### Environmental Conditions Necessary for Effective Peer Tutoring among Clothing and Textiles Students in Senior Secondary Schools in Onitsha Education Zone of Anambra State of Nigeria

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### Abstract

This study focused on environmental conditions necessary for effective peer tutoring among clothing and textiles students in senior secondary schools in Anambra state. The study was guided by four research questions. The study was a correlational research design. The population of the study is two hundred and forty (240) respondents. There was no sample for the study because of manageable number was used. Structured questionnaire was used to collect data. The findings indicated that laboratory facilities, conducive classroom, among others are space related conditions that can influence peer tutoring. The study also has facilities related conditions like ICT and library, adequate electricity, adequate cutting tables and others. Based on these findings, it was recommended that Federal Ministry of Education should provide clothing and textiles materials at senior secondary school for better performance. Text books and other learning materials should be made available for improved learning.

**Key words**: Environmental conditions, peer tutoring, Academic performance, Clothing and textiles.

### Introduction

Clothing and Textiles is an aspect of Home Economics which students are expected to study at the senior secondary school level of education. It deals with relevance and construction of clothing and textiles in the contemporary society as well as managing human clothing resources for the benefit of individuals and families (Duku, 2014; Osei, 2015). Clothing and textiles in school curriculum provided

students with an apprenticeship in clothing, textiles and fashion, which it properly carried out will ensure provision of skills for self-employment and income earnings by graduates. This is an advantage to the gross domestic earnings of the Nigeria nation. To reap the benefits of clothing and textiles in school curriculum, the students are expected to learn in a conducive school environment. The school environment refers to factors within the school that influence the teaching learning process. It includes classroom, library, technical workshop, teachers quality, teaching methods and peers (Annt & Nyhus, 2016).

Peer refers to one that is of equal standing with other, one belonging to the same societal group especially based on age, grade or status. Rubin (2008) described a peer as a friend, cohort, contemporary or one who is equal with, another in some other aspects. In the same vein, Rubin (2008) also described tutoring as an attempt to assist a person in changing some skills, knowledge, ideals and altitudes. Maheady, Mattette and Harper (2006), described tutoring as an informational activity which affords recipients access to information and knowledge from a more knowledgeable person. Peer tutoring is an information or instructional activity which affords recipients access to information and knowledge from a more knowledgeable person. It is an interactive classmates/friends, contemporaries or colleagues. This is beneficial because it enables students to gain from both the preparation and the instruction in which peers engage in and from the instructions that tutee receive (Egbochukwu & Obinnu, 2006). Peer tutoring is both proactive and collaborative, helping students acquire the attitudes necessary for successful mastery of normal development tasks (Salintrini 2005; & Rubin, 2008). Students in a group are paired for peer tutoring. They take turns to teach in their group. It can lead to social and academic development. Positive outcomes are increased and social growth. According to Sluijsmans and Prins (2006) peer tutoring is a supportive service that helps the individuals to clear away the entangling and hampering tentacles so that he can be what he really is and contribute more both to self and his fellows. The interactions transform tutoring from a private to a social activity by involving the tutee in the responsibility for their own learning development and that of others. Obunadike, (2012) stated that peer tutoring is effective at increasing achievement students at various educational levels. Peer tutoring has been used to improve children's word recognition and written capitalization. Peer tutoring promotes metacognition in which students achieve higher levels of thinking at a quicker rate than they might if they worked independently (Nazzal, 2002).

There is improved use of instructional time among students. Students make friends among themselves. In peer tutoring, students depend on each other to learn academic material while enhancing their social skills. Egbochuku and Obmnli (2006) noted that students when they work in team accompanying the academic goal, and it produces a cooperative spirit. Cooperative reward structures are used as incentives to encourage the students to learn the materials.

The students of peer tutoring can be traced back to parental educational background and age on a variety of academic, social and labor market outcomes (Zapala, 2002). Chang (2005) pointed out that the peer influences suggest that most male peers act as important role models, who are seen as powerful means of transmitting attitudes, values, norms and patterns of thought and behavior. Egbochuku and Obiunu (2006) indicated that male and important female peers are in students' determining behaviors particularly those related to school achievement. Zimmer and Toma (2000) reported that positive influences of peers from high socio-economic status are at least for some students. The most common perspective according to them is that peers, from families with high socio-economic status, are sources of motivation, aspirations and direct interactions for those with low socioeconomic status in learning.

