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Comparative Effect of Interactive Mobiles (Clickers) and Communicative Approach on the Learning Outcomes of the Educationally Disadvantaged Nigerian Pupils in ESL Classrooms

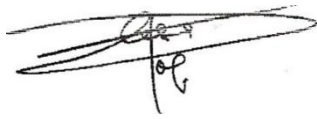
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PhD

**The University of Edinburgh
2013**

Declaration

I certify that this thesis has been written by me and that all information sources and literature used in the process of writing this thesis have been acknowledged. I also certify that the work in this thesis has not been submitted for a degree or as part of requirements for another degree or professional qualification except specified. Publications from the data of this thesis are included in the appendices.



Alaba Olaoluwakotansibe Agbatogun

2013

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Abstract

Effective teaching that promotes learners' active engagement and the development of communicative proficiency has been a challenge to teachers of English as a second language (ESL). Previous research on second language (L2) teaching has shown that L2 learners improve better in communicative skills when they are actively engaged, participate in communicative tasks that facilitate interaction and are provided with the opportunity to use the target language in the classroom. This study focuses on improving ESL learners' learning outcomes in remotely-located primary schools in Nigeria.

The study aimed to test whether the introduction of Personal Response System (PRS) and communicative approach can improve pupils' English-language communicative competences and their attitudes towards English learning. Specifically, this study examined the extent to which significant differences exist in pupils' communicative competence performance scores and learning gains based on teachers' use of a communicative approach, PRS and lecture methods in the ESL classroom. Furthermore, the research also attempted to find out whether pupils' attitudes towards the learning of English would significantly differ based on teaching strategy. Attitudes of pupils and teachers towards the interventions were also investigated.

A pre-test and post-test non-randomised control group design was adopted in this study. Some qualitative data were also collected to augment the quantitative main data. Ninety nine pupils from three intact classes in different schools in Ijebu-North local government, Ogun-State, Nigeria were assigned to two experimental groups and one control group. In addition to the traditional use of textbooks, one of the experimental groups was taught using communicative activities, while the second experimental

group experienced communicative tasks blended with the use of a personal response system. The control group received the conventional classroom instruction (lecture method), including the use of the English language textbook. In order to provide answers to the research questions and the hypothesis of this study, English Language Listening Tests and English Language Speaking Tests, Pupils' Attitude to English Language Lesson Questionnaire, Pupils' Attitude to Clickers' Questionnaire and Pupils' Attitude to Communicative Approach Questionnaire were administered at the pre-and post-test stages of the research. These instruments were also complemented with data from classroom observation, video recording of the instructional process, and audio-recorded interviews with the teachers and selected pupils in the experimental groups.

The results indicate that the two experimental groups showed greater improvement in communicative competence than did the control group; but the PRS group improved more than the communicative approach group both in listening and speaking skills development. Moreover, pupils' learning gains were statistically different, with the PRS group having the highest gain scores above the communicative approach group, while the control group did not experience increased learning gains. The results also reveal pupils' mixed-reactions with respect to their attitudes toward the English language lesson and the interventions. Teachers' attitudes toward the interventions were in the positive direction.

List of Publications

Agbatogun, A. O. (2012). Improving communicative competence with 'clickers': acceptance/attitudes among Nigerian primary school teachers. *International Journal of Primary Elementary and Early Years Education*. doi:10.1080/03004279.2011.637942

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Agbatogun, A. O. (2012). Investigating Nigerian primary school teachers' preparedness to adopt personal response system in ESL classroom. *International Electronic Journal of Elementary Education*, 4(2), 377-394. Available at http://www.iejee.com/4_2_2012/IEJEE_4_2_Agbatogun_377_394.pdf

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Dedication

This thesis is dedicated to:

The Almighty God

My wife; Olajumoke, and

My son; ProphetSamuel.

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Chapter One

BACKGROUND TO THE STUDY

1.1 Introduction

Language is a hall-mark and the most enduring artefact of any community. It plays significant roles in social interaction and transmission of social values. Across the globe, language is the centre of the educational enterprise (Marsh & Lange, 2000; Obuasi, 2007). The English language is the lingua franca of a vast proportion of the world. There are over a billion people learning English as a foreign language while over 750 million people have English as a second language (Marsh & Lange, 2000; Shamim, 2011). The global significance of English contributes to the efforts of donor agencies, such as the British Council, in funding programmes targeted at improving the English proficiency of non-native speakers in developing countries (Marsh & Lange, 2000; Shamim, 2011).

Similar to Nigeria's situation, many African countries with linguistic diversity, such as South Africa, Uganda, Tanzania, Ghana, Namibia, and Kenya have adopted English as a second language (ESL) in order to overcome cross tribal barriers and access the world beyond Africa (Adegbite, 2004; Alo, 2008; Omoniyi, 2012). In most of the African countries where English is the second language (L2), children in the public schools are exposed to learning through English, from the intermediate level of primary education so that they could acquire reasonable competence in English and could use English as the medium of communication (Marsh & Lange, 2000; Shamim, 2011). Learning through English may sometimes be a complex issue with non-native speakers, who are neither proficient nor comfortable in the language (Marsh & Lange, 2000; Swarts, 2000). Second language (L2) education in itself is not a Herculean task,

but its teaching requires exceptional instructional skills. Worse still, most African teachers teach English as L2 without seeking effective pedagogical strategies capable of maintaining a balance between the quality and quantity of teacher and learners' talk. Moreover, many teachers of English as a second language are more concerned about teaching the grammatical system, without regard to how learners can transfer that grammatical knowledge to meet the real-life situation language-needs (Terrell, 1977; Shamim, 2011). Accordingly, Terrell (1977) posits that the knowledge of second language (L2) grammar is not sufficient to communicate effectively. McGregor (1971) reiterates that effective teaching of a language in school will enhance the teaching of other subjects.

According to Amuseghan (2007), Nigerian teachers and students do not place priority on the ability to understand, and use English in authentic communication, nor is it a priority to master the language for social interaction. Rather, English is taught and learnt in Nigerian schools so that learners could earn a satisfactory grade that would enable them attain a higher level of career or educational placement. Ogunsiji (2012) and Omoniyi (2012) note that, despite that English has continued to enjoy pride of place in the Nigerian education system, the issue of English as second language (ESL) teachers without the right instructional skills, has been a substantial perennial problem to the effective teaching of English in Nigerian elementary schools. English is regarded as one of the subjects worst taught in Nigerian schools (UNESCO, 2000). The teaching and learning of ESL in Nigeria has been disappointing because instructional resources have been inadequate while many teachers lack creative teaching ability to improve learners' communicative skills (Ekpo, Udosen & Afangideh, 2007; Olaniyan & Obadara, 2008).

The current instructional mode in most Nigerian public primary schools is the traditional “chalk and talk” method, which involves the teacher talking to students and writing notes on the chalkboard. This didactic method, based on rote learning, is characterised by learners’ low level of retention and passive learning. Onukaogbu (2001) and Ekpo, Udosen and Afangideh (2007) report that most Nigerian primary teachers coerce learners to chorus lines of passages, followed by repeated prompted answers, leaving the learners with little or no opportunities to participate actively in class. Nigeria’s educational standard is diminishing (Aduwa-Ogiegbaen, 2006; Jekayinfa, 1993). A dwindling standard of education is evident in many learners’ inability to read and write fluently in English and mass failure in public examinations, such as the West African Secondary School Certificate Examination (Akande, 2003; Makinde & Tom-Lawyer, 2008).

The last three decades have witnessed a phenomenal growth of private schools, both in the urban and the remotely located parts of Nigeria, because of the low quality of education available in public schools. There is a widespread patronage of private schools by parents with a preference for the English medium of education. Parents, who can afford the cost, enrol their children in private schools in order that they should acquire high levels of linguistic skills and proficiency (Adebayo, 2009; Fakeye & Soyinka, 2009). The problem of sub-standard education applies across most Nigerian schools, but it is harsher in the sub-urban and rural schools (Abidogun, 2006). Besides the reports of scholars about professional teachers of English language in Nigeria, the account of the researcher, based on personal experience, also adds an impetus to undertaking this study.

1.2 Personal Background and Interest in the Topic

I am a teacher in Nigeria, with over eighteen years of teaching experience at the secondary and tertiary levels of education. Informal and formal observations of the researcher reveal that many in-service and pre-service teachers who teach English language struggle to engage learners in class discussion. In most cases, during the teaching practice, the instructional processes were teacher-centred. Most ESL teachers and student-teachers on teaching practice, often do most of the talking in the classroom, thereby giving learners little or no opportunity to talk. When learners talk, they use simple and closed-ended word(s) as answers to teachers' questions. Such words do not often give room for self-expression of ideas. Moreover, the researcher noticed a high level of the demonstration of pupils' lack of confidence to express themselves in English. It is unarguable that the problem of mass failure in English language engenders pupils' low levels fluency in English. As it happens in most countries across the globe, the researcher also observed that, on a few occasions, when the teachers needed to ask questions, extroverts who raise their hands to indicate their willingness to answer questions, are most favoured during the instructional process.

Evidences from empirical reports, as well as the researcher's observations, leave little doubt about Christopher's (2008) concern. According to Christopher, the ways and manner teachers teach English in most Nigerian schools do not engender the desired students' competence in language skills. Kennedy and Cutts (2005) observe that traditional methods of teaching English are inadequate to achieve instructional objectives because of learners' failure to demonstrate a reasonable understanding of the subject. Jibowo and Olayemi (2009) also reiterate that one of the main causes of Nigerian learners' poor performance in L2 has been pedagogical shortcomings.

1.3 Teacher-learner Interactions

Modern theories of teaching English language suggest that the instructional process should be learner-centred for teaching and learning of English language to be effective. In the traditional classroom, students do not demonstrate reasonable understanding of concepts while only a few of them dominate the instructional process because significant interaction is absent (Duggan, Palmer & Devitt, 2007; Jackson, 2007). A strategy that promotes interaction between the instructor and the learners, as well as among learners, is the pivotal tool to improving pupils' communicative skills in English (Farrell, 2002; Long, 1997).

Vygotsky (1978) stressed the significance of learning in a socio-cultural framework through what he described as the Zone of Proximal Development (ZPD). According to Vygotsky, ZPD is the difference between the learner's independent capacity to solve problems and his capacity to solve problems under the guidance of a more competent person (teacher) and in collaboration with his peers. Socio-cultural theorists believe that cognitive development and language acquisition take place in a child as he interacts with his environment (teacher, peers and other tools) through dialogues. Cook (2001) and Gamez (2009) describe peer interactions and teacher-learners interactions as facilitators of improved language skills. Oyinloye (2008) reiterates that if teachers provide learners with interactive opportunities in Nigerian schools, then the quality of L2 learning would improve.

1.4 Interactive Teaching Approaches

The didactic or teacher-centred methods of teaching and learning L2 involve

learners' acquisition of grammatical rules by rote learning, as well as immediate error correction, often done by the teacher. In the ESL classroom, more attention should be focused on facilitating learners' fluency in English as well as providing them the opportunity to use the language in an appropriate context. In order to assess the feasibility of interaction in L2 classrooms, this present study focuses on exploring the efficacy of two approaches (the communicative approach and the personal response system) that seek to encourage active learning and peer to peer interaction.

1.4.1 *Interactive Mobile Technology*

Interactive technology advancement has not gone unnoticed in the education sector. New opportunities for transferring knowledge, skills and ideas, are provided by the interactive mobile technology innovations. Innovation of mobile technologies, such as Tablet PC, mobile phones, and Personal Digital Assistant (PDA), has added new flavour to the teaching and learning process (Liu & Kao, 2007; Schmid, 2008). Thornton and Houser (2005) recorded improved academic performance in English language, with the use of mobile phones, among 44 Japanese university L2 learners. Lots of researchers have begun to experiment with the personal response system (PRS). A common name used to describe the PRS is "clickers" (Gachago, 2009; Sharma, Khachan, Chan, & O'Byrne, 2005). PRSs or Clickers are small wireless technology devices, manifestly smaller than the size of a TV remote control. Learners use them to transmit their responses to questions posed by the teacher. The response system displays the responses as feedback in the form of a bar chart on the projection screen (Caldwell, 2007; Stuart, Brown, & Draper, 2004). Schmid (2008) remarked that PRS has a promise of promoting interactivity in the classroom.

Several authors have emphasised the potential of PRS in the classroom. Kennedy and Cutts (2005), in a study of 241 first year computer science students at the University of Glasgow in the UK, found that frequent users of PRS performed better than other infrequent users in formal assessment tasks. Similarly, Stuart, Brown, and Draper (2004) reported that PRS promoted interaction and improved levels of academic performance among second year philosophy students. Moreover, research findings have revealed the efficacy of PRS in various educational disciplines (Kennedy & Cutts, 2005; Lantz, 2010; Russell, 2008). However, there is a dearth of such studies involving the use of PRS at the primary education level as most research focused on its use in higher education settings and disciplines other than English language.

1.4.2 *The Communicative Approach*

The communicative approach (C A) to language teaching was first introduced in the early 1970s. Communicative approach is directed towards enhancing learners' participation in communication and discussion during instructional process (Menking, 2002; Qinghong, 2009). CA is a classroom strategy that involves pairing and grouping of learners to enhance negotiation of meaning, development of confidence by engaging in tasks and activities that are fluency-based. The use of CA depicts a classroom situation that often emphasises interaction and helping learners to develop communicative competence (Wang, 2009; Qinghong, 2009).

Qinghong (2009) stresses that the role of a teacher using CA is more of a facilitator or a referee of learners' task performance because learners do more of the talking than in the traditional classroom. With CA, activities and tasks set up by the teacher include real life situations which involve games, role-playing, simulations and

problem-solving. Wang (1990), cited in Savingon and Wang (2003), reports that the communicative approach has been a welcome and successful approach to teaching a foreign language in China. Similarly, Nunan (1993), when summarising his research findings, noted that CA increased learners' participation and involvement in negotiating meaning during classroom discourse.

1.4.3 Gender, School Location and Inequalities in Education

In Nigeria, gender and school location are two significant indicators of inequalities in education. One of the stated aims of the educational system is to provide a learning environment that will promote Education for All (EFA) by 2015. As such, every learner, irrespective of gender and school location, will have an opportunity to achieve his or her potential (UNESCO, 2008, USAID, 2008). It is believed that bridging the gap, in view of these variables (gender and school location), is one of the major ways of achieving egalitarianism and enhancing human development (Alabi, Okemade, & Adetunde, 2010).

The location of schools has been a variable to reckon with when considering academic achievement of suburban and rural school-pupils; two locations that constitute the majority group in Nigeria (Basse, Joshua & Asim, 2009). Education cannot be divorced from societal activities; hence the chance of pupils being educationally disadvantaged may be significantly influenced by economic, political, social, cultural and geographical circumstances and factors. Rowland and DelCampo (1968) and Petersen, Louw, and Dumont (2009) opined that an educationally disadvantaged child attends a school that has an insufficient number of teachers and experiences retardation in reading achievement. Moreover, educationally disadvantaged

child records poor attendance in school, comes from parents of lower socio-economic family, and has limited knowledge of English that inhibits adequate communication, or combines two or more of the above mentioned characteristics. Adebayo (2009) further remarked that most schools in suburban and rural settings in Nigeria are educationally disadvantaged, because they have more educational-related challenges, which put them in a disadvantaged state below schools in urban settings.

Gender has been an enduring educational diversity in developing countries like Nigeria. Inequality of access is a crucial factor that contributes to gender disparity in the Nigerian educational system. Correspondingly, Adeyemi (2008) reiterates that excellent performance in L2 is attributed to females, rather than their male counterparts, in Nigerian schools. Research findings regarding gender and some other variables associated with teaching and learning seem to be inconclusive. Some findings indicate that gender inequality still persists in the education system (Mortberg, 2000, cited in Lee, 2003). Students' interest in technology, attitudes towards technology in the school curriculum, and ideas about careers related to technology are dictated by gender (Volk & Yip, 1999). However, research findings also show insignificant effect of gender on students' use and liking of technology in education (Hijazi, 2011; Mahama, 2012).

1.5 Aims of the Study

Eric Mazur pioneered in physics education the use of PRS to promote learners' engagement during instructional process (Abrahamson, 1999, 2000, 2006). Studies have shown that the use of technology in the classroom enhances students' learning. Similarly, adopting CA in English language instruction is becoming more popular, based on the claim that the strategy facilitates L2 learners' improved communicative proficiency. The question is whether teachers' adoption of CA only, or the integration

of PRS within a CA context, would make a significant difference to students' learning outcomes in an ESL classroom. In an attempt to answer this question, the researcher opts to compare how pupils' communicative competence would improve, based on the use of the lecture method, (as compared to) CA and PRS blended within the CA setting, in ESL classrooms. The study also aims to find out whether a teacher's adoption of technology, within an interactive teaching strategy, would make any significant difference in learners' attitude towards the learning of English, compared to a non-technology oriented interactive ESL classroom.

1.6 Statement of the Problem

Primary school is the fulcrum of all levels of education upon which meaningful national development is based (Asiabaka & Mbakwem, n.d.). Researchers have attributed poor performance of learners in school subjects to lack of competence in L2 and the shaky foundations of instructional strategy in primary education (Akin, 2007; Ogunbiyi, 2008; Onukaogu, 2001). One of the populations of learners in Nigeria, that remains unattended to by researchers is the educationally disadvantaged primary school pupils whose instructional needs are yet to be extensively researched. In Nigeria, education is regarded as the instrument for socio-political development and the determinant of economic mobility (Rahji; 2005; Lawal, 2007). It follows that, if some children are allowed to remain educationally disadvantaged, the national economy would be affected because it will reduce the pool of skilled workers. David (2008) is of the opinion that the absence of conscious efforts in effective teaching basic language skills; will leave pupils' competence in ESL to chance.

English is the anchor of other subjects in the curriculum of the Nigerian education

system at all levels; hence its foundation needs to be built from the primary education. Since language is acquired through social and guided interaction, classrooms that afford learners ample opportunity of face-to-face dialogue and interactivity are most conducive for language development (Farrell, 2002). Teachers need to employ appropriate technology-oriented pedagogy in the classroom in order to meet the needs of various categories of learners. In that way, teachers could successfully promote learners' improved English skills in the classroom. According to Koole (2006) and Vygotsky (1978), the nature of interaction changes as learners interact with each other, the environment, tools and information.

In Nigeria, there are some empirical evidences of the use of some technological devices in teaching and learning in a variety of subject areas, school types and age groups. Earlier research showed that Nigerian educators mostly use transparencies, PowerPoint presentation, radio, television, Facebook, audio and video compact discs, mobile phones, Internet and computers (Fasae & Aladeniyi, 2012; Olowa, 2012; Ogedebe, Emmanuel & Musa, 2012; Osinaike & Adekunmisi, 2012; Nwezeh, 2010). Similarly, researcher reported that Nigerian lecturers use technology more for personal purposes than for teaching and learning (Obakhume, 2011; Osinaike & Adekunmisi, 2012); most Nigerian educators use and have access to Internet at public Cyber cafes (Archibong, Ogbiji, & Anijaobi-Idem, 2010; Olowa, 2012).

The use of CA in teaching L2 has been extensively researched and proven effective in improving L2 learners' communicative competence in some countries. This approach has been under-studied across all levels of education in Nigeria. Therefore, it is crucial for research to be conducted with a view of testing the efficacy of the PRS and the communicative approach in promoting quality teaching and learning in

Nigerian schools. The focus of this study is to introduce the use of PRS and CA to primary school English language teaching and learning in Nigeria as well as evaluate the process and the effects of the introduction of such teaching strategies on students' attitude and academic performance.

1.7 Significance of the Study

This study is significant in the following ways: education service providers have the moral and ethical duty to ensure "Education for All". Unfortunately, a significant number of L2 pupils in educationally disadvantaged schools are not doing well in English language and some other school subjects. Researchers have attributed learners' poor performance to so many factors, but only a few have made feasible suggestions towards improving the academic underachievement in educationally disadvantaged primary schools in Nigeria. The targeted interventions designed for this study have the potential of intervening positively in this problem and proffering significant contributions and value to the lives of ESL learners (ESLL) in Nigerian disadvantaged schools. The significance of this study involves one way to teach ESL based on the use of interactive mobiles such as PRS and communicative approach to promote interaction and develop pupils' communicative competence in Nigeria.

There is the need to extend the theoretical model of multimodal learning from the sciences to L2 learning. The study from the pragmatic stance can help to articulate principles for the design of a new English language primary school curriculum that gives priority to interactivity and task-based language learning strategies. The study would be an information provider on how to improve general communicative competence among Nigerian learners.

The study would provide illumination to the Ministry of Education and other agencies saddled with the responsibility of education management in Ogun State and Nigeria. The outcome of this study would beam search light on the power and efficacy of interactive approaches (PRS and CA) in improving L2 pupils' communicative proficiency in English. The outcomes of this study may prompt the concerned authorities to develop educational policy that may encourage the adoption of the intervention strategies to rescue the nation's (primary) education from imminent collapse. The findings of this study might provide convincing evidence for primary school teachers on the need to change their pedagogical approaches to the teaching of L2 in schools. Such convincing evidence and the adoption of the interventions may assist in achieving the ultimate educational objectives of the L2 learning as contained in the National Policy on Education.

1.8 Research Questions

Taking into account the researcher's personal experiences and the previous research discussed in chapter three, the following research questions are raised to guide the study.

1. Does the introduction of PRS technology improve students' English learning and attitudes towards English language lessons?

The above is the overarching question addressed in this study, but the specific and subsidiary questions answered in the course of data analyses and interpretations in this study are:

- (1) Will there be any significant differences among the communicative competence scores in English of pupils exposed to the lecture method, the personal response

system (PRS) and the communicative approach? Are there gender differences in the effect of the communicative approach and the PRS on pupils' communicative competence development?

- (2) Will there be any significant differences among the overall academic performance scores in all school subjects of pupils exposed to the lecture method, the PRS and the communicative approach?
- (3) Are there significant differences in the attitudes towards English language lessons among pupils exposed to the lecture method, the PRS and the communicative approach?
- (4) What is the attitude of the teacher and the pupils to the PRS?
- (5) What is the attitude of the teacher and the pupils to the communicative approach?

1.9 Organisation of the Thesis

This thesis is divided into nine chapters. Chapter 1 presents a brief background of the study and some of the factors that inspired the researcher into undertaking the study. A brief introduction of an ideal English language classroom (interactive) is highlighted to reflect on some limitations of the traditional language classroom. Linked with the Vygotskian sociocultural theory, the promises of the use of interactive teaching approaches in instructional processes are succinctly explained in this chapter. While factors which contribute to inequality in Nigerian education system are introduced in this chapter, the research questions and hypothesis, the rationale and the significance of the study and the organization of the thesis are also discussed.

In chapter 2, the philosophy and the objectives of the education system, the role of the various tiers of government in the management of the different levels education system in Nigeria are briefly explained. The emergence of English and its relevance to

the Nigerian society are highlighted. The traditional nature of English instructional process in Nigerian schools is addressed and the need for change in instructional process in ESL classrooms is briefly elucidated. Chapter 3 provides an overview of the use and pedagogical benefits of PRS and the communicative approach in the ESL instructional process. Moreover, the significance of interaction and two-way communication in teaching and learning, opinions on attitudes, attitudes' features and some modalities of attitudes assessment in educational setting are briefly discussed. In chapter 4, the general methodological issues relating to this thesis are discussed. The justification for the use of mixed methods research, the adoption of quasi-experimental study is discussed. Issues relating to sampling, selection of pupils and teachers for the interview, the description, reliability and validity of the instruments are also given due consideration. The chapter also discusses the procedures involved in the data collection, data coding, data analysis, ethical issues and methodological challenges.

The next three chapters present the results of the study. In chapter 5, the results which provide answers to the question on whether there are any significant differences among the communicative competence scores of pupils exposed to different teaching strategies and with respect to gender gap are presented. Chapter 6 presents findings relating to the research question seeking to determine whether there are any significant differences among the overall academic performance scores across groups. In chapter 7, the outcomes of the survey and interviews with regarding the teachers' and pupils' attitudes to the interventions are discussed. The results of this study are discussed in chapter 8, while the last chapter of this thesis presents the conclusion, and recommendations based on the findings of the study and suggestions relating to possible areas for further research.

Chapter Two

THE NIGERIAN CONTEXT

2.1 Introduction

This chapter introduces the research context outlining Nigeria's educational objectives and related issues. This chapter discusses the administration and management of education, the educational policy and the structure of the education system. In addition, the chapter discusses the emergence of English in Nigeria and the place of English in the Nigerian education system. The chapter reviews English as a second language in Nigerian primary schools, the teaching of English in Nigerian schools, classroom assessment of English in Nigeria and the need for change.

2.2 Nigerian Educational Philosophy and Objectives

The Federal Republic of Nigeria located in West Africa is bordered by Benin to the west, Niger to the north, Cameroon to the east and the Atlantic Ocean to the south. The country has over 150 million people (FME, 2008; UNICEF, 2001). The country has a federal system of government with 36 states (see Figure 2.1), and 774 local governments. There are about 500 Nigerian languages, but Hausa-Fulani, Yoruba and Igbo are the three basic languages most widely spoken (Orekan, 2010; UNESCO, 2010).



Figure 2.1: *Map of Nigeria* (Nations Online Project, n.d.)

The education of Nigeria focuses on the development of citizens who will live better lives and make significant contributions to the advancement of the nation. The main objectives of the Nigerian education include:

- A free and democratic society;
- A just and egalitarian society;
- A united, strong and self-reliant nation;
- A great dynamic economy, and
- A land full of bright opportunities for all citizens (FGN, 2004).

UNESCO (2010) notes that, for the stated objectives to be achieved in Nigeria, the standard of education must be comparable at the international level in that every Nigerian child should be given an equal opportunity of quality education in an enabling environment.

2.3 The Administration and Management of Education in Nigeria

In Nigeria, the political structure of federalism dictates the administration and management of the education system (UNESCO, 2010). The Federal Government is

responsible for the policy formulation, coordination and monitoring of the education system. The Federal Government controls the states' unity schools, established to provide quality education for children from different cultural and religious groups, with a minimum payment, technical colleges and tertiary education institutions.

The state and local governments legislate, establish and manage secondary and primary education respectively (FME, 2005; Olubadewo, 2007; UNESCO, 2010). In order to ensure the goal of Education for All (EFA), some international organizations provide finances, material and equipment, as well as technical assistance for in-service teachers' training towards improving the quality of primary education. Such organisations include the United Nations Organisation, United Nations Educational, Scientific, and Cultural Organization, United Nations International Children's Emergency Fund, and the United States Agency for International Development, non-governmental organizations (NGOs) and other international agencies. Community support for Nigerian primary education includes donations from local and religious organizations, businesses and individuals to school projects. In some states, parents support primary education system by paying administrative charges and levies which range from eight hundred Naira to three thousand one hundred Naira (Olubadewo, 2007; Omo-Ojugo, 2009; UNESCO, 2000, 2010).

