Creativity And Implementation Of Educational Technology Curriculum In Tertiary Institutions In Cross River State, Nigeria

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Abstract

This study investigated the extent to which creativity practices influences educational technology curriculum implementation in tertiary institutions in Cross River State, Nigeria. To achieve the purpose of the study, a research question was posed and a null hypotheses were formulated and tested at 0.05 level of significance. Review of literature was carried out according to the sub-variables of the study. The study adopted the ex-post facto research design. The population of the study comprises of two thousand seven hundred and seventy one (2,771) students of educational technology studying in the University of Calabar, the Cross River University of Technology Calabar, College of Education Akamkpa and College of Education Obudu, all in Cross River State. A total sample of six hundred and eighty two (682) students was used for the study. The instrument for data collection was a 40 item structured questionnaire developed by the researchers. The instrument was titled "Creativity and educational technology Curriculum Implementation in Tertiary Institutions Questionnaire (CEDTCITIQ)". One-Way Analysis of Variance (ANOVA) with LSD Post-hoc analysis was used to analyze the data to test the hypothesis. The findings of the study revealed that students creativity significantly influence educational technology curriculum implementation in tertiary institutions in Cross River State Nigeria, it was recommended among other things that, there is need for school administrators to enhance creative learning by encouraging a constructivist problem based learning where the students are given the opportunity to research and only guided by the teachers.

Keywords: creativity, curriculum implementation, educational technology, tertiary institution.

Introduction and background

Curriculum implementation is an important component of improvement in educational system. As a result, the process requires to be well managed to make it successful as well as the

curriculum being relevant to the target groups. From the inception of western education in Nigeria, many attempts were made in formulating policies towards the improvement of educational practice in the country. The challenges facing our different educational levels does not have to do with the policy formulation, but rather its implementation. Notwithstanding huge amounts of money disbursed on implementing a newly introduced curriculum, many of those curricula were never successful. As stated by Alade (2011), these failures in curriculum implementation is due to lack of knowledge of the practices (academic culture) been observed in these schools from academics, stakeholders outside the institutions as well as educators within the institutions.

Successful curriculum implementation is responsibility of stakeholders within the institutions. This concept of implementation has to do with operationalization of good ideas and theories in educational development. That is to say, to implement involves putting into action ideas or theories. Mezieobi (2003), sees implementation to be ways of transforming agreed educational plans proposals, ideas, decisions and policies into actualization. According to Mezieobi (2003), success or failure could be the end product of any conceived plan. Implementation when not obtainable, a plan will only remain a wish or rather intention. On one hand, curriculum within a school system is viewed as planned learning experiences given to students in school. Esu, Enukoha, and Umoren (2004), sees curriculum to be the whole learning experience a student is given been guided by a teacher. Offorma (2005), opined that curriculum has three basic parts: "programme of studies, programme of guidance and programme of activities". Curriculum is hence the guide or instrument the schools employs in translating, goals as well as societal values to desired reality or outcome.

Garba (2004) sees implementation of curriculum as transmitting curriculum from paper to field towards achieving the desired goal of designed curriculum. Okebukola (2004) stated that curriculum implementation has to do with translation of aims of the curriculum from paper to practice. It involves the interactive phase of curriculum process that occurs within classroom in agreement with the teachers, students, school administrators as well as parents. It equally involves the use of physical equipment in addition to good teaching techniques. Curriculum implementation is the bedrock of scientific, economic, political as well as technological wellbeing of societies. And of cause, it is often said that societies do not rise above the standard of their educational standards.

However, the main challenge of Nigerian educational system is how to put into practice the well-intended as well as articulated curriculum through feasibility as well as full-scale commitment in implementation. In agreement with the above statement, Mezieobi (1993) stated that within Nigeria, many curriculum proposals have remained virtually inert and never put into use. That is to say that, any curriculum could be well articulated but remain useless if implementation is not well effected. No matter how well formulated a curriculum may be, its effective implementation is a sine qua non toward achieving the desired goals of education, this is because the problem of most programmes arises at the implementation level, acknowledging this Mkpa (2005) stated that in Nigeria, it is at the implementation stage that

many excellent curriculum plans and other educational policies are marred, giving reasons for the failure of curriculum in Nigeria, Mezieobi (1993) stressed that curriculum with all its well-conceived goals is failing, largely as a result of implementation dormancy or fault" (P;99). That is to say that, Nigeria tertiary educational institution is grossly unable to satisfy the man power required for societal development and growth. Consequently, Izuagba and Atuobi (2009) stated that within the last twenty years, graduate of Nigeria tertiary institutions are so highly deficient in practical as well as professional skills as observed by employers of labour within public and private owned industries.

