Challenges against Creative Skills in Foods and Nutrition by Senior Secondary School Students in Lagos State

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Abstract. The present knowledge based economy needs graduate with varying multi-faceted skills of creativity. This study investigated the challenges militating against the acquisition of creative skills needed in foods and nutrition by senior secondary school students in Lagos State and the ways of overcoming them. Two hundred senior secondary school Home Economics students/teachers were purposively studied from selected senior secondary schools in Lagos State. Questionnaire was used to collect data. Mean and standard deviation were used to describe the data. The result revealed the challenges militating against acquisition of creative skills in foods and nutrition as: few experts of foods and nutrition or home economics, inadequate tools and equipment to meet the number of students during practical classes, inadequate founding of schools and time-table constrains. The results also indicated the ways of improving acquisition of creative skills among senior secondary school students as: individualization of instruction, adequate supervision of students work and schools, provision of items needed for students practical classes, frequent curriculum review and exhibition of students creative work. It is recommended among others that conducive environment, adequate tools and equipment and experts in Home economics/Foods and Nutrition field should help in developing appropriate creative skills in foods and nutrition.

Key words: Foods and Nutrition, Creative skills, Challenges.

INTRODUCTION

One of the objectives of education in Nigeria is to produce skilled person who are able to play effective roles in national economy, technological growth and development. Among all the vocational subjects offered in Nigerian secondary schools, Home Economics appears to be one that stands out clearly in terms of offering opportunities and creative skills needed by learners to be successful in life. It is a field of study that offers numerous occupations for individual and is capable of equipping individuals with employable skills that can be used for self-reliance and wealth creation. Foods and Nutrition is one of the three major areas of Home Economics taught in senior secondary schools in Nigeria. It is capital intensive and characteristically a skill activity oriented course which when properly taught will equip learners with saleable skills needed for self-reliance.

Students need to be equipped with the requisite knowledge, skills and dispositions to solve the daunting problem of present age. Presently in Lagos State, there is massive unemployment coupled with poverty and related social ills plaguing graduates from universities and secondary schools. At the same time as the world struggles with youth unemployment, paradoxically, it is experiencing a skills and creativity shortage. The problem is that many schools and training programmes in Lagos State focus instead on the technical skills needed to perform specific tasks, because this approach is simpler, less expensive and easier to train a greater number in a shorter period of time.

Many graduates from secondary schools in Lagos State do not have the skills necessary for the current knowledge based economy, job market and they do not have the capacity to adapt to the creative needs of the society and remain employable over time as well as being self-reliant. In modern classrooms, teaching methodologies have become increasingly routine and objective in the transfer of knowledge. Teachers seem to have become the transmitters of knowledge only, without letting students experience the process through which they can make discoveries and be creative. Teaching has turned into a process of conveying knowledge to students without encouraging them to have a role in the creation of knowledge.

In such a situation, teachers' creativity plays a significant role hence the learning process is not...
student-centred. In most schools, during Foods and Nutrition classes and practicals, students are not allowed to develop and create saleable skills on their own, instead, teachers instruct them on what to do; this limits students’ creativity.

Funding is the major challenge faced by students as they acquire creativity skills. This is because all other challenges are hinged on funding. Funding can be best described as the life-wire of any educational programme and the bed-rock for any effective Home Economics programme. The survival of any educational programme, greatly depends on the amount of funds at its disposal. Funding has been described by Aheazu, (2005) as the provision of human and material resources needed for the achievement of educational goals. Okpala (2005) stated that funding deals with how to plan, budget for, secure and allocate financial resources in order to attain institution’s objective, while Obunadike (2009) described funding as a raising and using of funds by individual institutions and government. Explaining further, she said that funding ensures that the resources available are procured, disbursed, accounted for and monitored regularly to ensure their effective use.

