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TEACHERS' PERCEPTION OF INCULCATING CREATIVITY IN SECONDARY SCHOOL STUDENTS IN ABAKALIKI MUNICIPAL CAPITAL TERRITORY

***Achilike, B.**

Faculty of Education, Ebonyi State University, Abakaliki

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ABSTRACT

This study examined teachers' perception of inculcating creativity in secondary school students. Its main objective was to find out the ways teachers can help inculcate creativity in secondary school students as well as find out how students can enhance their own creative behavior. The study adopted a descriptive survey design. The population of the study was 1,050 teachers from the study area. A sample of 100 teachers were selected from a total population of 1050 teachers from the study area. Structured Students' Creativity Questionnaire was used for data collection. The data was analyzed using percentages and the hypotheses tested using Chi-square. The findings reveal that teachers can inculcate creativity in students by using discovery learning, exposing them to democratic classroom, encouraging them to freely express their skills, giving them project and experiment to carry out. The findings also reveal that students can enhance their own creative behaviour by reading imaginative books on creative people, engaging in discovery on every topic and sharing and comparing ideas with other students. Recommendations were made to include that: teachers should not only teach to cover the scheme of work, but should as well try to enhance creativity in students. Secondly, students should always try to make use of the opportunities that enhance creativity.

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INTRODUCTION

The pressures of the present day society pose serious threats to human existence. Such pressures include insecurity, hunger, diseases, inflation and political crisis. The changing society in these dimensions demands that man should be creative to enable him adapt, exist and function optimally. In this light, Nnachi (2009) opines that creativity becomes necessary because problems exist and should be solved. By means of creativity therefore, there is strong tendency for innovation and positive change for development and progress. The point remains that since the society poses a lot of challenges, there is need for creative people who should manage it to man's advantage. Such people are those who are innovative in the way they do things. They include those who think in special ways, reason and design things in puzzling manners. Thus, with such people, changes and improvement will be brought to the society. In recent years, there has been an increased interest in creativity in Nigeria. Following the

trend, creativity became a topic of very serious concern in schools, colleges and in universities. Many workshops and seminars have been organized for teachers of various categories because the country's policy makers have now realized that all talks on developing indigenous technology would be puffs of wind unless children who early in life show creative potentials are provided conducive environment that will encourage the development of their creative potentials. Every child is born with the potential of being creative (Cromptley, 1992). Since creativity is inborn, it remains a crucial aspect of an individual's personality. Although creativity is inborn, it can be inculcated. But its inculcation in the child is best done in the classrooms. It is worrisome that many teachers do not encourage creativity in the learners. They do so by failing to teach those creativity-oriented subjects like, writing, crafts, music, drawing, basic technology. Perhaps their failure to teach the subjects may be as a result of their wrong perception of creativity and the need to inculcate it in students. Against this background, this paper attempts to investigate teachers' perception of inculcating creativity in secondary school students in Abakaliki Municipal Territory.

***Corresponding author: Achilike, B.**

Faculty of Education, Ebonyi State University, Abakaliki

Concept of creativity

Some people are innovative in the way they do things. They tend to change already existing ideas and evolve their own ideas towards the development of the word. They thus formulate ideas, design things and carry out activities in manners quite new, strange, unfamiliar, interesting and rewarding to others (Nnachi, 2003). People of this nature are said to be creative people. The term "creativity" means different things to different people. To some people it means being imaginative or inventive, taking risk or challenging convention. To some others it means producing something that nobody has come up with before. The diverse views of people on creativity has given rise to different definitions. For example, Guy and Bill (2004) defined creativity as the entire process by which ideas are generated, developed and transformed into value. Westen (1996) defined creativity as the ability to produce valued outcomes in a novel way. Creativity according to Hockenbury (2000) is a group of cognitive processes used to generate useful, original and novel ideas or solutions to problems. Wood and Wood (1999) explained it as the ability to produce ideas and/or solutions to problems. Traditionally, creativity is associated with the achievements of remarkable people like Plato, Aristotle, Michael Faraday, Achebe, Shakespeare, Isaac Newton, Mozart, Einstein and others who have in one way or the other contributed ideas that changed the operation of things, increased efficiency of operations, boost people's interest in things as well as made the world a better place for human living. From these definitions one could see that creativity is imperative because problems exist and they need to be solved following new approaches. For this reason, adopting old methods to solve these problems may no longer be relevant.