Educational technology as a programme in any tertiary institutions has to do with technology in education, that is, a type of education that concerns itself with teaching and learning with technology, it involves the use of technology as a tool to enhance effective teaching and learning process across all subject areas. Richey (2008) posited that educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources and aids to improve the progress of human learning, in words of Faizi, Shakil, and Sidra-tul-Muntaha (2013), Educational technology is a system in education in which machines; materials, media, men and methods are inter-related and work together for the fulfillment of specific educational objectives, there are different types of educational technologies; most important are Power Point presentations, calculator smart board, computer, TV and internet, through educational technology students develop a wider range of knowledge and understanding of concepts for higher productivity through effective delivery of lessons, Educational Technology in our institutions is therefore concerned with designing the system as a whole, identifying aims and objectives, planning the learning environment, exploring and structuring the subject matter, selecting appropriate teaching strategies and learning media, evaluating the effectiveness of the learning system and using the insights gained from evaluation to improve that effectiveness for the future (Ololube, 2006).

Creativity could be defined as the ability to see the globe in a different way, make connections between unrelated situations, discover hidden patterns, as well as to generate solutions. According to Lunetta (2008), creativity involves two processes thinking, then producing, creativity is the process of bringing something new into being, creativity requires passion and commitment, brings to our awareness what was previously hidden and points to new life, for innovation to flourish, organizations must create an environment that fosters creativity. Bringing together multi-talented groups of people who work in close collaboration together-exchanging knowledge, ideas and shaping the direction of future Organizations led by creative leaders have a higher success rate in innovation, employee engagement, change and renewal. Creativity starts from bedrock of knowledge, undertaking a discipline, as well as mastering learning ways and patterns.

Bandura Social learning theory (1977)

In this theory, Bandura wrote on the importance of observing as well as modeling the behaviours, attitudes, as well as emotional reactions of other individuals. Bandura (1977) states: Learning would be exceedingly laborious, not to mention hazardous, if people had to

rely solely on the effects of their own actions to inform them what to do, fortunately, most human behavior is learned observationally through modeling, from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action, social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, an environmental influences; the component processes underlying observational learning are: (1) Attention, including modeled events (distinctiveness, affective valence, complexity, prevalence, functional value) and observer characteristics (sensory capacities, arousal level, perceptual set, past reinforcement), (2) Retention, including symbolic coding, cognitive organization, symbolic rehearsal, motor rehearsal), (3) Motor Reproduction, including physical capabilities, self-observation of reproduction, accuracy of feedback, and (4) Motivation, including external, vicarious and self-reinforcement, it encompasses attention, memory and motivation, social learning theory spans both cognitive and behavioral frameworks, Bandura's theory improves upon the strictly behavioral interpretation of modeling provided by Miller and Dollard (1941) Bandura's work is related to the theories of Vygotsky, Lave and Wenger which also emphasize the central role of social learning. With regard to the above article topic, the social learning theory will help to understand the influence of campus culture and academic culture in these universities and explain how they influence the students' performance which is the major goal of the curriculum.

Social learning theory is applied to this study because, it has to do with modeling to fit into an environment or rather to adapt to the environment. This theory support some creativity as elements of social environment which can induce proper curriculum implementation. That is to say that people become creative and model their behaviour based on the influence of the environmental culture.