Creativity skills in Foods and Nutrition cannot be adequately taught without the provision of human and materials resources. Arubayi (2010) opined that without funds these resources cannot be provided for, thus leading to poor quality teaching which has effect on the learning abilities of the individual, poor motivation and subsequent frustration on the part of the learner. The resultant effect is indiscipline, examination malpractices, truancy and mass failure. This very important subject when properly funded and taught will lead to the acquisition of different creativity and entrepreneurial based skills, saleable skills, life skills needed for self-reliance or paid employment in industries or other government parastatals.

Funds are needed to hire competent teachers, teaching facilities, equipment, laboratories and instructional materials. Teaching for quality creativity skills is purposeful and expensive which can only be achieved with the provision of adequate functional laboratories with well-equipped tools and equipment. This supports the assertion of the National Policy on Education (2004) that education is an expensive social service and requires adequate financial provision from all tiers of government for success. Therefore, the need to go beyond mere acquisition, comprehension and verbatim application of knowledge towards various techniques aimed at improving creativity among students necessitated this study. To achieve this purpose, the following specific objectives were pursued to:

1) Identify challenges militating against acquisition of creative skills among senior secondary school students in Foods and Nutrition.

2) Ascertain how to overcome the challenges militating against acquisition of creative skills among senior secondary school students in Foods and Nutrition.

**Methodology**

Lagos State is located in the south-western part of Nigeria. The smallest in area of Nigeria’s states, It is the second most populous state and arguably the most economically important state of the country, the nation’s largest urban area with six educational districts. The population of this study consisted of all Home Economics teachers and students in Senior Secondary School 3 in Educational district IV of Lagos State.

The sample size for this study consists of 20 Home Economics teachers who teach Foods and Nutrition and 180 students offering Foods & Nutrition at SS3 were purposively selected from the senior secondary schools in Educational District IV.

A structured questionnaire was used for data collection. The questionnaire was divided into sections. Section A sought demographic information of the teachers only while section B elicited information on challenges militating against acquisition of creativity skills and how to overcome the challenges. Section B was drawn on a four point scale rating: Strongly Agreed (SA) = 4, Agreed (A) = 3, Disagreed (D) = 2, and Strongly Disagreed (SD) = 1.

The questionnaire was subjected to content validation by experts in Foods and Nutrition. Their suggestions were used to improving the instruments towards meeting the objective of the study.

Copies of the questionnaire were administered on the Home Economics teachers and students specifically offering Foods and Nutrition in senior secondary schools (SS3). All the two hundred copies of questionnaire were retrieved.

The data collected was analysed using descriptive statistics such as mean and standard deviation. For the
decision rule, any mean ratings with 2.5 or above was considered as positive and accepted while mean ratings that were less than 2.5 were regarded as negative and rejected.

**RESULTS AND DISCUSSION**

The result of teachers’ demographics, educational achievement and years of experience is depicted on Table 1. All the teachers were female (100%). The percentage of teachers with BSc/Ed Home Economics constituted the highest proportion of 50%, those with NCE / HND were 25%. The respondents with MSc / Ed Home Economics were 25% while non among the respondents had Ph.D.

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>100.0</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Education**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE/HND</td>
<td>5</td>
<td>25.0</td>
</tr>
<tr>
<td>B.Sc / Ed Home Econs</td>
<td>10</td>
<td>50.0</td>
</tr>
<tr>
<td>M.Sc. Ed Home Econs</td>
<td>5</td>
<td>25.0</td>
</tr>
<tr>
<td>PhD.</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Job Experience**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5 years</td>
<td>2</td>
<td>10.0</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>4</td>
<td>20.0</td>
</tr>
<tr>
<td>11 - 15 yrs</td>
<td>10</td>
<td>50.0</td>
</tr>
<tr>
<td>16 - 20 yrs</td>
<td>4</td>
<td>20.0</td>
</tr>
<tr>
<td>21 - 25</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Data

As for the years of experience of the teachers, 50% had between 11-15 years of experience, 20% had between 6-10 years of experience, 20% had between 16-20 years of experience, none had between 21-25 years of experience while 10% of the teachers had between 1-5 years of experience.