Characteristics of a creative person

Research findings abound to show that creative people have their own peculiar characters. For example, findings (Nnachi, 2009) identify the following characteristics of creative persons:

- Often meet the acceptable level of intellectual considered creative.
- Have high intelligence in the areas they are considered creative.
- Are always keen in trying new ideas, approaches or methods
- Often ask deep and uncommon questions
- Quickly gain insight in the identified problem and their solution
- Are hardly shy of criticism
- Are influenced by divergent thinking
- Have ability to solve problems through discovery learning
- Are naturally flexible in thinking. In other words, they have the ability to do out of the box thinking
- Do well in scientific aptitude.

Creative process

Creative process involves step-by-step act of solving a problem in a strange or novel manner. The stages involved in the creative process are:

Problem identification: This is the first stage in creative process. It involves clearly identifying and defining the problem to be solved. This helps the creative individual to focus attention in the desired direction.

Preparation: At this stage, the creative person goes into full investigation of the problem in order to gather as much information as possible about the problem.

Incubation: At this stage the problem is internalized into the unconscious mind and nothing appears externally to be happening. However, the unconscious mind does not stop working on the problem during this period. According to Woolfolk (1998), the process of incubation involves unconsciously working through the problem while one is away from it. The creative person at this time desires to be alone. Daily responsibilities seem cumbersome to him and he takes for granted what is usually acknowledged as being important.

Illumination: At this stage the creative idea bursts forth from its preconscious processing into conscious awareness. The ideas now being reformed, inspire the individual (Nnachi, 2003). The person may feel a rush of excitement as all the bits and pieces fall into a place (Solso, 1988)

Verification: This is the final stage of creative process and it involves consciously verifying, elaborating, and applying the ideas to ensure its workability.

How teachers can help promote or inculcate creativity in Students

Every individual has the potential for creativity but we all do not manifest creative behaviors. We usually think that creative solutions just pop into minds in a split second inspiration. This is not always the case. However, creative experts agree that one can learn to be more creative (Cropley, 1992). The teacher has the responsibility to foster creativity in her pupils or students. Creative children are however not easy to handle. They are usually restless in the class, being preoccupied with things other than what the teacher wants them to do. They may be sarcastic and fantasizing and sometimes lost in their thought. The teacher should therefore be aware and understand the creative process so that they can better understand the creative child in the classroom. According to Mayesky (2008), there are many approaches that teachers can adopt to help promote and/or inculcate creativity in students. The approaches include:

Project work: Project work is a series of activities that allow the students to study, do research and act by themselves using their abilities, interest, personal experience, and aptitude, if teachers give project work to the students, it can help in sprouting creativity in them.

Democratic Classroom Environment: Teachers can make classroom environment where each student's voice matters a lot. They should permit frequent discussions and interactions amid students in the classroom and make time for extra-curricula activities for the students.

Use of Different Models: Teachers can use various models which include creative persons like Isaac Newton, Michael

Faraday, Shakespeare, and others to produce creativity in the students. A perfect model can help in establishing connection amid the students' real lives and classroom, inspire innovation and create chances to resolve novel issues, and lookout ways to spread learning prospects at classroom and home.

Risk-Taking: Risk-taking thinking automatically prompts creativity. Therefore; teachers must encourage risk-taking approach in the students. They can do this by offering safe environment that permits risk-taking, arousing willingness in the students to try new ideas. Carry out simple experiment and accepting the mistakes made by students while trying new things.

Active Learning: Active learning is a model of instruction that focuses the responsibility of learners (Bonwell & Eison, 1991). It includes use of creative stuffs like games, concepts, maps and study materials. Teachers create interactions that provide students a lot of problem-solving opportunities, and give them a lot of chances for hands-on field work.

Discovery learning: According to Jooligen (1999), discovery learning is a type of learning where learners construct their own knowledge by experimenting with a domain, and inferring rules from the results of these experiments. Teachers should encourage students to improvise experiment and think outside the box.

Ways students can enhance their own creative behaviour

We are living in the 21st century where technology is dominant in the education industry. Nowadays, we easily have access to many tools that develop creativity in the students. Among the tools are:

Web Blogs: Blogs are the great platform to enhance creative writing, reading and thinking in the students. Students can enhance their creative behavior through demonstrating their opinion about a particular topic or lesson in web blogs.

Brainstorming and Mapping tools: Nowadays, brainstorming and mapping tools such as mind maps, puzzles, and visual graphs are available over the web for everyone. Students can enhance their creative behaviour by making use of those tools.

