

# CREATIVITY IN TEACHING AND LEARNING PROCESS AS A VERITABLE TOOL FOR NATIONAL DEVELOPMENT AND ECONOMIC EMPOWERMENT

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## Abstract

Human beings continually learn from one another and share their information for generations. Our ability to understand the value of learning and to do so gives us the tool to understand more and more about our ; . investment and ourselves. Intelligence offers us the means to utilize abstract ideas and implement reasoning in our arguments to justify the things we do. The paper examines the need to harness the creativity in teaching and learning process in order to meet the growing demand for entrepreneurship in the 21 st century Nigeria.

## Introduction

Historical antecedents show that, it is possible in Nigeria, that creative children must have gone -unnoticed, just because they become creative person at the wrong time (Badu. in Shuanbu 2004).

The fast developing world in **information** technology and indeed the need for general empowerment of the population to enhance entrepreneurship requires creativity in teaching and learning process.

Shanibu (2004) states, that in Nigeria, creativity has not been given the expected premium in our institution of learning. Teachers may not favour student who have the potential to, be creative especially during classes. The teacher is expected to favour or carry all learners along irrespective of their characteristic behaviours.

Countries like the United States of America, Japan, and China etc. have grown to their present status in the global village due to their utilization of the creativity of their citizenry. Nigeria therefore, cannot ignore her potential greatness and expect socioeconomic emancipation. The 21st century certainly will be characterized by rapid technical development. Nigerian teachers must therefore be well equipped with the necessary tools to meet up with the challenges. The learners creative political should be recognized, thus making him useful not only to himself but to the society and the Nation at large.

## What Is Creativity?

Obviously, creativity means different things to different people and can be defined in any number of ways. Creativity can also be defined at many distinct levels - cognitively, intellectually, socially, economically, spiritually and from the finite perspective of discipline - business, sciences, music, art, dance theatre etc.

Morris (1976) defined creativity as the "capacity"to discover, a mixture of realistic and imaginative thinking, often resulting in novel solutions". The definition suggests that everyone has a certain level of creativity in him, provided he is able to juggle realities with abstraction and imagination.

Shuaibu (1996), re- echoed the special traits in creativity, as a concept that involves experiencing life in ones own way, and drawing upon ones own resources and capabilities.

However, literature abounds that creativity is "characteristic that a person possesses, a product or out come that is regarded as original and a process by which an unusual outcome is obtained"<sup>1</sup>. It does not take an intelligent person to be creative.

Creativity can rely on a number of factors some of which are named below:

1. **Motivation:** If the person has no desire to utilize their creativeness, they will not be creative.
2. **Personality:** People unique inclinations and differences in decisions making makes our choice of creativity unique and thus the decisions made in creating something will be different with each person.
3. **Parental Guidance:** Parents provide the crucial link for learning between birth and maturity, therefore their learning and partly their creativity and intelligence will rub off on those they learn, as will to people that they communicate with.

In addition to the factor, it is worth considering that any factor in the external environment will be a factor in one's creativity.

Debono (1976) said that creativity involves two forms of thinking; "Vertical thinking" and "Lateral thinking". Vertical thinking concerns itself on refinement of existing ideals, while lateral thinking goes around a problem, or reformulates it."

Creative work consists of the application and melding of three types of thinking, all of which can contend and can be learned or enhanced.

Creativity is a balance between these three forms of thinking.

1. **Synthetic Ability:** This includes divergent thinking, as it is the ability to think of or generate new novel or interesting ideas. But it is also the ability to spontaneously make connections between ideas, or groups of things - ones that often go unnoticed or discovered by others.
2. **Analytical Ability:** This includes the ability to think convergent, in that it requires critical thinking and appraisals as one analyzes and evaluates thoughts, ideas, possible solutions. This type of thinking is key in the realm of creative work because not all ideas are good ones, some need to be culled. Creative people use this type of thinking to consider implications and project possible responses, problems and outcomes.
3. **Practical Ability:** The world is full of people who have good ideas, as well as ones who can pick ideas apart. However, the basic key to creative work must include the ability to use practical thinking; this is the ability to translate abstractions and theories into realistic applications.

#### Levels of Creativity

The first three levels of creativity can be attained by anyone with motivation and persistence. The last two may be unattainable to all but inspired or the naturally creative genius.