**Challenges against Acquisition of Creative Skills**

Research Question: What are the challenges militating against acquisition of creative skills among senior secondary school students in Foods and Nutrition? Answer to research question 6 can be seen in Table 2.

The analysis in Table 2 showed that all but one of the ten itemized challenges militating against acquisition of creative skills had their mean values ranging from 2.51 to 3.98 which was above the cut-off point of 2.50. However, respondents rejected that any Home Economics teacher can teach Foods and Nutrition (mean of 1.06). The table also revealed that the standard deviations (SD) of the items are within the range of 0.68 to 0.96; this indicate that the mean values of the respondents were not far from one another in their responses.

<table>
<thead>
<tr>
<th>Challenges against acquisition of creative skills</th>
<th>Mean</th>
<th>SD</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most secondary schools do not have Food and Nutrition laboratory</td>
<td>3.58</td>
<td>0.85</td>
<td>Accepted</td>
</tr>
<tr>
<td>Foods and Nutrition experts are few</td>
<td>3.98</td>
<td>0.93</td>
<td>Accepted</td>
</tr>
<tr>
<td>Any Home Economics teacher can teach Foods and Nutrition during practical classes</td>
<td>1.06</td>
<td>0.96</td>
<td>Rejected</td>
</tr>
<tr>
<td>Inadequate tools and equipment to meet with the number of students during practical classes</td>
<td>3.90</td>
<td>0.75</td>
<td>Accepted</td>
</tr>
</tbody>
</table>
Table 3: Ways of Overcoming Challenges against Acquisition of Creative Skills

<table>
<thead>
<tr>
<th>Ways of overcoming challenges against acquisition of creativity skills</th>
<th>Mean</th>
<th>SD</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowing individualization of instruction</td>
<td>3.58</td>
<td>0.86</td>
<td>Accept</td>
</tr>
<tr>
<td>Use of varying examples by teachers</td>
<td>3.00</td>
<td>0.64</td>
<td>Accept</td>
</tr>
<tr>
<td>Encouraging students to work independently in class</td>
<td>3.97</td>
<td>0.70</td>
<td>Accept</td>
</tr>
<tr>
<td>Curriculum innovation should be more frequent to meet changing needs of the society</td>
<td>3.52</td>
<td>1.05</td>
<td>Accept</td>
</tr>
<tr>
<td>Adequate supervision of schools by Ministry of Education</td>
<td>3.20</td>
<td>1.00</td>
<td>Accept</td>
</tr>
<tr>
<td>Provision of well-equipped Foods and Nutrition laboratories</td>
<td>4.00</td>
<td>1.05</td>
<td>Accept</td>
</tr>
<tr>
<td>Provision of modern tools to schools</td>
<td>3.98</td>
<td>1.02</td>
<td>Accept</td>
</tr>
<tr>
<td>Promotion and exhibition of students creative works</td>
<td>3.34</td>
<td>0.96</td>
<td>Accept</td>
</tr>
<tr>
<td>Appreciation and award should be given to best creative works students</td>
<td>2.90</td>
<td>0.84</td>
<td>Accept</td>
</tr>
<tr>
<td>Exhibition of student's creative work at Local and State level Government Level</td>
<td>2.62</td>
<td>0.92</td>
<td>Accept</td>
</tr>
<tr>
<td>Encouraging competition of creative works among schools</td>
<td>3.41</td>
<td>0.65</td>
<td>Accept</td>
</tr>
<tr>
<td>Provision of incentives such as consumable materials for practical.</td>
<td>3.62</td>
<td>0.71</td>
<td>Accept</td>
</tr>
<tr>
<td>Adequate students motivation by teachers</td>
<td>2.88</td>
<td>0.95</td>
<td>Accept</td>
</tr>
</tbody>
</table>

