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Drama-in-Education, Multimedia Technology and Childhood Language Curriculum: The University Staff School (USS) Benin City, Edo State Experience

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Abstract

The continuous evolutions in information and communication technologies (ICTs) fields and the quest for educators to improve service delivery have opened new channels and opportunities to enhance teaching and educational methods. On one hand, these may improve the abilities of educators to present information in interactive and media-enhanced formats, relative to traditional methods. This may help pupils or learners by offering them the information in channels and methods that can be easier to understand, deal with and retrieve. On the other hand, offering those alternative methods can be helpful, particularly for children and pupils in rural areas where they can have virtual or remote instructors. This article investigated the impact of utilizing multimedia technologies on enhancing, or not, the effectiveness of teaching pupils at early stages in the University Staff School (USS) in Benin City (using Primary V class arms). The study is anchored in the Cognitive Theory of Multimedia Learning that upholds three main assumptions: there are two separate channels (auditory and visual) for processing information; there is limited channel capacity; and that learning is an active process of filtering, selecting, organizing, and integrating information. The Brainwave Video Anthology – a collection of English language packed

with English alphabets, words and sound 'pronunciation' was retrieved from YouTube to test students' ability to understand English letters, words and pronunciation "language skills." Two groups were selected from the school; based on their class distribution, where one group was taught the subject in basic English using the multimedia technology (YouTube video) developed for this purpose and the second class was taught the same subject using traditional methods of teaching (i.e., direct pupils-to-child instruction, board, etc.). Results showed that in teaching language skills at this age, using programmes or multimedia-enhanced methods of teaching can be effective in getting pupils' attention, especially when cartoon characters are used. Hence, the study recommended the introduction and use of multimedia alongside the already existing drama-in-education (D-I-E) in the early childhood curriculum in Nigerian schools.

Keywords: D-I-E, Multimedia technology, Early childhood, Language learning, Nigerian schools.

Introduction

As the use of English has increased in popularity so needs for qualified teachers to instruct the pupils in the latest language learning methods. A majority of teachers still teach traditionally. With the rapid development in science and technology, the emerging and developing of multimedia technology and its application to teaching which features audio, visual, and animation effects comes into full play in English class teaching and sets a favourable platform to reform and explore the English teaching model in the new era. It has been proven that multimedia technology plays a positive role in promoting activities and initiatives of pupils and teaching effectively in the classroom.

Technological innovations like videos and computers have gone hand-in-hand with the growth of English language teaching and learning and are changing how we communicate. It is fair to assert that the growth of multimedia has facilitated the growth of the English language to a large extent. With this, there has been a very significant proliferation of literature regarding the use of technology in teaching the English language. In a sense, a tendency to emphasize the inevitable role of technology in pedagogy to the extent of obliterating the human part of the teacher by technology part has been very dominant. As a result, if we neglect or ignore technological developments they will continue and

perhaps we will never be able to catch up, irrespective of our discipline or branch. For this reason, it is important for language teachers to be aware of the latest and best equipment or software and to have full knowledge of what is available in any given situation. Although nothing can fully replace an experienced teacher, technology has done much to assist teachers in their efforts in the classroom. There are many techniques applicable in various degrees to a language learning situation. The teaching principle should be to appreciate new technologies and functions where they provide something decisively useful and never let machines take over the role of the teacher.

The rapid development in Information and Communication Technologies (ICTs) and the use of computers in education have made it easier for users to access, deliver and store knowledge. Furthermore, "the ability of ICTs to deliver information quickly, correctly and attractively in the form of multimedia has also made learning more enjoyable. An enjoyable learning scenario is a necessity for effective instruction. Besides being an instruction that students enjoy, effective instruction also enables students to acquire specific skills, knowledge, and attitudes" (Dick and Reiser 19). Multimedia is the combination of different content forms. It includes a combination of text, audio, still images, animation, video, or interactivity content forms. It is usually recorded and played, displayed, or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Asthana posits that: "multimedia uses multiple forms of text, audio, graphics, animation, or video to convey information. As such, multimedia technologies offer today's classroom teachers the opportunity to move from a largely linear learning environment to an increasingly nonlinear environment" (140). Such technologies also allow students a strong degree of choice as they pursue learning with multimedia texts.