The enacted education edict of 1970 by the then Eastern Central State, as part of the post-war policies, paved the way for the Federal Government to have total control of schools (UNESCO, 2010). The Nigerian constitution provides the basic framework for the management of the education system by the three tiers of government in the country (FME, 2005). The significance attached to education in Nigeria, as the key to unprecedented national and local development, led to the struggle for control of the education sector by the federal government (Omolewa, 2001).

The Federal Ministry of Education (F.M.E.) is the national organ responsible for the regulation and management of the nation's education system, through the National Council on Education. The National Council on Education (FME) and the State Commissioners of Education) are the highest management organs for the country's education (FME, 2005). The FME is also responsible for the formulation and regulation of policy procedures, maintenance of education standards and the harmonization of educational policies of all states in the country. The local governments are statutorily responsible for the management of primary education in their respective states (FME, 2005; Orekan, 2010).

2.4 Education for All (EFA)

Access and equality are key factors in ensuring people benefit from education (USAID, 2008). In 1990, the Federal Government initiated the policy of EFA, developed various educational policies, rebranded with various nomenclatures such as Universal Primary Education (UPE) and Universal Basic Education (UBE). The policies claim to provide equal opportunity for all citizens to access educational services and promise to address the challenges of dropouts and low enrolment in schools. Statistics from the FME reflect annual increases in primary schools' enrolment (FGN, 2004; UNICEF, 2005; USAID, 2011).

The Nigerian National Policy on Education draws its strength from the Federal Republic of Nigeria's 1999 constitution, which declares that the 9-year basic education is free, compulsory and universal for everyone. The education policy so emphasises that every Nigerian child irrespective of any disabilities should have access to equal educational opportunities (FGN, 2004). Millions of people from different geographical locations are yet to access quality education despite the constitutional promises equal educational opportunity for all Nigerian children (Akungba, 2010; FME, 2005;

Olaniyan, 2011; UNESCO, 2000).

As earlier mentioned in the previous chapter, there is inequality within the Nigerian education system. There are concerns about the gap between the quality of education available in urban schools and those located in rural areas. For instance, Ofoha (2010) reiterates that there are educationally disadvantaged children across the nation. Ofoha posits that educationally disadvantaged children are those from poor parental backgrounds, and attend low profile public schools. However, the educationally favoured children are those from well-to-do families, who attend public and private schools of a high standard. Primary school enrolment in Nigeria is increasing because of free and compulsory 9-year basic education and the value attached to literacy education in the country (Akande, 2003; Ayodele, 2007; Olofintoye, 2008).

Researchers claim that about 22 to 23 million out of the nation's 30 million school-aged children in Nigeria enrol in school (Olofintoye, 2008; UNESCO, 2003; UNICEF, 2005). However, female enrolment in schools is low as compared to that of boys. Similarly, the urban schools attract higher pupil enrolment than schools in the rural areas (FME, 2003, 2005; USAID, 2011). In the same vein, UNICEF (2001) reports that females' literacy rate in Nigeria is 56%, in comparison to 72% of their male counterparts. According to Adamu (2004), the centralization of the Nigerian education system still gives state and local governments some control over the primary and secondary education systems, but the fact remains that overall, the Federal Ministry of Education controls education in Nigeria.

2.5 Nigerian Education System

The north and south dichotomy in Nigeria is a product of ethnic grouping and religious identities (Rufai, 2011). Prior to the colonial era, most northern states adopted

Islamic religion and Quranic education. Quranic education, with its Arabic culture, was the main form of education in Nigeria, especially in the northern region, before the advent of the Christian missionaries. Literacy in the Arabic language was a key to achieving success in the Quranic schools (Okobiah, 2002). There is an educational imbalance between the north and the south due to the “rejection-acceptance” dichotomy over the introduction of western education in Nigeria by the Christian missionaries and the British colonial administrators in the 19th century (Ochonu, 2008; Okobiah, 2002). That western education relates to Christianity, the Bible, and incongruent with the principles of Islamic education were some of the opposition that greeted the western education model in the north.

The recognition of the Northern protectorate’s Islamic education by the colonial administrators restrained the Christian missionaries from further evangelism and the introduction of western education in the Northern states (Amaghionyeodiwe & Osinubi, 2006). Southern Christians in Nigeria established a firm grasp, foundation and considerable achievements before the northern states became conscious of the worth and the pursuit of western education (Okobiah, 2002). Ever since then, there have been discrepancies in the level of educational attainment and professional development between the southern and northern parts of Nigeria.

After independence in 1960, some Nigerians contended that the British based primary, secondary, sixth form and higher education structures failed to meet the needs and aspirations of Nigerians (Amaghionyeodiwe & Osinubi, 2006; Fabunmi, 2005). Until 1984, Nigeria had operated a 6-5-4 education system (six years of primary education, five years of post-primary education and four years of tertiary education) except for some regions that operated a 7-5-4 education system (Abidogun, 2006; Ajibola, 2008). In 1985, the structure of the Nigerian education system changed to 6-3-

3-4 (6 years of primary education, 3 years of Junior Secondary School, 3 years of Senior Secondary School and 4 years of tertiary education) (Adiele, 2006; Amaghionyeodiwe & Osinubi, 2006; FGN, 2004).

The Federal Ministry of Education in January 1999 published the blueprint of Universal Basic Education policy (9 years of free and compulsory education launched to eradicate illiteracy, as well as increase adult literacy), containing a definition of basic education as early childhood, pre and primary education and the first three years of secondary education. The launch of UBE in Nigeria led to the 9-3-4 education system. That is 9 years of basic education, 3 years of Senior Secondary School and 4 years of Higher Education (FGN, 2004).

2.5.1 Early Childhood: Pre-primary Education

Children aged between 2-5 years receive the pre-primary education to at no cost in the public schools before they enrol in primary education. The curriculum at this level focuses on subjects like mathematics, Nigerian languages, English language, writing, rhymes, social studies, music, reading and elementary science (Abidogun, 2006; FGN, 2004).

2.5.2 Primary Education

Children aged between the ages of 6 and 11 plus enrol in primary education. It is the foundation of the education system and the anchor of Universal Basic Education. The curriculum is discipline-based, with subjects including English language, Nigerian languages, basic science, mathematics, civic education, writing, social studies, creative arts, agricultural science, physical and health education, computer studies and religious studies. Primary school pupils require passing entrance exams before they can gain admission into the Federal Government secondary schools (FGN, 2004; Olubadewo, 2007).

The 1999 Nigerian constitution and the National Policy on Education of 2004 cater for the national language policy that guides languages' instruction in schools. The documents state that learners should be taught in their mother tongue for the first three years of schooling. Moreover, English should be the main language of instruction from the fourth year of primary school till tertiary education level. Primary education in Nigeria emphasises the need for equilibrium between physical and intellectual development (Moja, 2000; Olaniyan & Obadara, 2008).

2.5.3 Secondary School Education

Within Nigerian secondary education, there are Junior and Senior Secondary Schools. Junior Secondary School provides the first three years of secondary school education for children who successfully complete primary education. After successful completion of junior secondary education, academically proven students continue to the senior secondary education stage, for another three years, at the end of which they take the equivalent of GCE O'level examinations or/and the Senior Secondary School Examinations, so as to gain admission into tertiary institutions (Adegbite, 2008; FGN, 2004).

2.5.4 Tertiary Education

Tertiary education covers the colleges of education, universities, professional institutions and polytechnics. Students aged 18 to 22 years enrol in programmes that may run for 3 to 7 years, depending on the structure and nature of the programme (FGN, 2004).

2.6. Emergence of English in Nigeria

The English language came to Nigeria, between the 16th and 17th centuries via colonists, missionaries and the entrance of slaves from Sierra Leone (Olateju, 2006; Omodiagbe, 1992; Taiwo, 2009). 1807 marked the end of the slave trade in Nigeria.

The freed slaves who hailed from Nigeria returned home and served as translators as well as interpreters, to enhance effective communication between the British colonial administrators, Christian missionaries and the Nigerian people (Taiwo, 2009). Interpreters and translators saw the need to polish their skills in English in order to interact with the high level British administrators. In 1842, 1850 and 1868, the missionary schools established to encourage more Christian converts used English as the medium of instruction to provide education for the people (Olateju, 2006; Omodiagbe, 1992; Oyetade, 2008). The colonization of Nigeria by the British, between 1914 and 1960, made English the language of communication among missionaries, the colonial masters, Nigerian trained teachers and students in schools and minor employees of the British such as cooks, stewards and clerks (Akindele & Adegbite, 1999; Fabunmi, 2005).

At the introduction of English in Nigeria, there were few schools; hence teaching and learning of English was more informal than what we have today. The missionaries gave children gifts to motivate in order to increase students' enrolment. English did not only become the language of administration but a subject and the medium of communication in government and missionary schools by the establishment of the 1882 education ordinance (Taiwo, 2009). Despite the criticisms that greeted this development, the language was more popular and widely acceptable. To some extent, Nigerians learnt English for social, economic and religious reasons (Lambo, 1992; Taiwo, 2009). As mentioned earlier, there has been a form of educational divide between the northern and the southern parts of Nigeria. The northern region, for religious reasons, did not adopt the use of English and was slow in the acceptance of western education (Aluede, 2006; Taiwo, 2009).

2.7 The Place of English in Nigerian Education Today

After independence, English became a core subject in the school curriculum while a credit pass in English became a prerequisite for gaining admission into Nigerian tertiary institutions and participating in some professional examinations. All freshmen of all higher institutions in Nigeria are required to enrol and pass the course “Use of English” before they can be awarded a certificate of completion (Edem, Mbaba, Udosen & Isioma, 2011; Oyinloye & Babatunji, 2011).

Similar to what operates in many parts of the world, Nigerians widely use English. The language has attained an enviable position in all sectors across Nigeria. Moreover, success and proficiency in, and functional knowledge of, English are keys to getting a fantastic job, and regarded as a socially responsible person in Nigerian society (Akande, 2003). Many Nigerian parents thus strive hard to enrol their children in schools where the language is the medium of communication while they also encourage their children to continue learning English (Ogunbiyi, 2008).

The significance of English language, both within the educational system and Nigeria in general, has been a factor that draws the attention of scholars, educators and researchers towards addressing the problems associated with its effective teaching and learning in Nigerian schools. Therefore, the researcher of this study embarked on a study of this nature.

2.8 ESL in Nigerian Primary Schools

English language is a paramount subject in Nigerian education system. As mentioned earlier, every Nigerian child who attends public schools uses English as the medium of instruction and means of communication at the fourth year of primary education (Akande, 2005). According to Edem, Mbaba, Udosen and Isioma (2011), teachers teach pupils in private primary schools and expose them to English as a

medium of communication from the beginning of their schooling. Despite the significant premium placed on English in the Nigerian education system, primary school pupils find it difficult to express themselves in it (Olateju, 2006). Many live in the environment where the spoken (indigenous) language discourages the use of English (Komolafe & Yara, 2010).

2.9 English Language Teaching in Nigerian Primary Schools

In Nigerian primary education, teachers teach English language for 70 minutes every day of the school week while they teach other subjects, excluding mathematics three times a week (Olajide, 2010). The prominent method employed by many primary school English teachers is the “traditional” pedagogy (Amuseghan, 2007). In the traditional English classroom, teachers often employ the lecture method, do most of the classroom talk and learners assume the role of passive recipients of information, rather than being active members of the instructional process. On many occasions, students are less involved in the process of knowledge development because teachers direct more efforts towards pupils’ cognitive learning outcomes than the development of their communicative skills.

Furthermore, rather than having an ESL classroom facilitated by multi-way interaction and multimedia exchanges, many Nigerian primary school English teachers rely mostly on textbooks (Ekpo, Udosen & Afangideh, 2007; Obayan, 2002). The textbooks used in most Nigerian primary schools lack exercises and activities that support modern techniques of language teaching (Amuseghan, 2007). Many teachers in Nigeria also lack the necessary exposure to the essentials of the language teaching and learning (Okon, 2003; Olateju, 2006).

Most Nigerian teachers teach English as a subject that has to be passed in internal and external examinations, rather than as a tool for effective daily

communication (Obayan, 2002). Teachers often teach the language content in abstract form, which negatively affects learners' participation in the instructional process. Despite the need to encourage learners' development of communicative proficiency, teachers place little or no emphasis on Nigerian pupils' development of communicative skills. Teacher and other stakeholders' focus in education have been on the pupils' grade-scores in the subject, in determining their continuation or discontinuation of schooling (Amuseghan, 2007; Asokhia, 2009).

English is the second language (L2), and the key language of communication among the various ethnic groups in Nigeria. Moreover, most primary school pupils in Nigeria enrol in schools without the necessary English skills that are capable of facilitating their effective communication in the English language (Abioye, 2010; Akande, 2003). Some educators may have associated pupils' overall performance in school with their level of proficiency in English language (Abioye, 2010; Akande, 2003; Jibowo & Olayemi, 2009). Pupils' ability to answer questions in the class is dependent on their level of literacy skills, knowledge and understanding of concepts, as well as their individual fluency level in English.

According to Abioye (2010), Elui (2008) and Obioma (2008), prior to 1977 in Nigeria, teachers measured learners' academic potential through summative assessment with a single examination or one-shot examinations or test conducted at the end of the term. The issue of students' assessment thus became one of the focal points of discussion during the Nigerian Curriculum Conference held in 1969. The participants of the conference recommended continuous assessment as an alternative form of classroom assessment with a view of making assessment school-based, cumulative, systematic and comprehensive (Ojerinde & Falayajo, 1984; Ubong & Wokocha, 2009).

The Nigerian National Policy of Education of 1977 revised in 1981 and 2004 eventually adopted the recommendation.

The Nigerian National Policy on Education, in its philosophy and goals, remarks that the educational assessment and evaluation in Nigerian schools should be based in whole or part on continuous assessment on the progress of the individual (FGN, 2004). The policy stipulates that students' continuous assessment should be through tests or examinations, assignments, projects, observations, questionnaires, socio-metric techniques and other modes of evaluation so as to ensure effective student's assessment. According to Afemikhe (2007), and Elui (2008), teachers measure students' cognitive, affective and psychomotor domains through the process of continuous assessment. The National Policy on Education emphasises the importance of continuous assessment in Nigerian primary education. However, classroom assessment practice in Nigerian schools limits its scope to the cognitive aspect (the use of tests and examination scores) rather than the use of tests, projects, interviews, observations, checklists, portfolio, assignments and other forms of assessment (Ehiametalor, 1983; Osokoya & Odinko, 2005).

2.10 Pupils' Classroom Placement and English Textbook Selection

In Nigeria, there is no accepted norm regarding pupils' placement into classes. In Ogun State (the target state of the study) as well as in Ijebu-North Local Government (IJNLG), pupils' classroom placement is at the discretion of the school heads and teachers. Some schools do not place pupils into classes based on criteria. However, in some schools, teachers use pupils' academic ability in English to place them into classes. Moreover, teachers or schools use the first test at the beginning of the first term

to determine learners' ability. Such tests often examine pupils' understanding of primary five English language (and Mathematics) topics. Teachers place pupils with low and high academic abilities in the same classes. The mixed grouping encourages the weak pupils (at least in theory) to be reinforced by the academically strong ones. English language scores become the determinant of pupils' classroom placement on the assumption that if pupils are able to read, understand English comprehension passages and can answer questions correctly, they may have no difficulty with other school subjects.

The primary school English curriculum is divided into modules per term, as well as on a weekly basis. In Nigeria, there is no consensus, across all 36 states and the FCT, about a universal English language textbook to be used in schools; hence none of the three tiers of government is responsible for promoting the design of English textbooks. Different publishers produce English textbooks in accordance with the federal and states' ministry of education guidelines. In Ogun State, primary schools do not use a common English textbook. The executive members of the Conference of Primary School Head-teachers of Nigeria (COPSHON), which coordinates the activities and welfare of primary school heads and schools' administration in each local government, unanimously agree and decide on the most suitable English textbook for all primary schools within the local government. Amongst the factors taken into consideration, before choosing any English textbook, are the relevance of the content to FME designed curriculum/modules, appropriateness of exercises, the difficulty level of the language used in writing and its cost.

Primary schools in Ijebu-North Local Government (IJNLG) use a common English textbook. Since 2005, Macmillan New Primary English Language books 1 to 6

have been the text of instructions in all schools within IJNLG. English teachers in some Nigerian educationally disadvantaged primary schools often have 40% to 65% learners in a class without English language textbook. Unfortunately, many parents lack the financial resources to provide pupils with such textbooks and other educational materials. Bearing in mind that education at this level is compulsory, pupils either pair to share or cluster around the remarkably few students who have copies of the textbook, during the instructional process. Teachers thus write comprehension passages on the chalkboard for the benefit of pupils without textbooks.

2.11 The Need for Change

The traditional methods of English language teaching in Nigerian primary schools have received criticisms from various stakeholders in education, including Nigerian researchers. The teacher dominates the traditional or the orthodox method of teaching while students are inactive during the instructional process. Such methods, according to Oluwole (2008), lack the necessary tools required to prepare children for the 21st century's global knowledge acquisition and the skills learners need to be functionally linguistic. Similarly, Idogo (2011) notes that one of the teacher's roles in the ESL classroom is to make the learning of English enjoyable by exploring teaching strategies that would make pupils gain pleasure and knowledge in the classroom. However, the teacher-dominated instructional method leaves pupils to gain little or nothing, with respect to proficiency in the language, because of the absence of interaction and two-way communication in the ESL classroom.

Adebile and Adeyemi (2008) remarked that teachers introduce Nigerian pupils late to English language as a medium of communication. Many of the pupils must have become proficient in their mother-tongues before the teachers introduce them to

English at primary four. In order to provoke students' active participation, teachers should teach English language learning content with fun, and integrate relevant learning resources in the classroom (Dike, 2002; Oluwole, 2008). Nigerian children's poor performances in public examinations, such as those set by the West African Examination Council and National Examination Council reflect their poor command of English.

Researchers attribute poor learning outcomes to low levels of communicative proficiency in English. The situation thus requires immediate and adequate attention by providing quality services to children in pre-primary and primary levels of education, so that the country could meet the global challenges of the 21st century in the face of universal technological advancement and global knowledge interconnectivity (Olateju, 2006; Omo-Ojugo, 2009). It is thus obvious that learners with low levels of proficiency in English at the point of assessment, especially those assessed for progression to the next educational "level", are likely to perform below their actual level of knowledge and ability because of their deficiency in communicative skills and ability to comprehend English.

Perhaps many Nigerian primary school teachers, who teach English as if communicative skills can only be acquired through textbooks, have not been trained in a different way. The implication is that, ESL teachers should realise that English should be taught and learned through natural or real-life activities, as well as the exploration of approaches that would promote multiway and multimedia exchanges in the classroom, rather than relying on textbooks (Obayan, 2002). Moreover, rather than teaching in abstract form, the Federal Ministry of Education in Nigeria encourages teachers' adoption and integration of relevant Information and Communication Technology into

the education.

Adebile and Adeyemi (2008) posited that the significance of English language in elementary education level cannot be underestimated. They contend that Nigerian students' failure in other school subjects has a strong relationship with their inability to express themselves in English; which is the language of instruction in schools. There is the need to seek immediate alternative approaches, such as the introduction of interactive mobile technology (such as the PRS and the communicative approach) with a view of improving pupils' communicative competence in English. Such a step becomes necessary so as to address the deteriorating quality of the nation's education system.

Chapter Three

INTERVENTIONS AND ATTITUDES IN ESL CLASSROOMS

3.1 Introduction

The previous chapter discussed the Nigerian education system, the pedagogical challenges facing learners' communicative proficiency development and the extent of teachers' effectiveness in the ESL classroom. The chapter also highlighted some reasons for a pedagogical paradigm shift from the traditional methods to more interactive instructional strategies, capable of promoting classroom interaction and learners' use of English in real-life situations. This chapter provides an overview of the research literature relevant to this study. The present review of literature relates to the applicability of personal response system (PRS) technology and communicative approach in supporting group teaching in the ESL classroom. Moreover, this chapter also discusses Vygotskian sociocultural theory; the theoretical foundation of this study and some issues relating to attitudes.

The growing use of information and communication technologies influences human activities. Some researchers are shifting focus on the use of mobile phones to enhance interactivity and communication in the classroom (Elegbeleye, 2005; Idowu, Cornford & Bastin, 2008). The use of mobile phones is gaining popularity in many countries including Nigeria because the technology is instant, location and distance-independent, and personal (Reid & Reid, 2005; Taiwo 2008).

Ever since the introduction of mobile phones in Nigeria in 2001, children, teenagers and young adults use the technology as a tool for socialization (Ogunyemi, 2006; Taiwo, 2010). Moreover, most Nigerian children even in the rural areas use mobile phones to text messages, download ringtones, vote on reality TV shows,

exchange music files via Bluetooth, chat and exchange mails in English and local languages (Ogunlesi, 2011; Taiwo, 2008). A greater number of school age children in Nigeria are familiar with the operation and the manipulation of mobile phones for different forms of communication.



Figure 3.1: *A Mobile Phone*

Teachers and instructors use the personal response systems (an interactive technological tool) to promote students' increased interaction in the classroom (Buhay, Best & McGuire, 2010; Kelly, 2007). The personal response system (PRS) is a mobile technology that looks like either a TV remote control or a pocket-mobile. Teachers use the PRS to poll learners' responses in the classroom. This chapter later discussed the details of the PRS technology (see section 3.2). In this study, the researcher introduced the PRS as an intervention in order to expose learners to a collaborative learning setting. The majority of Nigerian children are familiar with how to use mobile phones; whose features and mode of operation are similar to that of PRS (see Figures 3.1 and

3.2); hence the adoption of the PRS at the elementary education in this study. Besides, earlier researchers investigated the use of PRS for teaching and learning in higher education, hence this study investigates its effectiveness in the learning outcomes of primary school pupils.

3.2 Personal Response Systems Technology

The introduction of interactive technologies into the education system has caught the attention of government and education providers across the globe (Kennewell, Tanner, Jones & Beauchamp, 2007). One of the challenges educators face is how to ensure learning environment that is fascinating and captivating. Some of the peculiar characteristics of the new technologies (speed, automaticity, capacity, and interactivity) are prompting teachers' favourable disposition towards the use of technology-driven approach to promote learners' active engagement and interactive experience that might enhance effective teaching and learning (Caldwell, 2007; Meedzan & Fisher, 2009; Simpson & Oliver, 2002).

Bruff (2007) and Lantz (2010) referred to personal response systems (PRSs) as the instructional technologies teachers use in face-to-face settings to poll and analyse students' responses to teacher's questions. In the conventional or traditional classroom, students raise their hands to indicate agreement or disagreement to teachers' posed questions or through the use of flashcards of different colours. However, Teaching with Technology (2007) states that the technical form of response collection, which involves the use of electronic response systems is better than the non-technical form. PRS is similar to the "Ask the Audience" lifeline keypads used in the television game show "Who Wants to be a Millionaire?" (Caldwell, 2007; Draper, 2005). Some authors (Draper & Brown, 2004; Laxman, 2011; Martyn, 2007) described the PRS as the individual response devices that allow students to anonymously answer questions in

class. Unlike in the traditional classroom where students glance round the classroom to ensure a “good” number of students raise their hands to answer the teacher’s questions before joining them, the anonymity provided by the PRS motivates students’ massive responses in a “safe” manner. The teacher’s computer records, instantly summarises and presents the results in a bar chart format on the projection screen.

Literature refers to PRS by various names (Sharma, Khachan, Chan & O’Byrne, 2005; Barber & Njus, 2007; Barragues, Morais, Manterola & Guisasola, 2011). For the purpose of this study, the researcher adopts the name Personal Response Systems (PRS). Irrespective of the name given to the response systems, the non-self-powered and non-self-projected devices usually consist of transmitters or handsets, receiver hardware, software and the presentation tools (Kennedy & Cutts, 2005; Meedzan & Fisher, 2009).

3.2.1 Handsets

The handsets are pocket-size or handheld devices that look like TV remote controls. There are different types of handsets: those with binary buttons used to indicate Yes/No or True/False responses to questions, and those with multiple buttons either with letters ranging from A, B, C, D, E, F or numbers from 1 to 6 or 9 (see Figure 3.2).



Figure 3.2: *Personal Response System Handset*

Students use the handsets to key in their responses. Depending on different companies' configurations, some handsets allow students to indicate low, medium or high confidence in the accuracy of their responses. When personal response systems indicate different range of response accuracy, the teacher determines if pupils' answers were mere guesses or not (Meedzan & Fisher, 2009; Simpson & Oliver, 2006). Teachers use the handsets in anonymous mode or as named tools during the instructional process. The teacher alone knows the handsets' identity number when he or she uses them anonymously. Individual student's name or handset identity number would be known to everyone in the class when the teacher uses handsets with the students' identities known to everyone in the classroom (Fies & Marshall, 2006; Simpson & Oliver, 2007).

In this study, the researcher employed the radio frequency (RF) system of the PRS in anonymous mode. The RF system is wireless and faster in operation. This study employed the PRS anonymously with a view of allowing the pupils to interact with one

another in the classroom, engage in class-wide discussion and respond to teacher's questions freely and unembarrassed when they select wrong answers.

3.2.2 Receiver

The receiver is a wireless dongle attached to the teacher's laptop through the Universal Serial Bus (USB) port. The receiver collates the coded data sent through the handsets, transmits them to the computer and displays the processed results as immediate feedback to the teacher and the students (Eastman, 2007; Kennedy & Cutts, 2005).

3.2.3 Software

Different manufacturers design PRS with compatible presentation software. Most models of PRS have the software installed on the computer laptop before the handsets can send data to the laptop. On the computer screen, the software displays the serial number of the question asked, allotted time for students to turn in their responses and the maximum number of chances allowed to select an answer to a question. The software timer starts to count as soon at the command of the teacher, the counter indicates the number of received responses and confirms the receipt of students' responses by showing a green light with a "tick" mark. While the timer counts, students can send their responses and change option(s) within the allowable time-frame.

The teacher can increase or reduce the time allotted to students to answer the question (Simpson & Oliver, 2006; Teaching with Technology, 2007). At the expiration of the allowed time (usually between 15 seconds and 2 minutes), teachers can save the aggregated results displayed on the laptop and the projected screen as feedback for future use (Draper, 2005; Simpson & Oliver, 2006). Most software uses Microsoft PowerPoint that allows slides presentations. Slide questions range from

factual recall to those designed to challenge misconceptions of concepts (Teaching with Technology, 2007).

3.2.4 Presentation Tools

The presentation tools consist of computer laptop, presentation software such as PowerPoint and a data projector. The teacher shows PowerPoint question slides to students through a data projector that projects and a projection screen (Stuart Brown, & Draper, 2004; Lantz, 2010). PowerPoint slides are best when the teacher prepares them in advance so that the he or she can ascertain their suitability for the proposed lesson use before actual lesson (Eastman, 2007; Reay, Bao, Li, Warnakulasooriya & Baugh, 2005).