Source: Field Data

Overcoming Challenges against Acquisition of Creative Skills

The analysis in Table 3 showed that all the sixteen itemized skills needed for enhancing students’ creativity have their mean values ranging from 2.62 to 3.98 which was above the cut-off point of 2.50. This implies that all the items were accepted as ways of overcoming challenges mitigating against acquisition of creative skills. The table also showed that the standard deviations (SD) of the items are within the range of 0.65 to 1.04; this indicated that the mean values of the respondents were not far from one another in their responses.
Encouraging students to be innovative to come up with new ideas  3.54  0.68 Accept
Provision of items needed for students practical classes  2.82  1.04 Accept
Encouraging team teaching among teachers  3.29  0.82 Accept

Source: Field Data

The findings from the data collected revealed the followings:

1. Challenges militating against acquisition of creative skills
   
a) Most secondary school do not have Food and Nutrition laboratory
b) Food and Nutrition experts are few.
c) Not any Home Economics teacher can teach Food and Nutrition
d) Inadequate tools and equipment to meet with number of students during practical classes
e) Inadequate supervision of students practical works by teachers due to large in class size.
f) Poor learning environment that do not promote creative thinking
g) Inadequate funding of schools by government
h) Inadequate motivation of students through Food exhibition
i) Inadequate incentives such as provision of materials during practical demonstration.

2. Ways of overcoming the challenges faced in acquisition of creativity skills
   
a) Allowing individualization of instruction
b) Use of varying examples by teachers
c) Encouraging students to work independently in class
d) Curriculum innovation should be more frequent to meet the changing needs of the society
e) Adequate supervision of schools by Ministry of Education
f) Provision of well-equipped Foods and Nutrition laboratories
g) Provision of modern tools to schools

h) Promotion and exhibition of students creative works
i) Appreciation and award should be given to best creative works of students
j) Exhibition of student’s creative work at Local and State Government Levels
k) Encouraging competition of creative works among schools in the State
l) Provision of incentives such as consumable materials for practical work.
m) Adequate students’ motivation by teachers
n) Encouraging students to be innovative and to come up with new ideas
o) Provision of items needed for students’ practical classes
p) Encouraging team teaching among teachers

Findings of the study revealed that the challenges militating against acquisition of creative skills included inadequate supervision of students practical works by teachers due to large class size, poor learning environment that do not promote creative thinking, inadequate time allocated on the time table for practical classes, inadequate motivation of students through exhibition of practical works and provision of inadequate incentives such as calico and brown papers for students practical classes. In support of these findings, Oviawe (2010) noted that when planning the school curriculum, factors like learning outside the classroom wall should be included for instance, field trip and excursion to hotels and food industries would interest the students and increase their intuition, innovation and creative skills.

Findings of the study also showed that the ways of overcoming the challenges faced in acquisition of creativity skills included allowing individualization of instruction, use of varying examples by teachers, encouraging students to work independently in class and that curriculum innovation should be more frequent to meet the changing needs of the society. In line with these findings, Adams (2008) mentioned that changes are needed in teaching strategies to allow for the most authentic, complex, and applied demonstration of skills like unstructured inquiry and problem solving, learning to learn, creativity, communication, citizenship, collaboration, critical thinking, self-management, personal and social responsibility to be examined in contexts that allow tackling large-scale tasks over a longer period. Also,
there is need for policy reforms on education that are classroom-based curriculum embedded strategies that may occur over an extended period, during which students not only respond to questions or prompts, but also construct knowledge products and demonstrate skills through more complex tasks. To further buttress this, Herring (2012) mentioned that educational changes may be implemented by individual educators and/or by broad-based school organization and/or by curriculum changes with performance evaluations.

Modern education reforms are increasingly driven by a growing understanding of what works in education and how to go about successfully improving teaching and learning in schools (DeIloitte, 2011).

