

Encouraging Creativity among Technical College Students in Gombe State for Sustainable Development

Ayuba, M. Musa

School of Vocational Education Federal College of Education (Technical) Gombe, Nigeria

Abstract :- Sustainable Development is a process through which a nation grooms and replenishes manpower base. The technical colleges in Gombe State are training youth, encouraging creativity in them will go a long way for sustainable development. This study investigated strategies for encouraging creativity in technical college students in Gombe State. The study used two research questions. Survey research design was adopted and the instrument was questionnaire. One hundred and thirty-one teachers (131) were used for the study. Mean statistics and standard deviation were used for data analysis. The study identified many problems associated with encouraging and also many strategies for promoting creativity in technical colleges. Recommendations made include, among others, that teachers should be trained on the strategies for encouraging creativity in students.

Keywords: *Encouraging, Creativity, Technical Students, Gombe State, Development*

I. INTRODUCTION

Sustainable Development refers to the institutions and processes through which a nation grooms and replenishes her manpower based and through that ensure improvement in the country's economic growth. Economic growth refers to increased productivity. Productivity on the other hand connotes the efficiency with which a country uses its labour, money, materials and machines to produce its output. Sustainable development includes training to improve skill in the performance of a specific task or job and the process of acquiring background knowledge of a subject (Technical Education). Development in this sense is meant to enable individual realize their potential for growth (Anugwom, 2003). Sustainable development is a design by a (country) to develop the capacity to solve current problems as well as to meet future needs, (Okeke, 2002). Hence, Sustainable development is much more related to future rather than present. It is mainly targeted at producing specialized or skilled men and women and for long term purposes, which is achievable through technical education.

Technical Education is the branch of education, which is mostly concerned with preparing human resources for employment. It involves the study of relevant skills in the areas of mechanical technology, electrical/electronic technology, woodwork technology, building technology and agricultural education. Technical education according to United Nation Education, Scientific and Cultural Organization (UNESCO) and International Labour Organization (ILO) (2001) is the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. Technical colleges are institutions that provide technical education at post primary level. However, technical colleges are regarded as principal vocational institution in Nigeria. They give full training intended to prepare students for entry into various occupations (Okoro, 2006). Technical college students require knowledge and skills that will enable them to be employable, and self-reliant. According to Usman (2008) technical college programme is designed to produce craftsmen in a developing economy. Any industrially inclined society always pay particular attention to the development and sustainability of the technical college programmes because of the inestimable role it plays in the growth of industries in the area of supplying middle level manpower which represent the major thrust of the productive sector of the industries. Therefore, the need to make technical college students productive resources on order to meet industrial demand is imperative. Anyanwu (2008) posited that human beings become productive resources or human capital only when they are able and in a position to contribute meaningfully to productive economic activities. Without this, they would remain passive, potentially vibrant and inactive as other factors of production. Thus, when students are trained in creative thinking or behavior, they are fashioned to lead useful lives, enhance their capacity building and contribute to societal development. Blaug (1970) maintained that this kind training would result to economic expansion while the beneficiary would be able to secure qualitative life by being able the right choices and command higher earning profile. Anyanwu (2008) pointed out that economic growth is closely associated with technical education. This is premised on the fact that employers regard the qualifications accruing from capacity building as a reliable indication of personal ability, achievement drive and docility, thinking that

technical education has not only improve the recipients skills, the degree actually identifies as a better person in society. An explanation for this may be that the better educated students are generally more, more motivated, adapt themselves more easily to changing circumstances, benefit more from work experience and training, act with greater initiative in problem solving situations, assume supervisory responsibility quickly, become more productive than the less educated, earn high income because they have access to wider range of occupations and more inclined to migrate in search of jobs with higher income. To achieve that objective, Adesua (2003) stated that teachers are catalysts promoting social change in the society

But there are some not so very obvious examples of products of creative thought. These may include first, ways of putting questions across that will help to expand possible ways of exploring solutions. Teachers sometimes make the mistake of asking students questions that will produce thought-stopping answers (Umeano, 2004). Secondly, there are also ways of interpreting relationships that challenge people's presupposed ideas and lead them to see the world in imaginative and different ways. Creativity has been perceived in variety of ways. Hurlock (1981) defined creativity as the process by which something new, either an idea or an object, is produced. In this case, creativity is judged by the product of what a person creates. Craig (2001) sees creativity as an effective resource that resides in all people and within all organizations. He affirms that creativity can be nurtured and enhanced through the use of deliberate tools, techniques and strategies. According to Ekpenyong (1992) productive thinking implies that creative act will result in some observable products, such as works of art, innovation, invention, painting, new or novel ideas, solution of social, personal or interpersonal problems. Thus, a student could be said to be creative, if he can produce, imagine or compose products or ideas of any sort which are essentially new or novel. The role of a teacher is contributory factor to student creativity.