The use of PRS has gained acceptance in the primary, secondary and higher education markets of some developed countries (Abrahamson, 2006; Blood & Neel, 2008; Lopez-Herrejon & Schulman, 2004). The wide acceptance of PRS may be connected with its relative low cost and ease of use. Although educators have used the PRS in various educational contexts in the last four decades, its use has been more prevalent in the last decade, and the fields of science and engineering (Draper, 2003; Wit, 2003). Researchers and educators have used PRSs in disciplines such as Physics (Reay, Bao, Li, Warnakulasooriya & Baugh, 2005), Mathematics (King & Robinson, 2009); Medicine (Cain & Robinson, 2008), Engineering Mathematics (D'Inverno, Davis & White, 2003), and computer science (Lopez-Herrejon & Schulman, 2004), just to mention a few. Most of these studies carried out in higher education took place in developed countries like the United Kingdom, United States of America, Australia and Canada (Russell, 2008; Simpson & Oliver, 2007; Stuart, Brown & Draper, 2004).

3.3 Historical Overview of Response System

It must be noted that the current models of PRS available today are not the first to be developed. The evolution of the PRS has seen successes and failures. The use of response systems to collect and analyse students' responses in formal education has been over the last four decades. The response system was initially used in providing feedback (Abrahamson, 2006; Judson & Sawada, 2002). Educators and researchers built and used the first electronic response systems in 1966 at Stanford University and 1968 at Cornell University. The systems at Stanford University were technically difficult to use because of their primitive-analogue complexity while the Cornell system seemed to be more successfully used for teaching and learning. There were also German and Japanese patents around that time, but uncertainty surrounds the eventual working versions of these systems (Abrahamson, 2006).

In 1985 Abrahamson and his partners (Fred Hartline and Milton Faber) together with Better Education Inc developed Classtalk 1 with a view of improving instructional process. The Classtalk 1 was a prototype response system constructed from Atari keypads containing an additional communication circuit board and LED display connected to the teacher's computer by a special-purpose digital multiplexer (Russell & Pitt, 2004). The technology was trial-tested in physics class at Christopher Newport University to enhance interaction, feedback and learning outcomes in classroom (Abrahamson, 2006). Among the criticisms that greeted Classtalk 1 was the problem of anonymity and students' deliberate non-response without critical thinking. The criticisms led to the development of Classtalk II, which consisted of a Macintosh computer for the teacher, HP palmtop computers for students and a network connecting system (Russell & Pitt, 2004; Judson & Sawada, 2002). Eric Mazur used the Classtalk II successfully in February 1993 in a 500-seater lecture hall at the Harvard University

and the University of Massachusetts, Ohio State University and Christopher Newport University (Abrahamson, 1999, 2000, 2006).

In 1994, teachers and university professors in sciences and engineering disciplines criticized the Classtalk II systems in terms of the range of “coverage” and instructors’ lack of time to prepare ahead of the class so as to address the teaching challenges in the use of the response system. In view of the criticisms, researchers developed the calculator-based system. In December 1996, it was difficult for Abrahamson to further fund the project; hence he transferred the exclusive rights of the research company to Texas Instrument (TI). Texas Instrument did not show much interest in the production of response systems because of lack of commitment (Abrahamson, 2006).

Professor Nelson Cue had successfully worked with response systems in the United States of America. In 1997, Professor Nelson Cue, the Hong Kong government, an electronics manufacturer in Hong Kong and an anonymous alumnus of Harvard University developed infrared wireless technology called EduCue’s Personal Response System (PRS). The EduCue’s PRS uses a keypad, but requires infrared technology to provide feedback. The EduCue’s PRS automatically identified every student in the classroom irrespective of the distance of their seats in the class or hall (Abrahamson, 2006; Russell & Pitt, 2004). Most response systems available across the globe today are fashioned after the PRS model developed by Professor Cue (Abrahamson, 2006).

3.4 Motivation for PRS Use in Education

Some educational theories advance that learning involves a dialogic process between the learners, the teacher and the environment. Unfortunately, such a facilitating environment is lacking in many traditional classrooms because the traditional methods emphasise content transmission over student engagement (Kennedy

& Cutts, 2005; Laurillard, 2002; Simpson 2007). In a lecture-oriented classroom, students learn little or nothing because the method does not significantly improve their understanding (Crouch & Mazur, 2001).

Providing learners with interaction opportunities often leads to successful instruction. Such interactivity between the teacher and students, as well as among the learners is lacking in traditional classrooms (Liu, Liang, Wang & Chan, 2003; Sharples, 2000). Effective teaching should involve dialogic activities and social interaction, in order to ensure that learners achieve improved educational output (Russell, 2008). A classroom that lacks interaction offers students little opportunity for mental processing and critical thinking because no overt response is likely to take place (Stuart, Brown & Draper, 2004; King and Robinson, 2009).

To address learners' passive role in the traditional classroom, Kennedy and Cutts (2005) suggest the need for teachers' adoption of approaches capable of promoting interactivity during the instructional process. Yoder and Hochevar (2005) also posit that facilitating interaction in the class would involve teachers' use of approaches that generate group discussion, practical exercises and demonstrations. Stuart, Brown and Draper (2004) emphasise that technology should not be infused into education just for its own sake. Technology becomes useful and paramount when they bring solutions to instructional problems. D'Inverno, Davis and White (2003) argue that effective teaching and learning that promotes classroom interaction would be easily achieved through the use of PRS.

There is currently a shift in the pedagogical approach in schools from the teacher-centred to learner-centred approaches just to ensure students' active participation in the classroom (Milrad, 2003). The new approaches give priority to

students' active participation and engagement in the instructional process while the teacher acts as the facilitator, guardian and coordinator of learning activities (Milrad, 2003). In the conventional classroom, teachers ask learners questions with the mind of engaging them in instructional activities. Teachers asked such questions in anticipation that learners would voluntarily raise their hands to provide responses. Sometimes, teachers ask students show response cards to indicate right or wrong answers. Most of the time, such an approach favours the willing-to-answer students and the less timid learners. The use of flashcards to prompt students' engagement lacks privacy and may thus encourage dishonest responses from students (Caldwell, 2007). Moreover, learners' response rate in the traditional class is low because the nature of "packaging" given to students presents them as passive auditors provided with knowledge from "a container" and "carrier" of knowledge. Students in such a class do not pay adequate attention to what's going on in the class (Kennedy and Cutts, 2005; Stuart, Brown & Draper, 2004).

Teachers have also explored other methods such as instructive questioning to improve the quality of classroom instruction, but they still face difficulties with large numbers of students in class. In large classes, students prefer to keep quiet rather than talk in "public". Even when the teacher calls for volunteers to answer questions, only a few of the students regularly indicate their interest to participate in learning activities (Caldwell, 2007). Purchase, Mitchell & Ounis (2004) argue that all non-technical methods such as voting of hands, written tests, and the use of flashcards have engaged only the most confident and out-spoken students.

In order to promote students' active engagement and increased responses to questions in the classroom, Reay, Bao, Li, Warnakulasooriya and Baugh (2005) suggest the use of PRS. Caldwell (2007) argues that the interactive engagement introduced by

the use of PRS is highly powerful and useful for educational development. King and Robinson (2009) from a general overview of technology use in the classroom reiterates that, in bid to ensure students' maximum benefit from the instructional process, a student-focused learning approach through the use of Researcher and educators have proposed the PRS. They have tried it, and it is still undergoing continued teaching and learning experiment in classrooms. A survey conducted by Laxman (2011) on 640 undergraduates of the schools of Engineering, Humanities and Social Sciences and biological Sciences at Nanyang Technological University, Singapore revealed that the students claimed they were more engaged and actively participated in the lessons than they would have in a traditional classroom.

The rationale for using PRS for instructional process is to get the students thinking and talking about the subject openly. Moreover, teachers use the PRS to build students' confidence in learning as they compare their ability with that of other students in the class and thus come to the realisation that some other students get the answers wrong. Furthermore, the need for PRS technology is on the basis that teachers need to create a more dynamic teaching and learning environment that trigger students' engagement with problems, and immediately think of how to solve them (Stuart, Brown & Draper, 2004).

According to King and Joshi (2008), other instructional approaches like group activities and pop quizzes have been more useful to teachers because the feedback provided only gives a relative assessment of the teacher's effectiveness or mere identification of students who claim to understand what the teacher teaches. Teachers and students require feedback in order to take some steps and also make some decisions that would facilitate improved quality of instruction. In the traditional classroom, students need a long time to complete assessment. Similarly, the traditional teacher

requires a lengthy time to get students' answers marked and returned to them. Delayed feedback has a negative effect on the instructional process (Kennedy & Cutts, 2005). For example, Dihoff, Brosvic and Epstein (2003) conducted a study which investigated the effects of varying delays in feedback on learning outcomes among 95 undergraduates enrolled in a psychology course. The results of the study revealed that immediate feedback promotes a higher level of recall, higher level of students' confidence and lowest percentage of repeated errors than when the delayed feedback.

The use PRS allows the teacher to obtain real-time feedback about students' understanding of concepts in the classroom and also provide immediate feedback to students (Fan & van den Blink, 2006; Russell, 2008). According to Beatty (2004), PRS feedback helps students to identify errors and limitations. Learners may thereafter seek necessary assistance that could enhance their progress and give them more control of their learning. Immediate feedback reduces students' chance of retaining incorrect responses and facilitates the acquisition of correct responses (Peeck & Tillema, 1979; Anderson, Magill & Seklya, 2001).

Teachers face a series of challenges in their bid to prompt students to respond to questions in the classroom. Kennedy and Cutts (2005) observe that, besides having a few students attempting to answer questions in the class, many students who try to avoid giving wrong answers prefer to wait to get answers to questions from the teacher or their classmates. King and Joshi (2008) posit that the use of PRS encourages timid students' responses to the teacher's questions without other people noticing them in the classroom. As such, the PRS saves such students from the embarrassment associated with giving wrong answers when they raise hands to answer questions. Kennedy and Cutts (2005) emphasise that the use of the PRS helps to manage, and minimise students' frustration while answering questions in the classroom. The stance of King

and Joshi (2008) is that as students continue to respond to teacher's questions, they gain the needed confidence to participate in class discussions.

Schools across the globe are getting equipped with computers with the aim of enhancing the quality of classroom instruction. Personal computers are no longer personal to students because quite a number of them do not have access to school computers and cannot afford to have a computer system (Liu, Liang, Wang & Chan, 2003; Norris, Soloway & Sullivan, 2002). Where computers are available in schools, teachers often use them for demonstrations or as multimedia content presentation to students; hence communication in the class becomes one-way rather than being interactive (Liu, Liang, Wang & Chan, 2003). Unlike the PRS, a number of interactive technologies integrated into the classroom have been unable to facilitate students' understanding of course content because of the cost, and users' level of computer literacy skills. Low technical knowledge, inability of the devices to provide immediate feedback and identify students' misunderstanding of concepts are other reasons why PRS is preferred above some other technologies (Lynn & Mostyn (2010). However, the use of PRS for effective instructional process may be daunting because of some technical challenges associated with it. Moreover, teachers often spend more time to prepare for classroom than having enough time to teach much of the lesson content in class (Beatty, Gerace, Leonard, & Dufrense, 2006).

3.5 Pedagogical Pre-requisites for Effective Use of the PRS

Technology alone does not create better learning. What is crucial is the manner the teacher employs the technological device in the classroom to provide an enabling learning environment (Judson & Sawada, 2006). Different researchers have suggested various ideas on how best PRS could be effectively used in the class, but there no

consensus amongst educators about the best principles teachers must follow to make the best use of PRS for instructional purposes.

Different studies offer different insights into PRS's use in the classroom. For instance, Eastman (2007) suggests that the teacher should use PRS to facilitate learning and not to award higher grades to students. Students explore the PRS when the teacher attaches lesser grades to its use in the classroom. This is because the students do not focus on getting higher grades, but on the use of technology to promote dialogic communication. Similarly, Beatty (2004) emphasises that the teacher's focus should be on the pedagogy rather being on the technology because when the teacher actively engaged students in the instructional process, learning would be improved. Eastman (2007) posits that, two to three PRS questions should be used regularly during a lesson so as to enhance effective use of the technology. Moreover, he emphasises that the teacher should be careful to structure questions in such a way that not too many people will get the answers correct or wrong. Eastman also suggests that questions structure should be varied, so that the teacher does not limit responses to either Yes/No or True/False.

To make the best use of PRS in the classroom, the teacher should present three questions of different difficulty levels to the students. The first question should have the simplest difficulty level that could help to warm-up and build the students' confidence. With the first question, most students may get the answer correct; hence discussion time among the students should be exceedingly brief. The second question should be more difficult than the former. The teacher does not display the correct answer before asking students to engage in discussion after which they re-vote their answers. The third question; the most difficult one should be presented to students in order to check whether they have assimilated the concept. The issue is that, when

students have a smooth time with the second question, most of them are likely to get the last question right (Reay, Bao, Li, Warnakulasooriya & Baugh, 2005). Carefulness is necessary in designing questions to be used in the PRS class. PRS's questions should be few, short, comprehensible and legible. Keeping response options between 3 and 5 would minimize clustered and illegible questions. Simpler voting options should be selected for the students so as to allow for an increased number of valid responses (Robertson, 2000).

The suggested tips by Reay, Bao, Li, Warnakulasooriya and Baugh (2005) when compared to the ideas of Eastman (2007) seem to be more pedagogically useful in the use of PRS for assessment, prompting discussion and interaction in the class. However, some fundamental issues relating to timing, possible technological challenges, and questions' quality are undoubtedly missing in the narrative, which are relevantly valuable for potential users to know.

Presenting a more explanatory list of tips on effective use of PRS in education, Martyn (2007), after a review of some literature, suggests that question slides should be kept short but legible to avoid confusing students with too many words. Furthermore, the number of answer options should be kept to a maximum of five. Other tips from Martyn include:

- allowing sufficient time (between 15 seconds to 20 seconds) for students to answer questions,
- allowing time for discussion between questions,
- encouraging active discussion with the audience,
- not asking too many questions, using the device to address the key points,

- positioning the questions at periodic interval throughout the presentation,
- including a response grid so that students know that their responses have registered, increasing responsiveness by using a countdown timer that will close polling after a set amount of time,
- testing the system in the proposed location to identify technical issues (lighting, signal interference etc.), allowing time to set out clickers and start the system, and
- rehearsing the actual presentation to make sure it run smoothly, and
- providing instructions on how to use the clickers to the audience.

Considering teachers' main goal and other users' different purposes for using or wanting to use PRS, after a review of other literature, Caldwell (2007) came up with more comprehensive underlying educational principles applicable to the best practice of PRS utilization under some functional subtitles:

3.5.1 Planning: Teachers should keep in mind the purpose for adopting PRS in the class when developing questions. Teachers should prepare in advance about how to deal or address issues relating to students who forget their PRSs, and those who need batteries or have broken handsets. The teacher should first observe colleagues who use PRS before attempting to use the device and also know that the first year of PRS use requires extra time to prepare appropriate questions (Caldwell, 2007).

3.5.2 Attendance: Teachers may attach grades to learners' regular use of the PRS if the goal is to increase attendance in classrooms. PRS should be used in introductory courses with a new set of students for encouragement, accountability and to reduce

attrition. The teacher should be aware that the use of PRS for attendance purposes would increase attendance and classroom noise (Caldwell, 2007).

3.5.3 *Communication with Students:* The teacher should explain to students the rationale behind the use and the benefits of using PRS in the classroom. Students should be given the opportunity to discuss among themselves so as to learn the right and wrong answers during the discussion, while the teacher should adapt the lesson in line with the outcome of the assessment. Students should be discouraged from spying on answers selected by other students (Caldwell, 2007).

3.5.4 *Peer learning:* The number of students in each group should be between four and six whenever PRS is used for peer learning in the classroom. Group size becomes necessary because many students prefer small group discussion to a large number and the general-class discussion that is teacher-dominated (Caldwell, 2007).

3.5.5 *Grades and Anxiety:* Where PRS assessment scores constitute part of the class grade for the subject, teachers should regularly make such scores available and accessible to students in order to reduce anxiety. Furthermore, part of the obtainable marks could be awarded to students who choose the wrong answer while those who get the correct answer get full marks. Such a strategy would help to further reduce anxiety and cheating in the class (Caldwell, 2007).

3.6 Pedagogic Patterns of Personal Response Systems Use

Different forms of a classroom setting do have varying target goals; hence the effective use of PRS depends on the teacher's set objectives. Teachers use PRS for different purposes and a variety of activities (Bruff, 2007; Lantz, 2010). Some of the common patterns of PRS use in teaching and learning include the following:

3.6.1 PRS as a Diagnostic Tool: PRS can be used to foster students' collaboration with the teacher to plan, design and implement the learning process. Such a diagnostic process involves topics and content selection for current or future lessons based on the topics covered in the previous lessons and the evaluated responses of the students. The essence of this is for the teacher to identify students' level of understanding and comprehension as well as the areas of the subject's content where help needs to be provided (Simpson & Oliver, 2006; Wit, 2003).

3.6.2 PRS as an Examination and Assessment Tool: Questions that are likely to feature during examination can be presented to students and coordinated discussion initiated by the teacher so that students would be able to clarify difficulties encountered with the content or questions' structure (Draper & Brown, 2004; Kennedy & Cutts, 2005). PRS is also employable for both formative and summative assessments as well as testing students' cognitive knowledge of the school subjects' content (Draper, Cargill & Cutts, 2002; Premkumar & Coupal, 2008). In this study, PRS was used every day at the beginning, during and at the end of the lessons to assess pupils' understanding and knowledge of the previous and current topics.

3.6.3 PRS as a Peer Instruction Tool: It is easy with PRS to engage students in peer-discussion after the display of their first attempts' results. This gives students the opportunity to review available options and possibly sort out differences in their responses. Both the students and the teacher would have the opportunity to see whether there are variations in the pattern of responses and decide on the need for further discussion immediately when the results of the second round of voting are displayed, (Kennedy & Cutts, 2005). Similarly, in this study, the teacher of the PRS group

employed the technology as a tool to facilitate peer and group discussion during the lessons

3.6.4 PRS as Class-Wide Discussion Tool: The scope of class discussion is broader than can be experienced during peer instruction. Class-wide discussion does not emphasise much on small-group-peer instruction as compared with group discussion. In a class-wide discussion, the teacher throws issues open to the entire members of the class for discussion. Topics of discussion emerge from the students' displayed responses so that every student in the class has the same opportunity to discuss the issue and make contributions (Kennedy & Cutts, 2005). In this study, the teacher randomly used the PRS to initiate class-wide discussion so as to make classroom dialogue more appealing, challenging and provide the opportunity for increased interaction between the teacher and the pupils.

3.6.5 PRS as a Warm-up and Classroom Management Tool: Teachers sometimes employ PRS technology to prepare students for the day's class activities by giving them a short quiz rather than just teaching the subject material in the class without gaining their necessary attention. The PRS can change the classroom dynamics as the teacher poses some questions relating to the topic to be taught or previous topics with the aim of warming-up the students before the actual teaching and before engaging them in further discussion on learning materials presented during lesson (Bruff, 2007). In this study, as mentioned in 3.5.2, the PRS group's teacher used the technology at the beginning of the lessons to stimulate pupils' interest and attract their attention from all sorts of distractions.

In the same vein, the use of PRS can be extended towards classroom management. For instance, in order to put to a check to all unnecessary talk, movement

or disturbances in a rowdy class, the teacher can have a question displayed on the screen requiring their responses before doing anything and thus get the students ready for the lesson (Simpson & Oliver, 2006).

3.7 Benefits of PRS in the Classroom

The use of PRS has some impact on the teacher's effectiveness as well as the quality of learning received by the students. Some such benefits seem unachievable in the traditional classroom environment. However, the benefits derivable from using PRS for teaching and learning depend on how the teacher effectively integrates the devices to engage the students (Albon & Jewels, 2007; Simpson & Oliver, 2006). Some of the pedagogical benefits of PRS include:

3.7.1 Active Learning: Learning is a product of ongoing and adaptive dialogue between the teacher and students as well as the classroom tasks that expose students to the appropriate application of ideas and skills (Draper, Cargill & Cutts, 2002; McCabe & Lucas, 2003). Researchers (Braxton, Milem & Sullivan, 2000; Butler, Phillmann, & Smart, 2001) acknowledge the purpose of active learning in the class, in contrast to students' passiveness in the traditional lecture method, which reduce students to mere listeners. The focus of active learning is to change students' status of being "passive recording devices, storing the variable degrees of accuracy in memory and on paper, the auditory and visual stimuli perceived in a lecture, into a critical decision maker who analyse and synthesise concepts during the class period" (Paschal, 2002: 299).

Researchers report that many students actively engage with the use of PRS in the classroom as compared to the traditional classroom where only a few students respond to questions (Caldwell, 2007; Draper, Cargill & Cutts, 2002; Martyn, 2007). Similarly, Johnson and Meckelborg (2009) investigated the potential of PRS in reducing "agitation" and "apathy" in students; the outcome of the survey administered

to 184 undergraduates enrolled in an education assessment course indicated that students perceived PRS as an effective tool in promoting students' engagement and interaction in the class.

Kay, LaSage and Knaack (2010), examined the perceptions of 659 grades 9 to 12 Canadian secondary school students in accounting, biology, business and chemistry about the benefits, challenges, and use of PRS. Findings of the survey indicate that, 75% of the students agreed that they were more engaged in the class while 55% claimed they were more motivated into active involvement than they would have been without the use of PRS in the class. Also, using PRS technology to increase students' participation, the results of the questionnaire administered to 184 education assessment students by Johnson and Meckelborg (2009) confirm that PRS increases students' engagement in the class. van Dijk, Berg, and Keulen (2001) contend that active participation of students in the class is not synonymous with cognitive development. Moredich and Moore (2007) also submit that actively engaged students tend to be more attentive and achieve better learning outcomes than those who are more passive in the class.

Based on earlier research findings, PRS has been affirmed to be effective in promoting students' active participation in the classroom. For instance, the finding of Albon and Jewels (2007) in a study of 133 Asian students (completing units in accounting, power engineering, commerce, mathematics, research and writing skills in engineering and business, and information technology) indicates that 70% of the students value the use of PRS while the majority claimed that the technology motivated their participation in the classroom. Also, Fan and van den Blink (2006) conducted a study evaluating the effect of PRS on new engineering students enrolled in an

introductory computer programming course. The survey results indicated that the technology increased students' participation in the classroom.

3.7.2 Increased Interaction: Successful learning involves interaction between the students and content, as well as the skills and attitudes to be learned. Interactivity contributes immensely to success in classroom instruction because interaction occurs when the teacher encourages students' contribution more in the class as opposed to the teacher-talk which dominates the traditional classroom (Havill, 2007). Furthermore, Meedzan and Fisher's (2009) stance is that the use of PRS would promote interaction between the teacher and the students irrespective of the class size.

Blood and Neel (2008) emphasise that an interactive process that promotes students' active participation in the classroom tends to facilitate improved learning and achievement. However, McCabe and Lucas (2003) note that improved classroom interactivity occurs with the use of PRS when the technology is used intelligently, like having a short-quick five-item test either at the beginning or the end of a class so as to promote peer discussion among students. The effectiveness of PRS technology in promoting classroom interactivity was confirmed by the findings of Sharma, Khachan, Chan and O'Byrne (2005) who administered a survey to evaluate the attitudes of 138 students towards the use of PRS in a 'Fundamentals' lecture course. Most of the students confirmed that the PRS was an innovative way of encouraging students' participation in the classroom learning activities.

3.7.3 Increased Participation: Students are often conscious of the classroom environment when it comes to answering teachers' questions, and prefer private presentation of identity. The use of PRS allows students to answer questions quickly because the systems keep their identity secured and confidential; hence more students contribute their opinions than they would have in the traditional classroom, where their

identity is publicly known. With anonymous modes of PRS, students feel free to express themselves because they are aware that errors in their responses do not attract any embarrassment (Reay, Bao, Li, Warnakulasooriya & Baugh, 2005; Stuart, Brown & Draper, 2004).

With respect to encouraging students' responses to questions in the class, Caldwell (2007) notes that teachers of all class sizes are becoming positively disposed to the use of technology-driven approach such as PRS to provoke students' active participation in the classroom. Stuart, Brown and Draper (2004) conducted a study on the use of PRS in a philosophy class. Stuart et al., explored a multistage problem solving questions and open-ended oral questions for data collection. The results of the analysed data collected from 140 second year undergraduates indicate that the students were more confident and more willing to answer questions in class.

Also, investigating the usefulness of PRS as a learning tool among 33 non-medical students who enrolled in a pharmacology course at the University of Nottingham, Lymn and Mostyn (2010) found that 81.5% of the students attempted answers to each of the 127 questions asked during 8 lectures. Fan and van den Blink (2006) found that, among fresh undergraduate students enrolled in an introductory computer programming course, students in the PRS class answered more of the instructor's questions as compared to when the device was not used. Similarly, Kennedy and Cutts (2005) provide evidence to support that students who frequently use PRS are relatively more successful in their responses to questions and perform better than other students in the class.

Shneiderman, Alavi, Norman & Borkowski (1995) also affirm that when students are conscious that their responses would be anonymously displayed in the class, there is a higher tendency of having a more diverse set of responses than it would

have been in the traditional classroom. Corroborating Shneiderman et al, Beekes (2006) submits that many students who do not answer questions in the traditional class are just afraid of losing face. They lose face when they get the answers wrong; hence they choose to keep quiet rather than raise their hands to answer questions wrongly and be objects of ridicule.

3.7.4 Attention: Getting students' attention in the classroom has been a problem for many teachers. Teacher's ability to sustain students' attention in the class keeps students focused on concepts the teacher teaches them (Lantz, 2010). Students who are not actively engaged can only remain passive in class during the instructional process for a range of 10-18 minutes (De Bough, 2007; Meedzan & Fisher, 2009). Moreover, many students find it difficult to concentrate beyond 20 to 30 minutes in the class without any break. At a point during the learning process, some students start to experience heightened or suppressed emotion and loss of interest and attention; they may thus be distracted (D'Inverno, Davis & White, 2003; McLaughlin & Mandin, 2001). When PRSs are used in the class, students are anxious to know whether their chosen answers are correct or wrong; they are more curious and focused in the classroom as they work and play with the PRS keypads (Bruff, 2007; Simpson & Oliver, 2006).

The research on students' perception about the influence of PRS on learning experiences among 99 high school Spanish students by Roush and Song (2011) provides convincing evidence of the strength of technology in sustaining students' attention in class. In Roush and Song's study, they explored mixed research design (the use of the questionnaire and interview data collection methods), and reported that the majority of the students felt the PRS helped them to be more attentive in the classroom.

3.7.5 Improved Learning: Teachers' awareness and real time understanding of students' level of comprehension, assimilation and general learning are crucial to determining what happens next in the course of instruction. Such an understanding, according to Reay, Bao, Li, Warnakulasoori and Baugh (2005), is facilitated through the use of PRS in the instructional process. Stuart, Brown and Draper (2004) also argue that the PRS gets students' minds to work and influences their learning. Its engagement of students is a precursor to student-directed and improved learning because when the teacher engages students in the classroom; their level of active construction of knowledge increases (Caldwell, 2007; Kay, Lesage & Knaack, 2010). Consolidating the debate on the use of PRS in enhancing learning, Havill (2007) submits that the use of PRS for teaching and learning gives students more time to think and construct personal responses because there is always a gap between the questioning time and the time learners respond to questions. Beatty (2004) asserts that as students answer questions through PRS keypads, they develop a deeper understanding of concepts presented to them because as they decide the best possible answer, they are actively engaged in critical thinking.