Findings also indicated that other ways of improving acquisition of creativity skills included adequate supervision of schools by Ministry of Education, provision of well-equipped Foods and Nutrition laboratories and provision of modern tools to schools. In line with these findings, Mberengwa (2004) mentioned that upgrading of Foods and Nutrition laboratories is a priority especially with technology equipment. Quigley, Marshall, Deaton, Cook, & Padilla, (2011) asserted that educators are charged with the great challenge and responsibility of engaging students in learning so that they develop the skills and knowledge needed to function in today's world. Also in support of this finding, World Bank Report (2012) stated that to produce well trained graduates with excellent skills, further and higher education institutions must be able to bring together the minimal inputs necessary for successful performance and skill acquisition.

Findings also revealed that the ways of improving acquisition of creativity skills included promotion and exhibition of students' creative works, appreciation and award should be given to best creative works of students, exhibition of student's creative work at Local and State Government Levels, encouraging competition of creative works among schools in the State, provision of incentives such as consumable materials during practical classes, adequate students motivation by teachers and encouraging students to be innovative and to come up with new ideas. These findings corroborate Arubayi and Obumadike (2011) who stated that the teacher has enormous roles to play in motivating and imparting knowledge in skill oriented subjects to students. In the same vein, Nwazor (2012) mentioned that there is a need to provide opportunities for students to move beyond being passive recipients of knowledge to become knowledge builders, capable of creative and innovative solutions to problems. To enhance practical skill acquisition and creativity, Handle (2007) noted that there is no universal method of teaching creativity skills. Students should be allowed to explore their environment and be innovative.

Also, in support of this finding, Diyamett (2009) mentioned that teamwork should be a high priority for most students and being able to work well with their classmates is essential.

CONCLUSION

Findings from the study revealed that there are obvious challenges militating against acquisition of creativity skills, this implies that government, school administrators as well as Home Economics teachers should be actively involved in ensuring that students acquire the needed creativity skills.

The findings of the study have implication for Foods and Nutrition teachers and students, schools, curriculum planners and Government. Creativity involves multi-faceted skills aimed at equipping students for self-reliance and preparing them for the world of work. It therefore implies that Foods and Nutrition teachers should be aware of the different strategies, methods and techniques they can adopt in order to improve their students’ creative skills, hence, they should provide information from their research on how creativity skills among students can be achieved and sustained. Curriculum Planners on the other hand are responsible for curriculum development, planning, implementation and review. They need to review the entire Foods and Nutrition curriculum to incorporate all the needed creativity skills in other to equip students of Foods and Nutrition with such skills.

RECOMMENDATION

Based on the findings of the study, the following recommendations were made:
1) Only Home Economics experts should teach Home Economics courses so as to enhance the rate of creativity skill acquisition among students.
2) Competition can be done in schools to exhibit students’ creative works as well as rewards given to best creative works of students. This
would enable the students work independently, visualize and come up with creative projects/products.
3) Conducive environment should be provided for students to help develop their creativity skills.
4) There should be provision of well-equipped Foods and Nutrition Laboratories in schools.
5) Students should be encouraged to be innovative and demonstrate multiple approaches in solving a given problem.

REFERENCES

Biography
Dr. Tina Lano-Maduagu is a Home Economic Education specialist with focus on Nutrition and Dietetic. She has her undergraduate degree in Home - Economics and graduated with a first class honour from Ahmadu Bello University, Zaira in 1986; Master of Science in Human Nutrition from University of Ibadan, Ibadan, Oyo State in 1992 and a PhD in Nutrition and Dietetic from the Federal University of Agriculture, Abeokuta, Ogun State in 2014. She has over thirty year of teaching experience, conducted research in delivery of Home Economics Education, Human Nutrition and Dietetics. Dr. Lano-Maduagu owns the membership of six professional and academic groups and has over 20 publications.