

A DEMONSTRATIONAL APPROACH TO ACQUIRE ICT SKILLS AMONG SENIOR HIGH SCHOOL (SHS) STUDENTS IN GHANA– THE CASE OF ANTOA SENIOR HIGH SCHOOL

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ABSTRACT

The primary aim of this research is to help SHS students of Antoa Senior High School, to acquire skills in word processing through the use of demonstration method of teaching. The researcher in this study used a descriptive and exploratory design. The data used in the analysis were collected from students in SHS at Antoa Senior High School. The sample used for the research comprised of forty (40) students and Ten (10) teachers. Simple random sampling was used to select the sample. Questionnaires, Observation and Interviews were administered to collect data. First and Second class test were used as pre-test and post-test items respectively. Teachers and students were briefed before the Questionnaire and Interviews were conducted. After identifying the problems and implementing the interventions, the data collected were tabulated and represented graphically using bar and pie charts. The findings of this study revealed that, the use of demonstration, motivation as well as illustrations can in a long way help students in the acquisition of the necessary ICT skills in word processing. Students exhibited poor ICT skills before the intervention and it was due to the fact that the right teaching methods were not used by teachers. Students were also not motivated to learn ICT since it was not examinable. Also, the school's administration was to some extent not abreast with the actual problems pertaining in the ICT department. From the findings, it was recommended that ICT should be made examinable in the final examination of SHS students so that students will take ICT lessons serious.

Keywords: Information Communication Technology (ICT) Skills, Senior High School (SHS), Ghana Education Service.

1. INTRODUCTION

The world is becoming a global village and for that matter Information and Communications Technology (ICT) and its importance to the socio economic environment of any country as in the case of Ghana cannot be over-emphasized. For this country to be abreast with the developed world, ICT must bring a transformation in

teaching and learning.

Information Communication Technology (ICT) is a very important and interesting discipline which requires determination and confidence to enable one pursue it successfully. This is the reason why Ghana government together with the Ghana Education Service has made ICT a core subject in all Senior High Schools.

Information and Communication Technology (ICT) is so important in the world today that it makes it imperative for students to be competent in the use of ICT for many tasks that they can use computer to do.

- ICT enables us to
- Use the Internet to communicate effectively
- Access and share information through the Internet
- Follow basic ethics in the use of computers.

This realisation calls for detailed atmosphere for its study, but there is poor skill acquisition in the learning of Information Communication Technology (ICT) in Schools. In addressing this problem, proper steps need to be taken. Such steps need a thorough Investigation, Analysis and Suggestions as to what should be done to control such anomalies.

A careful Analysis and Observation has revealed that students in Antoa Senior High School - specifically the continuing students show little interest in the study of Information and Communications Technology (ICT) due to the poor skills that they exhibit.

In view of the fact that, the continuing students never write examination on ICT at the end of their study, the students of Antoa Senior High School, students show little interest in the study of ICT. This study therefore seeks to focus on the use of a demonstrational approach to help develop interest as well as skills needed in ICT specifically in word processing.

This research is being undertaken to find out some of the problems students face in the acquisition of ICT skills which has not yet been given the required attention. Based on this the researcher undertakes this study on how to use a demonstrational approach to acquire ICT skills among SHS students in word processing.

2. Literature Review

2.1 Theoretical Framework of the Study

Burns (1995) conceives learning as a relatively permanent change in behaviour as a result of experience which includes observable activity and internal processes such as thinking, attitudes and emotions. Burns considers that learning cannot manifest itself in an observable behaviour until some practices are put in place. It is clear that Burns includes demonstration in this definition of learning. In learning basic skills in ICT involving the use of the keyboard and mouse for instance, the sensory theory should be of paramount importance. Traditional sensory stimulation theory has as its basic premise that effective learning occurs when the senses are stimulated (Laird, 1985). Laird quotes research that found that the vast majority of knowledge held by learners, about 75% of learning is through seeing. Hearing is the next most effective that gives about 13% and the other senses touch, smell and taste accounts for 12% of what we

know as human beings. Stimulating the senses especially the sense of vision can significantly enhance learning. However, this theory says that if multi-senses are stimulated, greater learning takes place. Stimulation through the senses is achieved through facts presented visually. As regards the use of a variety of techniques and media, it is important to use demonstration, illustrations and motivation extensively in teaching skill acquisition. The following methods of teaching relative to the acquisition of ICT skills are discussed.