In peer tutoring, children reconstruct their understanding of the world in a social manner through collaboration process with their peers. The equality of the relationship between the children when in a collective group, and the motivation of children to collaborate based on their shared understandings. (Obunadike, 2011). Peer tutoring provides instruction, evaluation and reinforcement to one another, thus, creating mutual assistance and social support among students. In tutoring procedure, students assembled in groups of two or more are trained to teach one another. Students work together to prompt, monitor and evaluate each other, while working towards group goals. Students alternate between the roles of tutors and tutees in groups of two or not more than six. Students work together in their groups to achieve established goals or rewards that are contingent upon group performance. In this process, students function as both

tutor and tutee. Students engage in three aspects of interaction *taking responsibility for actions; reflecting on knowledge; developing structured knowledge*. Rubin (2008) elaborated knowledge by stating that when students prepare to be peer tutors, they take responsibility for knowledge because they will soon be communicating it one another.

Students must monitor their tutee's attitudes and behaviors, becoming more aware of problems skills and identifying gaps in their own altitudes and behavior. In peer tutoring, students ask questions and receive explanations heading them to better structure their knowledge, attitude and behavior. Research has it that peer tutoring indicates its effectiveness in improving both tutees' and tutors' academic and social development. It lowers the incidence of misbehavior in classrooms. It is being used increasingly across various disciplines to help engage students in their own learning process. Class-wide peer tutoring for example provides an individual instruction simultaneously regardless of the group size which will save a great amount of valuables classroom time. Ololube (2006) conclude that teacher management of homework and assignment given to students have an impact on student achievement, especially when it is well explained, motivated, corrected and reviewed during class time and used as an occasion for feedback to students.

In the face of this apparent gap, there is need to investigate Environmental conditions necessary for effective peer tutoring in teaching clothing and textiles in senior secondary school in Onitsha zone.

**Purpose of the study:** The purpose of this study was to explore environmental conditions necessary for effective peer tutoring among clothing and textiles students in senior secondary schools in Onitsha Zone. Specifically, the study determined:

- (a) space related conditions necessary for peer tutoring.
- (b) facilities related conditions necessary for effective peer tutoring
- (c) student-student relationship related conditions necessary for effective peer tutoring
- (d) teacher-student relationship related conditions necessary for effective peer tutoring

### **Research Questions**

Four research questions are raised for the study:

- (a) What are the space related conditions necessary for peer tutoring
- (b) How do facilities related conditions necessary for peer tutoring
- (c) To what extent does studentstudent relationship related conditions necessary for peer tutoring
- (d) How does the teacher-student relationship related conditions necessary for peer tutoring.

### Methodology

*Design of the study*: The study used a correlated research design. Correlational research design attempts to determine

whether and to what degree, a relationship exists between two or more quantifiable variables (Waters, 2009).

Area of the study: The area of the study was Onitsha Zone, Anambra state. It is made up of three L.G.A namely Onitsha North LGA, Onitsha South LGA and Ogbaru LGA. In Onitsha Education Zone, there are urban schools, semi urban school and rural schools. There are communities in nine local government areas of Anambra state (Federal Office of Statistics, 2014).

*Population of the study*: The target population of the study comprised clothing and textiles students and teachers teaching in the selected schools. There were 222 SS 2 students and 18 teachers making a total population of 240. Students: Onitsha zone 82, Onitsha south 74 and Ogbaru 66. Teachers: Onitsha North 8, Onitsha south 6 and Ogbaru 4. Clothing and textiles students of SS 2 were used for the study. They have both maturity level and experience at school and home. As a consequence, this group of students were in a better position provide valuable to information concerning the topic under investigation.

Sample and sampling techniques: The sample that was used for the study comprised 222 clothing and textiles students and 18 clothing and textiles teachers which amounted to a total sample of 240 students and teachers. Because of the manageable number, there was no sampling. They were purposively selected because only those with adequate clothing and textiles background were used. Instrument for data collection: The study used questionnaire as a tool for collection of data. The questionnaire was peer tutoring titled "Environmental conditions necessary for peer tutoring among clothing and textiles students" (ECNFPTCTS) was used by the researcher. It is divided into two sections. Section A is on personal ground of the respondents while section B is in clusters A, B, C and D. Cluster A is on space related conditions while cluster B is on facilities related conditions. The cluster C is on studentstudent relationship related conditions while cluster D is on teacher-student relationship related conditions necessary for peer tutoring. The response pattern is a four point scale. The face validity of the instrument was done by two experts in Home Economics and one in Measurement and Evaluation all in MOUAU. The

reliability of the instrument was estimated using the Pearson Product Moment Correlation. The instrument yielded reliability index of 0.76 which is reliable.

