

TOWARDS ENHANCING CREATIVITY AMONG TECHNICAL COLLEGE STUDENTS IN NIGERIA

Dr Jonathan .O. Oke¹ & Ayokunle .A. Olatilu²

^{1,2}Department of Vocational and Technical Education, Faculty of Education, P.M.B 5363, Ekiti State University, Ado Ekiti, Ekiti State, Nigeria.

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ABSTRACT

Creativity is the ability or power to create something new. However, creative skills are lacking among technical college students in Nigeria and hence leading to acquisition of technical skill without employability skill. Therefore this paper is out to consider how creativity could be enhanced among technical college students. The paper considers the concept of creativity, components of creativity, the nature of Nigeria technical college programmes and the strategies for enhancing creativity among technical college students in Nigeria, which includes: embracing creativity as part of learning; using the most effective strategies; thinking of creativity as a skill; among others.

Keywords: Enhancing, creativity, technical college students, Nigeria

INTRODUCTION

Creativity and vocational education are interdependent. Hence, Oke (2001) opined that creativity and vocational education can be described as two phenomena that contribute immensely to the growth and development of a nation. The author expressed that vocational education aimed at fighting against factors that depress the economy of a nation; while Kaufman (2008) on the other hand, said creativity intended to facilitate production of skills or ideas that are new, novel and original.

For many years past, people have tried to understand creativity and what the creative process entail. Creativity is seen as what happens when an individual produces something that is novel as well as appropriate, generative or influential (Stokes, 2006).

One can think of these three criteria as different levels on a hierarchy of creativity with novelty being the lowest level for creativity and influence being the highest level of creativity. Based on this definition, an idea that is novel, appropriate, generative and influential is seen to be more creative than an idea that is only novel and appropriate.

Vocational education is education that prepares people to work in various jobs, such as a trade, a craft or as a technician. Momoh (2012) opined that vocational education is sometimes referred to as career education or technical education. A vocational school is a type of educational institution specifically designed to provide vocational education. Vocational education can take place at the post-secondary and high reeducation level; and can interact with the apprenticeship system. At the post-secondary level, vocational education is often provided with highly specialized trades.

Technical Colleges are established to admit students from Junior Secondary School and provide them with full vocational courses of three-year duration. The Technical Colleges are regarded as principal vocational institutions in Nigeria (Okoro, 2006). They are established to give full vocational training intended to prepare students for entry into various occupations. On completion of the course of training, students have the alternative chance to seek job in industries, establish business on their own or proceed to higher institution for further training in Technical, Technological or Engineering courses (Federal Republic of Nigeria [FRN], 2013).

CONCEPT OF CREATIVITY

Creativity is the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context Plucker, Beghetto & Dow (2004).

According to Cox (2005), creativity is the generation of new ideas and opportunity; it is also a new way of looking at existing problems by thinking creatively and come up with a new solution. Creative thinking involves imagining familiar things in a new light, digging below the surface to find previously undetected patterns and finding connections among unrelated phenomena (Roger, 2008). Creativity can involve the occurrence of a composition which is both new and valuable (Eby,2012); thus acquisition of novelty is involved in creativity.

Novelty is the state of being new or original, especially in an interesting way. It has to do with production of a new object with development over the existing ones in a distinct way. For example, if an individual is asked to state what the mixture of cement, fine aggregate, coarse aggregate and water will produce; it would be considered highly creative if he or she can support the answer with explanation; since the answer to the simple question is very common, even though the correct and popular answer is “concrete”. That is why any novel product or solution must also be appropriate to the question or task at hand in order to be creative; it must provide an answer to a problem in a way that is useful.

In order reach a higher level on creativity, a skill should not only be novel and appropriate, but it must also be generative. Generative is an indication that this new and appropriate skill can lead to the production of more new and appropriate skills, products or ideas. If a particular skill reaches the highest level of creativity, it will also be influential; meaning that it will shape the way people think or do things (Stokes, 2006). In summary, creativity will help meet the initial criteria of novelty and appropriate creative process. The creative process refers to the sequence of thoughts and actions that lead to novel and adaptive productions (Lubart, 2001). Efforts to increase creativity are therefore widespread in education and are common in the industry.