It has been observed, however, that some teachers lack the knowledge of when to intervene and when to "hands-off". The ultimate academic goal is for students to become independent lifetime learners, so that they can continue to learn on their own or with limited support (Larkin, 2002). Creativity in technical education stresses the need for teachers themselves to be creative in the way they encourage and empower students, and students should be allowed to build upon conventional ways of thinking about and doing things.

What then are the strategies that will be required to meet the new demands of promoting sustainability in creativity among technical college students? This paper investigates the strategies for encouraging sustainable creativity in among technical college students in Gombe State.

Purpose of the Study

Generally, the study aimed at investigating the promotion of creativity in education among Technical college students in Gombe state. Specifically the study will:

1. Identify the problems associated with fostering creativity.
2. Identify the strategies for promoting creativity.

Research Questions:

The research questions which guided the study include:

1. What are the problems associated with fostering creativity among technical college students?
2. What are the strategies for encouraging creativity in Technical Colleges?

II. METHODOLOGY

Descriptive survey research design was adopted for the study. Olaitan, Ali, Eyo and Sowande (2002), explained survey research design as one which studies large or small population by selecting and analysing data collected from the group through the use of questionnaire.

Area of the Study

The geographical location of this study covers the six (6) Government Science Technical Colleges of Gombe, Akko, Kumo, Kwami, Nafada and Tula in Gombe State of Nigeria.

Population of the Study

The population was one hundred and thirty-one (131) respondents, comprising of school administrators and technical teachers, all from the six technical colleges, owned by the government of Gombe State. The Administrative staff consisted of the Principal, Vice Principal Academics and all the Heads of Department of trades taught. Technical teachers, as referred in this study consisted of all teachers that teach vocational trades including Technical Drawing. Heads of Departments that teach their trades are here in categorized under administrative staff.

Instrument for Data Collection

The instrument used for data collection was a structured questionnaire, developed by the researcher on Encouraging Creativity among Technical College Students in Gombe state for sustainable development. Section A consisted of 10 items on problems associated with encouraging creativity in technical college students. Section B consists of ten (10) items on strategies for encouraging creativity in technical colleges. The questionnaire was developed on a five point rating scale Strongly Agreed (SA) = 5, Agreed (A) = 4, Un Decided (UD) =3, Disagreed (D) = 2, Strongly Disagreed (SD) = 1.

Validation of the Instrument

To ensure the face and face validity of the instrument the initial draft of the questionnaire was given to three experts in technical education. They were requested to study the items and assess the suitability of the language, the adequacy and relevance of the items in addressing the research questions. Their corrections and comments were used to modify the questionnaire. Their suggestions were used to improve the production of the final copy of the questionnaire.

Method of Data Collection

The instrument was administered to all the respondents, who work in the six governments technical colleges in Gombe State. Compiled copies of the questionnaire were collected by the researcher one week after the administration. 124 completed and accessed copies were used for the data analysis out of the 131 distributed copies, 23 copies of the instrument issued to technical college Gombe teachers were retrieved out of the 26 copies issued to them, all the 19 copies issued to technical college Akko were returned, 26 out of 28 copies were returned from technical college Kumo, 16 out of 17 were returned from technical college Kwami, all the 20 copies issued to technical college Nafada were returned and 20 out of 24 copies issued to technical college Tula were retrieved. The total copies of questionnaire distributed was 131 and the used returned copies were 124.

Reliability of the Instrument

The reliability of the instrument was established using Cronbach Alpha (α). The validated instrument was administered to 6 teachers at Government Day Science Technical College Kafin-Madaki in Bauchi State. The data obtained from the respondent was computed based on Cronbach Alpha the reliability coefficient of 0.80 was realized so regarded as reliable for the study.

Method for data Analysis

Data collected from the respondents was analyzed using mean and standard deviation obtained from responses on the five-point response categories. For decision, item with Mean of 3.50 and above was considered as having high Means, any item with Mean rating less than 3.50 were considered as low.

III. RESULTS

Results of the study were presented based on the research questions. Table 1 presents the data elicited by research question 1.

Table 1: Problems associated with encouraging creativity in technical colleges.

| S/No. | Item Description | X | SD | Remark |
|--------------|--|----------|-----------|---------------|
| 1 | Lack of awareness on the importance of emerging good practice in promoting creativity for sustainable living | 4.17 | 0.78 | Problem |
| 2 | Inadequate co-operation between government and school board in the fostering of creativity. | 4.13 | 0.88 | Problem |
| 3 | Teachers are not really competent in the area of nurturing creativity. | 3.92 | 0.77 | Problem |
| 4 | Inadequate knowledge on the range of issues related to creativity with regards to teaching and learning. | 4.13 | 0.88 | Problem |
| 5 | Unavailability of creative practitioners and organizations to work in school | 3.93 | 0.79 | Problem |
| 6 | Creativity in the technical college education curriculum is not incorporated | 4.15 | 0.80 | Problem |