Meedzan and Fisher (2009) investigated 29 undergraduate nurses' satisfaction with the use of PRS in a health assessment course. The results show that most of the students (89%) concur that PRS is an excellent tool for gauging learners' level of understanding of concepts. In another study carried out among engineering freshmen who offered introductory computer programming, Fan and van den Blink (2006) also found that PRS helps teachers clarify what students know and what they do not know. Apart from the fact that PRS helps students' learning, Simpson and Oliver (2006) report that students are also able to track their progress in the class as teaching and learning progresses.

3.7.6 Immediate Feedback: Feedback and reflection are highly significant in the learning process (Cutts, Carbone & vanHaaster, 2004). Teachers' comments in the form of approval or disapproval of students' response serve as feedback to students who have to decide on whether to reformulate ideas or seek assistance from other people within their environment in order to attain an acceptable level of performance (Lantz, 2010). Students in the traditional classrooms often receive feedback one or two weeks after a test is conducted (Lantz, 2010). When the students receive such feedback, many of them do not take time to find out the correct answers to errors identified. Bruff (2007) posits that the use of PRS in the class overrides the lapses in traditional modes of assessment because the device provides immediate feedback as well as necessary, useful and motivational information about students' performance.

PRS responses are electronically and instantaneously marked to present immediate feedback to students. The bar chart graphical display of students' responses helps the teacher identify the weaknesses and strengths of the lesson and those of individual students in the class (Simpson & Oliver, 2006). PRS feedback also helps the teacher to adjust the pace of instruction in the class. As such, the teacher caters for the need of the students who do not initially understand the materials and concepts presented to them. Students also use the displayed feedback to gauge their thinking and compare their responses to those of other students in the class (Russell, 2008; Simpson & Oliver, 2006). In a study on the use of PRS across eight disciplines between 2001 and 2003 at Glasgow University, Draper and Brown (2004) report that the use of PRS provided students with whole-class and real-time feedback about their understanding of subject content so that instant error correction could be made to their choice of answers where and when necessary. In a descriptive study to investigating students' satisfaction about the use of PRS in the classroom, Meedzan and Fisher (2009) found that 98% of

students who participated preferred the feedback from PRS above the traditional mode of feedback.

3.7.7 Novelty or Fun: Some teachers use PRS at the beginning of the class to introduce or emphasise salient points and concepts, but on some occasions PRSs are used by teachers during lessons to break up their talk, which in turn keeps students relaxed and relieves fatigue or boredom (Caldwell, 2007). Since students find it difficult to concentrate beyond 20 minutes in the class, using PRS is sometimes fun and a way of bringing liveliness to the classroom environment. The results of the study by Lymn and Mostyn (2010) at Nottingham University show that all 33 participants surveyed agreed that they enjoyed the use of PRS for teaching and learning. Providing empirical evidence for what makes PRS enjoyable, Corcos and Monty (2008) conducted a quasi-experimental study involving 127 students each in the control and experimental groups. The participants from different years of study at the Liberal Art College of York University Toronto enrolled in a library instruction course. The finding of the study shows that students regard PRS in the class as an interactive tool that makes instructional process fun. Similarly, report research by Guiller and Bell (2011) on students' perceptions of the use of PRS in large lectures revealed that one of the 9 themes that emerged after the analysis of students' interview responses was that the use of PRS made lectures fun.

3.7.8 Attendance: According to Shapiro (2009), monitoring students' attendance in large classes is often challenging. The use of PRS increases students' attendance especially when its use is linked to grades (Jackson & Trees, 2003; Wit, 2003). Burnstein and Lederman (2001) posit that where the teacher attaches students' use of PRS to about 15% or more of the course grades, students' attendance would increase. Caldwell (2007) argues that daily use of PRS questions during teaching and learning

would reduce students' attrition rates and at the same time encourage regular attendance in the class. The impact of the use of PRS on students' attendance rate in the class showed in a trial test of the technology by Thornton (2011) on 84 students and 2 tutors of Worcester University. The majority of the students agreed that the use of the technology significantly and positively affected their attendance in the class, but the tutors had mixed opinions about the impact of PRS on students' attendance.

Mayer et al. (n.d) conducted a quasi-experimental study with 237 college students who completed an educational psychology course at the University of California. The study spanned two academic sessions and involved 130 students in the first phase as the control group and 107 students in the second academic session as the experimental group. The result of the study confirms that students' absence during lessons was less recorded in the PRS group when compared to that of the non-PRS class. Roush and Song (2011), however, report that students were indifferent about the influence of PRS on their attendance.

3.8 Technology and Language Learning

Computers were first used in language learning in the 1960s. During the behaviouristic of 1960s, Computer Assisted language Learning (CALL) was used to expose language learners to drill practice by structural linguists. In the 1970s and 1980s, the communicative CALL focused on the use of language for real-life communication. The communicative CALL was an improvement of the behaviouristic CALL (Kern & Warschauer, 2000)

The use of technology for language instruction has grown in the last three decades. There is no single best way to learning a language because of the differences that exist in learners' language styles. Outside the classroom, children and young

learners frequently engage with emerging technologies and may have developed expertise in them. Children's expertise skills are being drawn upon by some language teachers who provide scaffolding to learners through technology (Salaberry, 2001). The recent learning theory of constructivism assumes learners to be active participants in the instructional process. Yoshi and Flaitz (2002) argue that the new language-learning tasks offered by the emerging technology extend the options language educators have to develop language learners' skills through input. Blake (2000) investigated the effect of paired network discussion on negotiation of meaning among 50 undergraduate Spanish learners, and reported that jigsaw tasks and exposure to CMC enhanced negotiation among learners.

Over the years, language teachers have explored the potential of varying technologies starting from the earliest paper-based technologies such as dictionaries, grammar books, charts, through to radio, television, slides, tape-recorders, videos, and overhead projectors as alternatives to the traditional chalkboard (Shapran, 2011; Sharples, 2000). Teachers have also adopted a series of computer-oriented technology to accomplish language practice activities, vocabulary building activities, and listening and speaking instruction (Chapelle, 2001; Warschauer, 2002). According to Milton (2002), language laboratory was introduced into language instruction with a view of improving language learning in schools. Milton, however, remarks that, there is no strong evidence which support that language laboratories improved the overall efficiency of language learning. Besides, the use of computer laboratory follows the traditional methods of drill, and repetition without meaningful interaction.

Much has changed in language learning with the advent of multimedia, mobile technologies and other Internet-connected devices. Most of these technologies provide

language learners ample opportunities for active participation and interaction (Levy, 2009; Shapran, 2011). The focus of the communicative approach on social interaction rather than linguistic form appropriates the relevance of interactive online technologies in language learning. Chat rooms are also used in conducting tests, document sharing and posting of URLs. Text chats, voice chats, audio blogs, voice bulletin boards, and Wikis have been used to promote oral communication skills (Lamy & Hampel, 2007; Levy, 2009).

Internet broadband technology has provided opportunities for remote-presence oral interaction through the use of Voice over Internet Protocol (VoIP) applications such as Skype, toolbox, video chat, and tango. Some language teachers project images onto the projection screen while learners speak directly with guest speaker with the aid of the microphone (Sharma, 2011; Shapran, 2011). Through Web 2.0 applications, video clips are now accessible on YouTube, MySpace and Google Video sites. Short Message Service (SMS), twitter and Google talk are being employed to facilitate oral interaction in written form (Sharma, 2011). Videos containing language instruction content are either uploaded or downloaded using digital cameras, or Personal Digital Assistants (PDAs) or mobile devices such smartphones, MP3 players, and podcasts to support language instruction. Virtual world such as Second Life (a simulated 3D interaction environment with different residents assuming peculiar identities) is now being used to promote effective language instruction (Morris, 2005; Shapran, 2011). According to Milton (2002), computer language games comprising of more realistic elements of communication are useful in language learning. The interactive features of games are capable of motivating children's and young learners' interest in language learning.

3.9 Technology-Driven English Language Classrooms

English teachers are seeking ways to ensure that learning is more appealing and enjoyable to learners (Kilickaya, 2007; Ybarra & Green, 2003). One of the ways of providing learners especially those with limited proficiency in English, with diversity of learning experiences is the adoption of technology. The use of technology in all educational disciplines is on the increase (Lai & Kritsonis, 2006). Technology integration in language teaching provides a variety of realistic contexts in language learning (Bas & Kuzucu, 2009; Liang & Bonk, 2009). Teachers now use a variety of electronic technology to enhance the effective teaching and learning of English as a second language (L2).

The increasing adoption of technology in schools changes the roles of language teacher from classroom director or dictator to that of a co-learner (Spodark, 2001). According to the National Standards in Foreign Language Education Project (1999), integrating appropriate technology into the English classroom helps to develop learners' linguistic skills and enhance classroom interaction. Kung (2002) further argues that, providing learners with the needed experiences in the process of second language learning and acquisition requires the language teacher's reliance on the promises of technology.

Students' communicative competence is dependent on their language skills. Learners would improve in the four basic language skills (listening, speaking, reading and writing) if and when appropriate technology is incorporated into the instructional process (Kaspoglu-Akyol, 2010). Moreover, Murray (1999) contends that a child learns a language when he or she becomes a member of a community practice. Learners' active engagement, use of relevant educational technology and authentic communication with peers in the ESL classroom provide the opportunity for

communicative language use (Williams & Lutes, 2008; Verkler, 2004). Active engagement of L2 learners in classroom activities via technology makes the language lesson more interactive and meaningful and improves their language fluency (Swain, 2005; Wartinbee, 2009).

Technology integration within a communicatively-based approach has the potential of making significant contributions to learners' language proficiency improvement. Additional practice in interpersonal, interpretative and presentation communicative modes as well as improved communication reflecting real life situations is more noticeable among language learners exposed to technological devices (Sider, 2011; Verkler, 2004). Ybarra and Green (2003) identify the usefulness of technology integration in L2 class to include verbal interaction, vocabulary development, improved students' reading ability and development of writing skills. In the same manner, Jones and Fortescue (1987) highlight three crucial points of relevance of technology in the language classroom as:

- Technology as the knower of the right answer;
- The technology as work horse; and
- The technology as stimulus.

A sizeable number of empirical research findings adjudge technology effective in the language classroom. Jang (1992) investigated the effect of graphic presentation of knowledge structures on 45 seventh grade ESL students' comprehension of content knowledge and acquisition of second language for academic purposes in Vancouver. The findings of the study show that, students in the experimental group had increased comprehension and recall L2 acquisition above those in the control group. An evaluative and qualitative case study conducted in Turkey by Bas (2010) on the effect

of DynED software use for English language teaching and learning in six rural and six urban elementary schools. Its findings revealed that the technology did not only develop learners' listening and speaking skills, but learners also had lots of fun in the class.

Kayaoglu, Akbas and Ozturk (2011), examined the effects of animation on vocabulary among 39 students learning English as a foreign language in a preparatory class at Karadeniz Technical University. The study of Kayaoglu, Akbas and Ozturk, revealed that students exposed to animation during language learning had a significantly higher mean post-test score as compared with their mean pre-test score. However, the results of the also showed that the mean post-test score of students who were taught with the conventional lecture method was not significantly different from their mean pre-test score.

Kayaoglu, Akbas and Ozturk (2011), argued that if technology gives students the opportunity to learn through multi-sensory organs in other school subjects, such encouraging situations may likely apply in the language learning classroom. In view of the results of earlier studies, the researcher of this study is of the view that the introduction of PRS in the ESL classroom, even at the primary education level would not only be novel and entertaining, but would also be result-oriented in terms of students learning outcomes and teachers' disposition.

3.10 The Communicative Approach

The Communicative approach (CA) is one of the most significant paradigms for language teachers who are concerned about how to develop learners' communicative fluency. Although a number of authors have contributed towards explaining the meaning of the communicative approach, Richards and Rodgers (2001) affirm that

there is no universally accepted definition of CA. In the fields of applied linguistics and English as a foreign language, CA and Communicative Language Teaching (CLT) have been interchangeably used to mean an approach that focuses on the communicative needs of the learners (Riley, 2008). According to Jin (2008), communicative approach refers to a set of principles about teaching, including recommendations about method and syllabus, which focus on meaningful communication rather than language structure, use and not usage, which require engaging students in tasks that promote the use of the language instead of studying the language.

Emphasising the importance of input, processing and output, Qian (2010) defines CA as the engagement of learners in language learning through activities and events that would enable them to freely express themselves in the language being learned. In a communicative approach setting, attention is not focused on language forms, but on learners' ability to meaningfully express ideas, concepts and notions within a context. Savignon (2002) refers to CA as a multidisciplinary approach that focuses on the elaboration and implementation of participatory communicative activities that will promote the development of learners' functional language ability.

Providing further details of the nature of communicative activities, Mambo (2004) defines CA as the use of real life situations to trigger communication among learners in such a manner that it leaves learners in suspense of the outcome of the class activities. Mambo's definition further reflects on the nature of activities in real life situations which give learners the opportunity to learn the language while they use it.

Richards and Rodgers (2001) portray CA as a process in which learners learn language in pairs or groups by exploring the potential of available language learning resources in problem-solving tasks. Inferring from previously mentioned definitions of

CA, the researcher of this study refers to CA as the exploration of relevant instructional materials that provide learners with the opportunity to learn a language while interacting in groups to accomplish real-life-situated tasks. Through the tasks, language learners are provided the opportunity to engage in untailed and self-motivated use of the target language. To this end, the students and the teacher are active co-participants who share responsibilities to ensure effective language development and improved communication.

3.11 The Evolution of the Communicative Approach

The last millennium has witnessed tremendous changes in the way language is being taught (Kato, 1998). Before the emergence of the communicative approach, various methods had been adopted in language teaching and learning between 1850 and 1980s.

3.11.1 *Language Teaching Between 1850 and 1980*

The exponents of the grammar translation method of language teaching included Johann Seidenstucker, Karl Plotz, Ollendorf and Johann Meidinger. The grammar translation method, traditionally used in teaching Greek and Latin, emerged from the United States of America and dominated language teaching between 1850 and 1950 (Richards & Rodgers, 2001). The method favours the use of the mother tongue, while the target language's use is kept less active, with strict adherence to grammatical rules for sentence formation. The method is characterised by immediate correction of errors, less attention to the development of listening and speaking skills, development of learners' mental discipline and intellectual skills, and much emphasis on the reading of texts, as well as learners' attainment of high levels of accuracy (Barnard, 2004; Lowe, 2004; Richards & Rodgers, 2001). Obviously the grammar translation method

was developed to improve learners' ability to read and master L2 text vocabulary and literature.

Although the grammar translation method seems to have few advocates, theory and/or literature to justify it, some foreign languages are still being taught with the method (Richards & Rodgers, 2001). However, the general acceptability of the grammar translation method has become questionable because of the demand for oral proficiency in foreign languages; hence the emergence of the direct method in 1890s. Exponents of the direct method argued that vocabulary could be taught without the use of the mother tongue and/or translation, but through demonstration, use of visuals, active use of the language rather than explanation and mastery of grammatical rules (Garrido, n.d.; Richards & Rodgers, 2001). It is worth noting that the direct method still demands learners' ability to produce correct grammar and pronunciation (Kato, 1998). Despite the fact that the grammar translation method paid little or no attention to the target language's use, the direct method not only gives learners an opportunity to learn a target language but also gives due consideration to the use of the language within a specific social context.

Towards the end of the 1950s, there was demand for radical change in the process of language teaching in the United States. The audiolingualism method (ALM) was coined by Nelson Brook in 1964, when it became necessary to improve the communicative competence of Americans in foreign languages (Richards & Rodgers, 1987, 2001). The audiolingualism model was rooted in the principle that language can be learned through a stimulus-response system. Audiolingualism relies on the use of mimicry, memorisation of a set of phrases, over-learning of language through extensive repetition, the use of tapes and visual aids in language laboratories with a view to

building learners' communicative proficiency (Garrido, n.d; Lowe, 2003). The teacher provides input models of language structures and controls the pace of learning, while learners' participation is achieved through drills and teacher-learners' interactions (Barnard, 2004).

Besides the fact that the ALM was criticised for a weak language and learning theoretical foundation and for the output which fell below expectations, the need to replace form-orientation approaches to language teaching and learning with an approach involving learners' engagement in tasks that would develop both accuracy and fluency, led to the emergence of the communicative approach (Foster & Skehan, 1999; Wesche & Skehan, 2002; Zhao, 2011).

3.11.2 *The Communicative Approach (CA)*

The criticisms that greeted the earlier methods of language teaching shifted linguists' attention towards developing an integrated language teaching approach. The integrated approach encompasses more than one method of language teaching, and caters for the needs of both the teacher and students (Garrido, n.d.; Wnejie, 2009). A group of researchers claims that communicative approach's (CA) origins can be traced to different sources. However, some other researchers argue that CA emerged as an alternative to structuralism and audiolingualism in Great Britain in the 1970s. In the 1970s, there was a strong move among British applied linguists towards functional and communicative potentials of language that could meet the linguistic needs of learners. Moreover, learners taught with the traditional grammatical methodologies failed to communicate using appropriate social language, gestures and expression; hence the emergence of the communicative approach (Savignon, 2002; Wozzley, n.d).

In another development, Lowe (2003) tracing communicative approach to the

works of the Council of Europe in 1960s, asserts that CA emerged in two phases. Lowe claims that the first phase flourished between 1970s and 1990s. At that time, teachers fashioned language teaching after the functional syllabus, which laid emphasis on communicative functions. The audiolingualism influenced the communicative functions because teachers still exposed students to language teaching by listening and repetition. The first phase of CA focused more on learners' use of language to perform functions, such as requesting, apologising, and advising. Around 1980, the first phase of the CA's development suffered a setback which eventually led to a reformation as influenced in the late 1970s by the language learning theory of Krashen. According to Krashen (1982), there exists a distinction between language acquisition and language learning. Krashen argues that grammar structures of a second language are learnt while language acquisition is a subconscious process which develops as an individual uses the language for communication.

Lowe contends that the second phase of the communicative approach is superior to the first phase because of the distinction between accuracy (which deals with grammar and linguistic forms) and fluency (which deals with prompting learners to speak without being interrupted). Krashen further argues that, irrespective of the category (accuracy or fluency), the use of an information gap and unhindered discussion in real-life situations are essential for all classroom communication activities. Malik (2008) argues that though Krashen's opinion has received a series of criticisms, yet his ideology has remained relevant in L2 teaching and learning.

Presenting a detailed description of CA, Savignon (2002) links it to the rapid increase in the language needs of immigrants and guest workers in Europe and North America and the British linguistic tradition. Such language needs enmeshed in social

and linguistic contexts prompted the development of a syllabus for learners based on non-functional linguistics. Wozzley (n.d) claims that CA is a product of various approaches, which emphasise the significance of communication in teaching language. Wozzley further remarks that CA began with Chomsky's cognitive approach, which emphasises a distinction between "performance" and "competence" (Firth & Wagner, 1997).

The target of CA may be interpreted as the development of speaking skills, with less emphasis on reading and writing skills, so as to develop communicative-style teaching with a focus on authentic language use and real life communication among students. Alatis (2007) distinguishes between CA and other methods of language teaching by mapping out the distinction by the use of the descriptive words "teacher-centred language classroom" and "learner-centred language classroom", as contained in Table 3.1. It is worth noting that, in this study, "learner-centred instruction" is not a synonym of CA because learner-centred instruction is an aspect of the communicative approach.

Table 3.1: Differences between Teacher-Centred and Learner-Centred Instructions

	Teacher Centred Classroom	Learner Centred Classroom
1	Focus is on instructor	Focus is on both student and instructor
2	Focus is on language forms and structures (what the instructor knows about the language).	Focus is on language use in typical situations (how students will use the language).
3	Instructor talks, students listen	Instructor models, students interact with instructor and one another.
4	Students work alone	Students work in pairs or groups
5	Instructor monitors and correct every student utterance	Students talk without constant instructor monitoring; instructor provides feedback/questions when question arise
6	Instructor answers students questions about language	Students answer each other's questions using instructor as information resource.
7	Instructor chooses topic	Students have some choice of topics.
8	Instructor evaluated students learning	Students evaluate their own learning; instructor also evaluates.
9	Classroom is quiet	Classroom is noisy

Adopted from Alatis (2007: 3).

The communicative approach (CA) teachers provide learners with the opportunity to communicate in the target language, and in real-life situations. The communicative language teaching and learning requires that learners engage in various communicative tasks, rather than focusing on linguistic forms. Linguistic forms inhibit learners from communicating in the target language naturally (Ellis, 2003; Skehan, 2003; Zhao, 2011). Moreover, the communicative approach is a teaching strategy that emphasises meaningful exchange of information among interlocutors who appropriately use the target language in real-life situations.

The communicative approach in a second language classroom provides learners the opportunity to develop and experience the learning process by active engagement in communicative activities capable of improving their communicative skills (Gardner, 2008; Guo, 2008). The implication of the above description of CA is that frequent use of a language is a key to developing learners' communicative competence. However,

caution must be exercised to ensure that interlocutors exchange the appropriate meaning of a message. Whilst relevance of form and grammar in language learning should not be undermined Wozzley (n.d) stresses that both fluency and accuracy are crucial to achieving useful communication.

Communicative competence (CC), a term coined by Hymes in 1972 is the significant theoretical framework underpinning communicative approach. Meanwhile, Roberts (2004), on the other hand, claims that Wilkins was one of the first to use the term “communicative competence” in 1974. However, irrespective of the origins or the proponents of communicative competence, its relevance and significance to the communicative approach to language teaching cannot be overestimated.

3.12 Defining Communicative Competence

Information consists of conceptual, social, affective, and psychological elements. Different people possess varying degrees of ability and knowledge about language use; hence communicators often need to explore available opportunities to negotiate, judge, decide and have a better understanding of concepts under discussion. The point of agreement and understanding between communicators is the point at which communicative competence is achieved (Canale, 1983). This implies that successful language use for communication is a reflection of the development of user’s communicative competence (CC).

Also, communicative competence can be interpreted as the ability to convey a message to other people by using appropriate language in a specific context (Malik, 2008; Zhuang, 2007). The definitions above seem to be more confined to mere language use without giving due attention to the issue meaningful interaction between interlocutors. Zhan (2010) portrays communicative competence as not only the

learners' ability to know the language code, but also to know what to say to whom and how to say it in a specific context. Zhan's definition seems more explicit than the ones earlier mentioned because of understanding of the significance of appropriateness, social and cultural contexts in language use, as well as the social values attached to the language.

Literature shows that there is no consensus concerning a definition of communicative competence among scholars and educators, thus leading to the development of different models of communicative competence, some of which are discussed in this thesis.

3.13 Models of Communicative Competence

The ability to communicate in both spoken and written forms is the goal of language teaching and learning; hence activities that revolve around communicative practice are essential aspects of language instruction (Savignon, 1983; Hedge, 2009). According to Hedge (2009), learners need to integrate themselves effectively into the world they are in by having in-depth knowledge of language and also by being advanced in the use of the language as a means of communicating with people in different settings and contexts.

The idea of competence began with Chomsky (1965), when he questioned the audiolingual and situational language teaching methods on the basis that there is a significant distinction between performance and competence. Chomsky argued that structuralism and behaviourism were unable to account for creativity and uniqueness of individual sentences. Therefore, learners' production of sentences through imitation and repetition was not the best method of language learning. Rather, any measure of linguistic competence should be based on an individual's knowledge of language

structure (Celce-Murcia, 2007). Thus, the notions of “competence” (exclusive possession of knowledge about grammatical rules) and “performance” (the actual use of language in a completely homogeneous community) were introduced into modern linguistics (Chomsky, 1965).

Hymes criticised Chomsky’s model, which focuses on linguistic competence without due consideration of socio-cultural factors in heterogeneous speech communities and different competence among language users (Hymes, 1972; Ya, 2008). Hymes contends that, besides the linguistic competence (grammatical correctness), there is also the language users’ need of sociolinguistic competence (the use of language in an appropriate context). The reason was because language structure and its acquisition are context-based. On this platform, the term “communicative competence” was coined by Hymes (1967, 1972) and is still in use today (Celce-Murcia, 2007; Hymes, 1972; Zhuang, 2007).

Hymes’ model of communicative competence is entrenched in the socio-linguistic view, which gives due consideration to L2 learners in the same learning environment, but with different “linguistic baggage” and cultural differences. The model does not emphasise language users’ mastery and adherence to grammatical or linguistic rules, but gives language users the opportunity to search, select and use appropriate linguistic resources applicable to the context of language use.

Hymes’ description of competence was relatively vague. Canale and Swain (1980) added strategic competence to Hyme’s earlier proposed linguistic competence and sociolinguistic competencies so as to make the model more applicable to language teaching and assessment than Hyme's model. Canale and Swain replaced linguistic competence of Hymes with grammatical competence, but Canale (1983) later added a

discourse component of competence to the earlier model of Canale and Swain (Canale, 1983; Celce-Murcia, 2007). Hence the components of Canale and Swain's model are grammatical, strategic, sociolinguistic, and discourse competencies (see Figure 3.3). Canale and Swain's model of communicative competence consider communication, as a dynamic interactional process, achievable through the use of language.

Grammatical competence equips learners with lexical items, morphology, syntax, semantics and morphological knowledge that enable them to possess the necessary knowledge of how words are combined into various sounds, and the specific stress of sentences. Sociolinguistic competence is concerned with the appropriateness and the manner in which utterances are made with respect to learners' knowledge of what is socially and culturally acceptable. Strategic competence relates to the verbal and non-verbal communication strategies capable of minimising communication breakdown arising from low competence. Discourse competence relates to how L2 learners are able to observe the rules of cohesion and coherence in order to engage in meaningful communication (Canale & Swain, 1980; Celce-Murcia, 2007; Uso-Juan & Martinez-Flor, 2008).

Earlier researchers have justified the relevance of Canale and Swain's competence components in the acquisition of communicative competence, based on how the model emphasises the appropriate use of rules of grammar, and the importance of social context in developing learners who are competent language users (Meyer, 1990; Rintell, 1990).