1. **Primitive and Intuitive Expression:** This first level incorporates the primitive intuitive expression found in children and adults who have not been trained in art. There is an innocent quality to primitive art, but also directness and sensitivity. The naive artist creates for the joy of it.
2. **Academic and Technical Level:** At this level the artist learns skills and techniques, developing a proficiency that allows creative expression in myriad ways. The academic artists add power to expression through the mastery of craft.
3. **Inventive Level:** Many artists experiment with their craft, exploring different ways of using familiar tools and mediums. Breaking rules is the order of the day, and challenge the boundaries of academic tradition, becoming increasingly adventurous and experimental. Inventors use academic tradition and skills as a stepping-stone into new frontiers.
4. **Innovative Level:** Materials and methods that are art of the ordinary are introduced. Now the creator breaks the boundaries. The academic or inspirational foundations remain as a substructure of unconscious thought guiding these creative efforts.
5. **Genius Level:** These are individuals whose ideas and accomplishments in art and science defy explanation. Genius is arguably the one level that is unexplainable and perhaps unattainable, something that an individual is born with.

#### Characteristics of Highly Creative Individuals

Considerable research works have been done showing an enormous number of creative personalities. Torrance (1972 in Shuaibu, 2004) identified over 30 creative traits that could be used to identify the personality and behaviour of the potentially creative students. However, the behaviour patterns of the creative have been summarized depending on the thoughts and situations that engender them to create and these are:

1. **Creative Persons are Original:** This statement may seem boring to the reader especially if creativity is conceived as an ability that should be quite different from the usual expected response to a given problem. It should however be understood that creativity involves three major phrases. It involves a response that is novel, an answer that is not statistically frequent; such a response must be adaptive to reality.
2. **Creative persons are Independent in Judgment and in Action:** They do not offer explanations for their actions. They are strongly self-motivated to attend to issues that give

them concern and which of course call for independence.

3. **Display a Great Deal of Curiosity about Many Things:** Are constantly asking questions about anything and everything; may have broad interests in many unrelated areas. Literature abounds that this aspect of a creative child is most often disliked. A child who is consistently punished for being curious may regard himself as a 'hopeless dunce'. Recognizing a child's talent for asking difficult and puzzling questions might make him find his study easy and existing. A flexible teacher achieves much more when his students are guided and allowed to be themselves.
4. **Creative Persons Want To Meet Challenges and Attempt Difficult Tasks:** Creative people are adventurous and are willing to take risks. Wallas (1967) reported that in many countries of the world, teachers' reaction to "attempt difficult tasks" ranked very low. Most often children, who attempt tasks that are difficult and invariably make mistakes, may be punished, and described as "difficult children". The potentially creative like to be different and they like to carefully test the limits of their abilities, situations, materials and methods.
5. **Creative Persons Are Unusually Aware Of His or Her Impulses:** They are often more open to the irrational within him or herself. They may freely display opposite gender characteristics (freer expression of feminine interest in boys, greater than usual amount of independence of girls).
6. **Display Keen Sense of Humour:** They see humour in situations that may not appear to be humorous to others. Sometimes their humour may appear bizarre, inappropriate, and irrelevant to others.
7. **Creative Persons Exhibits Heightened Emotional Sensitivity:** They may be very sensitive to beauty, and visibly moved by aesthetic experiences.

### **Thinking and Production Criteria for the Selection of Potentially Creative Students**

To respond to the creative needs of the students to be able to empathize with him and to recognize and appreciate him to whom he is, the teacher must genuinely know him. Studies have shown that some teachers are not quite aware of the characteristics of their students that have potential to be creative. But since the teacher is the major instrument by which the creative talents can be fostered from the beginning of child's schooling, it is important that the teacher be able to identify such talents.

In education, emphasis is placed so much on students who conform, such that those students who have the potential to be creative are almost not remembered. Identification will help in giving the required environment for maximum performance of talented students. Measures of creativity include test of divergent thinking, personality, scales, nomination of teachers and peers, and self reports (However and Bachelor, 1989).

Torrance suggested that fluency, originality, flexibility and collaboration (Usefulness) form the four most important criteria that single out the individuals who are creative. To distinguish among the attributes of flexibility, fluency and originality have been ground also to be difficult.