Creativity and curriculum implementation in tertiary Institutions

Creativity could be characterized as ability to see the globe in a different way, make connections between unrelated situations, discover hidden patterns, as well as to generate solutions. According to Lunetta (2008), creativity involves two processes thinking, then producing. According to the author, creativity is the process of bringing something new into being, creativity requires passion and commitment, brings to our awareness what was previously hidden and points to new life, for innovation to flourish, organizations must create an environment that fosters creativity, bringing together multi-talented groups of people who work in close collaboration together- exchanging knowledge, ideas and shaping the direction of the future Organizations led by creative leaders have a higher success rate in innovation, employee engagement, change and renewal. Creativity starts from foundation of knowledge, learning a discipline, as well as mastering thinking ways and patterns. A good student teacher and indeed practicing teachers end up becoming great teachers by not just using textbook or attending to classes. Towards achieving this quality, he or has have to seek knowledge further either in conferences or workshops. Conferences, workshops, and continuing education abound that could afford the student teacher the extra needed aid in the use of technology for

themselves and learners they teach. Administrators have to encourage their tutors to continue their education as well as make opportunities available for them in doing that.

Bajardi and Rodriguez (2013), carried out a study on Art Education to Develop Creativity and Critical Skills in Digital Society: Integrating the Tradition in an E-Learning". According to the authors, today the importance of art education and developing creativity is increasingly recognized at all levels of education systems. However, there are still many issues to clarify and develop, such as teacher training, their collaboration with artists and other professionals for a complete and efficient education that further connects to larger society. Furthermore, a key point to clarify is the use of new media, since teachers often diverge between who reject the use of digital equipment by preserving traditional methodologies and tools, and who fully adopt the use of new media growing away from the tradition. To solve this dichotomy we have experienced a contemporary-art education-project in schools, universities and museums in various European countries that integrates traditional teaching methods with new technologies using an on-line platform. According to Craft (2000), fostering the climate of creative purpose and challenge appears to act to disperse a culture of 'whingeing' and blame. Encouraging creativity in organizations may well not only enhance market share but also serve to ensure higher levels of commitment from employees.

Robert (2009), carried out a study on teaching creativity and inventive problem solving in science. According to the author, engaging learners in the excitement of science, helping them discover the value of evidence-based reasoning and higher-order cognitive skills, and teaching them to become creative problem solvers have long been goals of science education reformers, but the means to achieve these goals, especially methods to promote creative thinking in scientific problem solving, have not become widely known or used. In this essay, the author review the evidence that creativity is not a single hard-to-measure property, the creative process can be explained by reference to increasingly well-understood cognitive skills such as cognitive flexibility and inhibitory control that are widely distributed in the population, the author explore the relationship between creativity and the higher-order cognitive skills, review assessment methods, and describe several instructional strategies for enhancing creative problem solving in the college classroom Evidence suggests that instruction to support the development of creativity requires inquiry-based teaching that includes explicit strategies to promote cognitive flexibility, students need to be repeatedly reminded and shown how to be creative, to integrate material across subject areas, to question their own assumptions, and to imagine other viewpoints and possibilities.

METHODOLOGY

The study population is made up the whole students of curriculum and teaching/educational technology in the four tertiary in Institutions in Cross River State in 2017/2018 academic year. These includes University of Calabar, Calabar; Cross River University of Technology, Calabar; College of Education Akamkpa and College of Education Obudu. The selected departments have a total population of two thousand seven hundred and seventy one (2,771).

The study sample comprised of 682 students of curriculum and teaching/educational technology department across the four tertiary institutions in Cross River State offering the course. The sampling techniques used in securing data for this study was purposive and accidental sampling. By purposive, here the researcher used only educational technology department in the tertiary institutions within the study area because the researcher intentionally want to study the influence of institutional practices on the implementation of educational technology curriculum making the educational technology students the major respondents in the study. Secondly, the accidental sampling was adopted as the researcher only gave the instrument to the students present whenever he visits the lecture halls

Research question

A research question was raised to give direction to this study as follows:

1. How does level of creativity influences curriculum implementation in Cross River State tertiary institutions?

Research hypothesis

A research hypothesis was subsequently formulated to give answer to the research questions. It is stated as thus:

1 There is no significant influence of creativity on educational technology curriculum implementation in tertiary institutions. .

