JUNIOR HIGH SCHOOL PUPILS’ ATTITUDE TOWARDS THE STUDY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY IN CAPE COAST METROPOLIS OF GHANA

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ABSTRACT:

The purpose of this study was to ascertain the attitude of Junior High School pupils towards the study of Information and Communication Technology (ICT) in selected schools in the Cape Coast Metropolis in Ghana. Descriptive research design was employed in this study where questionnaire and observation guide were used to collect data from 203 pupils. The respondents were purposively drawn from three private and four public schools located in the Efutu, Pedu-Abura and Aboom circuits in the Cape Coast Metropolis. The schools were located in either urban or rural areas of the Metropolis. Predictive Analytics Software (PASW) version 18 for Windows was used to analyse data collected. Frequencies and percentages were used to analyse the biographical data and research question. The finding of the study revealed that pupils in the seven schools had much positive attitude towards the study of ICT.

Keywords: attitude; behaviour; rural area; urban area; public; private

1. INTRODUCTION

The introduction of Information and Communications Technology (ICT) into the curriculum of Ghana for both public and private schools encompassing the first and second cycle institutions in 2007 (Michayahu, 2010), is to complement other subjects for a holistic development so that those who avail themselves to formal education will derive the maximum benefits from it.

ICT is so important in the world today that it makes it imperative for every young person to be competent in the use of ICT for the many tasks that he/she will have to accomplish. (CRDD, 2007).

In 2007, the government of Ghana and China signed a loan agreement of RMB 250.0 million Yuan (USD 30.0 million). The amount was to help develop the first phase of the Ghana National Communications Infrastructure Backbone Project which is to help facilitate the penetration of ICT infrastructure in the country (Concessional Loan agreement between Ghana and the Export-Import Bank of China, 2007).

2.0 REVIEW OF LITERATURE

This section looked at the theory and empirical study underpinning this study. It looked at the theory of Planned Behaviour, attitude formation and attitude towards the study of ICT at the Junior High School.

2.1 The Theory of Planned Behaviour

Ajzen and Fishbein (1980) have identified three categories of Background Factors among which were personal self esteem, personality, locus of control and emotions as the first category. The second category has elements like demographics, age, gender, ethnicity, education and religion. Environment, stress, ICT exposure, workplace and employment demands as the elements of the third category.

According to the Planned Behaviour Theory propounded by Ajzen and Fishbein (1980), Behavioural Beliefs determine Attitude towards the Behaviour; Normative Beliefs also lead to Subjective Norm while Control Beliefs result in
Perceived Behavioural Control. Behaviour is formed from Intention and Intention come from Attitude towards the Behaviour; Subjective Norm and Perceived Behavioural Control.

2.2 Attitude Formation

Common findings in the research revealed that attitudes and beliefs are linked, attitudes and behaviour are linked and attitudes are essentially likes and dislikes (Siragusa, Kathryn & Dixon, 2008). Over a period of time and following a series of experiences students develop either favourable or unfavourable feelings associated with certain interactions. These feelings or ‘states’ may well form the basis of their attitudes towards their own self conceptualisation of the use of (ICT) as a means of enhancing learning (Siragusa & Dixon, 2008). According to Ajzen and Fishbein (2005), behavioural intentions are thought to result from beliefs about performing the behaviour and certain behaviours are influenced by a range of background factors such as personality, mood, values, education, ethnicity and gender amongst others.

2.3 Attitude towards the study of Information and Communications Technology

In a study by Siragusa and Dixon (2008) to find out the attitude of students towards the study of ICT revealed that students believed interacting with ICT was pleasant, helpful and easy. Also, the study found that students have feelings of anxiety and intimidation when working through the ICT interaction. It can be deduced from this study that students have much interest in studying ICT and might be doing better in the subject at school.

Rashid and Riaz (2003) carried out a study in Allama Iqbal Open University and found that most of the student’s have positive attitude towards ICT and may easily accept better and advanced way of learning. In a study conducted by Balanskat, Blamire and Kefala (2006) in Finland, Denmark, Norway and Sweden indicated that ICT has a positive impact on pupils’ learning. A study in Slovak elementary schools by Fančovičová and Prokop (2008) found that attitudes toward ICT were positive and gender differences were weak. Although they found that school had an effect on the behavioural dimension of attitudes, it was not caused by the accessibility of computers per se. However, large numbers of students per computer (up to N = 68) greatly reduced student’s use of computers at schools.