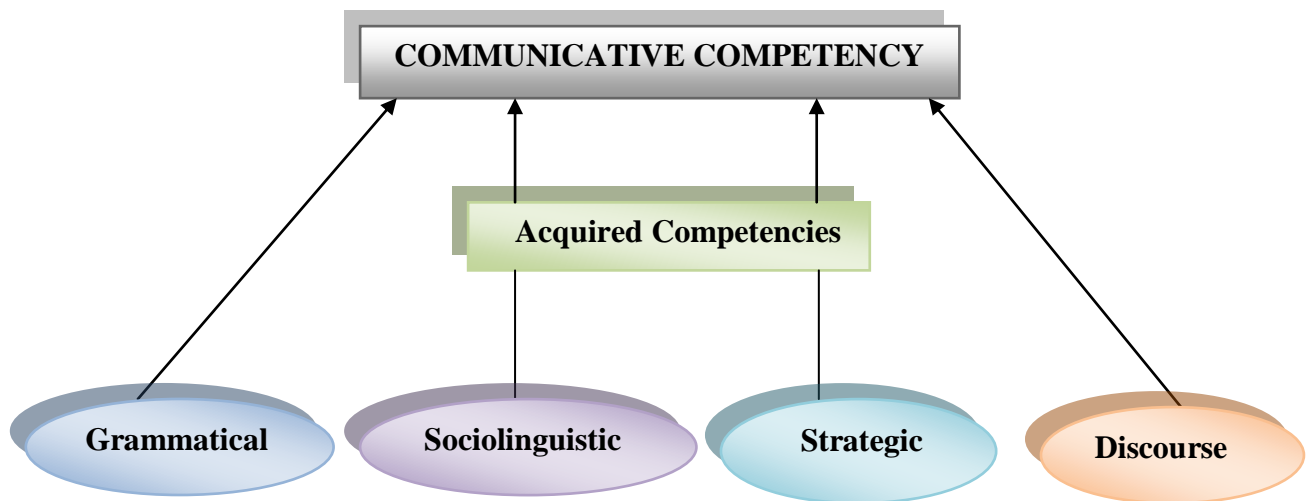


Figure 3.3: *Canale and Swain's Model of Communicative Competence* (Canale, 1983)

Canala and Swain's model seems to be more realistic than previous attempts by other authors in describing effective communication because it does not dwell on a learner's mastery of knowledge. The four components of Canale and Swain's model give learners the opportunity to compensate for a deficiency in one field with competent performance in other fields. However, a common ground between Canale and Swain and Hymes models is the principle that some rules of language use would be ineffective without the rules of grammar. Above all, Canale and Swain's model is simpler, more widely accepted and used across countries and cultures in the corridors of L2 teaching and learning.

Hymes' idea of communicative competence came from an anthropologist's standpoint and not a language educator's; hence the need for an interactional model of communicative competence. Savignon's model highlights that the component of communicative competence cannot be exhibited in isolation but through expression, interpretation, and negotiation of meaning within a context, rather than engaging

learners in rote learning and recitation (Savignon, 1983, 1997). Similarly, Bachman (1990) also proposed the use of the communicative language ability (CLA) model modified by Bachman and Palmer (1996), in order to distinguish between language competence and metalinguistic competence. The focal point of this model was that competence comprises of organisational competence (grammatical and textual competencies) and pragmatic competence. Organisational competence is similar to the discourse competence identified by Canale (1983) while pragmatic competence consists of illocutionary competence (individual's knowledge of speech acts) and sociolinguistic competence (Uso_Juan & Martinez-Flor, 2008).

Bachman's model seems more explicit, comprehensively detailed and more useful in language assessment than the previously discussed models. However, the meaning ascribed to grammatical competence seems too restricted to grammatical form, which portends a risk to its wider acceptability. Although Savignon's model is still one of the most relevant models of communicative competence in the world today, the simplicity of the description of the components and the organisational structure of the essentials of communicative competence may enhance the preference of Bachman's model above Savignon's.

Bachman's model was criticised because its scope was limited to the context of language testing (Davidson & Fulcher, 2007). Celce-Murcia, Dörnyei and Thurrell (1995) proposed a communicative competence model which added actional competence (the ability to comprehend and produce all significant speech acts and speech act sets) to the components of Canale and Swain's model. In order to give recognition to the importance of cultural issues in language learning, Celce-Murcia, Dörnyei and Thurrell substituted sociolinguistic competence and grammatical

competence in Canale and Swain's model with sociocultural competence and linguistic competence respectively. Celce-Murcia, Dörnyei and Thurrell's (1995) model of communicative competence emphasises that, if culture is integrated into language teaching, and instructional materials are context-based, learners would have a better understanding and make good use of the target language during communication (Celce-Murcia, 2007; Uso-Juan & Martinez-Flor, 2008).

Moreover, it is obvious that all communicative competence models, developed after Canale and Swain, emphasise the need for learners to negotiate meaning through interaction and appropriate use of language within a specified context; and this highlights the relevance of the communicative approach in the present study. A communicative teacher should, therefore, teach learners the language needed to express and interpret different functions, which include requesting, describing, expressing likes and dislikes. By so doing, learners would be able to develop the confidence to use and understand the principles of appropriate language use to accomplish given tasks in different situational contexts (Canale & Swain, 1980; Richards, 2006).

3.14 Teacher's and Students' Roles in the Communicative Approach Classroom

The communicative approach is a departure from traditional second language teaching methods (Richards, 2006). With this new strategy of language teaching, the roles of the teacher and the students change during the instructional process. Littlewood (1983) points out that, in adopting CA in language instruction, the teacher has to re-define his initially assumed traditional roles while learners also assume new roles that are different from what they experience in the traditional language learning classroom.

The communicative classroom, unlike the traditional classroom, is a learner-centred learning environment which places much emphasis on the activities of the

learners, rather than that of the teacher. Learners in the communicative approach classrooms are expected to participate, and cooperatively control classroom learning activities while attempting to accomplish tasks in groups or in pairs (Richards, 2006; Richards & Rodgers, 2001). In a CA classroom, learners communicate more and develop the confidence of language use when they are at the centre of communicative activities than they would be in a traditional classroom. The active engagement of learners in classroom tasks triggers interaction among one another and brings out the creative ideas and knowledge in them (Stridsberg, 2007).

A communicative approach teacher provides learners with communicative tasks that enable them to interact and negotiate meanings. In the process of negotiation, the teacher overlooks immediate and direct correction of learners' errors. The teacher's roles in a CA classroom include that of a facilitator or coach of a team who has the responsibility of providing an enabling environment for learners' uninterrupted expression and communication, engendered by interaction, collaboration and negotiation of meaning while being engaged in communicative tasks (Qinghong, 2009; Richards, 2006; Richards & Rodgers, 2001). To elaborate the teacher's role in a CA, Littlewood (1981) notes that the teacher only offers experience and stimuli that serve as the motivators to learners' communication. Littlewood emphasises that while learners are in control of the learning activities, the teacher should neither stay out of the classroom nor assume the position of participant-observer, but act as a facilitator of learning.

In addition to the CA teacher's roles mentioned above, Giri (1996) further remarks that the teacher should also assume the roles of a needs analyst. That is, he or she should formally or informally identify and determine the language needs of the

learners, through need assessment. The need assessment should be collaboratively carried out with the learners, rather than needs identified based on teacher's assumptions and speculation. In a CA classroom, the teacher-consultant role of the teacher, as perceived by Littlewood (1981), is presented by Giri (1996) as a counsellor to the language learners. In the same manner, Littlewood's perception of the CA teacher as an initiator of learning, language instructor, classroom manager and coordinator of learning, is summarised by Giri as the group-process manager.

The finding of a study by Ali, Hukamdad, Akhter, and Khan (2010), which investigated the effects of a problem-solving method on Pakistan elementary school students' achievements in Mathematics, reveals that the students who worked in groups to discuss mathematical problems had higher academic achievement levels as compared to their counterparts who were taught by teachers using the traditional, passive, lecture - based teaching method. Similarly, the finding of Sert (2005) shows that, among the 91 ELT undergraduates of Hacettepe University in Turkey, students exposed to the pair-work and small group activities made fewer grammatical and spelling mistakes, and registered increased attendance, as compared to those in the control group who had done their assignments individually.

It is imperative to note that, irrespective of learners' level of active participation or the degree of control they have over instructional process, the presence of the teacher in the classroom is still paramount. The teacher is expected to guide the learning process, observe and take note of the strengths as well as, the weaknesses of the process, in order to prepare to meet the challenges of certain individual learners and the entire class, in general (Littlewood, 1981).

Since co-construction of knowledge through social interaction is significant in CA, the sociolinguistic co-creation of a zone of proximal development (ZPD) between learners and the teacher becomes a relevant theoretical issue for discussion in this study (Vygotsky, 1978, 1986). The ZPD has been described as a theoretical concept on which grammar and communication are based (Escandon, 2007).

3.15 Vygotskian Sociocultural Theory

In this study, the theoretical framework used is the sociocultural theory. Researchers such as Kao (2010), Lantolf, (2000) and Min (2006) are of the view that Vygotsky came up with the idea of sociocultural theory some years after the Russian revolution. Since the development of sociocultural theory, various researchers have used it in the field of second language (L2) learning. Although Vygotsky died in 1934, his work was done in the early decades of the last century. Vygotsky's work on sociocultural theory only became known in the west and translated much later after his death. In any case, his book "Thought and Language" was published posthumously in the year of his death in Russian. The book was translated into English in 1962.

Vygotsky (1978) emphasises that child's learning involves a form of mediation between the learner, social, cultural and historical context. In the days of Vygotsky, educators were of the assumption that effective learning is learners' attainment of a level of threshold of development in the performance of tasks. However, Vygotsky (1978, 1993) argues that the understanding and the determination of the child's development level are best by identifying what such a child could do under the guidance of a more competent person within a sociocultural and historical context.

The child learns, and increases knowledge, through interaction with the physical and social environment. Accordingly, a child develops mentally as he or she interacts

with parents, siblings and other people around. Learners learn a language better when they use it in social-interaction with adults and peers who are more knowledgeable in the language (Vygotsky, 1978; 1993). Relating sociocultural theory to second language learning, Lantolf (2000) mentions that since human cognition develops through social activity, L2 learning is a semiotic process linked with participation in social activities. Vygotsky (1981) asserts that the starting point of a child's mental development is the social plane before advancing to his or her potential development.

Education, for Vygotsky, is not simply a matter of acquiring knowledge or skills, but rather that which seeks to develop learners' ability to learn through critical thinking and communication of their ideas or understanding across to people in different ways through "cultural tools". The tools are artefacts created by people within the social and cultural setting and useful in solving sociocultural problems. Such tools include language, works of art, the computer, calendars, and symbol systems (John-Steiner & Mahn, 1996; Turuk, 2008). Sociocultural theory claims that the human mind is mediated; hence "tools" are essential in human understanding of the world in which individuals live. Vygotsky (1978) emphasises that social interaction influences the child's thinking development and learning; hence the child's developmental growth progresses as the child interacts with people and "tools" in the immediate environment (Turuk, 2008).

3.15.1 Zone of Proximal Development

The zone of proximal Development (ZPD) is a vital component of sociocultural theory. Vygotsky (1978) contends that the child's current level of development is not enough to measure his ability, but the potential development of the child should be considered; hence the learner's performance under an adult's assistance projects the child's future achievement. Choice (2010) submits that the ZPD represents a

“metatheory” of more freedom for a student-centred interaction within education as opposed to the teacher-dominated instructional process.

Moreover, Vygotsky’s ZPD has become associated with scaffolding of learners (Guk & Kellog, 2007). Scaffolding in education involves a transfer of tasks responsibilities from a more knowledgeable person to the learner in order to facilitate the child’s learning and development (Daniels, 2001; Verenikina, 2003). When teachers understand learners’ mental abilities, they would be able to identify the relevant, appropriate and suitable tasks for the learners. Within ZPD, interaction is a key to co-construction of knowledge (Cheon, 2008; Shabani, Khatib & Ebadi, 2010; Verenikina, 2003; Wells, 1999).

3.15.2 Zone of Proximal Development in the Classroom

There is the need to reconnect ZPD within the school processes and practices of teaching. The ZPD is a concept developed against grammatical form of language teaching with a view of exposing learners to “systematic thinking skill” which gives attention to planning, goal setting, drafting and generation of ideas as strategies for teaching second language (Gewa, 2005; Hogan & Tudge; 1999).

The idea of internalization presupposes that the teacher should drive learners into the abstract world so as to develop the ability to solve complex problems rather than learners relying on the teacher at all time (Turuk, 2008). Generation of new knowledge is a product of dialogic social interaction. Therefore, social context and interaction with people and the environment influence learners’ internalization of thoughts, attitudes and beliefs (Bowler, Large, Beheshti, & Nettet, 2005; Chaiklin, 2003; Lantolf & Aljaafreh, 1995).

Teaching implies being responsive to learners’ goals as well as providing the necessary assistance that would enhance the achievement of these goals. The help

needed by learners should not be restricted to the teacher alone; rather it should be extended to other competent learners. Learners can even co-teach one another without necessarily relying on the teacher's assistance as reflected in the research findings of Mitra (1999). Mitra indicated that children who had access to public computers taught themselves English through the use email, chat and search engines. All the learners need is mutual-collaborative engagement in an activity directed towards a specified outcome (Gewa, 2005; Kao, 2010). Adair-Hauck and Donato (1994) suggest that instructional processes should be interactive rather being unidirectional. In summary, the teacher should strive to encourage small group or pair discussion among learners in order to ensure effective collaboration in knowledge construction, and the active involvement of a large proportion of the learners in learning activities.

According to Adair-Hauck and Donato (1994), the Vygotskian ZPD brings the distinction between the explicit teacher who behaves as a dispenser of knowledge and the implicit teacher who acts as a facilitator of the learning process. The teacher as a facilitator and coordinator of the instructional process should provide linguistic guidance, and mediate between the learners and the learning environment. As the teacher guides the learners, he awakens a series of internal developmental processes which are operational only when learners socially interact with authentic artefacts (Gewa, 2005; Hogan & Tudge, 1999). Du Vall's (2002) study on the English language reading ability of 7th grade students in Southern Georgia showed that teacher's use of scaffolding enhanced students' reading performance.

The relevance of ZPD to language learning implies that the teacher should group and regroup learners to perform different tasks so as to promote sociocultural interaction in the real world (Barnard & Campbell, 2005; Donato & McCormick, 1994; Turuk, 2008). However, as learners co-construct knowledge with peers during

discussion sessions, teachers should redefine tasks to meet the individual learner's capability.

3.16 Principles of the Communicative Approach

Both the quantity and quality of the relevant research conducted, which has led to the general acceptance and integration of the communicative approach into language instructional process, have been sources of impetus to the popularity of the approach across the globe. The new route to language teaching and learning is an approach, rather than a method because it focuses on communicative competence as the goal of language teaching as well as how to develop ways of teaching the basic four language skills. There is no individual author that has a superior claim on CA. Hence the existence of its several models and different interpretations, but which embrace a range of various but common principles, proposed today (Richards & Rodgers, 2001). For instance, Littlewood (1981) asserts that one of the basic features of CA is the systematic attention it gives to both functional and structural aspects of language. In a review of Littlewood's and the research work of other people on CA, Richards and Rodgers (2001) mention that the characteristics of CA should be based on:

- a focus on language teaching and learning goal on communicative competence;
- systematic attention is given to functional and structural aspects of language;
- learning activities is based on pair or group work, while the target language is used in problem-solving tasks; and
- at least two parties are involved in meaningful interaction.

Richards and Rodgers (2001) mention that the CA focuses on ensuring that learners accomplish instructional communicative goals, rather than language form. Another feature is that both fluency and accuracy are complementary to each other and

are necessary in achieving communicative competence. Sometimes, the significance of fluency may have to over-ride accuracy, so as to engage learners in appropriate use of language. Lastly, one of the paramount features of the communicative approach to language learning and teaching, as pointed out by Richards and Rodgers, is the ability of the learners to use the target language in unrehearsed contexts.

The ideas of Littlewood (1981), Richards and Rodgers (2001) and Brown (2006) about CA, highlight a fantastic deal of interest in the needs, as well as the desires of the learners, in a language class. As a matter of fact, the teaching mode that helps in the development of learners' communicative competence in an authentic context is also emphasised as being that which is acceptable and recognised as useful for language teaching and learning. Moreover, in order to give learners the opportunity to engage in meaningful interaction and communication, tasks should be assigned to learners in pairs or groups.

3.17 Pair Work and Group Work in the English Language Classroom

Teacher-initiated interaction characterises most language classrooms. In a teacher-dominated classroom, learners' level of participation and active involvement in classroom activities is limited. Long and Porter (1985) argue that, in a teacher-dominated language learning classroom, learners have little time to practice the target language. However, the focus of language teaching and learning has changed from that of grammatical knowledge acquisition to one of communication through meaningful interaction. Similarly, the emphasis of CA on the development of learners' communicative competence, gives preference to language teaching and learning through pair or group work, rather than via the traditional classroom setting (Al-Farsi, 2008).

The use of the pair or group work has been challenging to some teachers.

Martine (2006) notes that a teacher's lack of experience of working with small groups or paired learners is likely to have a negative influence on the effectiveness of the strategy, as well as the interactional output in the language classroom. However, language teachers have used pair and group work activities such as role-play, games and problem-solving, in recent times to register the relevance and impact of such activities in the English language learning classroom (Brumfit, 1984; Long & Porter, 1985; Pellowe, 1996). Despite the effectiveness of the pair or group work in language teaching and learning, there are mixed feelings about the criteria for grouping or pairing learners. However, pairs or groups should be formed to suit the learning goals and learners' needs (Al-Farsi, 2008). Pollard (2002) proposes that groups could be formed, based on such considerations as learners' ages, attainments, friendships and interests.

The terms 'pair work' and 'group work' have sometimes been used interchangeably. For instance, Pellowe (1996) used 'pair work' to describe a group of 2 or 3 people. However, McDonough and Shaw (1993) observed that pair work and group work are not the same; hence they should not be used synonymously. Brown (2006) perceives pair work activity as the interaction of two or more people striving to solve a problem. Moreover, group work involves learners working together in face-to-face interaction, without direct teacher's supervision, in order to achieve a common goal (Killen, 2003). In this study, pair work is a bilateral interaction between two learners in an attempt to complete a task without the teacher's influence while group work is an interactive communication among three or more learners attempting to accomplish a task under the general guidance of a teacher-facilitator.

Pair work and group work in the language classroom allow learners to have better control over learning activities and participate more in the learning tasks than they would in the traditional classroom (Nunan, 1991). Moreover, teachers in the

traditional language classroom often restrict learners to questions which require one word or two-word answers that limit their use of a variety of linguistic items. In such situations, learners would be subjected to their teacher's immediate error correction, with a view towards achieving grammatical accuracy. However, learners working in pairs or groups are more encouraged and motivated to use the target language, even when their peers initiate error correction (Long & Porter, 1985).

Edwards (2005) investigated the occurrence of exploratory talk amongst students aged between 11 and 16 in small groups, in secondary school mathematics classrooms in the United Kingdom; the finding of the study indicates that the students exposed to peer dialogue were more involved in classroom talk. One of the findings of a study conducted by Liqun and Xiubo (2011), on how to improve students' reading ability and self-development of vocabulary through group and pair work, indicates that while the performance scores of the students in the experimental group increased in reading, listening, vocabulary and structure, the students were also more expressive during communication.

Pair work provides a psychologically positive influence on the classroom's climate during the instructional process. Language learning experience is both emotional and psychological. Learners' language ability and language use in the traditional classroom is likely to be hindered by some psychological factors such as lack of motivation, poor levels of self-confidence, anxiety and fear of error in language use. However, when learners work in pairs or groups, the influence of such psychological factors is reduced as they work and not being observed and monitored for grammatical correctness. As learners interactively communicate in pairs or group, they employ communication techniques such as agreeing, disagreeing, negotiation of meaning and clarification to foster social interaction (Choudhury, 2005; Martine,

2006).

The use of pair work or group work in language teaching promotes a series of verbal interactions, spontaneous meaningful oral communication and collaborative learning among learners. The technique of pair work allows learners to evaluate their contributions and develop new knowledge as well as self-confidence in the use of language in authentic contexts and will hopefully lead to improvements in their communicative abilities (Choudhury, 2005; Matera, 2008). Maden (2010) investigated 62 Turkish undergraduates enrolled in a native language teacher course. His findings reveal that the majority of the students perceived that the Jigsaw IV enhanced their self-confidence in the use of the language and improved their levels of cooperation, interaction and active participation in the classroom.

Despite the numerous benefits of using pair work or group work in an English language classroom, teachers face a range of challenges while implementing pair and group work activities. Planning, preparing, and coordinating group work or pair work activities are time consuming. Sometimes, group work demands more of teachers' effort and creative ability than the adoption of traditional methods. Besides, paired or grouped learners rarely practice enough or complete tasks assigned to them because they always have limited time in the classroom (Matera, 2008).

Maden (2010), in a study with Turkish undergraduates, found that the students viewed the group work teaching strategy as a time consuming approach. With grouped L2 learners, emphasis is directed towards message communication, at the expense of linguistic correctness and completeness of language form (Hedge, 2000). Such a practice portends danger to L2 learners' development of communicative skills because learners may develop "undesirable fluency" while communicating anyhow with linguistic items that lack linguistic correctness.

One of the ways to build cohesiveness within group work is by having a comfortable seating arrangement that facilitates interaction. Teachers face the challenge of the physical facilities needed to create comfortable seating arrangements suitable for group activities. When learners do not sit face-to-face, the purpose of task engagement may be defeated because side-by-side seating arrangements do not always facilitate effective classroom discussion and management of groups requiring teacher's assistance, so as to be actively involved in tasks (Hedge, 2000; Martine, 2006; Puente & Tajonera, 1999). Additionally, a few outspoken learners sometimes dominate group activities, thus leaving the task completion to the few assertive learners. As a result, the slower and less confident learners in the class are disadvantaged (Puente & Tajonera, 1999).

A number of teachers are resistant to using pair work and group work in language teaching because of the volume of noise generated during classroom discussion (Matera, 2008). Of course, when learners are truly engaged in dialogic discussion, positive noise, which may be disturbing to the language teacher or neighbouring classes, is inevitable. In addition, during group activities, learners who find tasks too complicated or confusing may regard the classroom as dull and uninteresting and thus switch to the use of mother tongue in an attempt to seek clarification among themselves (Martine, 2006). For instance, Pellowe (1996) conducted an action research on how pair work can prompt and sustain students' communication during pair-work activities. The outcome of the study revealed that students do not maintain the use of English to improve their fluency while working in pairs with other students, to accomplish communicative tasks. Martine (2006) warns that students' use of their mother tongue in an English classroom may have a serious negative impact on their English communicative skills' development.

It is worth noting that the novelty of a new pedagogical strategy is not enough to ensure effective classroom teaching and learning. Rather, teachers' and students' attitudes are particularly significant not only to achieving educational objectives, but also towards effective adoption and use of pedagogical innovation in the classroom (Gilakjani & Leong, 2012). Similarly, Savignon and Wang (2003) reiterate that the attitudes of the teacher and that of the students regarding effective implementation of an instructional strategy should not be neglected. Thompson (1996) and Sato and Kleinasser (1999) further argued that an understanding of teachers' attitudes would help to determine the extent of success in the implementation of new teaching methods.

3.18 Personal Characteristics and Language Learning

Some personal characteristics such as age and gender are some of the widely discussed variables of individual differences in second language (L2) acquisition (Ellis, 1985; Singleton, 2001). An understanding of age and gender factors, to some extent, provides insight about how they contribute to the quality of L2 learners' input and output at all stages of language learning (Shehadeh, 1999).

3.18.1 *Age and Language Learning*

There is yet to be a consensus among researchers about the influence of learners' early exposure to L2 learning on their levels of proficiency attainment (Garcia-Mayo, 2003; Singleton, 2003). The critical period hypothesis was prompted by the observation that adults may attain a high level of proficiency in a language but not necessarily sustain native-speaker's accent while children are able to attain native-speaker's competence (Garcia-Lecumberri & Gallardo, 2003). Studies on the effect of age on learners' acquisition of L2 have either confirmed or disproved Lenneberg's

(1967) critical period hypothesis. Lenneberg argues that a child acquires a language best from about age 2 to puberty, after which the brain loses plasticity. This neurolinguists' hypothesis emphasises that, the more the plasticity of the brain, the easier and quicker L2 acquisition takes place (Shakouri & Saligeh, 2012).

Between ages 1 to 7, children acquire necessary skills essential for extended discourse. At early years, children come into non-native language learning classrooms with different first language (L1) skills and learning abilities. At age 5, individual child's language baggage starts to influence the rate his conversational skills' development (Cameron, 2001). Collier (1987) after a review of literature contends that children between ages 8 and 12 are more efficient, and acquire language more than those who are between 4 and 7 years. However, Grabiec (n.d) argues that younger learners do not learn languages as fast as older ones, but with longer exposure, they gain overall higher success.

Some language researchers and educators (Jaspel, 2008 cited in Shakouri & Saligeh, 2012; Munoz, 2006) opine that children are less inhibited to express themselves in a target language because they are more prompted to interact with other people in a naturalistic environment than adults do. Gomez and Gerken (2000) argue that children acquire a language faster and easier than adults because the former do not consider language structure when communicating with the language. MacSwan and Pray's (2005) study on the influence of age on English proficiency development between young and older school revealed that, although younger children require more time to achieve proficiency in English than adults, they learn English faster than the older ones. Similarly, Cenoz (2003) investigated whether or not the rates of language acquisition for older and younger children were the same. Cenoz reported that, among

135 primary and secondary school students in Gipuzkoa, younger learners were more positively disposed to language learning than the older ones.

Cameron (2001) notes that children up to puberty stage do not find it easy when using words that express cause and effect, coordinators (but, and yet), and clauses introduced with “although” or “unless”. Though children who start learning a language early develop and maintain a higher level of language skills than adults who start late, children who are early-start language learners are slower in learning grammar, and make slower progress of the L2 than adult learners. After puberty, adults retain their accent when acquiring a second language while younger learners have more accent free pronunciation (Collier, 1987). Gomez and Gerken (2000) conclude that language acquisition during adulthood results in abnormal linguistic competence. In other words, children are more likely to acquire language effortlessly, use the target language functionally and successfully than adults because they do not focus much on language vocabulary and grammar rules.

3.18.2 Gender and Language Learning

Gender is a fundamental factor that distinguishes and categorises individuals in every society. The role of gender in language learning has attracted the attention of L2 educators and researchers because of its recognition as a type of individual difference. Gender factor has become a social practice; hence it drives people’s actions, beliefs, and how language is learned (Pavlenko & Piller, 2008).

There is gender disparity in L2 learning classrooms. There is a growing concern that male students are less motivated to learn a language as L2 (Csizer & Donyei, 2005; William, Burden & Lanvers, 2002). Moreover, gender differences have been

associated with language learners' extent of negotiation of meaning, dominance during interaction, interpersonal relations, and opportunity for both comprehensible input and output. For instance, more interruptions and dominance over conversation have been associated with males than females. Males talk more and initiate self-and other-initiated repairs while females employ such conversation to improve their level of comprehensible input (Long, 1996; Pavlenko & Piller, 2008). Female learners perform better than males in tasks relating to content comprehension, vocabulary acquisition and retention. Research findings also revealed that females were more willing to learn L2 than male learners (Csizer & Donyei, 2005). Wharton (2000) and Shmais's (2003) study found no gender differences in the strategy used by language learners.

It is worth noting that, gender disparity in L2 learning may be socio-culturally connected, because some cultures permit inter-gender interaction in social situations than other cultures (Celce-Murcia, 1997; Shehadeh, 1999). For instance, Abu Radwan (2011) investigated the effects of L2 proficiency on language strategies used among 147 undergraduates at Qaboos University. The results indicate no significant differences in the overall strategy used by the male and female students. However, male students were found to employ more of social strategies than females because of the cultural background which limits females' levels of socialisation.