2.1.1 The Demonstration Approach of Teaching

Demonstrating is the process of teaching through examples or experiments. For example, a science teacher may teach an idea by performing an experiment for students. A demonstration may be used to prove a fact through a combination of visual evidence and associated reasoning. Demonstrations are similar to written storytelling and example is that they allow students to personally relate to the presented information. Memorization of a list of facts is a detached and impersonal experience, whereas the same information, conveyed through demonstration, becomes personally relatable. Demonstrations help to raise student interest and reinforce memory retention because they provide connections between facts and real-world applications of those facts. Lectures, on the other hand, are often geared more towards factual presentation than connective learning.

The basic method of instruction for teaching skill-type subject matter is the demonstration method of instruction. This method is recommended for teaching a skill because it covers all the necessary steps in an effective learning order. The demonstration step gives trainees the opportunity to see and hear the details related to the skill being taught. Those details include the necessary background knowledge, the steps or procedure and the safety precautions. The repetition in the demonstration approach helps the average and slow learners and gives the learners an additional opportunity to see and hear the skill being taught. The performance step in it also gives all trainees the opportunity to become proficient. The demonstrational approach to teaching and learning undoubtedly stimulates more than one sense – the sense of vision, the sense of hearing and in isolated situations, and the sense of touch. This as concurred by (Laird, 1985), increases the rate of assimilation by students.

Among the numerous merits of using the demonstration approach to teaching are; giving students excellent examples to follow, showing connections between concepts, events and processes. However, poorly organized or ineffective demonstrations confuse students about concepts and processes. In using demonstration method of teaching, one has to determine processes, concepts and skills to be learned, determine points of similarity and dissimilarity, secure any and all equipment and supplies needed for the demonstration.

2.1.2 Concept of Illustrations in Teaching

An illustration is a depiction (such as a drawing, painting, photograph or other image) that is created to clarify or dictate sensual information (such as a story, poem or newspaper article). Common knowledge tells us that using materials in education

increases productivity in terms of both quality and quantity. Course materials used in the classes not only ease the work of teachers but also motivate students to participate in the class (Safran, 2000). Therefore, stimulants that will attract students' attention and give the message effectively should be used. Çilenti (1991) claimed that many stimulants should be used in education. According to Philips quoted in Çilenti, when the time factor is kept constant, people remember 10% of what they read, 20% of what they hear, 30% of what they see, 40% of what they discuss, 50% of what they both see and hear, 80% of what they see, hear and tell and 90% of what they see, hear, touch and tell. Learning experiences may be reinforced by using many stimulants and materials. Thus, illustrations constitute an important part of these stimulants.

According to cognitive theory, only a small fraction of all sensory stimuli that reaches the brain actually make it to the working memory, a process known as selective perception (Gagné, 1985). Considering the limitations of working memory, it is easy to understand why such a process is necessary. With all the stimuli that are vying for attention, it is a challenge to keep learners focused on the intended message or task. Using illustrations is important because it helps students to get a clear understanding of abstract concepts.

2.1.3 Motivation

Motivation is a theoretical construct used to explain the initiation, direction, intensity, persistence and quality of behaviour especially goal directed behaviour (Maler & Meyer, 1997). Motivation is usually constructed as relatively general needs or desires that energizes people to initiate purposeful action in sequence. (Thrash & Elliot, 2001). The concept of student motivation deals with the degree to which students invest attention and effort in various pursuit which may or may not be the ones desired by teachers. Student's motivation is rooted in their own subjective experiences especially those connected to their willingness to engage in lessons, courses and learning activities and their reasons for doing so.

Motivation is an important psychological tool that affects learning and performance in at least four ways. Firstly, it increases an individual's energy and activity level (Pintrich, Marx and Boyle, 1993). It influences the extent to which an individual is likely to engage in an activity intensively or half heartedly. Secondly, motivation directs an individual towards certain goals (Eccles and Wigfields, 1995). Motivation affects choices people make and the result they find rewarding. Thirdly, Stipek (1998) says motivation promotes initiation of certain activities and persistence in those activities. It increases the likelihood that people will begin something on their own, persist in the face of difficulty, and resume a task after a temporary interruption. Lastly, motivation affects the learning strategy and the cognitive process an individual employ (Dweck and Elliot, 1993). Thus it increases the likelihood that people will pay attention and practise to learn in a meaningful way. It also promotes learner's ability to seek help when they encounter difficulties.