Infographics: Infographics (information graphics) help students to enhance their imagination and creativity. Using various tools available on the web, students can showcase their creativity using graphs.

Online Games: Students can also enhance their creative behaviour by using online educational games which helps them to learn a specific lesson with fun. In addition to the 21st century technologies, students can as well enhance their creative behavior by reading imaginative/adventurous books on great achievers/creative people, engaging in discovery learning, sharing and comparing ideas together among themselves, forming dramatic and literary club and using the internet for further reading on different topics. Various theories on creativity by Mangal (2013) show that:

- Creativity is a gift from god to man and is not universally distributed. Accordingly, some people get a

large share. Others get little share while there are those who have no share at all. An individual can only be creative to the limit set by nature but environmental influences can counter the limit (Clifford, 1990; Nnachi 2009, and Chauhan, 2013).

- Creativity is something native, an innate or inborn trait, a special mental power or unique cognitive abilities that cannot be acquired through learning or training. In other words, creative persons are born not made.
- Creativity is not only the result of one's heredity, inborn capacity or God's gift. It is acquired and nurtured like other human traits. A positive environment or situation that is open, democratic and free, contribute positively to the release of creative potentials (Clifford, 1990, Nnachi 2009 and Chauhan 2013).
- Creativity is a means and product of one's emotional purging, an opportunity for sublimation and catharsis.
- Creativity is a function of the interaction between the brain's hemispheres.

Statement of the problem

'Creativity' is a recurrent issue in education, as seen in the work of special interest groups such as British Educational Research Association Special Interest Group Creativity in Education, government departments and advisory committees like Department for Culture Media and Sport, (2006) National Advisory Committee on Cultural and creative Education, (1999 and Scottish Executive, 2006). The interest of researchers in creativity produced a considerable number of investigations in the 1990s and 1970s. While there was a subsequent decrease following this initial increase, interest in creativity has remained consistent and has in fact peaked again in the last decade in many Western countries (Burnard, 2007; Craft & Jeffrey, 2008; Diaz & Riano, 2007; Hickey, 2002; Kaufman & Sternberg, 2010; Webster, 2009). As observed elsewhere, there are at least two generic concepts of creativity co-existing: the 'traditional' concept and the 'new' concept (odena, 2001b). The traditional concept of creativity is ascribed to people who contribute significantly to a field and whose contributions are recognized by the community, such as literary artist (e.g. Williams Shakespeare, Chinua Achebe and Wole Shoyinka), painters or sculptors, fashion designers etc. The significance of this traditional perspective in a school context tends to focus more on the output (such as interpretation within the 'canon') rather than the creative process. This implies that although the work of 'the masters' is a source of inspiration and is often studied in educational institutions, such exceptional standards of quality are difficult to reproduce. Other authors have called it *Historical Creativity* (Boden, 1990) or Big 'C' *creativity* (craft, 2001). In contrast, the 'new' concept of creativity is related to a psychological notion of imaginative thinking and has broad applications in the school context (Savage & Fautley, 2007). Within this latter concept, creativity is defined as imagination, successfully manifested in any valued pursuit. Taking this situation into account, there are issues that need further consideration. For instance, teachers' perception of inculcating creativity in students is rarely examined in the literature. Teachers are seen as students' second parents. They take custody of students

while in school. They help to nurture them and thus contribute significantly to the development students. It is worthy to note that although some work has been done on creativity by previous authors, however, adequate attention had not been given to the perception of teachers on how creativity could be inculcated in secondary school students. This gap is what this study intend to bridge.

Purpose of the study

The purpose of this study is to find out teacher's perception of inculcating creativity in secondary school students in Abakaliki Municipal Territory. The main objectives are:

1. To find out the key psychological characteristics of a creative student.
2. To find out how teachers can inculcate creativity in students
3. To find out how students can enhance their own creativity in behavior.

Research questions:

The following research questions guided the study:

1. What are the key psychological characteristics of a creative student?

2. How can teachers inculcate creativity in students?
3. How can students enhance their own creative behavior?

Hypotheses:

Due to the literature reviewed above, the following hypotheses were raised for statistical testing:

1. There are no significant ways teachers can help inculcate creativity in students.
2. Students cannot enhance their own creative behavior(s).