3.19 Assessment Language Speaking Skills

3.19.1 The Need for Speaking Skills Assessment

Speaking skills occupy a significant place in learners' development of communication skills. Conducting a reliable and valid speaking assessment in second or foreign language has been a challenge to teachers. The importance of speaking skills

in language instruction underscores the relevance of oral proficiency testing in language assessment (Fulcher, 2000; Kim, 2003).

Assessment of language speaking proficiency helps to predict an individual's performance in the use of the target language for real-life communication (Itkonen, 2010; Underhill, 1988). Good communicative speaking tests should reflect test-takers ability, authentic real-life communication and the content of what students have been taught as contained in their textbooks (Bachman, 1990; Lado, 1961 cited in Fulcher, 2000; Morrow, 1982). Similarly, the length of speaking tests-items should be structured to fit the school-age and the English proficiency level of the examinees (Fulcher & Davidson, 2007; Kim, 2003).

3.19.2 *Speaking Skills Assessment Techniques*

One of the challenges in language instruction is identifying the best approach in assessing students' progress in speaking skills. Examiner's choice of technique in the assessment of learners' speaking skills is also influenced by the context for testing the tasks, level of difficulty of the tasks, and learner's age (Luoma, 2004; Nattress, n.d). Some of the techniques and test tasks employed by language teachers in assessing language students' speaking competence include:

3.19.2.1 *Oral Interview:* This elicitation technique requires students talk with someone. It is a structured testing method guided by the use of prepared list of questions. It is a direct face-to-face oral interaction between the interviewer and the test-takers. The technique provides learners a genuine sense of communication (Cambridge Indonesia, 2013; Underhill, 1987).

3.19.2.2 Conversational Exchanges: This technique involves asking students to respond to a series of situations. Sometimes, students are allowed to make sentences from such mini-situations using some patterns of expression (O’Sullivan, 2008).

3.19.2.3 Picture Cues: The technique is suitable for language learners with limited English proficiency. Different pictures and charts can be presented to learners for a description of events happening in them. Students use the picture(s) to tell a story (Cambridge Indonesia, 2013; Underhill, 1987). The objective of this technique is to check how well individual test-taker can recount sequence of actions (Luoma, 2004).

3.19.2.4 Oral Presentation: With this technique, a learner is guided to choose a topic of interest. Students normally have between 10 seconds and one minute to prepare for the oral presentation. Normally, individual student’s presentation takes between 3 to 10 minutes. This technique is a good way of engaging language learners in authentic and communicative activity (O’Sullivan, 2008; Underhill, 1987).

3.19.3 Grading Learners’ Speaking Ability

Assigning scores to learners’ speaking ability has been a issue in speaking assessment because of the complexity of speech act. Scoring of speaking tests should be based on real-life outcomes and the various forms of communicative competence (Fulcher, 2000). According to Nattress (n.d), if the goal of speaking assessment is to evaluate learners’ improvement in their ability to communicate orally, scoring their performance should be based on the fluency assessment of their language use rather than focusing on grammar usage. Success in speaking is best measured through performance rating scale (Fulcher, 2000; Rubin, Daly, McCroskey & Mead, 1982). Upshur and Turner (1995) cautioned that the use of published rating scales for

assessing students' speaking ability may cause problems because they are too broad to capture students' ability or language progress within some contexts.

Scoring is a fundamental issue of consideration in language learners' speaking proficiency assessment. There are two types of scoring modes (holistic scoring and analytic scoring) language examiners employ in assessing speaking skills. Holistic assessment provides an overall impression regarding the language ability of individual student in accomplishing tasks. In analytic assessment, scores are assigned to students' responses to the different components of speaking tasks (Luoma, 2004; Rubin, Daly, McCroskey & Mead, 1982). Cambridge Indonesia (2013) suggests a 0 to 5 point-scoring-scale on how learners' English language speaking competency can be assessed using the holistic scoring system. The procedure involves assigning:

- 5 points to learner's use of English with few noticeable errors
- 4 points when a learner uses English with occasional errors, which do not obscure meaning
- 3 points for a learner who uses English with occasional errors, which expression of meaning
- 2 points to learner's use of English with frequent rephrasing of sentence construction and/or restrict the use of the language to basic structural patterns
- 1 point for learner's use of English with lots of errors in word order, which thus obscures meaning
- 0 point to a learner who uses English un-reasonably with lots of word order errors.

In this study, the researcher employed the holistic scoring mode to assess pupils' speaking competence. This was done with a view of focusing on examining the L2 learners' individuality in the use of the English language in communication rather than focusing on grammatical structure.

3.20 The Nature and Components of Attitudes

Attitudes are a significant and indispensable concept of social sciences, yet researchers and educators are yet to have a consensus definition of the term (Ferguson & Fukukura, 2012). According to Thurstone (1931), attitudes are how favourable or unfavourable a person could be towards an object. Since attitudes are inseparable from an individual's behaviour, Likert (1932) relates attitudes to a certain range within which responses move.

The above definitions of attitudes relates to thought and emotions. However, with the inclusion of the behavioural component, Allport (1935: 810) describes attitudes as "mental and neural state of readiness to respond to organised thought experience, exerting a directive and/or dynamic influence upon the individual's response to objects and situations with which it is related". Schwarz and Bohner (2001) illustrate earlier definitions of attitudes as being broad and place much emphasis on human behaviours. From the evaluative perspective of attitudes, Lind (1984) refers to attitudes as the degree of positive or negative feeling associated with individual's response to a specified psychological object. Similarly, Zanna and Rempel (1988) define attitudes as the grouping of a stimulus along evaluative dimensions. Eagly and Chaiken (1993) portray attitudes as the psychological tendency expressing assessment of an entity with some degree of like or dislike.

Moreover, Maio and Haddock (2010) define attitude as the overall assessment of an attitude object based on cognitive, affective and behavioural information available to the evaluator. Fishbein and Ajzen (1975) explain attitudes as predispositions to behave in a way. The idea of Fishbein and Ajzen implies that attitudes can be measured from the bipolar dimensions of virtuous or evil, harmful or beneficial, pleasant or unpleasant and likeable or dislikeable (Ajzen & Fishbein, 2000; Maio & Haddock, 2010). Attitude can differ in direction (positive or negative or neutral) and strength (weak or strong) while stable attitudes are more likely to influence behaviour (Brown, Manogue, & Rohlin, 2002; Cunningham, Zelazo, Packer & Van Bavel, 2007).

In summary, attitudes reflect an individual's emotions and behaviour. It is an expression of the behaviour towards the object. Therefore, attitudes are a person's behaviour towards a thing based on his or her beliefs, values, personality and emotions or feelings.

Attitudes are multidimensional, and consist of three key components, which are affective, cognitive and behavioural attitudes (Ajzen & Fishbein, 2005; Kwon & Vogt, 2008). The affective attitudes refer to the magnitude and the direction of affect towards the psychological object. Affective attitudes imply individual's positive or negative feelings which prompt ones behaviour towards an object (Eagly & Chaiken, 1993; Lind, 1984). Cognitive attitudes refer to a person's level of knowledge about attributes and consequences. It is the formation of beliefs about an attitude object based on ones cognitive ability about the object (Ajzen & Fishbein, 1980; Kwon & Vogt, 2008). The behavioural attitudes reflect an individual's reaction towards the attitude object (Eagly & Chaiken, 1993; Kwon & Vogt, 2008)

Figure 3.4 illustrates the threefold interaction among the attitudes' components and their relationship with attitudes. The cognitive attitudes influence and depend on the affective and behavioural attitudes' elements because of the threefold interaction among the three components. The implementation of behaviour is a function of the interaction between the three components of attitudes, and in turn, attitudes influence the three factors (Clore & Schnall, 2005; Olson & Stone, 2005).

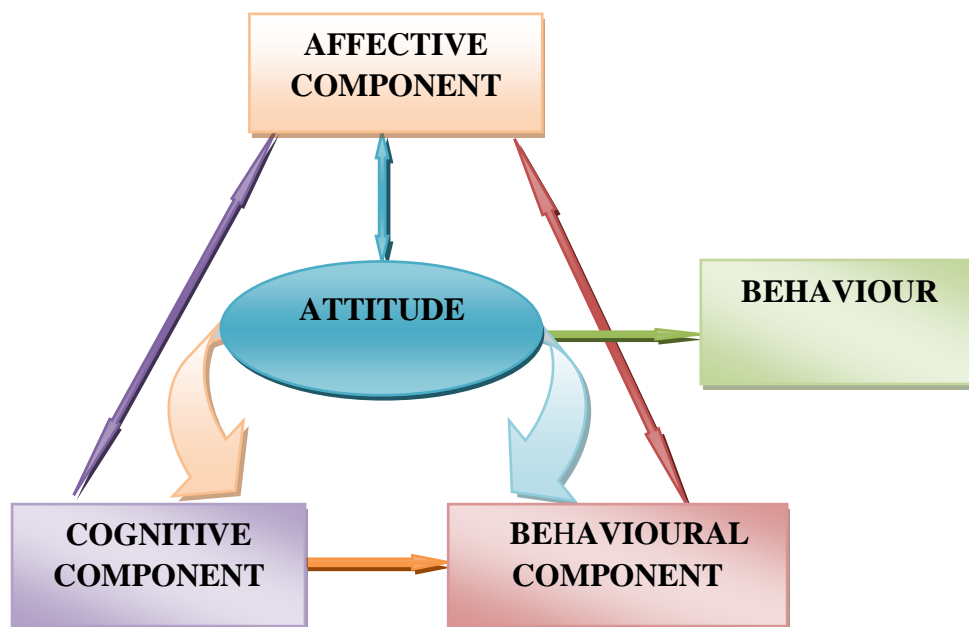


Figure 3.4: *Interaction of Attitudes Components* (Sabates & Capdevila, 2010)

3.21 Why Study Attitudes?

Across the globe, various pedagogies are emerging from time to time, but successful implementation of these strategies within the school curriculum connects to the attributes of the teachers and learners. One of the factors that affect effective teaching is the attitudes of the teachers and students. Attitudes and beliefs are socioculturally constructed and influence person's actions (Rivalland, 2007). The proposition of theory of planned behaviour (TPB) indicates that, attitude is a significant factor that influences behaviour (Ajzen, 2001; Fishbein & Ajzen, 1975).

Understanding students' attitudes is valuable in attaining educational goals as well as determining the areas where assistance has to be given (Estrada, Batanero, Firtuny & Diaz, 2005; Prokop, Tuncer & Chuda, 2007). Adverse attitude has the predictive power to contribute to learners educational deficits (Gregg & Washbrook, 2009; Liu, 2005). Attitudes toward a discipline or a topic have the potential of determining the extent to which students learn and apply what they learn outside the classroom. In the classroom, actively engaged students are more likely to have a higher level of positive attitude to schooling than those who are passive and are recipients of information (Khoo & Ainley, 2005). Similarly, understanding teachers' motivations, perceptions and beliefs about new pedagogy are essential since their perceived usefulness of the new approach would make its integration in the classroom easy (Ottesen, 2006; Hew & Brush, 2007). Teachers' beliefs about new pedagogy are not easy to change while their resistance to change has a negative influence on their readiness to adopt new instructional strategy (Hall, 2005; Mackenzie, Hemmings, & Kay, 2011).

3.22 Moderators of Attitudes towards L2 Learning

Various internal and external factors influence language learning (Wang, 2006). One of the crucial factors affecting students' attitudes towards second language (L2) learning is motivation (Purdie, 2003). Children who understand the significance of a language in a society tend to be more positively disposed to learning the language as compared to those spoon-fed in the classroom. Moreover, when the teacher makes the lessons more participatory, playful and lively, students tend to be motivated to learning a language (Klinger, 2002). Increased contact with the speakers of a target language has influence on the attitude towards learning the language (Alsayed, 2003; Robinson-

Stuart & Nocon, 1996). However, Massey (1986) posits that the more students study a target language, the more their negative attitudes increase.

Using the IELTS test scores of 50 participants to investigate factors that contribute to success in English learning, Alsayed (2003) found that individuals who are exposed early to English and whose parents speak decent English tend to show more favourable attitudes towards learning English. However, the research findings of Alsayed (2003) also show that low proficient English speakers show more positive attitude towards learning English than the highly proficient ones because of their intention to improve their English skills.

In the process of teaching English to non-native speakers, teachers sometimes employ learners' first language (L1) to facilitate understanding of concepts (Butzkamm, 2003; Larsen-Freeman, 2000). According to Brown (2000) and Nasary (2008), teachers' use of L1 while teaching English as L2 or foreign language can facilitate learners' positive attitudes towards learning L2. Brown's and Nasary's claim is based on the fact that the use of L1 provides L2 learners the opportunity to express themselves. In a study which investigated the role of L1 in L2 learning among 85 English language foreign students, Nasary (2008) reported that the level of proficiency in L2 was not a determining factor of students' attitudes towards learning English.

Anxiety may influence students' readiness to learning a second language. Students' expression of uneasiness, frustration, self-doubt or apprehension has influence on their attitude towards learning a non-native language. L2 learners with language anxiety do not volunteer to answer questions and participate in activities, come to the class unprepared, avoid speaking the target language in the class and are less willing to

communicate with others (Gregersen, 2005; Wei, 2007). Wei (2007) investigated 57 Chinese undergraduates' pattern of anxiety in the EFL classroom. His findings showed that anxious students panic to speak when they are unprepared. Moreover, such students do not attend classes, worry about the consequences of failing English, and are not sure of themselves when they speak.

Further research on attitudes shows that the creative ability of learners and willingness to embrace change influences their attitudes to new methods (Bennett & Kottasz, 2001) and technophobia dictates students' attitudes to technology-led instruction (Bennett & Kottasz, 2001). Moreover, teachers' resistance to change and the contexts of introducing new methods influences their preparedness to accept and adopt new instructional techniques (Bennett, 2001; Meyer & Goes, 1988). For instance, in a study about the attitudes of 193 kindergarten teachers' from New South Wales and Victoria towards the teaching and learning of writing, Mackenzie, Hemmings and Kay (2011) report that less experienced teachers were less positively disposed to a Vygotskian approach of teaching writing.

Likewise, Bennett's (2001) study on lecturers' preparedness to adopt new teaching methods shows that 72% of the 296 lecturers were more favourable to the use of new teaching approaches because they found the technology-oriented or group-work based method useful in making the learning experience more appealing to students. Therefore, the power of influence over human behaviour underscores the significance of attitudes in life. The meaning attached, and reactions to what goes on in sociocultural settings reflect individual's sense of evaluative assessment.

3.23 Measurement of Attitudes

Attitudes are not easily observable by sight, but can be inferred from responses; hence individual's attitudes can be measured by direct or indirect means (Fazio & Olson, 2003). The direct means involves the use of a self-report questionnaire that elicits respondents' like or dislike about an object. Self-report often consist of a summated rating scale first developed by Likert (1932) which requires the respondents to express the degree of their feelings towards a statement (Ferguson & Fukukura, 2012; Maio & Haddock, 2010). With the Likert scale, strong and positive attitudes correspond with a "strongly agree" response for positively worded items or "strongly disagree" for negatively worded items generated to discourage respondents' tendencies to agree or disagree with every item (Maio & Haddock, 2010). Indirect attitude measures are inferences about a person based on performance. Sources of inferences include sequential priming tasks, affective priming tasks and implicit association tests. Furthermore, indirect attitudes are becoming popular in psychological research. The unconscious mental associations seemingly complex to measure with self-report can be assessed through indirect means (Brunstein & Schmitt, 2004).

The direct attitude measure has been criticized for some reasons. First, the direct attitude measure sometimes overlooks some issues (Morrel-Samuels, 2002). Secondly, the approach measures the complexity of attitudes without much consideration of the behavioural component of attitude especially when the intention is to predict learners' behaviour (Allport, 1935; Kothandapani, 1971). According to Rajecki (1982) and Rosenberg and Hovland (1963), there is no relationship between like or dislike when used in a statement on Likert scale with respect to the attitude that statement it represents. Absolute reliance on data collected through direct measure of attitude may

lead to a misrepresentation of the research participants; hence the need to combine the direct and the indirect means of attitudes measurement. In this study, the researcher used data from the video recording of classroom instruction and interviews to augment the questionnaire data used to measure pupils' attitude towards the English language lesson and the interventions.

Chapter Four

RESEARCH METHODOLOGY

4.1 Introduction

One of the aims of this study is to make a comparative analysis of the effects of the communicative approach, Personal Response System (PRS) and the traditional transmissive method on the communicative competences and attitudes of the educationally disadvantaged Nigerian pupils in the ESL classroom. This chapter presents an overview of issues related to the procedures involved in the study which include the guiding research philosophy, research design, participants, pilot study, research instruments, reliability and validity of instruments, data collection procedure, data analysis, ethical issues and conclusion.

4.2 Guiding Research Philosophy

The paradigm considered to be more relevant to this study is the pragmatic paradigm. Pragmatic paradigm is one of the philosophical foundations that provide a framework for mixed methods research. According to Creswell (2003), pragmatic paradigm connotes the overall approach to research which involves mixing data collection methods and data analysis procedures within the research process. Pragmatic paradigm is relevant in a study of this type when a set of research questions are designed to gather data about the actions and behaviour as well as the attitudes of research participants (Brannen, 2005; Creswell, 2009; Mertens, 2010). Mixed methods involves the combination of qualitative and quantitative research techniques, methods and approaches into a study during data collection and analysis as well as interpretation of findings (Bazeley, 2004; Johnson & Onwuegbuzie, 2004). It is a creative, inclusive,

pluralistic and complementary form of research paradigm employed by researchers in answering research questions. Mixed methods involves researchers' making discovery, testing hypotheses and relying more on best of a set of explanations to understand findings (Johnson & Onwuegbuzie, 2004).

Sometimes, research issues are relatively complex and thus require that data are collected from different perspectives; as such, researcher needs to employ mixed methods in order to enrich the understanding of what a single approach would have produced (Creswell, Klassen, Clark & Smith, 2011; Sale, Lohfeld & Brazil, 2002). The integration of mixed methods in research increases the strength and reduces the weaknesses of either the quantitative or the qualitative methods of data collection in a study. The suitability of the mixed approaches in research is to provide stronger evidence for conclusion through collaborated findings and as well generate more complete data; so that findings derived from an approach can be employed to enrich the insight achieved through the second approach (Creswell, Klassen, Clark & Smith, 2011; Curry, Nembhard & Bradley, 2009; Johnson & Onwuegbuzie, 2004). The mixed method approach of data gathering and analysis is used in this study so as to make further elaboration and clarification of the findings from the quantitative method with the qualitative data results (Bryman, 2006). Furthermore, in order to draw on the strength of the two methods to offset the weakness of both methods, the qualitative and the quantitative methods are thus combined in this study with respect to data gathering and data analysis.

The researcher's interests here are to gather data on pupils' academic performance (communicative competence in English language) and to gain a deeper understanding of the factors that might have contributed to the outcomes of the study.

Qualitative data were collected through semi-structured interview, personal observation augmented with audio and video recording. Quantitative data were collected through the administration of structured questionnaires and performance tests. Providing pupils and teachers the opportunity to speak during interviews gave the researcher a better understanding of the participants' attitudes in English language classrooms. The interviews also provided a better insight about the feelings of the learners and the teachers toward the effectiveness of the PRS and the communicative approach as well as determining whether the interventions are worth being sustained.

4.3 Research Design

The purpose of a research design is as a framework to assist the researcher to provide answers to the already stated research questions or hypotheses in as valid, objective and accurate manner as possible (Kerlinger, 1986). The selection of a research design is dependent on the nature and the extent of the information the researcher intends to obtain. This study seeks to investigate the effectiveness of teaching strategies (CA and PRS) as alternative to the traditional, transmissive way of teaching English. To explore this in a controlled way, the research was undertaken as an experimental study. Scholars describe experimental study as that which occurs when the researcher quests beyond the description of observation, but desires to make inferences about the contributors to the occurrence of knowledge or event(s) by manipulating conditions and the application of treatment (Beaumont, 2009; Shadish, Cook & Campbell, 2002).

However, the use of true experimental design has been criticised in educational settings because it lends itself to artificiality and deception. Artificiality may occur in

true experiments within education settings because experiments conducted in the laboratories are not typical of real-life situations. The experimenter's control over the laboratory conditions in a true experiment may distort human participants' behaviour in a social setting like the school system. Deception in a true experimental study occurs because in the process of randomisation, participants get to know that their behaviours are observed, and thus act to suit the purpose of the research (Beaumont, 2009; Schram, 2005).

Though this study is experimental in nature, the adoption of true experimental design became impossible because the study was conducted in social settings and it was unsuitable for the researcher to control the experimental conditions (Campbell & Stanley, 1963). In other words, the quasi-experimental design utilising pre-test post-test with non-randomised control was employed in this study. The quasi-experimental design was adopted in this study because it was practically and ethically infeasible for the researcher to randomly assign pupils into schools and subjects to treatment (Moore, 2008; Stuart & Rubin, 2008). With quasi-experimental design, the treatments which occur before the effect is measured are manipulated by the researcher (Shadish, Cook & Campbell, 2002).

The choice of the quasi-experimental design for this study was further based on the facts that the researcher is interested in addressing questions on the effectiveness and impact of the two new teaching strategies (the communicative approach and the PRS) on pupils' learning outcomes. Moreover, the researcher was not able to randomly assign the teachers and pupils into groups (schools/classes) in order not to disrupt the schools' settings because the organisational structure of the school, class, and the

teacher assigned to the class was pre-existing before the intervention. The researcher was careful to ensure that the pupils in the three schools involved in this study were equivalent in some key aspects such as location, quality of teachers, curriculum content, textbooks used and first language spoken or language of immediate environment.

One of the best ways to reduce the selection problem is to make use of non-randomised quasi-experimental design which helps to control for groups' pre-treatment differences (Gribbons & Joan, 1997; Grimshaw, Campbell, Eccles & Nick, 2000); hence the relevance of the design to this study. In this study, the pedagogical strategies which formed the independent variables were the lecture method, PRS and the communicative approach, while gender was also treated as covariate in the course of analysis. Meanwhile, the basis of comparison was the teaching strategies (the lecture method, PRS and the communicative approach) employed in the study.

Pupils from three schools were involved in this study. One of the schools (group A) was treated as the control group, while the other two schools (groups B and C) were assigned to treatment conditions. Subjects in the control group (A) were exposed to the traditional instructional delivery method, while pupils in the experimental group (B) were exposed to the PRS and those in the second experimental group (C) received the communicative approach intervention. Introducing the communicative approach intervention group in this study was aimed to distinguish between the effects of introducing a more participative type of teaching in the ESL classroom and the effects of introducing interactive technology (PRS) which also requires the use of a communicative approach.

This study involved the gathering of data from human participants. The researcher's awareness of the ethical implications of collecting information from the groups of participants involved in this study; in particular in relation to the children and the desire to ensure maximum cooperation of the respondent in the process of the study; hence basic ethical issues were given due consideration.

4.4 Ethical Issues

Ethical guidelines consistent with the British Educational Research Association's (2004) revised ethical guidelines for educational research were followed in undertaking this study. Between August and the first week of September, 2010, the researcher sought permission from the Education Officer (E.O.) and the Executive Secretary (E.S.) to Ijebu North Local Government Education Authority (LGEA). The permission was sought to: engage some primary school pupils and teachers in the current PhD research work and second to organise a training event for the teachers on how to effectively integrate the proposed interventions in ESL classrooms. The researcher also met with the head-teachers of the schools involved in this study between January 10 and 14, 2011 to introduce himself, further gain their consent and support for their teachers' and pupils' involvement in the study.

Apart from giving the teacher-trainees the Teachers' Consent Form (see appendix 1 for a copy of the consent form) to sign during the training, the teachers in the three schools also introduced the researcher and the two research assistants engaged in the study to the pupils. Pupils in each participating school were told that the research group was carrying out a research, but that the pupils' participation was voluntary. The pupils were further informed that, anyone of them could decline to participate in the study, and in the course of the research, any one of them could withdraw his or her

participation without being penalized. Teachers assured the pupils that the end of the term's assessment would not in any way be affected by their performance or participation or non-participation in the study, The researcher also sought the parental permission by giving pupils Parents' Consent Forms through their teachers. All the parent's consent forms given to the pupils were retrieved with positive responses. Pupils were further assured that by no means would their identity be revealed to anyone except the research group.

4.5 Participants

4.5.1 Research Population

The population of this research was pupils in primary six (aged between 10 and 13 years) in the educationally disadvantaged primary schools in Ijebu-North Local Government (INLG) of Ogun State, Nigeria. Ogun State was chosen for this study for convenience reasons; it is the home state of the researcher; hence research activities in all locations was easily coordinated and monitored. The choice to conduct the study in Ogun State also gave the researcher a better chance to reduce some of the assumed limitations (cost, coordination and monitoring of research activities and time management) to the study. Moreover, Ogun State has more of her primary schools located either in the suburban or rural areas; hence its relevance to the study.

4.5.2 Pupils' Sample and Sample Procedure

The sample of the main study was 99 pupils selected from three educationally disadvantaged primary schools in Ijebu-North Local Government. The researcher's choice of the above sample of learners was based on the fact that the primary 6 is very important in Nigerian education system because it is the stepping-stone to enrolling in secondary school education. In addition, English language is introduced to primary

school pupils in Nigeria as the medium of instruction from the fourth year of primary education. Therefore, one would expect that at primary six, pupils would have acquired some communicative skills that could enhance the use of the target language in real-life situations. The study employed a multi-stage sampling technique for sample selection. First, the list of all one hundred and two (102) primary schools in IJNLG was compiled. All schools across the divisions were then stratified into educationally advantaged and disadvantaged groups.

The educationally disadvantaged schools were stratified into two groups based on the mode of pupils' placement into classes at primary six. Amongst the schools which conduct placement tests in the beginning of first term of primary six to identify the academically weak and strong students with a view of allocating pupils of varying or mixed academic abilities in the same classes; three schools were selected to participate in the study. Schools with pupils of mixed abilities in classes were chosen because majority of schools in Ogun State and all other states in Nigeria employs the mixed-ability method of placing pupils in classes.

The three schools involved in this study were selected from the three geographical divisions of Ijebu-north local government area. To select a school from each division, the names of schools (which conduct placement tests in the first week of first term of primary six) in each of the three divisions were randomly selected (Reeves, 1992). Moreover, selecting from different location helped to eliminate group effects that could subject pupils in any of the groups to modifying their behaviours. Moreover, selection of groups from different location was also done to simply minimise the "Hawthorn effect" so that pupils in any of the intervention groups did not see themselves as special participants to the extent that their psychological and behavioural

attitudes were not influenced during the study (Bulman, Garcia, & Hernon, 2012, Coombs & Smith, 2003).