Owusu – Banahene (2007) outlines the following as means through which teachers can motivate their learners.

1. Make students active participants in learning.

2. Tell students what they need to do to be successful in their subject.
3. Avoid creating intense competition among students.
4. Be enthusiastic about students.
5. Vary your teaching methods
6. Give students feedback as quickly as possible
7. Reward success
8. Avoid demeaning comments.

According to Sackey (1994), motivation is a force that drives students to learn. He further explained that to effectively motivate learners, teachers need to consider and examine the basic elements that are essential to effective classroom management. Thus, motivation is a tool which cannot be taken for granted if proper teaching and learning outcome is to be achieved.

2.2 Empirical Basis of the Study

2.2.1 The Role of Illustrations in ICT skills Acquisition

According to Russell N. Carney and Joel R. Levin (2002), Research conducted primarily during the 1970s and 1980s supported the assertion that carefully constructed text illustrations generally enhance learners 'performance on a variety of text-dependent cognitive outcomes. Research conducted throughout the 1990s still strongly supports this assertion. The more recent research has extended pictures-in-text conclusions to alternative media. Consideration is given here to both more and less conventional types of textbook illustration, with several "standards for teachers" provided in relation to each type.

Similarly, illustrations have been a part of a more recent development through the pictures in storybooks of childhoods. Although the empirical research evidence strongly indicates that storybook pictures may interfere with "learning to read" (i.e., the initial stages of extracting words and meaning from text—Samuels, 1970). Fang (1996, p. 136) suggests that "the contributions of pictures to the overall development of children's literate behavior seems to be overwhelmingly greater than its potential dangers."

As was just noted, reviews of the effects of pictures on students' text processing conducted in the 1980s examined reading-to-learn studies and found advantages for pictures as text adjuncts. In particular, (Levin et al.1987) a review in terms of Levin's five functions. Also, Levin (1981) asserted that pictures serve in text processing—four conventional functions (decorational, representational, organizational, interpretational) and one more unconventional one transformational. Briefly, decorational pictures simply decorate the page, bearing little or no relationship to the text content. In contrast, representational pictures mirror part or all of the text content and are by far the most commonly used type of illustration. For example, a picture that accurately portrays a scene described in a story book would be deemed representational.

Organizational pictures provide a useful structural framework for the text content. Interpretational pictures help to clarify difficult text. Finally, transformational pictures include systematic mnemonic (memory enhancing) components that are designed to

improve a reader's recall of text information. Here, information is often recorded to make it more concrete and then related to a meaningful, interactive illustration.

As an addition to pictures-in-text commandments, Levin and Mayer (1993) proposed seven "C" principles for explaining the "whys" of picture facilitation. In particular, they suggested that pictures improve students' learning from text because they make the text more concentrated (focused, with respect to directing a reader's attention), concise ("a picture is worth a thousand words"), concrete (the representation function), coherent (the organization function), comprehensible (the interpretation function), correspondent (relating unfamiliar text to a reader's prior knowledge).

In a related review, Peeck (1993) lists a number of reasons why pictures should facilitate learning, including increasing motivation, focusing attention, depth of processing, clarification of text content, decreasing interference, processing support for the type of information typically extracted from a specific type of text (Waddill et al., 1988; Waddill and McDaniel, 1992), and serving as mental models (Glenberg and Langston, 1992; Gyselinck and Tardieu, 1994). Nevertheless, Peeck goes on to doubt that pictures contribute much to text processing in real-life situations. As Weidenmann (1989) argued, for a variety of reasons "good pictures fail." For example, pictures are often viewed as "easy" material and may be examined only superficially by learners. Peeck describes several attempts to teach literacy, including approaches by Constable et al. (1988) and Higgins (1979). He recommends teaching visual literacy in the context of teaching reading comprehension (Palincsar and Brown, 1984). Peeck concludes with a helpful summary. Here, his recommendation for the optimal processing of adjunct pictures is to "tell the student to do something with the illustration" and it requires a "controllable" product.

2.2.2 The Role of Demonstrational Approach in ICT Skills Acquisition

The direct demonstration approach is a very effective method of instruction, especially when trainees have the opportunity to repeat the procedures. According to Miller et al (1999), the demonstration or "doing" method is used to teach skills, demonstrate step-by-step the procedures in a job task, using the exact physical procedures if possible. While demonstrating, explain the reason for and the significance of each step. To be effective, plan the demonstration so as to be sure to show the steps in the proper sequence and to include all needed steps.