Methodology

The research employed a descriptive survey design. The population was 1,050 teachers in the area of study. A sample of 100 teachers were selected from a total population of 1050 teachers from both private and public secondary schools in Abakaliki Municipal Zone for this study using Simple Random Sampling Technique. The teachers were sampled from ten (10) randomly selected private and public secondary schools from Abakaliki Capital territory. The instrument used for data collection was a researcher structured Students' Creativity Behavior Questionnaire (SCBQ), which adapted Likert Scale pattern. Three research questions guided the study. The data from the questionnaire was analyzed using percentages and the hypotheses were tested using Chi-square.

RESULTS

S.No.	Items	Responses				Percentage of Responses			
		SA	A	SD	D	% SA	% A	% SD	% D
	What are the key psychological characteristics of a creative student?								
1	High school grades indicate high creativity	10	20	48	22	10	20	48	22
2	Scientific aptitudes indicate high creativity	33	40	10	17	33	40	10	17
3	Ability to invent/innovate indicate high creativity	69	31	0	0	69	31	0	0
4	Ability to think differently or out of box thinking	85	15	0	0	85	15	0	0
5	Ability to solve problems by discovering learning	82	18	0	0	82	18	0	0
6	Ability to ask deep, uncommon questions indicate creativity.	75	20	0	5	75	20	0	5
7	Leadership skill and creativity. are the same	41	34	20	5	41	34	20	5
	How can teachers inculcate creativity in students?								
8	Teachers can inculcate creativity by use of discovery learning	55	33	2	10	55	33	2	10
9	Teacher-centered expository teaching enhances creativity.	10	14	50	26	10	14	50	26
10	Democratic classrooms are conducive to creativity.	60	25	5	10	60	25	5	10
11	Encouragement of students free expression of skill (e.g. music, craftwork, arts) enhances creativity.	75	25	0	0	75	25	0	0
12	Cramming (note learning) enhances creativity.	0	0	70	30	0	0	70	30
13	Project work enhance creativity.	80	20	0	0	80	20	0	0
14	Experimentation	80	20	0	0	80	20	0	0
	How can student enhance their own creative behavior?								
15	Student can enhance their creativity by reading imaginative/adventurous books on great achievers/creative people in all fields	84	16	0	0	84	16	0	0
16	Students can enhance creativity by reading only to pass examinations	0	0	75	25	0	0	75	25
17	Student can enhance their own creativity by engaging in discovery learning using science clubs etc.	78	20	0	2	78	20	0	2
18	Student can enhance creativity by healthily questioning of the old ways things are done	30	45	10	15	30	45	10	15
19	Forming dramatic and literary clubs enhance creativity	70	30	0	0	70	30	0	0
20	Using the internet websites to research every topic further enhances creativity	80	15	0	5	80	15	0	5
21	Sharing and comparing ideas together (brainstorming) among students	60	37	0	3	60	37	0	3

Test of hypothesis 1

Items	SA		A		SD		D		Total
	Of	ef	Of	ef	Of	ef	Of	ef	
Teachers can inculcate creativity by use of discovery learning	55	47.1	33	22.4	2	18.7	10	11.7	100
Teacher-centered expository teaching enhances creativity	10	47.1	14	22.4	50	18.7	26	11.7	100
Democratic classrooms are conducive to creativity	60	47.1	25	22.4	5	18.7	10	11.7	100
Encouragement of students free expression of skill (e.g. music, craftwork, arts) enhances creativity	75	47.1	25	22.4	0	18.7	0	11.7	100
Cramming (note learning) enhances creativity	0	47.1	0	22.4	70	18.7	30	11.7	100
Project work enhances creativity	50		40		4		6	11.7	100
Experimentation		7.1		2.4		18.7			10
Total	330		157		131		82		700

Degree of freedom	Level of significance	X^2_{cal}	X^2_{tab}
18	0.05	505.7	28.869

Items	SA		A		SD		D		Total
	Of	ef	Of	ef	Of	ef	Of	ef	
Student can enhance their creativity by reading imaginative/adventurous books on great achievers/creative people in all fields	84	57.4	16	23.3	0	12.1	0	7.1	100
Students can enhance creativity by reading only to pass examination	0	57.4	0	23.3	75	12.1	25	7.1	100
Student can enhance their own creativity by engaging in discovery learning using science clubs etc	78	57.4	20	23.3	0	12.1	0	7.1	100
Student can enhance creativity by healthily questioning of the old ways things are done	30	57.4	45	23.3	10	12.1	15	7.1	100
Forming dramatic and literary clubs enhance creativity	70	57.4	30	23.3	0	12.1	0	7.1	100
Using the internet website to research every topic further enhance creativity	80	57.4	15	23.3	0	12.1	5	7.1	100
Sharing and comparing ideas together (brainstorming) among students	60	57.4	37	23.3	0	12.1	3	7.1	100
Total	402		163		85		50		700