Apart from wanting to avoid easy communication among pupils in different schools, the selection was also made to ensure that each geo-political region of the local government (context of the study) was represented in the study. Furthermore, the selection was done to ensure that no politically sensitive communities was disappointed, and to prevent a situation whereby the researcher would be lured by the officials of the local government education authority to have the study conducted in their favourite schools. In each participating school, the study was conducted in the classes of the trained teachers who were selected to participate in the main study.

At the onset of the study, 151 pupils (the communicative approach group = 47, the PRS group = 58 and the control group = 46) who constitute the members of each class in the three participating schools were involved in the study. However, at the end of the study, the number of pupils who fully completed all tests and as well responded to all questionnaires at the pre- and post tests was 99 (the communicative approach group = 32, the PRS group = 41 and the control group = 26). In other words, pupils who did not complete pre- and post tests data of all the instruments were excluded from the study's sample. The attrition rate witnessed across the schools was because pupils who defaulted in the payment of the "administrative fee" and school levies for the term (see section 2.3) were deprived entry into classes, and participation in the end of the term's examination.

4.5.3 *The Teachers' Sample*

Prior to training the teachers, some criteria were chosen as the standard of measuring trainees' performance. The selected criteria were generated based on the researcher's review of some literature (Berk, 2005; Little, Goe, & Bell, 2009; Schacter, 2001). After listing the criteria, they were reviewed by some primary school teachers and an English language lecturer. All the teachers were given the opportunity to have practical demonstration of the knowledge gained during the training. During the practical demonstration, the researcher and three independent evaluators assessed each trainee on effective use of the communicative approach and the PRS in ESL classrooms based on the set criteria (see appendix V).

The scores of all the evaluators were summed up and the mean was calculated for each of the trained teachers to determine their individual performances. Amongst the 17 primary six teachers purposefully trained on the effective use of the communicative approach and PRS in English language classrooms, 5 teachers were selected based on their outstanding performances measured after a set of criteria. Also, three other teachers (who were not involved in the training) from different schools were treated as control groups' tutors during the pilot and main studies. Meanwhile, one of the 5 selected trained teachers was mainly engaged as a member of the review committee, and independent rater involved in the inter-rater assessment.

So, eight teachers in all participated in the pilot and the main studies. Four of the teachers were involved in the two phases of the classroom teaching during the pilot study (2 for the intervention schools and 2 for the control group). Three teachers were involved in the main study (see sections 4.6; 4.92 for the details of the pilot and the main studies). Moreover, in each of the participating school the study was conducted in

the primary six classrooms officially assigned to the selected teachers. To gather information about the attitude of the teachers towards the PRS and the communicative approach, each teacher assigned to the respective classes of the treatment groups for this study were engaged in one-on-one interview.

4.6 The Pilot Study

In order to test the logistics and gather information that would be useful in improving the quality of the instruments and the interventions proposed for this research, a two-stage pilot study was conducted between October and December 2010. Three primary schools in Ijebu-North local government of Ogun State, Nigeria were selected for the pilot study. A total number of 148 primary six pupils participated in the pilot study, but after invalid questionnaires and tests were excluded, the final sample was 136 pupils (36 = the communicative approach group; 42 = the PRS group and 58 = the control group).

Engagement in a pilot study before the actual experiment is very important in social research. Pilot studies are regarded as the feasibility study undertaken by researchers to assess the logistics and as well to collect enough information helpful in the planning and improving the quality as well as the efficiency of the main experiment (Thabane et al. 2010). In most instances, there is the need to pre-test research instruments in order to identify possible flaws and thereafter refine the proposed design, instruments, methodology or research process. Moreover, pilot studies are undertaken to identify possible practical challenges (ethical, political, procedural or policy issues) the researcher may likely encounter and eventually affect the research process (Thabane et al., 2010; van Teijlingen & Hundley, 2001).

4.6.1 First Stage of Piloting

The first phase of piloting was conducted in October 2010. Three schools were involved in the first phase of the piloting. After selection, each school was randomly assigned to different treatment condition. The pilot study was done to determine the reliability of the proposed instruments (English Language Listening Test, English Language Speaking Test, Pupils' Attitude to English Lesson Questionnaire, Pupils' Attitude to Clickers Questionnaire and Pupils' Attitude to Communicative Approach Questionnaire). The English Language Listening Test (ELLT) consisted of a comprehension passage and five questions, while the English Language Speaking Test (ELST) consisted of five (5) mini-guided-situation test items. Pupils' Attitude to English Language Lesson Questionnaire (PAELQ) consisted of 16 items, Pupils' Attitude to Clickers Questionnaire (PACQ) consisted 21 items, while the Pupils' Attitude to Communicative Approach Questionnaire (PACAQ) was an 18-item instrument.

The English language tests and Attitude to English Lesson Questionnaire were first administered on all participants before the teaching began in the control school and before the exposing pupils in the experimental schools to the interventions. Two weeks after the commencement of introduction of the interventions in all the participatory schools, the English language tests, and Pupils' Attitude to English Lesson Questionnaire were re-administered the second time. Similarly, the Pupils' Attitude to Clickers Questionnaire and Pupils' Attitude to Communicative Approach Questionnaire were also administered to assess pupils' attitude to the interventions at the second week of the pilot experiment. After the first stage of piloting, exploratory factor analysis (EFA) was performed on the survey instruments. EFA is used to

measure the dimensionality of research instruments. It is a process that involves the determination of the number of factors that can possibly explain the variations or correlation among a set of variables. In essence, EFA identifies the number of latent constructs as well as the underlying factor structure of a set of variable without imposing any preconceived structure on the outcome (Child, 1990; Surh, 2006).

The results of the reliability analysis showed that Pupils' Attitude to Clickers' Questionnaire (Cronbach's $\alpha = .14$) and Pupils' Attitude to Communicative Approach Questionnaire (Cronbach's $\alpha = .28$) were not reliable in any way. In view of the outcome of the EFA, the decision to increase the number of items in each of questionnaires and re-pilot the instruments became inevitable in order to possibly achieve stronger reliability indexes. The full results of the EFA are presented later in this chapter (see section 4.8.1). Thereafter, some modifications (further explained in section 4.8.1) to the instruments were made before the second stage of the piloting was undertaken.

4.6.2 Second Stage of Piloting

The second stage of the piloting was conducted between November and December, 2010. In the second phase of the pilot study, the three schools that participated in the first phase were used, but with a modification. The school which received the PRS intervention in the first the piloting stage was exposed to the communicative approach; hence the pupils earlier exposed to communicative approach were taught with PRS. Another school whose teacher did not participate in the training and in the first stage of the pilot study was engaged as the control group during the second stage of piloting. Meanwhile, with the head teachers' permission, teachers in the

experimental schools had to a shift from class A to B to avoid a re-administration of some of the instruments to the same set of pupils.

The instruments were first administered in all the schools between Monday and Thursday. The administration of the instruments was done in such a way that the Pupils' Attitude to English Lesson Questionnaire and English Language Listening Tests 1, 2, 3 and 4 were administered in the morning of each day. The English Language Speaking Tests 1 and 2 were administered in the afternoon of each-other-day in each school; all arrangement done in this way to reduce tests-boredom and stress on the part of the pupils and teachers. The English Language Speaking Tests, Pupils' Attitude to English Lesson Questionnaire, and English Language Listening Tests were administered the second time with a two-week time lapse between the first and second administrations.

4.7 Research Instruments

The study employed multiple methods of data gathering which involved a combination of quantitative and qualitative ways of data collection. According to Sommer and Sommer (1980), multi-method approach of data gathering is used to probe more deeply into significant issues inherent in the variables under investigation and to contribute a better understanding and the interpretation of the research findings. This study therefore gathered data through the use of questionnaires, performance test, video recording and interview.

4.7.1 Questionnaires

Questionnaires were used in order to generate adequate amount of quantitative data because it was impossible for the researcher to have all the time at his disposal.

Schools have an academic calendar that guides them and the researcher had to carry out the study at the limit of time set. Moreover, structured questionnaires were used in this study because researchers have argued that they are quicker to code and analyse than word-based data within a short time frame (Cohen, Manon, & Morrison, 2007). Questionnaires have also been reported to be ideal for statistical descriptions and yield more comparable data than qualitative data gathering methods (Sax, 1979; Bechofer & Paterson, 2000), and are useful to ensure participants' confidentiality. In view of the above, Pupils' Attitude to English Language Lesson Questionnaire, Pupils' Attitude to Clickers Questionnaire, and Pupils' Attitude to Communicative Approach Questionnaire were used in this study for quantitative data collection.

4.7.1.1 Pupils' Attitude Questionnaires

Pencil and paper-based Pupils' Attitudes to Clickers Questionnaire (PACQ), Pupils' Attitude to Communicative Approach Questionnaire (PACAQ) and Pupils' Attitude to English Language Lesson Questionnaire (PAELLQ) were used to collect quantitative data rating of the students' attitudes towards English language lesson and the interventions used in this study. Two considerations were taken into account in constructing the questionnaires for this study. The first was related to the dearth of research on the use of PRS and the communicative approach in the primary education. Secondly, there was a dearth of research instruments measuring primary school pupils' use of PRS and the communicative approach, and attitude towards learning in the ESL classroom. Therefore, due to the lack of pre-existing tested instruments, the researcher thus constructed instruments based on the literature reviewed. Similarly, the choice of a pencil and paper-based survey in collecting the feedback is based on giving the students the opportunity to provide the responses at their own pace.

After a review of literature, constructs to be measured were assumed, while items relating to them were generated. In order to therefore check whether the various listed items generated by the researcher actually measured the same construct, an exploratory factor analysis (EFA) was performed. Based on the content of the factors formed, the factors used in this study were named. Thereafter, items of all questionnaires used in this study were categorised into dimensions based on the SPSS item-loading output of the exploratory factor analysis performed after the second stage piloting. To determine the number of measured variables to be included in the analysis, variables with strong “goodness of fit” and which correlate together were loaded as a measure of the same factor during EFA (Costello & Osborne, 2005; Swisher, Beckstead & Bebeau, 2004).

4.7.1.2 Pupils’ Attitude to Clickers Questionnaire

The Pupils’ Attitude to Clickers Questionnaire (PACQ) was designed by the researcher because of the dearth of research instruments measuring attitudes of primary school pupils to the use of personal response system (clickers). In order to therefore have a research instrument whose content and language would be suitable to the target participants, PACQ was designed by the researcher. The survey consists of 23 items constructed based on the researcher’s review of some literature on the use of the PRS in teaching and learning in higher institutions of learning (Kaleta & Joosten, 2007; Kennedy & Cutts, 2005; Meedzan & Fisher, 2009; Patry, 2009; Stuart, Brown, & Draper, 2004).

The first part of the instrument contains items eliciting participants’ descriptive information such as age and gender, while other items were generated to probe five aspects of students’ attitudes. The items of the questionnaire were raised to elicit

participants' attitudes comprising of general attitude to learning with PRS (1, 7 and 13), pupils' engagement (items 8, 11, 16, 19 and 22), assessment and feedback (items 3, 4, 9, 15 and 20), attention and learning (items 5, 10, 14, 17, 21 and 23), and behavioural intention (items 2, 6, 12 and 18). Each of the items requires the participants to choose either "True" or "False" to indicate their agreement or disagreement. The Cronbach alpha reliability of the instrument was .76.

4.7.1.3 Pupils' Attitude to the Communicative Approach Questionnaire

Pupils' Attitude to Communicative Approach Questionnaire (PACAQ) was designed to measure pupils' attitude and disposition towards the use of communicative approach in ESL classroom. The items of the instrument were constructed based on the researcher's review of literature on the use of the communicative approach in teaching and learning (Nunan, 1993; Menking, 2002; Qinghong, 2009). The first part of the instrument contains items eliciting participants' descriptive information such as age and gender. The second part of the instrument contains 28 items generated to probe five aspects of students' attitudes comprising of general attitude (items 1, 9, 10, 14, 15, 22, 27 and 28); active engagement (items 3, 12, 16, 18, 21, 25 and 26); speech confidence (items 4, 5, 6, 11, 19 and 24), behavioural intention (items 7, 13 and 13) and learning (items 2, 8, 17 and 20). Participants were required to select "True" or "False" to indicate their agreement or disagreement to each of the items. The Cronbach alpha reliability of the instrument was .70.

4.7.1.4 Pupils' Attitude to English Lesson Questionnaire

In order to generate data about the pupils' feelings towards English language lessons in both the experimental and control groups, the English Language Attitude Questionnaire was developed by the researcher. The development of this questionnaire

was based on a review of some subjects' attitudinal scales designed for children between 9-12 years: Euclidean Geometry Attitude Scale (Mogari, 2004); English Language Questionnaire (Lin & Warden, 1998); Attitude towards Science Scale (Murphy & Beggs, 2001) and English Language Pupils' Questionnaire (Rass & Holzman, 2010). There were 26 items in the survey requiring respondents' selection of either "True" or "False" to indicate their agreement or disagreement to each of the items. The items were raised to measure pupils' attitude to English language lessons. Items 1, 6, 10, 11, 16 and 26 were raised to measure pupils' affective attitude, items 3, 5, 8, 13, 15, 17, 19, 21, and 24 were raised to measure the cognitive attitude of the pupils, while items 2, 7, 12, 20, and 22 were raised to measure pupils' behavioural intentions, while items 4, 9, 14, 18, 23, and 25 were generated to measure pupils' general attitude to English language lesson. The test re-test reliability of the instrument was .76.

4.7.2 English Language Tests (ELTs)

In most Nigerian schools, learners' proficiency in English was assessed based on their responses to multiple choice question items rather than exposing them to test items that are capable of prompting their use of English in real life situations and communicatively. In other words, Nigerian primary school children were familiar with structural assessment tests that focused much on grammar and accuracy. In this study, the researcher developed the English language tests which were communicative-oriented and real-life situations based to measure pupils' communicative competence in English language. Specifically, English Language Listening Tests and English Language Speaking Tests were developed to measure pupils' pre- and post-treatment communicative performance in the ESL.

4.7.2.1 English Language Listening Tests

English Language Listening Tests 1, 2, 3 and 4 were used in the study to measure pupils' listening ability. Each test comprised of a short comprehension passage and five short questions. The obtainable mark for each question ranged between 0 and 3. Pupils' responses with minor spelling errors to any of the test items were awarded some marks. The researcher prepared a guide for the administration of the tests (see appendix III). The teachers followed the guide to administer the tests. The test re-test reliability of the English Language Listening Tests 1, 2, 3 and 4 were .94, .93, .86 and .87 respectively.

4.7.2.2 English Language Speaking Tests

English Language Speaking Tests (ELST) 1 and 2 were used to assess pupils' English speaking ability. The English Language Speaking Test 1 consisted of ten items (nine mini-guided-situation and a picture-description test items), while English Language Speaking Test 2 comprised of eight items (seven mini-guided-situation and a picture-description test items) that could prompt pupils' use of English language in real life situations. The test items were developed to reflect pupils' everyday life experience relevant to the curriculum content and activities contained in the English language textbook within the context of the study. As the teacher read each of the items to the individual pupil in question form, each pupil was expected to respond to the teacher within a frame of 90 seconds per item. Pupils' performances in each item were rated on a scale of 0 to 5 (0 = No Response, 1 = Very Poor, 2 = Poor, 3 = Fair, 4 = Good and 5 = Very Good). The test re-test reliability of the English Language Speaking Tests 1 and 2 were .87 and .92 respectively.

4.7.3 Semi-Structured Interviews

Semi-structured interview allows researchers to deeply investigate and probe issues, thoughts, perceptions, feelings and perspectives which are not easily measured quantitatively (Wellington, 2000). In this study, teachers of the experimental schools and their pupils were taken through semi-structured interview to investigate their attitude and disposition towards the interventions as well as confirm data gathered through the questionnaire and explain emerging issues.

Compelling pupils to participate in a research in any form is unethical. Moreover, the researcher was also being careful to ensure that sincere information were gathered from the pupils; hence pupils' interview was made voluntary. The class teacher of each experimental school asked pupils willing to participate in the interview to indicate their interest. Amongst the overwhelmingly willing learners, five pupils were randomly selected in each experimental school for interview purpose. There were six open-ended questions eliciting pupils' perception of the effectiveness of the treatment and their attitude towards the treatment. The researcher's choice of open-ended questions is premised on the fact that such questions allow the interviewee to have freedom to express their views, attitudes and perceptions (Wellington, 2000). In the same vein, semi-structured interviews were also conducted with the teachers in the experimental groups in order to elicit information about their perception and disposition towards the PRS and the communicative approach. A schedule of seven open-ended questions was developed to guide the teachers' interview. To improve the research data accuracy and quality, the researcher audio-taped the interview process (Travers, 1969; Wellington, 2000).

To conduct the interview for the teachers and the pupils, the researcher first contacted the teachers in the experimental schools to secure appointments. Each intervention school selected a day in the eleventh week of the study as the interview day for all interviewees. Before starting the interviews, the pupil-interviewees were reminded that their responses during the interview were important and would be treated as further clarification of their earlier responses in the questionnaires. First, the researcher introduced himself again to the interviewees to further build an atmosphere of trust and instil confidence in them. The teachers and the pupils interviewed were reminded of their right to withdraw at any time from the interview process. The researcher also went further to ask the interviewees of their permission to audio-record the interview process. All the students and the teachers who participated in the interview process in the two schools granted the permission to record their interviews.

The language of interaction during the interview was the pupils' language of the immediate environment (Yoruba). The decision to use Yoruba language to conduct the interview was to ensure that the pupils expressed themselves freely without panic or any form of language barrier bearing in mind the pupils' level of proficiency in English. Each pupil was interviewed for about eight (8) minutes. However, the interview was conducted in English for a pupil who could not fluently communicate in Yoruba language because of the peculiarity the pupil's ethnic background (Igbo). Meanwhile, the two teachers in the experimental groups were comfortable to have the interview conducted in English.

4.7.4 Video Recording

The English language instructional process in all the three schools involved in this study was video recorded. The essence of this exercise was to capture the various

activities that could not be easily narrated by the third party or completely observed in the course of the research. To avoid pupils' distraction by the sudden appearance of the camera during the actual research, the researcher was in the various classes for familiarisation purposes. Specifically, a week before the actual study, the researcher was in the schools to help the teachers in collection and distribution of notebooks and textbooks to pupils, as well as coordination of the classroom in order to be acquainted with the learners and the teachers. Video recording of the instructional process was done in all the schools on rotational basis. In order to capture the video recording, the Sony DCR-SR57 camcorder was always set on a tripod stand and panned around from the back of the class to avoid distraction and to also ensure that space is not unnecessarily occupied in the class in a way such as to disturb the instructional process (see Figure 4.1).

4.8 Reliability and Validity of Instruments

Reliability and validity are two fundamental aspects of research measurement. The significance of the consistency or the reproducibility of test scores can not be underestimated in research because inconsistently assessed scores are not easy and are sometimes difficult to interpret (Downing, 2004; Miller, Ryan, Keitner, Bishop & Epstein, 2000). Validity is an appraisal of the extent to which a measure is able to measure that which it is set to measure, while reliability is the extent to which a measuring instrument yields the same results over a period of repeated measurement using the same sample. Amongst the approaches explored to estimate reliability include the use of test retest, parallel form of reliability, calculation of internal consistency (Cronbach alpha or alpha coefficient of reliability) and inter-rater reliability.

Test-retest reliability known as the stability test checks whether the scores would be stable over time. The same test items are administered on two different instances within a short time to the same group of examinees and the test is found reliable when the reliability coefficient of the two scores is high from .70 and above. A highly correlated result of the tests indicates how consistent the examinees scores can be expected to be across different test forms (Golafshani, 2003; Miller 1985 cited in Miller, Ryan, Keitner, Bishop & Epstein, 2000).

Internal consistency reliability involves the estimation at which each item of an instrument correlates with one another about the content and construct being investigated. The internal consistency reliability of the instrument is thus based on the correlation between the item variances and the total score variance (Bachman, 2004). Above all, the internal consistency reliability analysis is performed to ensure that sets of scores are parallel and independent (Bachman, 2004). Inter-rater reliability involves the use of different raters who use the same rating form to measure the same set of items in order to determine the consistency of the raters in their ratings. Similarities in raters' rating would indicate high reliability results. This form of reliability assessment is used when tests include performance tasks or items that needs to be rated by individuals' sense of judgement (Downing, 2004, Liao, Hunt, & Chen, 2010). In the current study, test re-test internal consistency (Cronbach alpha) and inter-rater forms of reliability were employed to determine the reliability of the instruments used.

4.8.1 Modification of the Instruments

There was the need to ensure possible reliability of all the instruments for this study after the first stage of piloting; hence the number of items for Pupils' Attitude to Clickers' Questionnaire and Pupils' Attitude to Communicative Approach

Questionnaire were therefore increased from 21 and 18 to 67 and 74 respectively. The number of items was therefore increased with a view of gaining higher reliability of the instrument (Downing, 2004). Moreover, the number of the items was increased in order to take care of some items that dropped in the final version of the scale after the factor analysis (DeCoster, 2000; Suhr, 2003). In addition, arising from the teachers' suggestion, the options earlier written as "True of Me" and "Not True of Me" which seemed to confuse some of the pupils during the first piloting were replaced with "True" and "False" respectively.

Furthermore, the Cronbach's α result (.67) of the Pupils' Attitude to English Language Lesson Questionnaire was not very weak, but the concern of the researcher again was about the six items ("I try to answer teacher's questions more during English language lessons", "I like to learn English language both at home and in the school", "I fear to speak in English", "I find English language lessons difficult", "I only learn English language at school" and "For me to do well in other subjects, I have to learn more of English language") deleted as not having goodness of fit when the EFA was conducted on the instrument. With such outcome of reliability test, the construct reliability of the instrument may be questioned. The number of items was therefore increased from 16 to 41. As mentioned earlier, the step was undertaken with a view of gaining higher reliability of the instrument, and so as to take care of some items that dropped in the final version of the scale after the factor analysis.

Although English Language Listening Test (Cronbach's $\alpha = .87$) and English Language Speaking Test (Cronbach's $\alpha = .80$) had very good strength of reliability, the initial ten items of the instrument were considered to be too few and might not have reasonably catered for a wide range of activities and topics taught during the term. In

addition, the use of battery test in assessment of this nature is one of the best ways to enhance the strength of the tests' reliability. In order to enhance the strength of the instruments' reliability, the number of the items was therefore increased before the EFA was performed. So, the English Language Listening Test was modified to English Language Listening Tests (1, 2, 3, and 4). Each test had a different and short comprehension passage followed by five (5) questions.

The English Language Listening Test 1 (the test administered in the previous pilot study) was modified by interchanging the positions of the first and the last question-items so as to follow the sequence of content of the comprehension passage. Similarly, the English Language Speaking Test was modified to English Language Speaking Tests 1 and 2 with each having 10 items. In the version of the English Language Listening Tests, items included the use of pictures to prompt the pupils to narrate events/activities. As part of modification made to English Language Listening Tests and English Language Speaking Test, guidelines for the teachers on the delivery of the tests were also generated. The word "jot" contained in the instruction to pupils in English Language Listening Tests was replaced with "write".

After the second stage of piloting, the exploratory factor analysis performed on the survey instruments reduced the Pupils' Attitude to English Lesson Questionnaire's items from 41 to 26. Also, Pupils' Attitude to Clickers' Questionnaire's items were reduced from 67 to 24, while the items for Pupils' Attitude to Communicative Approach Questionnaire were similarly reduced from 74 to 28. In each of the survey instruments, the 26, 24 and 28 items were differently loaded during EFA into different factors. After EFA analysis, the items retained for further use in this study were based on the following criteria: items which were clearly and significantly loaded in a factor

and not with loadings on two or more subsets, those items with high loading was from 0.40, and those items whose eigenvalues were greater than 1.0. The emerged factors based on the EFA loading were adopted as the various dimensions of each of the questionnaires used for the data collection (see appendix IV). In addition, the questionnaires and the tasks tests (English language listening and speaking tests) were subjected to further reliability tests.

In order to further establish acceptable instruments' reliability, classical item analysis was also performed on individual items by computing the difficulty and discrimination indices of all items in each instrument. Classical item analysis uses the traditional parameters to measure the difficulty level of an item by dividing the mean mark obtained by a sample of test taker and the maximum obtainable mark. Moreover, the classical item analysis relates to item discrimination which measures the correlation between the performance of an item and the performance in the entire test. If the correlation is high, the item discriminates between test takers with low test score and those with high test score (Bachman, 2004; Izard, 1997).

According to Bachman carrying out classical items analysis on test tasks items and questionnaire items is important, because too difficult items will affect the difficulty level of the test. Moreover, test administrator should also be conscious of how test items discriminate between the low scorers and the high scorers on a test. In classical item analysis, the recommended and acceptable item difficulty index is between 0.4 and 0.8 (Bachman, 2004; Tucker, 2007), while a reliable item should have a discrimination index that is above 0.3 (Bachman, 2004).

The results of the classical item analysis showed that, for the English Language Speaking Test 1, the difficulty indices of the items ranged from .43 to .67, while the discrimination indexes of the items were between .34 and .83. With respect to the English language Speaking Test 2, all but items 4 and 5 had item difficulty indices that ranged between 0.4 and 0.8 as well as discrimination indices that was above 0.3. Regarding the Pupils' Attitude to Clickers' Questionnaire, the discrimination indices of all but item 20 was above 0.3. The discrimination indexes of the Pupils' Attitude to Communicative Approach Questionnaire items were above 0.3. Similarly, the Pupils Attitude to English Language Lesson Questionnaire items recorded discrimination indices between .36 and .65.

There is a relationship between item's discrimination index and the extent of its reliability; hence it is appropriate to simultaneously consider both the difficulty and discrimination indices of an item before a test item is regarded as being reliable. Similarly, questionnaire item's discrimination level determines whether the item is reliable or not (Bachman, 2004; Tucker, 2007). In line with the above acceptable rule of thumb, items 4 "How do you want to spend the next weekend?" ($p_i = 0.3$, $D_i = 0.97$) and 5 "From the picture labelled "B", what is the child doing?" ($P_i = 0.34$, $D_i = 0.92$) of the English Language Speaking Test 2 were removed for further use in this study.

The removal of the items was because the p_i values of the items were below 0.4, while their discrimination indexes were above .80. In other words, items with discrimination index close to 1.0 were regarded as being too easy for the pupils. Similarly, item 20 "The use of clickers does not help in learning because it does not allow me to ask questions in the class" ($D_i = .25$) of the Pupils' Attitude to Clickers' Questionnaire was also deleted from the list of items used for this study because of the

inability of the item to adequately discriminate between low and high scorers in the group. After expunging items 4 and 5 from the English Language Speaking Test 2, as well as item 20 from the Pupils' Attitude to Clickers' Questionnaire, the results of the Cronbach alpha reliability coefficient and the test re-test reliability test of all the instruments are presented in Table 4.1

Table 4.1: *Research Instruments' Reliability Test Results*

Instrument	Cronbach Alpha	Test Re-test
English Language Listening Test 1	.95	.94
English Language Listening Test 2	.92	.93
English Language Listening Test 3	.91	.86
English Language Listening Test 4	.91	.87
English Language Speaking Test 1	.73	.87
English Language Speaking Test 2	.84	.88
Pupils' Attitude to English Language Questionnaire	.71	.76
Pupils' Attitude to Clickers' Questionnaire	.70	
Pupils' Attitude to Communicative Approach Questionnaire	.70	

4.8.2 Inter-Rater Reliability and Intra-Rater Reliability

When responses to test items are scored by different human raters, to control for the measurement error resulting from inconsistencies in different raters' judgements, inter-rater reliability of scores should be performed (Bachman, 2004). In order to further ascertain the strength of the English Language Listening and Speaking Tests; the consensus estimates were carried out through inter-rater reliability test. To conduct the inter-rater reliability for the English Language Listening Tests, two unmarked copies of each listening test were selected at random from each school and given to an

independent marker for double-blind review. The scores from the school teachers and those of the independent marker for the 24 selected scripts in each test were correlated and the result indicated .99. In the case of the English Language Speaking Tests, the audio-taped record of the tests for 12 pupils across the schools was also presented to the independent marker for blind review. The teachers' and the independent marker's scores were correlated and the results was .89. The audiotape record was used in order to reduce/remove physical or facial presence bias.