It must be noted that demonstration is an essential teaching approach in supporting the learning of a skill at any level or grade and is the most supportive of all the teaching approaches (Cambourne 1988; Mooney 1990). The other teaching approaches; shared, guided and independent are all used to support student learning, but each approach respectively offers less teacher guidance than the one before it. As the students gain more knowledge about a particular skill, they need less support and the approach should change. Demonstration is typically used to introduce a new skill to a whole group, but it can and should be applied to individuals or a small group whenever more support is needed for their learning.

2.2.3 Motivation as a catalyst in Skill Acquisition of Students

A wealth of empirical evidence on motivation exists, including research substantiating basic characteristics of the trait (such as domain specificity and the existence of gender differences), as well as research linking motivation to other types of learning outcomes. First, although it seems reasonable to suppose that an individual's levels of motivation vary across domains depending on his or her specific interests, there is some evidence that motivation in one domain may generalize to other domains. For example, Gottfried (1990) found that motivation in reading predicted later motivation in science, and social studies. At the same time, motivation in mathematics appeared to relate more strongly to other mathematics constructs than to motivation in other subject areas, suggesting that motivation to learn mathematics among lower elementary students may be less generalizable to other subjects. In general, research suggests that the domain specificity of motivation and self-concept tends to increase with age, particularly as students accrue more educational experiences. Some evidence also supports the presence of gender differences. For example, Lange and Adler (1997) reported that teachers rated girls significantly higher than boys on intrinsic motivation and mastery-oriented behaviors, although achievement and class scores for these two groups were the same. Guay et al. (2010) found girls to have higher intrinsic motivation for reading and writing than boys did. However, boys had higher intrinsic motivation for mathematics than girls did.

Those working in the field of motivation argue that its importance as an educational outcome stems from its relationship to achievement and performance in a variety of domains. First, the act of encouraging motivation in children is critical because it predicts motivation later in life (Broussard & Garrison, 2004; Gottfried, 1990). Gottfried (1990) found that academic intrinsic motivation at ages 7 and 8 predicts subsequent motivation, even after controlling for IQ, achievement, and socioeconomic status. Further, the stability of this relationship increases from ages 8 to 9. Thus, highly motivated 7- and 8-year-olds tend to grow into highly motivated 9-year-olds.

Motivation is also related to achievement and IQ. Research demonstrates a relatively consistent relationship between motivation and achievement in reading and mathematics (Broussard & Garrison, 2004; Gottfried, 1990; Lange & Adler, 1997). In the higher levels of education, both intrinsic and extrinsic motivation predict reading achievement. Moreover, the relationship between motivation and achievement appears to strengthen with age. By age 9, students with high levels of motivation consistently exhibit higher achievement and class scores than students with low motivation (Broussard & Garrison, 2004). Indeed, Lange and Adler found that motivation contributes to the prediction of achievement over and above the effects of ability. Typically, researchers have used such findings to support the conclusion that motivation leads to achievement. Gottfried (1990) further established a relationship between motivation and achievement, but she maintains that the causal relationship works in the opposite direction. Similar to results from other studies, Gottfried found that elementary-age children with higher academic intrinsic motivation tend to have higher achievement and IQ, more positive perceptions of their academic competence, and lower academic anxiety. However, in Gottfried's study, early achievement more

strongly predicted later motivation than the reverse. Whereas motivation was mildly correlated with later achievement, the strongest correlations were between achievement at ages 7 and 8 and motivation at age 9, such that high achievement at an early age was associated with high motivation at a later age. However, Gottfried speculates that motivation may be predictive of achievement in the longer-term.

3. Method

3.1 Research Design

This study emphasizes the use of a demonstrational approach in acquire skills in word processing among a group of students in a particular institution. The researcher in this study used a descriptive and exploratory design which seeks to gather information so that a description of what is going on could be known. It involves collecting data in order to answer questions concerning the current status of an issue or situation. It generally provides a descriptive picture of a situation to establish norms and baseline for consideration of researchers in making their decisions to help raise relevant questions, or identify the needed areas of research.

3.2 Population and Sampling

The population of the study consist of teachers and students in S.H.S in Antoa Senior High School. The sample size of teachers was ten (10) and that of the students forty (40). This study was basically an interaction with the teachers and students in S.H.S of Antoa Senior High School. The school is a mixed one with boarding facilities for both boys and girls.