Degree of freedom	Level of significance	X^2_{cal}	X^2_{tab}
18	0.05	625.3	28.869

DISCUSSION

The environmentally acquired theory of creativity states that Creativity is not only the result of one's heredity, inborn capacity or God's gift, that can be acquired and nurtured like other human traits, and that a positive environment or situation that is open, democratic and free, contribute positively to the release of creative potentials. The result of this study is in line with this theory. This is shown by 55 of the respondents who strongly agreed that teachers can inculcate creativity in students by use of discovery learning, 60% who strongly agreed that democratic classrooms are conducive for creativity, 75% who strongly agreed that encouraging students to freely express their skills enhances creativity, 50% and 80% who strongly agreed that giving students project work and exposing them to experiments respectively helps to inculcate creativity in them. The result also shows that, adopting certain strategies by students can help enhance their creativity behaviour. This is shown by 84% of the respondents who strongly agreed that students can enhance their creativity behavior by reading imaginative/adventurous books on creative people/great achievers. 78% strongly that students can enhance their creative behavior by engaging in discovery learning. 70%, 80% and 60% who strongly agreed that student can enhance their own creative ability by forming dramatic and literary clubs, using the internet for further research of any topic introduced and brainstorming respectively. The first hypothesis which stated that there are no significant ways teachers can help inculcate creativity in students was rejected since $x^2_{cal} = 505.7 > X^2_{tab} = 28.869$. The second hypothesis which state that students cannot enhance their own creativity was also rejected since $X^2_{cal} = 625.3 > X^2_{tab} = 28.869$. The researcher therefore concludes that there are significant ways teachers can help promote and/or inculcate creativity in students and also that students can help enhance their own creative behaviours by adopting certain strategies.

Recommendations and Conclusion

Creativity is a vital ingredient in every progressive society, hence its need can never be over emphasized. In the field of education, teachers need to perceive it as an integral part of their task as well as give it immense attention. Unfortunately,

this important phenomenon is ignored in some schools. There is need for teachers to create situations and activities induce creative interest in the pupils and students as well as inculcate same in their teaching and learning. Such act may include organised project work, brainstorming, experimentation, use of different models, excursions. A creative child has the ability to excel in the midst of difficult situations and achieve his goal. Government should from time to time organize seminars to educate teachers on the need to inculcate creativity in students. Teachers should not only teach to cover the scheme of work, they should as well help to inculcate creativity in students. Students should be encouraged to make use of the opportunities that help to enhance creativity. In addition, school authorities should provide adequate teaching aids for teachers to use in teaching. This is because teaching aids facilitate creativity in teaching and learning because it surpasses mere hearing and touches on other senses of pupils and students.

REFERENCES

- Bonwell, C., Eison, J. 1991. *Active Learning: Creating excitement in the Classroom*, Washington D.C. Jossey-Bass
- Clifford, S.D. 1990. *Principles of educational psychology*. Enugu: Academic Publishing Company.
- Cropley, A.J. 1992. *More Ways than one: Fostering Creativity in the Classroom*, Norwood, N, J: Alhex Pub.
- Guy, C. & Bill, L., 2004. *Be Creative: BBC Books* retrieved from www.learningunlimited.co.uk
- Hockenbury, S.E. 2000. *Discovering Psychology*. Worth Publisher.
- Jooligen. W.V. 1999. Cognitive tools for Discovery Learning. *International Journal of Artificial Intelligence in Education* 10, 385-397.
- Mangal S.K. 2013. *Advanced educational psychology*. New Delhi: PHL, Learning Private Limited.
- Maysky, M. 2008. *Creative Activities for young children*, 7th edition. Albany: Delmar.
- Nnachi, R.O. 2003. *Introduction to Educational Psychology*. Okigwe: Whytem.
- Solso, R.L. 1988. *Cognitive Psychology*. 2nd edition. Newton. MA: Allyn & Bacon.
- Woolfolk A. 1998. *Readings in Educational Psychology*. Boston: MA: Allyn & Bacon.