Components of creativity

Some scholars like Sameh, Eva and Wim (2017) identified four components of creativity as criteria to be used for measuring creative thinking and for evaluating the quality of creative output. The identified components include:

Fluency: The Quality of smoothness of flow; that is, being fluent in problem solving. This is the production of multiple problems, ideas, alternatives or solutions. It has been shown that the more ideas we produce, the more likely we are to find a useful idea or solution. Fluency is a very important ability especially in the creative problem solving process. To have too few alternatives is not a good thing in problem solving, especially if you have to be innovative (Kim 2006).

Originality: Originality is the ability to generate new, different and unique ideas that others are not likely to generate (Rowe 2003). It means getting away from the obvious and commonplace or breaking away from routine bound thinking. Original ideas are statistically infrequent. Originality is a creative strength, which is a mental jump from the obvious. Original ideas are usually described as unique, surprising, wild, unusual, unconventional, novel, weird, remarkable or revolutionary. We need courage to be creative, because as soon as new ideas are proposed, the old ideas become unpopular one. In addition, the original thinker must be able to withstand the ridicule and skepticism, which will be directed toward his/her ideas. In addition, in order to enhance creativity we have to be respectful of unusual or crazy ideas or alternatives (Kim 2006).

Flexibility: Flexibility is the quality of being bent turned or twists without breaking, or the ability to create different categories of ideas, and to perceive an idea from different points of view. It is the ability to process ideas or objects in many different ways given the same stimulus. It is the ability to delete old ways of thinking and begin in different directions. It is adaptive when aimed at finding a solution to a specific problem or dilemma. Flexibility is especially important when logical methods fail to give satisfactory results. Flexible thinking provides for changes in ideas; deviation in thinking to include: contradictions, differing viewpoints, alternative plans, differing approaches and various perspectives of a situation (Kim 2006).

Elaboration: Ability to expand on an idea by giving details information, or the ability to create an elaborate plan. It is the process of embellishing an idea by adding details. It helps create new meanings and better understanding of things. Elaboration encourages students to expand their ideas and organize their thinking, as well as helping students clarify and articulate their thoughts.

This generalized sense of change often leads to anxiety (Negus & Pickering, 2004). It is under these circumstances that creativity becomes much more present and more important (Runco, 2004). It is claimed to help us achieve our goals individually and collectively (Westwood & Low, 2003). At the same time, the aura of panacea creativity has gained more ground among psychologists and technologists at large.

THE NATURE OF NIGERIA TECHNICAL COLLEGE PROGRAMMES

Technical colleges are established by the Federal Government of Nigeria to prepare individuals to acquire practical skills, basic and scientific knowledge and attitude required by craft men and technicians at sub-professional level in order to achieve the goals of technical education, which shall be to:

- enable individuals acquire vocational and technical skill;
- explore individual to career awareness by exposing useable options into the world of work;
- enable youth acquire an intelligent understanding of the increasing complexity of technology and;

- to stimulate creativity or creative thinking skill among the youth(Federal Republic of Nigeria [FRN], 2013).

The essence of the last goal is to ensure that students who are regarded as the recipients of the programme are not only developed in technical skills; but to ensure that they are also developed in attitudes and habits that will make them become creative, innovative and resourceful persons (Oziengbe,2009).

In line with the educational policy of the Federal Government of Nigeria, Hsiao (2004) opined that all technical college education programs should be run well to enhance the economic and environmental consequences of the professional tasks involved. The professional tasks referred to here could only be maximally carried out through the knowledge of the students' creative ability (Oke, Musta'amal & Inti 2015).