3.3 Sampling Procedure

As part of the sampling procedure, a random sampling technique was used for this study. Random sampling was chosen because each element in the population has equal chance of being selected for the study. The researcher wrote forty labels of S's for students to pick and ten labels of T's for teachers to pick.

3.4 Research Instrument

The type of research instrument employed in any research depends on the data the instrument will be gathering, the nature of the research being assumed, the characteristics of the sample to be used and the type of research design. The researcher decided on Observation, Questionnaires, Tests and Interview methods as her device for the gathering of data for the research because they are practicable within a given time, resource constraints and the feasibility of using it within a chosen or given context; they are also appropriate for the achievement of the research objectives and they are also able to produce a form of data appropriate for addressing the research questions.

3.4.1 Data Collection Instruments

Researchers engage themselves in the conduction of research to learn about problems in order to prescribe effective solutions to them. This is effectively achieved when enough information is known about the problem at hand. For the researcher to know more about the research problem, the following instruments were used in the collection of the needed data:

3.4.2 Observation

The researcher critically observed S.H.S students during ICT class, their attendance to

class as well as their relationship with the researcher especially how they respond to questions and answers in class. Students were also observed during class exercises to check the level of their skills.

3.4.3 Questionnaire

The researcher decided on questionnaire as a data gathering instrument because it does not require much time from the respondent and it also allows for broad geographical sampling. The researcher administered the questionnaire because self distribution gives the researcher the opportunity to establish some kind of cordial relationship with the respondents. In all, forty (40) questionnaires were distributed to students.

3.4.4 Interview

Interview in general is perceived as an oral questionnaire and it has an advantage over questionnaire because interviews allow interviewers and interviewees to seek clarification and exchange ideas which cannot be done using questionnaire. The researcher therefore selected the structured interview method because the respondents were made aware of the subject matter of the discussion and so answers were given in a similar context.

3.4.5 Tests

A Test is an assessment intended to measure a test - taker's knowledge, aptitude, skills, or classification in many other topics. A series of tests were conducted by the researcher on the students during the pre-intervention, intervention and post intervention stages of the study.

3.5 Data Analysis

The data collected was analysed by comparing the various exercises and responses made by the students who formed part of the study. The data was organized into tables and results were analysed using actual figures and percentages.

4. Results and Discussion

4.1 Pre-intervention Results

Before the researcher was able to get accurate information about the research problem and design an appropriate intervention strategy, the researcher conducted a little background data collection on the problem. Instruments such as tests, observation, Questionnaire and interview were used for this purpose. This section discusses the results obtained.

4.1.1 Motivation as a Catalyst in Skill Acquisition of Students

The researcher observed that students were not motivated to learn ICT and as such had not acquired the necessary skills. When asked in the questionnaire, to what extent students were motivated to learn ICT, varied responses were given as shown in Table 4.1 below:

Table 4.1: Motivation Level of Students

Response	Frequency	Percentage (%)
Very motivated	0	0%
Motivated	6	15%
Not motivated at all	34	85%
Total	40	100

As depicted in Table 4.1 none of the respondents representing 0% responded to be very motivated towards learning ICT. Six (6) students representing 15% however said they were motivated to learn ICT with an overwhelming number of thirty-four (34) students saying they were not at all motivated to learn ICT.

4.1.2 The Role of Demonstrational Approach in ICT Skills Acquisition

Teachers were not using the Demonstration method of teaching to teach ICT, as such it led to low ICT skill acquisition among students. All the teachers who were interviewed admitted to the fact that using demonstration in teaching ICT helps in enhancing skill acquisition but they were not using it in their teaching. When an item in the questionnaire sought to ask the teaching method used by their teachers, below is their response.

Table 4.2: What teaching method does your teacher use when teaching ICT?

Marks	Frequency	Percentage (%)
Lecture	19	47.5%
Discussion	12	30%
Demonstration	0	0%
Lecture and Discussion	9	22.5%
Lecture and Demonstration	0	0
Total	40	100%

Table 4.2 shows the teaching methods used by teachers and the results indicate that, nineteen (19) students representing 47.5% responded that teachers use the Lecture method, twelve (12) students representing 30% of respondents responded that teachers use Discussion method, nine (9) of the students responded that teachers use Lecture and Discussion, none of the students responded that teachers use either Demonstration or Lecture and Demonstration. A pre – test was also conducted and it was observed that because teachers were not using demonstration in their teaching, it led to the inability of the students to acquire the needed skills in word processing. Table 4.4 indicates students' performance when a pre – test was conducted.