To achieve effective instruction, language instructors need to create an enjoyable learning environment and one of the methods is to use multimedia teaching instruction. Nowadays, it is common to see instructors use multimedia tools as their teaching aids in their efforts to reproduce or enhance their teaching. "The use of multimedia is a woven combination of text, graphic art, sound, animation and video elements, enables both synchronous and asynchronous learning" (LeeTiernan and Grudin 2). Information can be projected onto a computer screen and/or television monitors as well as LCD projectors. In a similar vein, drama-in-education (D-I-E) is a mode of learning that challenges and supports

students to make meaning of their world and enables them to express and communicate ideas in the art form. Drama derives from the Greek word Dran – to do. Drama is something of significance that is 'done' or enacted. In theatre studies, it is action explored in time and space in a fictional context. According to Galazka: "drama and theatre is a shared experience among those involved either as participant or audience where they suspend disbelief and imagine and behave as if they were other than themselves in some other place at another time. There are many aspects to the imagined experience of as if" (4).

Drama is a framed activity where role-taking allows the participants to think or/and behave as if they were in a different context and to respond as if they were involved in a different set of historical, social and interpersonal relationships. This is the source of dramatic tension. In drama we imagine the real to explore the human condition. Acting a role in a play, or taking a role in a drama, is a mental attitude, a way of holding two worlds in mind simultaneously: the real world and the world of dramatic fiction. The meaning and value of the drama lie in the dialogue between these two worlds and the human subjects behind its representations: the real and the enacted; the spectator and the participant; the actor and the audience. Even in performance we are not simply showing to others but also seeing ourselves, and because of this, drama is an act of 'self' creation.

It is thus referred to as the method of drama in education among elementary school courses in this study; which can be said to be a method which has applicable properties for all kinds of courses. Freeman points out that "the method of drama in education is used in many areas from mathematics education to social education, from language education to multicultural education" (137). There are quite a several studies that have found drama practices in education to be effective in many different fields such as science, mathematics, life science, and language teaching in primary school. "Researches show that academic achievement, level of remembrance (permanence), attitude towards the lesson (perspective) increase positively in lessons that are taught with a method of drama-in-education (D-I-E) in primary school" (Fleming and Merrell 180). The method of D-I-E is a mode that contributes to an individual's personality development, develops social behaviour and skills, and enables the individual to trust and recognize himself/herself as well as academic achievement. "The drama-in-education method, which is distinguished from other methods by these features, has a responsive quality that

appeals to emotional intelligence" (Idogho and Osuya 15715). No matter what kind of intelligence an individual possesses: "the learning from emotional intelligence which is usually derived from the drama-in-education and by extension multimedia technology developed an individual holistically" (Idogho and Osuya 15716). It usually results in self-definition and understanding of oneself wishes and values if the drama in education is effectively deplored. In a system that attaches importance only to academic achievement and does not care about the emotional intelligence of the individual, there will be individuals who are successful in the academic field but unhappy.

For drama in education method, it can be said that it is a method that can compensate for the lack of individual and social communication due to the development of the technological age because the method of drama in education involves a social community with its participants and leader. It makes an individual feel a sense of belonging to a group and being in a social environment. Thus, during the primary school period when self-confidence develops, the pupils increase their sense of belonging and social communication. The pupils who realize self-expression through social activities embedded in drama-in-education as found in a social community also feel the expression "I am here in this world" and, therefore, are naturally expressive which is evidence of learning in the individual. As a teaching method, the method of D-I-E is also effective in attracting and sustaining the attention of pupils in primary school age. As a support to the course, the concentration disorders that occur during the lesson can be removed from the monotony with an amusing drama. However, there are great responsibilities for classroom teachers in planning, implementing, and evaluating drama activities in primary school.

The problem of poor and ineffective learning of the English language has been noticed among pupils across all levels of education in Nigeria. At present, there are many multimedia technologies such as the internet, instant replay messenger, smart phone, projector, television, e-books, graphics, Mp3 player, video player and animations. These technologies have been contributing enormously to teaching and learning of English language effectively. Especially, multimedia technologies are a great source for language activities, and material in teaching and learning English language. However, many pupils may not have the technical skills to make full use of these technological resources. Therefore, this study examined the effectiveness of using multimedia technologies for teaching

and learning English language in the early-childhood curriculum. All these kinds of technological tools that make humans able to transmit information in a very large meaning, leveraging the learning power of human senses and transforming information into knowledge, stimulating the cognitive schemes of learners, have been made available with the help of technologies in the 21st century. "The use of multimedia technologies in educational institutions is seen as necessary for keeping education relevant to the twenty-first century" (Selwyn and Gordard 172).