The Nigerian educational programme which is referred to as the 6-3-3-4 System of Education and renamed as 9-3-4 System of Education begins at primary school and the Junior Secondary School levels. (Oke et al., 2015). The pupils are expected to undergo vocational programme as Pre-vocational education at the JSS level, with the subjects including: Basic Technology, Home Economics, Fine Arts, Computer Studies, Music, Practical Agriculture and so on. At the Senior Secondary School level, vocational education subjects include: Building Construction, Applied Electricity, Metal Work, Wood Work, Auto mechanics, Home economics (FRN, 2013). Students are expected to transit from this level to university, polytechnics or College of Education or establish on their own; if they can not continue with the formal education to higher institutions (Oke, 2001).

How to Enhance Creative Skills among Technical College Students

There is a need to further boost the creative skills of students in Technical colleges, even if they have some skills or ability before. Hence Miriam (2013) explains ways to enhance creativity to include:

1. **Embracing creativity as part of learning:** To embrace creativity as part of learning, one needs to create a classroom that recognizes creativity; by allowing the students to be free and creative during the classroom activities.
2. **Using the most effective strategies:** There is need to always look for the most effective strategies or ways to teach creativity. Torrance in an experiment, found out that the most successful approaches used creative arts, media-oriented programs, or relied on the Osborn-Parnes training program (Osborn, 1963). Programmes that incorporated cognitive and emotional functioning were the most successful.
3. **Thinking of creativity as a skill:** To enhance creativity among technical college students, we must think of creativity as a skill. When we think and believe creativity to be a skill, then our job as educators will be to find ways to encourage its useage and break it down into smaller skill sets.
4. **Creating programs to develop creative skills:** In order to enhance creative skill among technical college students in Nigeria, we need to create programmes that will help to develop the skill, by bringing together students from around the world to design creative solutions to a particular problem and help them to compete with each other.
5. **Using emotional connections:** Research suggests that the best creativity instruction lies in the emotions of the learner. For example, in "Community Problem solving programme," students can devise a solution to help their local community, such as helping homeless youth.
6. **Seeing creativity in a positive light:** We should see creativity in a positive light. If we are teaching creativity, we need to embrace it too.
7. **Trying the Incubation Model:** In enhancing creativity we are advised to try the incubation model of Torrance (Lesswing, 2014). The model involves 3 stages which are: Heightening Anticipation, Deepen Expectations and Extending the Learning
8. **Gathering resources:** There are lots of resources related to creativity for reading; these resources need to be gathered and read in order to know ways of fostering creativity.
9. **Giving room for mistakes:** In fostering creativity, we need to give room for mistakes; because we learn to do things better through mistakes. There is a saying that "If you're not prepared to be wrong, you will never come up with anything original" (Robinson, 2015).
10. **Designing space for creativity:** When designing classroom, design some space for exploration; such as: a thinking table, a drama stage, a drawing table, or a space for groups to discuss ideas.
11. **Encouraging curiosity:** To encourage curiosity, we need to consider what is important to students' interests; drives their own thinking tank and gives inspiration to their world. Since creativity is intrinsic in nature, hence the need to step into their viewpoint to find what motivates them.

- 12. Considering the work of current experts in the field:** In enhancing creativity, the works of current experts in the field of creativity should be considered.
- 13. Teaching creative skills explicitly:** Teachers need to teach creative skills explicitly. Creative skills are not just about good ideas, they are about having the skills to make good ideas happen (Collard, 2014). The creative skills however, should include five major areas, which include: Imagination; being disciplined or self-motivated; resiliency; collaboration; giving responsibility to students and have them develop their own projects.

Summary

Creativity is a trait that must be possessed before people can become successful innovators, several researchers have proposed methods of enhancing the creativity of an individual, such as embracing creativity as part of learning, creating programme to develop creative skills, seeing creativity in a positive light among others.

Conclusions

Achievement of the objectives of technical college education system requires the promotion of creativity in the students. Students of technical colleges on graduation, are expected to offer their skills in different trades they had acquired. The teachers are also directly involved in properly exposing the students to the right knowledge and skills that would enable them become creative.

Recommendations

From the study, it is recommended that:

- Teachers should encourage divergent thinking while students should take risks to find out facts for themselves.
- Teachers should purposefully create awareness in students by informing them the values inherent in creative work.
- The government should co-operate with private organizations for the development of innovative and high quality research in technical college programs.

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