Table 4.3: Students' performance on pre – test

Marks	Frequency	Percentage (%)
0 – 5	19	47.5%
6 – 10	16	40%
11 – 15	4	10%
16 – 20	1	2.5%
Total	40	100%

From Table 4.3 it can be seen that nineteen (19) students scored 0-5 representing 47.5%, sixteen (16) students scored 6-10 representing 40%, four (4) students scored 11-15 representing 10% and only one (1) student scored 16-20 representing 2.5%.

4.1.3 The Role of Illustrations in ICT skills Acquisition

It became apparent from the researcher's observation of the teaching and learning process of ICT that illustrations were rarely used. This made skill acquisition among students very difficult and ICT lessons very dull. The teachers also confirmed,

through interview, that they did not use illustrated diagrams when teaching ICT. This was the response of students when they were asked in the questionnaire whether teachers use visual aids to enhance teaching and learning of ICT?

Table 4.4 Does your teacher use visual aids to enhance teaching and learning of ICT?

Responses	Frequency	Percentage (%)
Yes	0	0%
No	100	100%
Total	100	100

As presented in table 4.4 all the respondents (100%) responded "No" to indicate that teachers teach without using visual aids which did not help in the acquisition of ICT skills in processing word.

4.2 Post Intervention Results

The post intervention stage presents the results of the intervention. After successful implementation of demonstrational teaching as an intervention technique, the researcher evaluated the extent of skill acquired by students and their levels of motivation.

4.2.1 Motivation as a Catalyst in Skill Acquisition of Students

Research shows that, the motivation level of students is directly linked to their performance or academic achievement. Students who are highly motivated will achieve higher than students whose motivation is low. After the implementation of the intervention strategy, the researcher again solicited from the students their level of motivation through questionnaires. Table 4.5 below gives the results of the responses as responded to by the respondents.

Table 4.5: Students' motivation level after the intervention.

Response	Frequency	Percentage (%)
Very motivated	22	55%
Motivated	18	45%
Not motivated at all	0	0%
Total	40	100

As shown in Table 4.5 twenty-two (22) respondents said they were very motivated representing 55% whereas eighteen (18) respondents said they were also motivated representing 45% none of the respondents said they were not motivated at all. Students claimed that motivation has gone a long way into helping in the learning of ICT thereby enhancing their skill acquisition in processing word.

4.2.2 The Role of Demonstrational Approach in ICT Skills Acquisition

Since the researcher employed the demonstrational approach as her intervention, the Word Processing skill acquisition level of students improved. The questionnaire administered to respondents contained an item which sought to know which teaching method they thought was appropriate for teaching ICT lessons. Table 4.6 below shows the responses given by students.

Table 4.6 Which method of teaching do you think is appropriate for teaching ICT lessons?

Responses	Frequency	Percentage (%)
Demonstration	25	62.5%
Lecture	2	5%
Discussion	4	10%
Lecture and demonstration	6	15%
Lecture and Discussion	3	7.5%
Total	40	100%

From table 4.6 above, twenty-five (25) respondents said they liked the Demonstration method representing 62.5%, two (2) responded they liked the lecture method representing 5%, four (4) responded they liked Discussion method representing 10%, six (6) responded they liked Lecture and Demonstration representing 15% and three (3) responded they liked Lecture and Discussion representing 7.5%. The respondents admitted that the Demonstration method of teaching has helped in their skill acquisition in processing word. This can be seen as illustrated in Table 4.7 below when a post – test was conducted after this intervention was implemented

Table 4.7 Students' performance on post – test

Marks	Frequency	Percentage (%)
0 – 5	0	0%
6 – 10	4	10%
11 – 15	15	37.5%
16 – 20	21	52.5%
Total	40	100%

From Table 4.7, it can be seen that none of the students scored 0-5, four (4) students scored 6-10 representing 10%, fifteen (15) students scored 11-15 representing 37.5% and twenty-one (21) students scored 16-20 representing 52.5%.

4.2.3 The Role of Illustrations in ICT skills Acquisition

The researcher used illustrated diagrams as part of the intervention strategy. This made the lessons of the researcher lively which boosted skill acquisition of students in the use of Word Processors as seen in table 4.7 when a post - test was conducted. During the interview, when teachers were also asked whether illustrations can be used to help students acquire word processing skills, they admitted to the fact that it was a good method of teaching skill acquisition.