*Method of data collection:* The copies of the instrument were distributed by the researcher and two research assistants to the respondents. A total of 240 copies of the questionnaire were distributed but 238 copies were retrieved.

*Method of Data Analysis*: Data were analyzed using mean and standard Deviation. A mean of 2.50 was used as a cut-off point for decision making for each item. Thus, any item with a mean of 2.50 and above was considered as accepted response while any with a mean below 2.50 was considered an unacceptable response.

### **Results and discussion**

Research Question 1: What are space related condition necessary for peer tutoring?

| S/N | Space related conditions                | Mean | SD   | Decision |
|-----|---|------|------|----------|
| 1.  | Laboratory space should be adequate     | 3.26 | 0.72 | Agree    |
| 2.  | Adequate classroom space                | 2.80 | 9.84 | Agree    |
| 3.  | Conducive classroom for peer tutoring   | 3.41 | 0.76 | Agree    |
| 4.  | Classroom should be airy and ventilated | 3.34 | 0.80 | Agree    |
| 5.  | Adequate facilities for practicals      | 3.38 | 0.75 | Agree    |
| 6.  | Adequate classroom space                | 2.85 | 0.98 | Agree    |

Table 1: Mean rating of space related condition necessary for peer tutoring.

Table 1 revealed that items 1-6 were agreed upon by respondents as space related conditions necessary for peer tutoring.

# Research Questions 2: How does the facilities related conditions necessary for peer tutoring?

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| S/N | Facilities related conditions               | Mean | SD   | Decision |
|-----|---|------|------|----------|
| 1.  | ICT and library facilities                  | 3.30 | 0.80 | Agree    |
| 2.  | Instructional materials                     | 3.14 | 0.90 | Agree    |
| 3.  | Height of working tables should be adequate | 3.02 | 1.18 | Agree    |
| 4.  | Height of ironing board should be adequate  | 3.13 | 0.79 | Agree    |
| 5.  | Adequate cutting tables                     | 2.85 | 0.98 | Agree    |
| 6.  | Adequate ironing content                    | 3.29 | 0.99 | Agree    |
| 7.  | Adequate ironing board                      | 3.38 | 0.75 | Agree    |
| 8   | Adequate electricity (Light)                | 3.34 | 0.80 | Agree    |
| 9.  | Socket being properly fixed                 | 1.85 | 0.56 | Disagree |
| 10. | Centre for tie and dye                      | 3.03 | 1.19 | Agree    |

**Table 2:** Mean rating of the respondents of facilities related conditions necessary for peer tutoring

Table 2 revealed ten items for facilities related conditions necessary for peer tutoring. Among the ten items only item nine was considered void. Items 1,2,3,4,5,6,8 and ten were agreed upon.

### Research Question 3: To what extent does student-student relationship related conditions necessary for peer tutoring?

| Table 5. Mean failing of felated conditions necessary for peer tutoring. |   |      |       |          |
|--|---|------|-------|----------|
| S/N  | Student-student related conditions          | Mean | SD    | Decision |
| 1.   | Students previous knowledge in clothing and | 3.02 | 0.98  | Agree    |
|  | textiles                                    |      |       | -        |
| 2.   | Their interest in clothing and textiles     | 3.26 | 0.72  | Agree    |
| 3.   | Students patience                           | 3.29 | 0.99  | Agree    |
| 4.   | Self-motivation                             | 3.14 | 0.90  | Agree    |
| 5.   | Hard work                                   | 3.30 | 0.80  | Agree    |
| 6.   | Sharing of experiences                      | 3.34 | 0.80  | Agree    |
| 7.   | Cooperative spirit among peers              | 3.34 | 0.80  | Agree    |
| 7.   | Social skills                               | 2.28 | .073  | Agree    |
| 8.   | Creativity                                  | 3.01 | 0.9y6 | Agree    |
| 9.   | Carefulness                                 | 2.80 | 0.83  | Agree    |

Table 3: Mean rating of related conditions necessary for peer tutoring.

The nine items presented in table 3 in students related conditions necessary for peer tutoring were agreed upon.