Educators have heralded the advent of multimedia technologies as a catalyst for change in traditional teaching practices; to innovate and improve on traditional practices. "One of the ultimate goals of multimedia language teaching is to promote students' motivation and learning interest, which can be a practical way to get them involved in language learning" (Dick and Reiser 18). Advances in information and communication technologies, particularly the internet and interactive multimedia technologies, are creating new networking opportunities for pupils. Technology-mediated mentoring is one way to bring to pupils subject matter experts that can give advice, feedback, and guidance. Multimedia in education has the potential to go beyond the boundaries of interaction and exploratory learning. The actors in the education community could establish a Virtual Education Space. It is against this backdrop that this study set out to experiment with multimedia technology when integrated into D-I-E as a viable tool for teaching and learning the English language

Theoretical Framework

Multimedia learning focuses on promoting pupils understanding by mixing words and pictures. It depends on designing multimedia instructional messages in ways that are consistent with how people learn. A Cognitive Theory of Multimedia Learning propounded by Meyer Richard in 1997 has been presented by researchers which are based on three assumptions suggested by cognitive science research about the nature of human learning; the dual-channel assumption, the limited capacity assumption, and the active learning assumption. The dual-channel assumption is that humans possess separate information processing systems for visual and verbal representations. For example, animations are processed in the visual/pictorial channel and spoken words (i.e., narrations) are processed in the auditory/verbal channel. The limited capacity assumption is that the amount of processing that can take

place within information processing channel is extremely limited. For example, learners may be able to mentally activate only about a sentence of the narration and about 10 seconds of the animation at any one time. "The active learning assumption is that meaningful learning occurs when learners engage in active cognitive processing including paying attention to relevant incoming words and pictures, mentally organizing them into coherent verbal and pictorial representations, and mentally integrating verbal and pictorial representations with prior knowledge" (Idogho 89). This process of active learning results in a meaningful learning outcome that can support problem-solving transfer.

A framework for the cognitive theory of multimedia learning is presented in the following manner. In a computer-based environment, the external representations may include spoken words, which enter through the ears, and animations, which enter through the eyes. The learner must select relevant aspects of the sounds and images for further processing. In addition, the learner may convert some of the spoken words into verbal representations for further processing in the verbal channel whereas some of the animations can be converted into visual representations for further processing in the visual channel. In a book-based environment, the external representations may include printed words and illustrations, both of which initially enter through the eyes. The learner must select relevant aspects of the incoming images for further processing. The second set of processes is to build a coherent mental representation of the verbal material (i.e., form a verbal model) and a coherent mental representation of the visual material (i.e., form a pictorial model). These processes are called organizing. A third process is to build connections between the verbal and pictorial models with prior knowledge. These processes are called integrating. The processes of selecting, organizing, and integrating generally do not occur in a rigid linear order, but rather in an iterative fashion. Once a learning outcome has been constructed, it is stored in long-term memory for future use. When active learning occurs, the outcome is indexed in long-term memory in a way that allows the learner to use it to solve transfer problems.

According to the cognitive theory of multimedia learning, meaningful learning depends on all three of these processes occurring for visual and verbal representations. Instructional methods that enable and promote these processes are more likely to lead to meaningful learning than instructional methods that do not. According to this theory, learners can engage in active learning (such as the processes of selecting,

organizing, and integrating) even when the presentation media do not allow hands-on activity (such as printed text and illustrations, or animation and narration). The challenge of multimedia instructional design is to prime and guide active cognitive processing in learners so that learners construct meaningful internal representations.

Materials and Methods

Study Design: This is a quasi-experimental study that uses mixed methods approaches research design. The researcher used a quantitative approach to compare the final scores of two groups namely the pupils who learn through multimedia teaching instruction and the students who learn through traditional classroom instruction. Besides that, one-to-one interviews and classroom observations to investigate the attitude and perception of the participants towards multimedia teaching instruction were also carried out.

Variables and Instrument: The independent variable of this study is the instructional approach (multimedia teaching instruction vs. traditional teaching instruction), and the dependent variables are students' achievement as measured by their final scores in the experimental design, their attitude as well as their perception. The final scores of the Primary V Pupils of University Staff Schools (USS), Benin City were used as the measuring instrument. The test was designed by the researchers/ facilitators to measure the performance of pupils who took the English language contents for the programme/workshop.

Participants: Two classes of Primary V were chosen to be the participants – one class of 31 pupils as the control group and the other class of 34 pupils as the experimental group. The total number of pupils was 63. There were 22 girls and 11 boys in the control group, while the experimental group consists of pupils only. *Procedure:* The study was conducted over a term (14 weeks) with four contact hours a week. Before the study commenced, the pupils' previous term examination scores were used as the pre-test to investigate whether there were any significant differences between both groups. In the final week of the term, five pupils in the experimental group were randomly chosen for the face-to-face interviews. In the study, both groups were taught by the same instructor. In the control group, a textbook and workbook were used. Teaching and explanation were done using traditional classroom instruction.