Bovee, Voogt, and Meelissen (2007) investigated computer attitudes of 240 students from eight primary and secondary schools in South Africa. The student population of six of the eight schools that participated in the study can be characterised as middle or upper class. Two schools were from South African townships. All eight schools used computers for educational purposes, although the availability and use of the computers differed. The latter showed a less positive attitude towards computers, but more interest in computer-related careers compared with the students in the upper/middle class schools. The study found that computer access and experience, which was significantly lower in the township schools, was also related to computer attitude. I am of the view that the more access to computers, there is a positive correlation in positive attitude towards the study of ICT among the students in the township (urban areas).

2.4 The Problem

The Basic Education Certificate Examination (BECE) result released by the West African Examinations Council (WAEC, 2011) in July, 2011 showed that only a few pupils passed ICT very well. In School A (name withheld), a total of fifty-six pupils were presented for the BECE. Seven pupils representing 12.50% obtained grades 3 to 5 and forty-nine pupils also obtained grades 6 to 9 representing 87.50%. In terms of gender, four males (7.14%) had grades ranging from 3-5; and three females had grades ranging from 3-5 (5.38%); fourteen males (25%) had grades ranging from 6 to 9 and thirty-five females obtained grades ranging from 6 to 9 (West African Examinations Council, BECE Results, 2011). It is clear from this that over 80% of the pupils failed, and this is an indication that there is a problem to be resolved through research. The purpose of this study is to investigate the attitude of pupils towards the study of Information and Communications Technology in selected public, private, urban and rural JHS in Cape Coast Metropolis.

2.5 Research question

To find answer to this problem, this research question below was set to guide the study.

a. What is the attitude of pupils towards the study of ICT at the JHS?
3.0 METHODOLOGY

The method used to approach this study has been discussed in this section which includes research design, population and sampling procedure, instrumentation and data collection procedure.

3.1 Research Design

A cross-sectional survey design was adopted to help find a solution to the problem that was investigated. All studies are designed to either test hypotheses or answer research questions to find solution to a problem (Gay, 1992).

3.2 Population and Sampling procedure

The targeted population for the study were all public and private Junior High Schools (JHS) in Cape Coast Metropolis. These schools are scattered in the rural and urban areas of the Cape Coast Metropolis in the Central Region of Ghana. The accessible population consisted of pupils in some selected public and private JHS in rural-urban areas in the Efutu, Aboom and Pedu-Abura Circuits. There are 80 public and private JHS with an enrolment figure of 2,954 JHS 2 pupils. The accessible population for the study consisted of pupils in 7 selected schools (Christ Church Anglican JHS, St. Nicholas Anglican JHS, Ayifua St. Mary Anglican JHS, Sir Holdbrook-Smith International JHS, Golden Treasures International JHS, St. Cyprians Anglican JHS & Tuwohofo Holy International JHS) in the Cape Coast Metropolis.

This population was chosen for the study because it was a mixed school population and easy to access in terms of proximity and transportation to make the collection of data easy to the researcher. Also, the necessary character traits of behaviour and attitude and all the components of a complete community could easily be found in these schools setting. Purposive sampling method was used to select the 7 Junior High schools based on computer availability in these schools and also on their geographical locations of the schools. According to Frankael and Wallen (2000), a sample size of a minimum of one hundred (100) was enough to give a meaningful generalization. Hence, a sample size of two hundred and three (203) was good for a meaningful generalization.

3.3 Instruments

The instruments used to collect the data were questionnaire and an observation guide. “Teachers’ Attitudes Toward Computers” (TAC) originally developed by Woodrow (1992) Version 6 was adapted and renamed as “Pupils’ Attitude Toward Computers” (PAC) for this study. Reliability estimates for PAC ranged from .87 to .95. The contents of the Observation Guide were also discussed with experts and the necessary review and adjustments were made before it was finally sent to the field to collect data. This was done to ensure the validity of the various items in the instruments for data collection for the study. The Observation Guide was to help collect data for the triangulation.

3.4 Data Collection Procedure

Seven days were used for the data collection in the respective 7 schools. The observation was done during the ‘double periods’ lessons only and this was to allow for a relatively long period to see what goes on in the class while teaching goes on. The questionnaire was administered and it was collected after they have been completed by the respondents with the reason of achieving hundred percent rate of collection.

3.5 Data Analysis

The Predictive Analytics Software (PASW) version 18 for Windows was used to aid in the data analysis. Frequencies and percentages were used to analyse the biographic data and research question one. Qualitative data analysis was used to analyse the observed behaviour from the respondents. The observed behaviours were used to support the data collected with PAC during the analysis of the researcher questions.
4.0 RESULTS AND DISCUSSION

The responses from the data collected are shown in Tables 1 and 2.