## Research Question 4: How does teacher-student relationship related conditions necessary for peer tutoring?

| S/N | Teacher students relationship necessary for peer | Mean | SD   | Decision |
|-----|--|------|------|----------|
|     | tutoring   |      |      |          |
| 1.  | Teachers guidance                                | 3.36 | 0.72 | Agree    |
| 2.  | Helping students                                 | 2.80 | 0.84 | Agree    |
| 3.  | Monitoring students                              | 3.34 | 0.81 | Agree    |
| 4.  | Encouraging them                                 | 3.38 | 0.75 | Agree    |
| 5.  | Giving and marking assignments                   | 3.06 | 0.96 | Agree    |
| 6.  | Proper grouping of students for peer teaching    | 3.15 | 0.88 | Agree    |
| 7.  | Provision of facilities                          | 2.28 | 0.73 | Agree    |
| 8.  | Reinforcement for good performance               | 3.26 | 0.82 | Agree    |
| 9.  | Detecting anomalies                              | 3.17 | 0.86 | Agree    |
| 10. | Financial support from administration            | 2.28 | 0.73 | Agree    |
| 11. | Students having genuine interest                 | 3.15 | 0.80 | Agree    |

Table 4: Mean rating for teacher-student relationship necessary for peer tutoring

Table 4 revealed eleven items as Teacher-students relationship necessary for peer tutoring. None of the eleven items were disagreed upon. The students and teachers were in support of the idea listed above.

### **Discussion of Results**

The findings of the study in table 1 showed the level of agreement with the space related conditions necessary for peer tutoring. All the six items were recorded to be significant. These findings support the earlier findings of Onasanya (2010) on the need to allow space related conditions for example ICT and library facilities and other instructional facilities that necessitate peer tutoring. This is in agreement with Adewale (2013) who said that provision of facilities for practical work can enhance students academic achievement. This study also investigated if students have adequate classroom space. It is expected that students who were given required and adequate classroom and airy space have a high academic performance.

The results as shown 2 showed the facilities related conditions and how it is necessary for peer tutoring. The question was posed to examine how adequate instructional materials affects the academic performance of students of clothing and textiles. Items 1-10 of the questionnaire for clothing and textiles students were developed to answer this research question. Majority of the students were of the view that the availability of ICT and library facilities could help to improve the academic performance of students of clothing and textiles. In support of this recent findings, Osei (2015) found that adequate and regular electricity correlate with students performance. With the presence of such facilities, the students can resort to them in order to make further research on clothing and textiles.

Table 3 showed the level of agreement with the factors that could make clothing and textiles teachers and

students effective in the classroom. All the 10 items were recorded significant. School environment is focused on student-student related conditions necessary for peer tutoring.

The present study confirms the previous finding of earlier researchers (Cebulla, 2000; Yara, 2011) that the presence of students academic abilities, especially the previous knowledge, interest, creativity, co-operative spirit, social skills influence peer tutoring.

The result further reveal that teacher- student relationship related factors can influence environmental conditions necessary for peer tutoring. This is consistent with observations of Yara and Obunadike (2012) which implies that giving assignment, monitoring students, giving and marking assignment, dictating anomalies and others are accepted factors that explain for the level of students and teachers performance in clothing and textiles. Furthermore, this is in agreement with Adevemi (2013) who advocates that provision of facilities, reward of good work, helping students, among others must have influence on the academic performance of students in clothing and textiles.

### Recommendation

The following recommendations have been made regarding the results of the study and their pedagogical implications on teaching clothing and textiles at senior secondary school level.

 Federal ministry of Education should adequately provide all senior schools that offer clothing and textiles with necessary clothing and textiles equipment and other instructional materials.

- Learning materials such as recommended text books, chalkboards and its accessories, among others should be provided to schools to aid the efforts of both students and teachers in the teaching of clothing and textiles.
- To have a sustained improved academic performance among clothing and textiles students, the government, parent/guardian associations, school management committees should pool resources together in order to provide senior secondary schools with ultra modern residential facilities.

### Conclusion

Environmental conditions have a very strong relationship with students academic performance. The teachers through their specific roles either have negative or positive influence on students academic performance. Therefore, the teachers should enhance an environment conducive learning in which the leaners are free to consult them when in need, provide adequate learning facilities and arouse interest in the learners to work hard.

The study established that home and environment school exert potent influence students academic on performance. These factors directly and indirectly pointed to areas that have to be addressed in order to promote good academic performance. Peer level factors also have a relationship with peer tutoring. Students whose friends engage in negative activities such as sneaking out of school and being absent from school chronically are likely to have lower peer tutoring.

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