4.3 Discussion of Post Intervention Results

After assessing and analyzing the performance of S.H.S students, it was observed that their inability to apply the necessary ICT skills in word processing was due to numerous factors which included poor foundation at the J.H.S level and also the inability of the teachers to use the necessary teaching methods in skill acquisition.

4.3.1 Motivation as a Catalyst in Skill Acquisition of Students

Based on the findings above, it was obvious that when proper motivational strategies were used, students' skill acquisition in the use of Word Processing improved. When

students were asked whether they would be motivated to learn ICT if it were made examinable in the external examinations, about 36 representing 90% said 'Yes' whilst 4 which represented 10% said No.

4.3.2 The Role of Demonstrational Approach in ICT Skills Acquisition

After the intervention which was the use of the Demonstrational Approach, students' performance was evaluated to have improved drastically. This is seen in the comparison of the pre and post – test results based on their first and second class test respectively as illustrated in figure 4.9 below.

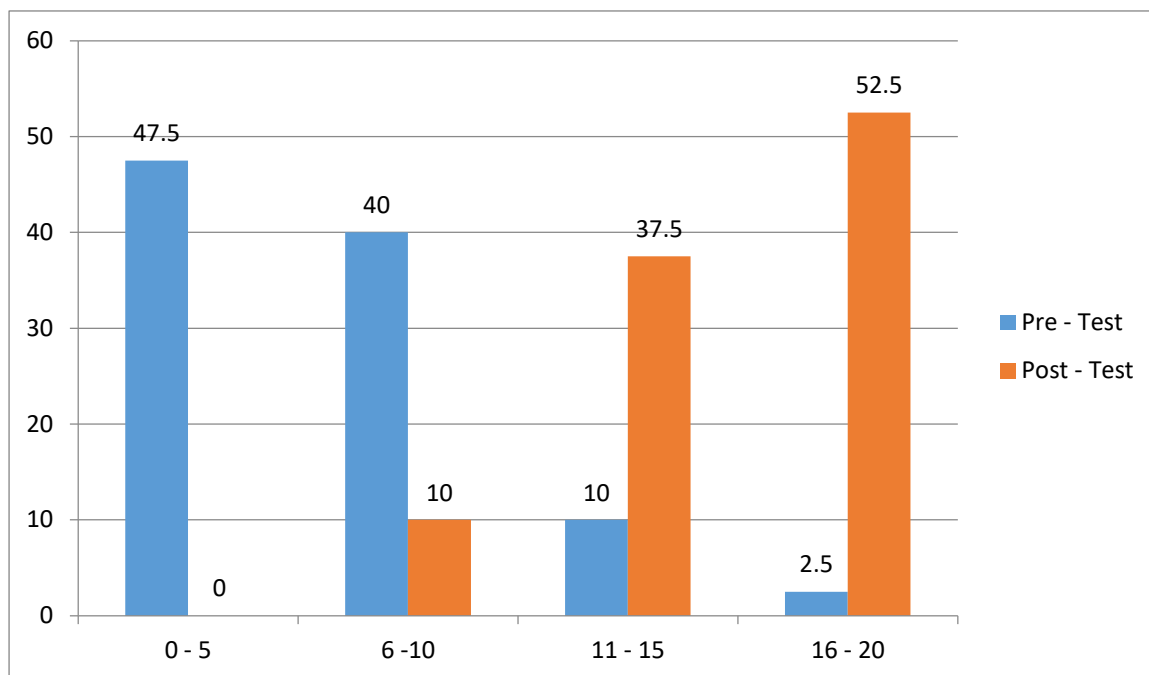


Fig 4.1: Comparison of pre-test and post-test results

4.3.3 The Role of Illustrations in ICT skills Acquisition

As part of the intervention strategy, the researcher included the use of illustrated diagrams. As is seen from figure 4.9 above, this translated into an improvement of performance when a second class test was conducted as against the performance in the first class test where illustrated diagrams were not used.

5. Conclusion

The study of this research revealed that, the use of demonstration, motivation as well as illustrations can in a long way help students in the acquisition of the necessary ICT skills in word processing. Students exhibited poor ICT skills before the intervention and it was due to the fact that the right teaching methods were not used by teachers. Students were also not motivated to learn ICT since it was not examinable. Also, the school's administration was to some extent not abreast with the actual problems pertaining in the ICT department.

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