In the experimental group, the same workbook is used for practice but multimedia teaching instruction was employed to teach the course content to the pupils. Both groups were exposed to the same syllabus and given similar homework. In addition, the instructor also used his method, "dual-language expanded sentence method" to teach sentence structures. The experimental group was placed in TEC (technology-enabled classroom). "The dual language expanded sentence method" as used in this experiment implies the use of the participant's mother tongue, to make sentences and their interpretation in English language and vice versa. TEC is a classroom equipped with a computer, audio-visual player, multimedia speaker, LCD projector and automatic projector screen. The teacher controls the use of the equipment with a touch panel icon on the computer screen for both classes, the instructor carried out whole class teaching. He usually stood in front of the class, while the pupils sat facing the whiteboard. Every lesson consisted of three sections: vocabulary, dialogues and sentence patterns. The learning materials are described in detail as follows. *The Learning Materials of the Traditional Instruction*: The textbook used in the control group is the book used by the pupils learning Elementary English Language in Primary V in University Staff Schools (USS), Benin City. Every chapter consists of two situational dialogues, a list of new vocabulary, and a few sentence patterns.

Discussion of Findings

The Qualitative Findings: Face-to-face Interview

Five pupils in the experimental group turned up for the one-to-one interview with the researchers. The questions asked were as below:

1. Do you like your instructor to use multimedia teaching instruction to teach you? Why?
2. If you can choose, which class do you want to attend – the one with multimedia teaching instruction or the one using a textbook?
3. Do you think the situational dialogues presented through VCD are appropriate?
4. What is your opinion on the use of PowerPoint presentations to introduce/teach new words?
5. You were asked to get into groups of four for a simulation of the situational dialogues after watching the video clips. What is your opinion on that?

6. After learning through multimedia teaching instruction, did you notice any change(s) in your attitude or your friends' attitudes towards learning English Language studies?
7. Did you get any other benefits after learning through multimedia teaching instruction?

Below is the summary of the findings:

1. All five respondents gave a "yes" answer and indicated that they like to learn the English language through multimedia teaching instruction very much. Respondents gave similar reasons for preferring multimedia teaching instruction. For them, learning through multimedia teaching instruction is fun and exciting.
2. All the respondents said that they certainly prefer to attend the class with multimedia teaching instruction instead of attending the class that uses a textbook. They indicated that the former benefits them more and is not boring.
3. Respondents liked to watch the VCD that presented dialogues in a real situation. Besides, they get motivated by watching the animation characters speak good English.
4. They claimed that they learn faster and understand lessons better through watching a video. They also felt good and excited to hear more "people" speak good English in the class.
5. The respondents said that the new words introduced through PowerPoint presentations were not boring but useful, encouraging and easy to understand. They paid attention to the slides as they would not want to miss any. They also did not feel hesitant to request the instructor to "repeat" the words or sentences so that they can get the tones and sentences more correctly: something that they would not have done in a traditional classroom instruction class. However, two of the respondents thought that the slides were not catchy enough. They found a few of their classmates did not pay full attention during the second practice at the end of the class. They hoped the instructor would improve the quality of the slides by adding some animations, and inserting relevant pictures and soft music so that it will be more enticing. They liked the animation done on the new words which were presented in the PowerPoint presentation, and as such, they were more interested to learn.
6. Respondents accepted and liked the system. They felt the system is very good because it encourages them to work cooperatively and

they feel happy and excited. The boredom of learning decreases compared to the old system (traditional instruction).

7. Respondents claimed that they and also their friends have a more positive attitude towards learning in class. They noticed that there was less daydreaming in the class. Their attention increased; they were eager to study more because they could learn easily with colourful graphics and animations. They were eager to attend the English class. They felt time passes quickly compared to the old system. One of the participants recommended that multimedia learning instruction be incorporated into the teaching of all English phonetics. If possible the workbook should also be made in the form of interactive multimedia.
8. Unexpectedly all the respondents revealed that they got the most benefit from the use of the "dual-language expanded sentence method" which was used by the instructors to teach them to write correct English language sentences. They can easily understand the sentence structure and they are very confident in writing English sentences now. They feel that learning through multimedia teaching instruction is enjoyable, beneficial and effective. They hope the instructor will continue using this method to teach them. They like this method very much compared to the conventional method. In a similar vein, the English language teacher affirmed that the experiment in multimedia technology integrated into drama-in-education (D-I-E) for teaching English in the primary school curriculum is viable and laudable. He admits that the medium makes teaching and learning English simple since it combines both pictures and sound and as well demonstrated before the learners. He, therefore, opined that the medium and method should be encouraged.