Data analysis

The data was analysed using One-way Analyses of Variance (ANOVA), and Fisher's LSD Post-hoc analysis at .05 significant level and 2 and 118 degrees of freedom

Ho: 1 Creativity does not significantly influence Educational technology curriculum implementation in tertiary institutions.
Independent variable in this hypothesis is creativity tested in categories as high, moderate as well as low creativity and the second variable (dependent) is Educational technology curriculum implementation. Testing the present hypothesis ANOVA was used result stated in Table 1
The analysis of variance (ANOVA) in Table 1 indicated that the calculated F-ratio of 46.251 ($F=46.251$, $p<.05$), were higher crit. F-ratio of 3.00 tested at .05 sig. level and 2 and 679 df. and since p(.000) is less than p(.05), meaning that significant influence of creativity does exist on Educational technology curriculum implementation in tertiary institutions. Hence, the null hypothesis was dropped. Hence F-ratio is significant, a post hoc test was undertaken and the findings outlined in Table 2.

The Table 2 result indicated that the mean point ($\bar{x}=19.06$) for those with creativity is higher than $\bar{x}$ ($\bar{x}=17.97$), moderate level of creativity as well as those with low level of creativity ($\bar{x}=15.55$). This implies that those with high level of creativity can enhance the implementation of Educational technology curriculum in tertiary institutions in the State.

Table 1 ANOVA

Result of the influence level of creativity on Educational technology curriculum implementation in tertiary institutions

Level of creativity	N	Mean	SD
Low	273	15.5568	4.45953
Moderate	242	17.9711	4.09169
High	167	19.0659	2.75973
Total	682	26.2727	4.22691

variation sources	SS	df	MS	F	Sig.
Between Groups	1458.830	2	729.415	46.251	.000
Within Groups	10708.443	679	15.771		
Total	12167.273	681			

*significant at .05 level, F-crit. =3.00

Table 2

Fishers LSD result on the influence of influence creativity on Educational technology curriculum implementation in tertiary institutions

Variable	Low (N=273)	Moderately (N=243)	High (N=167)
Low	15.55	-2.42	-3.51
Moderately	-4.09*a	17.97	-1.09
High	-2.98*b	-3.11*c	19.06
MS $_{within}$ =15.771			

Where a= principal diagonal means of group
b= above the principal diagonal differences in group means
c=. below the principal diagonal t-crit
*= significant values

Discussion of findings

Creativity and Educational technology curriculum implementation in higher institutions

The present hypothesis result shows significant influence of creativity on Educational technology curriculum implementation in tertiary institutions. The conclusion was sequel to the fact that F-calculated of 46.251 was greater than F-critical of 3.00 tested at .05 significant. level and 2 and 679 degree of freedom. Thus the null hypothesis was dropped retaining

alternate hypothesis meaning that creativity to a greater extent influences Educational technology curriculum implementation in tertiary institutions.

The above conclusion agrees with Lunetta (2008), who stated that creativity is the process of bringing something new into being, creativity requires passion and commitment, brings to our awareness what was previously hidden and points to new life, for innovation to flourish, organizations must create an environment that fosters creativity, bringing together multi-talented groups of people who work in close collaboration together- exchanging knowledge, ideas and shaping the direction of the future Organizations led by creative leaders have a higher success rate in innovation, employee engagement, change and renewal. Creativity starts from foundation of knowledge, learning a discipline, as well as mastering thinking ways and patterns. A good student teacher and indeed practicing teachers end up becoming great teachers by not just using textbook or attending to classes.

Craft (2000), following the same line of less stringent criteria, nevertheless leaves assessment in the hands of the teacher, suggesting that the observation and recording by the teacher of the behaviour of students is particularly significant, as this highlights what is then novel for the individual student as meaning maker.

Conclusion

Sequel to the results of this research work conclusions were reached that effective Educational technology curriculum implementation requires the power relationships, between stake holders in the school system, that is to say that students creative habits enhances the Educational technology curriculum implementation of such institution. This conclusion was made from analysis findings as the study variable was seen to have a significant influence on curriculum implementation of educational technology in tertiary institutions in cross River State.

Recommendations

There is need for school administrators to enhance creative learning by encouraging a constructivist problem based learning where the students are given the opportunity to research and only to be guided by the teachers.

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