Analysis of covariance statistics to compare the mean scores of female and male students educated with drawing - series and those taught without.

Table 2 The t-test statistics of both boys and girls educated with drawing-series and those educated without drawing-series instructional package.

Variable	N	Mean	St., devia- tion	df	T	Sig.
Male	45	12.3	1.711	88	0.84	.773
Female	45	14.0	2.070			

Table 2 shows that F calculated value of 0.84, and that the value of .773 is greater than 0.05 alpha levels. The shows that, there is no significant difference between mean scores recorded on post-test of the male and female students educated with drawing series and those educated without drawing-series package. Therefore, the null hypothesis is not rejected.

The data analysed in hypothesis 1 revealed that students taught with creative drawing-series achievement better than the others from the conventional learning strategy. Whereas Hypothesis 2 revealed that there is no major disparity between the male and female students educated with drawing-series and those without drawing-series packages. This finding agreed with the finding of Edalati (2005), who confirmed the effectiveness of drawing on the students' achievement when taught with spellings drilling. The finding was also in agreement with Tabrizi (2009) who reported the effectiveness of drawing in the treatment of Dysgraphia disorder learners. And this finding also supported the findings of Edalati (2005), Hall (2009) and Tabrizi (2009) based on their review on drawing and learners. The finding contradicts Odewumi's (2015), whose finding reported that there is no

noteworthy dissimilarity between male and female students when they were handled with drawing media.

In essence, the finding indicates that gender did not influence the performances of students when they were exposed to a creative drawing-series package. This result displays the significant difference in the creativeness of students prior to and later than in the intervention of treatment, in other words, instruction implementation of creative drawing-series has directly affected the development of creativity in learners. Therefore, it is possible to equate drawing-series packages with other technological instructional packages and devices like developed plastic instructional package of Olu-morin (2002), photo series instructional package of Olanrewaju (2003), Video-based package of Gambari, James, and Olubode (2013). Computer-Assisted Instructional Package of Fakomogbon, Adetayo, Oyeboode, Enuwa (2014), PowerPoint instructional package of Ofili, (2015), slow motion instructional package of Odewumi and Bello (2016) and painting series instructional packages of Bello and Odewumi (2017) which enhances more effectiveness in learning than the conventional methods of instruction in the Nigerian schools.

CONCLUSION

According to the result and discussion above this study concluded that (1) the efficacy of creative Drawing-series Instructional Package (DIP) is positive and effective in teaching practice, (2) the use of the package has helped in providing an empirical basis for maximizing classroom instruction, (3) the creative Drawing-series Instructional Package gives female and male students the opportunity to study at their own pace, (4) this study reveals that the students' group who use Drawing-series Instructional Package (DIP) showed excellence performance. Therefore, in order to optimize the learning practices this study recommend several things, i.e. (1) creative arts trainer should adopt creative DIP to improve students' performance, (2) creative arts trainer should strategize and make more emphasis on the use of drawing-series instructional package that could benefit both male and female students, and (3) public schools owned by government should be equipped with necessary drawing materials to influence positively the potentials of students in creativity.

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