Classroom Observations

The learning atmosphere was observed to be lively and encouraging. During the first week, the students paid full attention to the PowerPoint presentation. Sometimes, they requested the instructor to "replay" certain words that they want to hear the pronunciation of more clearly. Almost all the students seemed to enjoy this new way of learning. A few students read new words and sentences loudly and joyfully. The class always rang with cries of joy and laughter when they were watching video clips. Smiles were seen on the students' faces. The instructor observed that more

students dare to try to guess the meaning of words or sentences as well as construct sentences voluntarily. The instructors/facilitators did not find pupils falling asleep or daydreaming in the middle of the class. It was very rare to come across pupils trying to do other work during the class. However, one weakness that was observed was the pupils were busy copying the sentences shown on the slides. As a whole, the instructor found that the pupils showed good and positive responses towards the use of multimedia teaching instruction by him. From the classroom observations and interviews with some pupils, it shows that the pupils prefer this new teaching instruction to the traditional method.

Discussion of the Qualitative Findings

From the pupils' responses in the interviews and classroom observation, most of them showed a very positive response and expressed that they like this method instead of the conventional method. They welcome this "new" teaching method and they enjoy learning through it and hope that the teacher would continue implementing this method in the English class. It is believed that the pupils are motivated to perform better than their previous performance now that they learn English language in a livelier, interesting and motivating way. The instructors also discovered that through PowerPoint presentations, they had effectively taught sentence construction to their pupils, especially through the "dual-language expanded sentence teaching method." This is certainly beneficial as the students can easily understand the grammatical rules and write correct English Language sentences.

The Quantitative Findings

A "pre-test" was carried out to determine whether there were any statistical differences between the control and experimental groups. The previous term's examination results were used for this purpose.

Discussion of the Quantitative Findings

The pre-test result showed that before the study started, both the control and experimental group were statistically not different. Although the experimental group's mean score is .46 higher than the control group, the difference is not significant at $p < .05$ level. After one term of learning the Elementary English Language course through multimedia teaching instruction, the experimental group obtained a higher mean score. The difference between the mean scores of both groups is bigger. The mean

difference is only .46 during the pre-test, and it increased to 6.00 for the post-test. The difference between both groups becomes statistically significant.

Conclusion

This study, even though is small, can be considered a pilot study to examine the implementation of multimedia teaching instruction in the English language class for non-native learners. It is recommended that in the future, more English language instructors should implement multimedia teaching instruction in their teaching to replicate its effectiveness. Another consideration that may take off from here is to use and study the effect of using an electronic workbook to replace the printed workbook that we normally use in class. This simple study has proven that drama-in-education (D-I-E) integrated with multimedia teaching instruction is more effective than traditional teaching instruction in terms of pupils' achievement. Although "there are proponents that claim learning is influenced more by the content and instructional strategy in a medium than by the type of medium" (Vaughan 31) and also that "media are merely vehicles that deliver instruction but do not influence pupils' achievement" (Clark 449), the effectiveness of multimedia teaching instruction cannot be denied. Instructors should take advantage of multimedia teaching instruction not only to teach but also to create and enhance pupils' motivation, interest and achievement. Language instructors especially those who teach English Language as a third language should be cognizant of the benefits of using multimedia instruction.

A combination of their skills, experience and the use of multimedia teaching instruction will definitely bring about a more effective teaching and learning. This postulated that the learning of Elementary English Language courses through multimedia teaching instruction has produced positive results. As such, it could be posited that multimedia teaching instruction could be used to replace traditional classroom instruction. The main purpose of using D-I-E integrated with multimedia technology in language teaching is to promote students' motivation and learning interest in the English language. In the non-native English-speaking context, this can be a practical way to get them involved in language learning. To achieve this goal, language teachers should create a favourable environment for English language teaching, which should be based on the availability of information and teaching materials. While

using multimedia technology in teaching if pupils are not too dependent on their mother tongue, they should be motivated to communicate with each other in English. The process of English learning should be more pupils-centred and less time-consuming. Language teachers should maintain the pupils' communicative competence through multimedia technology. In conclusion, the utilization of multimedia technology can fully improve the pupils' thinking and practical language skills; it will ensure and fulfil an effective result of English language teaching. Despite some disadvantages of using multimedia technology in teaching, multimedia technology can be used effectively in the English language teaching classrooms. Overall, non-native speakers of English as language teachers can teach English more efficiently if they use multimedia technology.

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