However, to minimize the associated problems, test and non-test method are used in identification. (A) **Test Method of Identification of Creative Talent**

1. **Uses of Things:** A use for things test was derived from test originally designed by Haverford in his factor analytical work on cognitive ability to score to answers that are non conventional.
2. **Word Association:** The subject is presented with ambiguous words such as bold, field, bald, sad etc and asked to give many meaning as he can think for each of the word.
3. **Fables:** The subject is required to make up three different ending for folk stories, the last line of which is missing. In other words, such stories are not complete; the test could be made a little bit more difficult if it requires that ending should either be sad or humorous.
4. **Problem Devising:** The subject is presented with a long paragraph containing many numerical statements. He is expected to produce as many mathematical problems as possible based on the data given in the paragraph,
5. **Visual Bias Tests:** This test demands for a drawing from the subjects. But with the drawing a title is given and such title may be: flying kite in the sky. The subject is expected to draw a

diagram (hat depicts "flying kite in sky").

(B) **Non-Test Method of Identification of Creative Talent:** The non-test methods have been used to identify creativity. This method is used for placement, classification, promotion and selection of scientists and engineers in national development or assignment. The speed in accomplishing it, the level by which individuals could be motivated, the nature of questions and many other factors may serve as hindrance to this method. **Encouraging Creativity in Class**

Creative learning requires creative teaching and there is no substitute or short cut. Education can help provide a sick free society by building environment that will not restrict creative ability, an environment that will help in providing the psychological safety and psychological freedom for creative performance. The teacher's tasks in the optimum fulfillment of his students who have potential to be creative are enormous. The first test is that teachers need to be fully aware that creativity is highly complex with series of cognitive and emotional variables, which they have to develop based on individual's experience and differences. A liberal teacher also realizes that most children have the potentials to be creative and all we need to do is identify and nurture such attributes. There are so many ways we can use to promote creativity in the classroom: All areas of the curriculum could be used to encourage creative thinking by guiding students not only to seek solutions, but also to find new problems.

Hennessey and Amabile (1988), however, listed some ways we can adopt to encourage creativity in the classroom.

1. Minimize the use of extrinsic rewards for creative production; stimulate students to find intrinsic satisfaction in their efforts.
2. When possible, allow students to make choices in writing stories, for example, give student's opportunity to create their own themes. In science projects, encourage students to identify an area of interest that they can study. Students become problem finders when you give them freedom to make their own choices.
3. Students can learn to be creative when they experience success. Helping students develop self-esteem and a sense of their own is an on going responsibility in teaching.
4. When possible, involve students in the evaluation of their own work, instead of students accepting a teacher-imposed assessment of their efforts students can benefit from self-evaluation and peer evaluations. **Brainstorming**, honest criticism and small group discussions help student's perceive their own work accurately and also encourage creative thinking.

#### **Conditions for Creativity in the Class**

To achieve the set down teacher's objectives and to nurture healthy relationship between the students and their teachers, there is need for deliberate procedures. The following conditions could be useful.

1. The teachers should try to extend love to all the children in class. Every child wants to learn and the process of learning may vary from child to child and what we need to do is to try to understand each.
2. The teacher should develop and establish confidence in the children, to help them in accomplishing a task set for them.
3. Use informal approach of teaching, especially when necessary to encourage 'loosening up' when students are free, they work better, especially when the teachers - students classroom rigidity is removed.
4. The home and the school should serve as 'positive partners' to develop self-concept of children. Parents should complement the efforts of the teachers.

#### **Conclusion**

In a democratic country, democracy cannot thrive on the discouragement of talents, but on the contrary progress in various human endeavors depends on the proper education given to the potentially creative who will excel in different areas of life and will should the responsibilities of directing the destiny of the nation by giving lead in all walks of life. Many Nations of the world

depend on creative talents for survival, be it in political decisions, economic, physical, social and psychological.

Creativity is important in solving national problems and in particular can lead our country to a state of viable position among other nations of the world. Neglecting it will be unfortunate. Therefore creativity should be given the attention it deserves in our nations building. References Debon (1976). *Teaching Thinking*. London Temple Smith.

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