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|----|--|-------------|-------------|---------------|
| 7 | Poor atmosphere created for a better understanding and appreciation of creativity activities and the benefits. | 4.16 | 0.81 | Problem |
| 8 | Lack of creativity partnerships in government funded national initiatives. | 4.12 | 0.81 | Problem |
| 9 | Lack of improved development agencies to nurture creativity in young people. | 4.11 | 0.76 | Problem |
| 10 | Lack of teacher's possession of good subject knowledge at a sufficient broad range | 2.12 | 0.64 | Not a problem |
| | Cluster mean | 3.89 | 0.79 | |

As shown in table 1, out of the 10 assumed problems associated with encouraging creativity among technical college students, 9 of them received mean ratings of 3.50 and above implying that these were perceived as problems indeed. Only 1 out of the 10 assumed problems had a mean rating below 3.50 and therefore was not considered a problem.

Table 2: The strategies for encouraging creativity in technical colleges.

| S/No | Item Description | X | SD | Remark |
|------|---|-------------|-------------|--------|
| 1 | Introduction of critical thinking and problem solving strategy in the teaching learning activities. | 4.13 | 0.78 | Agreed |
| 2 | Establishing a creative environment by provision of procedures and creative products. | 4.13 | 0.87 | Agreed |
| 3 | Encouraging students to take risks and become autonomous learners. | 3.92 | 0.74 | Agreed |
| 4 | Provision of instructional materials and different strategies to encouraging active learning among students | 3.92 | 0.84 | Agreed |
| 5 | The ability to make the student to understand that there is value in creative thoughts and behaviours. | 4.14 | 0.81 | Agreed |
| 6 | Promotion of thinking skills for all subjects. | 4.13 | 0.80 | Agreed |
| 7 | Follow-up work to be undertaken including identifying what colleges need to do to encourage creativity. | 4.14 | 0.74 | Agreed |
| 8 | Proficiency in the area of ICT skills. | 4.07 | 0.81 | Agreed |
| 9 | Developing and promoting Nigerian art and culture. | 3.82 | 0.89 | Agreed |
| 10 | Asking thought provoking questions that require students to use previously learned information in new ways. | 4.06 | 0.92 | Agreed |
| | Cluster mean | 4.04 | 0.82 | |

Data presented in table 2 indicate that all the 10 items relating to the sustainable strategies in encouraging creativity received the mean rating of 3.50 points and above. Using the cut-off point of 3.50 as benchmark, the data suggest that the whole of 10 items were agreed as strategies for encouraging sustainable creativity in technical colleges in Gombe State.

IV. DISCUSSION

Data in Table 1 shows the suggested problems associated with fostering creativity among Technical College students. Only item number 10 had a mean score of 2.12 which is below the benchmark of 3.50. The result of the analysis revealed that there is lack of awareness in the importance of many emerging good practices in promoting creativity for sustainable living such as conducive environment and good relationships among stakeholders and there is lack of qualified teachers in the area of creativity. The findings are in line with the observation by Craig (2001) that individuals within an organization could work more effectively together by capitalizing on each others' strengths, rather than punishing each other because of individual differences. If an atmosphere of openness and trust prevails in the organization, then the adapters and innovators will be able to join their creative talents to propel the organization to success. The present study's finding about teachers not being competent enough to nurture creativity in their students is also in line with the finding of Umeano (2004) that teachers sometimes make the mistake of asking students questions that will produce thought-stopping answers. The data in Table 2 revealed the strategies that could be used for promoting creativity among technical college students. Mean response scores for items 3 and 6 affirm the assertion of Goh (1972) that student with creative imagination is independent in finding solutions, taking initiative and making judgment. Craig (2001) noted that fostering creativity in technical colleges would inspire in students convergent and divergent thinking,

creative and critical thinking and opportunity to take risks and explore their new interest which they will gladly pursue without having to be prodded. A critical aspect of promoting creativity among students is to give them time.

V. CONCLUSION

Technical Education programme is the gate way that could be adopted to solve the nagging problem of Economic development of the nation. Therefore, the need to strategize for effective promotion of creativity imperative is through greater collaboration between educators and policy makers in different parts of Nigeria including Gombe State to exchange ideas so that good practice can be achieved and the extensive work that has already been accomplished would be built upon.

VI. RECOMMENDATIONS

The survival of the technical college programmes requires the encouragement of creativity in the students. This has implications for the teachers themselves. They need to be competent users of those strategies required for encouraging creativity in students. It is recommended that:

- Educators should recognize, appreciate and promote different strategies and styles of creativity.
- Teachers should themselves be trained in the creativity and thinking skills.
- The government should co-operate with the private sectors and colleges in the development of innovation, high quality research and education.
- Programmes in such area as creativity, enterprise citizenship, health and well-being should be embedded and developed across the curriculum.

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