Table 1: Attitude of Pupils towards the Study of ICT at JHS

<table>
<thead>
<tr>
<th>Category</th>
<th>Agree (%)</th>
<th>Disagree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want to learn a lot about computers</td>
<td>195(96.1)</td>
<td>8(3.9)</td>
</tr>
<tr>
<td>The challenges of learning about computers are exciting</td>
<td>156(76.8)</td>
<td>47(23.2)</td>
</tr>
<tr>
<td>I like learning on a computer</td>
<td>180(88.7)</td>
<td>23(11.3)</td>
</tr>
<tr>
<td>I can learn many things when I use a computer</td>
<td>183(90.1)</td>
<td>20(9.9)</td>
</tr>
<tr>
<td>I get bored when I think of trying to use a computer</td>
<td>53(26.1)</td>
<td>150(73.9)</td>
</tr>
<tr>
<td>Working with computers makes me feel tense and uncomfortable</td>
<td>39(19.2)</td>
<td>164(80.8)</td>
</tr>
<tr>
<td>Working with a computer makes me nervous</td>
<td>49(24.1)</td>
<td>154(75.9)</td>
</tr>
<tr>
<td>Computers intimidates me</td>
<td>50(24.6)</td>
<td>135(64.5)</td>
</tr>
<tr>
<td>Using a computer is very frustrating</td>
<td>68(35.5)</td>
<td>135(64.5)</td>
</tr>
<tr>
<td>If I had a computer at my disposal, I would try to get rid of it</td>
<td>88(42.4)</td>
<td>115(57.6)</td>
</tr>
<tr>
<td>Studying about computers is a waste of time</td>
<td>21(10.3)</td>
<td>182(89.7)</td>
</tr>
<tr>
<td>Computers are changing the world too rapidly</td>
<td>140(69.0)</td>
<td>63(31.0)</td>
</tr>
<tr>
<td>I am afraid that if I begin to use computers, I will become dependent upon them</td>
<td>71(35.0)</td>
<td>132(65.0)</td>
</tr>
</tbody>
</table>

A cursory look at Table 1 shows that more than 76% of the respondents agreed with the positive statements “I want to learn a lot about computers”, “The challenges of learning about computers are exciting”, “I like learning on a computer” and “I can learn many things when I use a computer”. More than 57% of the respondents have also disagreed with all the negative statements “I get bored when I think of trying to use a computer”, “Working with computers makes me feel tense and uncomfortable”, “Working with a computer makes me nervous”, “Computers intimidates me”, “Using a computer is very frustrating”, “If I had a computer at my disposal, I would try to get rid of it”, “Studying about computers is a waste of time”, “I am afraid that if I begin to use computers I will become dependent upon them” except the statement “Computers are changing the world too rapidly” had 31% of the respondents who agreed with this negative statement.

Table 2: Respondents’ feeling about Computers

<table>
<thead>
<tr>
<th>Statement</th>
<th>1-3(%)</th>
<th>4-7(%)</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers are:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unpleasant</td>
<td>24(11.8)</td>
<td>179(88.2)</td>
<td>Pleasant</td>
</tr>
<tr>
<td>Suffocating</td>
<td>48(23.6)</td>
<td>155(76.4)</td>
<td>Fresh</td>
</tr>
<tr>
<td>Dull</td>
<td>15(7.4)</td>
<td>188(92.6)</td>
<td>Exciting</td>
</tr>
<tr>
<td>Unlikeable</td>
<td>18(8.9)</td>
<td>185(91.1)</td>
<td>Likeable</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>18(8.9)</td>
<td>185(91.1)</td>
<td>Comfortable</td>
</tr>
</tbody>
</table>

From Table 2, the positive feeling of respondents about computers have percentage scores ranging from 76.4% to a maximum of 92.6% on the statements “Pleasant”, “Fresh”, “Exciting”, “Likeable” and “Comfortable” while the negative statements “Unpleasant”, “Suffocating”, “Dull”, “Unlikeable” and “Uncomfortable” about the feeling of respondents about computers have percentage scores ranging from 7.4% to 23.6%.

5.0 Conclusion

In observing pupils during their normal class lesson, it was obvious that they have interest in their lessons. Putting all the interpretations and
deductions from Tables 1, 2 and the observed behaviour on the field during the data collection from the seven schools, it can be concluded that pupils in the rural and urban area Junior High Schools in the Cape Coast Metropolis have positive attitude towards the study of ICT. The finding of the study revealed that pupils in the seven schools; Christ Church Anglican JHS, St. Nicholas Anglican JHS, Ayifua St. Mary Anglican JHS, Sir Holdbrook-Smith International JHS, Golden Treasures International JHS, St. Cyprians Anglican JHS and Tuwohofo Holy International JHS have much positive attitude towards the study of ICT. This finding revealed the current attitude of pupils in relation to the study of ICT.

REFERENCES