Meanwhile, to ascertain the raters' consistency in the marking of tests' scripts, intra-rater reliability tests were conducted. In conducting the intra-rater reliability test for the English Language Listening Tests, ten pupils' scripts chosen across the three schools were given to their respective teachers to re-mark four days after the initial scoring. The scores obtained from the two sets of marking were correlated; hence the results of the intra-rater reliability for the English Language Listening Tests indicated .96. Similarly, audiotape record of speaking tests for 10 pupils across the schools were re-presented to their respective teachers four days after the initial scoring. The two sets of scores were correlated; thus the results indicated an intra-rater reliability of .97.

4.8.3 Validating the Instrument

Before the final administration of the instrument during the main study, efforts were made to ensure the validity of the instruments. At first, the drafts of all instruments were presented to a seven-man panel of the review committee constituted by the researcher for the purpose of the study. The review committee members were English language teachers trained on the use of the PRS and the communicative approach in ESL classrooms. The instruments were further given to two primary school

teachers and two colleagues of the researcher to further scrutinise the language of the instruments. Thereafter, the instruments were finally reviewed by the researcher's supervisory team and based on the reviewers' comments, the final version of the instruments were produced.

4.9 Data Collection Procedure

As mentioned earlier, instruments used for data collection during this study were first trial tested to ensure the reliability of the instruments and the feasibility of the research. Prior to the pilot study, the teachers who were to be involved in the study were trained on how to effectively integrate the interventions in ESL classrooms to enhance learners' improved communicative competence. The training was followed by the pilot study undertaken in two stages; thereafter the data for the main study were gathered.

4.9.1 *Training of Teachers*

The use of the PRS and the communicative approach for instructional purpose is seemingly new in Nigerian education system. Involving teachers in effective integration of the interventions in this study demanded that teachers should be trained. Since the Ijebu-North Local Government Education Authority (INLGEA) officers were keenly interested in the proposed study, immediate approval was given to organise the training event for 17 ESL teachers selected from 7 schools. All the 17 teachers were trained by the researcher and an English language lecturer from a neighbouring university. At the commencement of the training, teachers were told that their participation was voluntary and that whosoever wanted to withdraw could do so at any

time. To further ascertain teachers' voluntary commitment, the Teachers' Consent Form was given to them to fill, sign and return to the researcher.

The training was conducted 5 hours daily for 7 working days between the second and the third week in September, 2010. The aims of the training included: (1) to provide an introduction to new approaches of teaching and learning ESL; (2) to motivate the teachers to integrate either or both the PRS and the communicative approach effectively into ESL classrooms; (3) to provide the rationale for integrating PRS or/and the communicative approach into ESL classrooms; (4) to provide the techniques and procedure involved in the effective integration of the interventions in ESL classrooms, and (5) to equip teachers with the necessary skills needed in assessing learners communicative competence. As mentioned earlier (see section 4.5.3), amongst the trained teachers, five of them who were engaged with the experimental groups were selected on their performances based on set criteria.

4.9.2 Main Study's Data

After successful piloting and realisation of acceptable reliability level of all the instruments, the data for the main study was thus collected in three phases. The three phases involved were the pre-treatment, the treatment or intervention and the post-treatment stages.

4.9.2.1 Pre-treatment Stage

In order to assess pupils' initial level of communicative competence in English language in the control group and the two experimental groups prior to the exposure of pupils to the communicative approach and PRS teaching strategies, English Language Listening Tests 1 to 4, as well as English Language Speaking Tests 1 and 2 were

administered as pre-tests to pupils across the groups. Similarly, the Pupils' Attitude to English Lesson Questionnaire was administered to pupils in all the groups to measure their initial attitude towards English language lessons before the administration of treatment to the experimental groups. All the mentioned instruments were administered as pre-test to all the groups at the first week of the study (between January 17 and 21, 2011).

4.9.2.2 Treatment Stage

After the pre-treatment, the treatments were administered on pupils in the different groups. In administering the treatments, teachers in the control, the PRS and the communicative approach groups taught pupils English language 70 minutes every working day for 10 weeks. In all the groups, the focus of the study was on comprehension, grammar and composition aspects of English language instruction. The content and learning activities of the lessons for the period of this research were carefully chosen by the teachers of the three groups in order to ensure that pupils across the groups were exposed to the same curricular content.

4.9.2.2.1 The Control Group

In the control group, the setting and instructional process was predominantly the traditional classroom which emphasises methodical instructional process which relies on English language textbook and teacher's explanations. Teaching and learning in the control group followed the traditional pattern of the teacher-centred classroom. The teacher was mainly involved in the talking, presentation of instructional content, identification and explanation of difficult words as well as the assigning of homework at the end of the lessons. Most times, the teacher read aloud while pupils listened to her, and thereafter the pupils were involved in silent and reading aloud of passages.

In most cases, teacher's explanation of the lesson content required little or no input from the pupils. Pupils in the control group indicated their willingness to answer questions by raising their hands. Most times, the teacher provided solutions or explanations when pupils did not respond to answer questions. More often than not, little or no efforts were made by the teacher in the traditional classroom to encourage pupils' talk. Pupils in this group were hardly given the opportunity to ask questions. Rather, the teacher's questions which often attracted "Yes" and sometimes "No" as the chorus answer from the pupils was "do you understand?" As a matter of fact, from the beginning to the end of the lesson, pupils sat to face the teacher as well as the chalkboard. More often, the pupils were mere listeners to the teacher's talk rather than being actively engaged. A few minutes towards the end of the lessons, the teacher usually wrote the summary of each lesson on the chalkboard for the pupils to write in their notebooks.

4.9.2.2 The Communicative Approach Group

On the first day of the study, the teacher explained to the pupils what the communicative approach entails and that pupils were free to pair or form groups with anybody in the class whenever they were asked to do so. In the communicative approach group, pupils were divided into various groups. Each group sat around a desk and a bench as a team to accomplish the given tasks based on the lessons' content. Grouping of the pupils during lessons was without stringent criteria other than pupils coming together as group members by choice and self-decision. However, pupils were often constrained by the seating arrangement to have comfortable semi-circle or circular seating arrangement in the class because their benches were permanently glued to the floor. During the lessons, the teacher first presented an overview of the lesson content to the pupils.

Rather than the pupils taking turn to read aloud in the class, different tasks reflecting the lesson content were assigned to the different groups. The teacher gave each group (4 to 6 pupils) specific instructions on how to accomplish the assigned tasks within a time frame. Tasks were structured after the content of the English textbook used in the class. While students were working on the tasks in groups, the teacher often went round to ensure meaningful discussions ensued among the pupils. The teacher occasionally made clarifications where necessary. Pupils were sometimes encouraged to initiate, participate in group's discussion and write major points of their discussion in their notebooks. At the expiration of the time allotted for the tasks' completion, representative(s) of each group presented a summary of their activities to the class. Sometimes, activities during the classroom instruction involved role plays, dramatisation, classroom dialogues, description and illustration of things or events and group discussion so as to make the instructional process more interesting and engaging. The discussion between the pupils in different groups were summarised in writing on the chalkboard by the teacher as the major points of the lesson.

4.9.2.2.3 The Personal Response System Group

In the personal response system group, the PRS was introduced to the pupils in the first lesson of the first week. The data projection system was always arranged in the class by the teacher and the trained research assistants. The computer laptop and the camcorder video recorder were set at the back of the class where the research assistants easily projected questions on the projection screen without distracting the pupils (see Figures 4.1 and 4.2)



Figure 4.1: *Strategic Placement of Video Recorder in the PRS Classroom*



Figure 4.2: *The PRS Classroom Setting*

The basic principles of operation (how to switch on and off the handset, how to join the class, how to vote responses and how to simply interpret the graphical histogram), rules guiding the use of the device to enhance good classroom management

as well as the safety of the handset were practically explained to the pupils on the first day of introducing the technology in the class. The PRS handsets were distributed to all pupils at the beginning of the lesson and retrieved from them at the end of each lesson.

Teaching in this group was interactive with the teacher's use of the personal response system (PRS). At first, the teacher engaged the pupils in personal-silent reading of the lesson content, followed by peer discussion of the lesson content (activities) assigned to the pupils by the teacher. Meanwhile, the PRS was used in anonymous mode during the lessons. The teacher asked 2 to 3 multiple-choice or true-false questions via the PRS. The PRS questioning and answering exercise often lasted for about 10 minutes of the lesson time. The PRS questions were either displayed at the beginning of the lesson with a view to assess pupils' previous knowledge and stimulate their interest in the new topic or at the middle or at the end of the lesson to assess pupils' understanding of concepts covered within the specific lesson.

PowerPoint slides questions prompting pupils' responses were displayed on the projection screen usually within a defined time of 30 seconds provided for the pupils to answer the question. Time left to answer was always shown by the timer on the slide. As soon as all the pupils had answered the question or the time was up, the bar chart was first displayed showing the distribution of the responses. The histogram was often programmed not to indicate the correct answer with a different colour-bar as the responses of the pupils were displayed. This was done to place all the pupils on the same level of playing-ground for peer discussion.

To further initiate interaction and discussion, pupils were asked to explain to their peers within 2 minutes why they thought their chosen answers were correct before the question was re-displayed for pupils to recast their votes. Thereafter, the teacher displayed the responses of the pupils with the correct option highlighted on the

histogram in green colour. The display of the correct answer was followed by the teacher's explanations and clarifications of issues which seemed to confuse some of the pupils.

4.9.2.3 *Post-treatment Stage*

The two experimental groups were exposed to the communicative approach and the PRS technology, while the control group was taught with the lecture method in ESL classrooms for 10 weeks. Thereafter, the English Language Listening Tests 1 to 4, and the English Language Speaking Tests 1 and 2 were administered to all the groups as post-test to assess possible changes in pupils' level of communicative competence in English language. In the same vein, Pupils' Attitude to English Lesson Questionnaire was also re-administered as post-test intended to measure possible attitudinal change among the groups towards the learning of English language. To measure Pupils' attitude to the interventions, Pupils' Attitude to Clickers Questionnaire and Pupils' Attitude to Communicative Approach Questionnaire were administered to the PRS group and the communicative approach group respectively.

All the instruments were administered as post-test in the 11th week of the study. Pupils' Attitude to English Lesson Questionnaire, and English Language Listening Tests 1 to 4 were administered in the morning of each day while the English Language Speaking Tests 1 and 2 were administered in the afternoon of each day in all the schools to reduce tests-boredom and stress. Pupils' Attitude to Clickers Questionnaire and Pupils' Attitude to Communicative Approach Questionnaire for the PRS group and the communicative approach group respectively were administered on Friday of the post-test week. Within two days of the post-test week, the teachers' and pupils' interviews were conducted after the schools' closing time.

4.10 Procedure for Instruments' Scoring and Data Coding

Pupils' Attitude to Clickers' Questionnaire, Pupils' Attitude to Communicative Approach Questionnaire, and Pupils' Attitude to English Language Lesson Questionnaire are instruments designed with binary forms of responses. The pupils were therefore required to choose either "True" or "False" to respond to the items of the questionnaires. So, the scoring of the data followed simple direct method of assigning "1" to "True" and "0" to "False". Using the codes "1" for "True" option indicating higher score and "0" for "False" option; indicating lower score, the data were entered into the statistics data editor of SPSS 17 software package. After entering all responses of the participants into the SPSS statistics data editor page, items 7, 9, 10 and 20 of Pupils' Attitude to Clickers' Questionnaire, items 1, 3, 4, 10, 18 and 28 of the Pupils' Attitude to Communicative Approach Questionnaire, and items 2, 6, 16 and 24 of the Pupils' Attitude to English Language Lesson Questionnaire which were negatively-worded were recoded into positive direction, so that higher score on the scale means more positive attitude. The recoding of above mentioned items was done to ensure that all the items of the instruments were in the same direction.

The English Language Listening Tests 1, 2, 3 and 4 were rated by teachers who were trained and had agreed on what qualities to be considered regarding the adequacy of responses to items; hence rating system for these tests followed the partial credit pattern. The assessment of tasks-oriented activities such as speaking was based on the degree of competence rather than the conventional award of marks to right or wrong responses. Learners' degree of performance was graded with partial credit ranging from 0 to 5 depending on their level of partial success or partial understanding of the tasks (Frary, 1989; Masters, 1988, Bachman, 2004).

Based on the teachers' unanimous judgement criteria, marks were awarded to pupils' responses to the English Language Listening Tests 1, 2, 3 and 4 items, with 3 marks being the maximum obtainable for each of the 5 items contained in each of the tests. For each of the listening tests, the total mark for each pupil in the 5 items was entered into the SPSS statistics data editor for further processing. Similarly, for the English Language Speaking Tests 1 and 2 which contained 10 items each, the rating ranged between 0 and 5. Score obtained in each item of the speaking tests was also entered into the SPSS statistics data editor for each pupil. After all data in all the tests and questionnaires were entered for each pupil in the various groups, data files were combined with each group assigned identification number 1, 2 and 3 for analysis purposes.

4.11 Data Analysis

The statistical analysis of the data gathered for this study was performed by using descriptive and inferential statistics. The descriptive statistics employed included mean and standard deviation, percentages, frequency distribution tables and graphical illustrations. The inferential statistics used involved Freeman-Halton extension of Fisher's exact test from 2x3 and 3x3 contingency tables, dependent and independent t-tests, Analysis of variance (ANOVA) and Analysis of covariance (ANCOVA). The rationale for the use of the statistical tools employed in this study was based on the nature of the research questions answered and the hypothesis tested.

The frequency distribution is used to show the number of times each data score occurs in a data set and also to assess the properties of the distribution of scores in relation to the shape of the distribution. Frequency graphical illustrations such as the histogram are useful in providing information with respect to scores distribution's

departure from normality (Field, 2006). In this study, to therefore ascertain the shape of the communicative competence pre-test and post-test scores' distribution for the sample and the frequencies of each group's attitudinal scores, the frequency distribution is shown.

The use of t-test statistics is common when comparing the means of two experimental groups (with normal distribution) assigned to different conditions (Field, 2006). The Analysis of variance (ANOVA) is the best applicable statistics when comparing the means of more than two different groups on a particular variable (Langsrud, 2003; Tabachnick & Fidell, 1989). The research questions 1 and 2 sought to find out whether there were significant differences among the communicative competence scores; and the overall academic performance scores in all school subjects of pupils exposed to the traditional lecture method, the PRS and the communicative approach. To provide answers to the questions, the independent t-tests was used to determine the differences between sub-sets of pupils within each group with respect to their communicative competence tests' scores and overall academic performance scores in all school subjects. The paired samples t-test was employed to compare individual group's mean pre-test and post-test scores.

Similarly, to further investigate whether a statistically significant difference existed in the communicative competence gain scores between the low and the high communicative competence pre-test scorers, the paired samples t-test statistical analysis was performed. The ANOVA was also used to check the significant differences in the gain scores, the mean communicative competence tests scores and the overall academic performance scores in all school subjects among pupils across the groups. The ANOVA

test was performed with a view of determining how much of the variations across the different set of pupils were associated with the differences in the teaching strategies.

To test whether there were gender differences in the effect of the three different teaching strategies, ANOVA and ANCOVA were used. The results of the ANOVA test revealed the existence of a significant difference in the communicative competence pre-test scores among pupils in different groups (see chapter 5). Such difference in entry experience may influence the post-test outcome of pupils' communicative competence levels. To control for such baseline differences among the participants that were not randomly assigned to groups in an experiment of this nature, and also test for the main and interaction effect of the treatment and gender on pupils' communicative competence after adjusting for the differences associated with the covariate (communicative competence pre-test scores), the ANCOVA was thus performed (Jamieson, 2004; Wright, 2006). Similarly, the ANOVA was used to test the significant effect of gender on pupils' communicative competence post-test scores.

Moreover, the research question 3 of this study was: are there differences in the attitudes towards English language lessons among pupils exposed to the lecture method, the PRS and the communicative approach. To provide answer to this research question, the pattern of attitude to English language lessons for different groups of pupils as measured by their responses to individual attitudinal survey items were compared by using Fisher, and Freeman-Halton exact test from 3×3 R x C tables. To further determine whether significant differences existed between two of the three groups involved in the study, Fisher and Freeman-Halton exact test from 2×3 R x C table analysis was also performed on all items of Pupils' Attitude to English Language Lessons.

The Freeman-Halton extension of Fisher's exact test or Fisher, and Freeman-Halton exact test is used when there are more than 20% of cells with expected counts less than 5 or zero. The test is also best applicable to a small sample size data (Agresti, 1992; Konopinski, Jones & Johnson, 2012). With respect to research questions 4 and 5: what is the attitude of the pupils to PRS and communicative approach; and what is the attitude of the teachers to the PRS and communicative approach; the quantitative data were analysed using the frequency distribution. Similarly, the quantitative data analysis was supported with the description of still images from the video recording of the classroom instructional process (purposely used to augment data from the questionnaires), while the teachers' and pupils' interview responses went through narrative description.

4.12 A Review and Critique of the Instruments

A review of literature by the researcher of this study revealed a dearth of research instruments that measure the educationally disadvantaged pupils' English language communicative competence, and attitudes to ESL lessons, the PRS and the communicative approach. At the initial stage of developing the study's instruments, suitable specifications were listed. The specifications of the tests and questionnaire items included appearance, content, length, type of items to include, range and source(s) of topics to be included (Milanovic, 2002). The review and critique of this study's instruments is presented on two broad themes (the English language tests and the survey questionnaires).

4.12.1 A Critique of the English Language Tests

The English Language tests were designed to measure pupils' communicative competence. To do this, listening and speaking tests items were generated from what the pupils learned. The content of the listening tests emphasises measures of literal comprehension; hence passages and a few questions were selected from the pupils' English textbook. Responses of the listening tests were designed in multiple choice formats to facilitate easy measure of the literal comprehension (Rubin, Daly, McCroskey & Mead, 1982). The ordering of the question-items reflected the chronological order of the comprehension passages' content. The question-items were placed after the text because learners' comprehension was tested, and the pupils were also expected to draw conclusion from the passages (Milanovic, 2002). The listening tests were pre-tested to find out if the pupils had difficulty in understanding the comprehension passages, and the questions.

The speaking tests were performance-based items, which provided the pupils with meaningful context for real-life situations' language use. Besides, the task-items were the types the learners could narrate or describe using the target language; hence most of the task-items were open-ended. Lead-ins (of different time frame) and illustrative pictures were used to prompt pupils' oral use of the target language. Performance rating-scores (0 to 5) used to evaluate pupils' speaking ability ensured that the assessment of English fluency did not only favour the good learners, but also provide room for the low and average pupils to examine their levels of improvement (Gutek, Murphy & Douma, 2004). The arrangement of the speaking tests items, which followed the sequence of topics covered during the term enhanced pupils' understanding of the tasks-items.

The listening and speaking tests items focused on functional communication competence than linguistic skills; hence vocabulary, syntax, phoneme recognition and discrimination were not given preference in the tests-items and evaluation. The tasks-items of the listening and speaking tests were context-based, authentic and learner-centred (Rubin, Daly, McCroskey & Mead, 1982). The language structure of the listening and speaking tests' reflected the language ability of the pupils. This was done to ensure that the pupils did not only respond very well but understood the items (Milanovic, 2002). The feedback of the review committee on the test-items informed the production of the final draft of the listening and speaking tests (see sections 4.8.1 and 4.8.3); thus the language of the tests was appropriate and suitable for the pupils' age-group and their context.

Cronbach internal reliability results of the tests at the second piloting (see Table 4.1) was far better than those found for the first pilot sample. The listening and speaking tests items were neither too difficult nor too easy; hence they would be psychometrically sound if administered over and over again with the same sample, context and circumstances (Bryman, 2006; Gutek, Murphy, & Douma, 2004). The listening and speaking tests' items, based on the descriptor of high-low scorers and the content of what the pupils learned, have content validity (Rubin, Daly, McCroskey & Mead, 1982). Moreover, the validity of the listening and speaking tests may be justified from the negative association that existed between pupils' classes of pre-test scores and gain scores. The item selection process, good internal and test re-test reliability, and validity suggest that the listening and speaking tests are sound instruments.

4.12.2 A Critique of the Questionnaires

The three questionnaires used in this study (Pupils' Attitudes towards English language Lessons Questionnaire, Pupils' Attitude to the Communicative Approach Questionnaire, and the Pupils' Attitude to Clickers Questionnaire) are self-report inventory representing the first attempt to assess pupils' attitudes towards the communicative approach and the PRS in Nigeria. The title of each of the questionnaire was kept short, simple, and well reflect the purpose of the study. The "true" or "false" format of the questionnaire encouraged the individual pupils choose a response and minimise non-response, (Guttek, Murphy & Douma, 2004). Emoticons inserted in the "True" or "False" boxes did not only catch the attention of the young learners and motivate their responses, but also lend credibility to the instruments. The items of the questionnaires were framed based on the pupils' level of English literacy. The questionnaires have attractive quality for comprehensive evaluation of pupils' attitudes to English lessons and the interventions (Keyser & Sweetland, 1985).

The questionnaires' items comprised a mixture of positively and negatively worded items. A mixture of positively and negatively worded items in the survey instrument minimises respondents' unidirectional response to all items (Rattray & Jones, 2007). The positively worded items were easily understood and attracted encouraging responses from the pupils. The pupils seemed to find it difficult to understand and interpret the negatively worded items. A rewording of the negative items in the positive direction may be needed to improve pupils' responses to the items. The psychometric properties of the instruments in Table 4.1 attest to their acceptable standard of quality. The length of the questionnaires may be an issue, but the administration can be done with ease between 15 and 25 minutes. Perhaps the length of

the questionnaires may be reduced for future use. The exploratory factor analysis (EFA) was performed on the items of the questionnaires. The outcome of EFA is a significant but not the only sufficient way of establishing construct validity. Perhaps if, the internal consistency across items, and repeated factor analysis of the same measure taken from different samples were measured, the results may have added strength to the internal consistency of the construct validity (Guttek, Murphy, & Douma, 2004).

It should be noted that all the instruments used in this study were newly developed, thus need evaluation as measurement instruments in longitudinal studies. Moreover, studies are further needed to confirm whether or not the language of the questionnaires is difficult to understand for 10-13 years educational disadvantaged pupils.

4.13 Limitations to the Study

The limitations identified in this section might give a better understanding of the findings of this thesis within the context in which the data were collected. The first limitation was the setting of the research based on time constraints. Since PhD programme is time framed, the data collection procedure could not be extended beyond 12 weeks. The time constraint may have affected the findings regarding pupils' communicative competences. However, there is the possibility that, pupils' attitude towards English language lesson might have been influenced by time factor since Narayanan, Rajasekaran and Nair, (2008) have argued that attitude change towards a school subject due to new teaching method is a gradual process. Moreover, in view of the limited personal funds to support the fieldwork, the sample involved in the pilot and main studies were recruited based on convenience. Probably if the data collection

exercise was financially supported by donor agencies or research organisations, the geographical scope of the study might have been expanded.

Across the three schools involved in this study, there was unanticipated pupils' attrition towards the end of the term due to the implementation of educational policy which required that learners who defaulted in paying school levies be refused entrance into the classroom. Consequently, the sample size within each group (especially the control group) was relatively small and this in turn to an extent had influence on the type of analysis performed to measure the pupils' attitude during the study. Considering this, it might be useful in the future to probably extend the conduct of this type of study over a period of 2 to 3 terms in order to take care of such unanticipated circumstance(s).

A further limitation to the study was the dearth of standardized research instrument measuring attitudes towards the PRS and the communicative approach at the primary education level and in English language as a school subject; hence the need for the researcher to develop the instruments used in this study. Perhaps further development of instruments measuring pupils' attitude to the PRS and the communicative approach within the context of the teaching and learning of the ESL and perhaps pupils from developing countries like Nigeria would be of benefit to future research. Furthermore, recruiting teachers to adopt the interventions was a challenge in a context where the PRS and the communicative approach as teaching strategies were hardly known in the education sector. Lots of time, personal funds and material as well as human resources were expended to ensure teachers' training before the data collection began.

In chapter 7 of this thesis, the results showed that, pupils' responses to the negatively worded items contradict their answers to the positively worded questions probing similar issues. Such inconsistencies might result from the negative form of some items; hence pupils might have had difficulty in understanding the meaning of the negatively worded items. Without any doubt, such inconsistencies might have been a reflection of the English language proficiency level of pupils within the context under study. Therefore, fundamental errors may be committed if the outcomes of this study are compared with findings of other studies which involve learners who are native speakers of English or those who learn English language in well structured, organised and enabling environment.

In addition, pupils' low level of proficiency in English was relatively restrictive in terms of the methodology adopted (use of language of the environment) to elicit "rich" information from the pupils during the interview. Here, the researcher recognises the fact that if the language of the environment (Yoruba) was not adopted for the conduct of the interview, the degree of responses gathered from the pupils who are non-native speakers of English might have been very low. Furthermore, it is also important to note that this study was conducted in schools located at the sub-urban areas of a local government in Ogun State, Nigeria; hence the current findings may be limited to educationally disadvantaged schools in Ogun State and some states in the western Nigeria.

Chapter Five

EFFECT OF TEACHING STRATEGIES ON PUPILS' COMMUNICATIVE ATTAINMENT IN ESL CLASSROOMS

5.1 Introduction

In chapters 1 and 3, it has been remarked that the traditional lecture method of teaching English as a second language (ESL) is inadequate to provide learners with the necessary learning experience that would facilitate improved communicative competence. There is therefore the need for ESL teachers to seek possible avenues to create interactive environments that could encourage learners' active learning in classrooms. The purpose of this study is to investigate the comparative effects of the communicative approach, the personal response system (PRS) and the lecture method on pupils' learning outcomes in the ESL classroom. This chapter is first aimed at establishing whether or not the distribution of pupils' language competences scores deviates from normality. In addition, this chapter comparatively examines the effects of the communicative approach, the PRS and the traditional lecture method on pupils' academic performance with respect to improvements in their communicative competence in the ESL classroom.

Furthermore, this chapter also aims to present findings on the main effect of gender, as well as the effect of the interaction between gender and treatment (the communicative approach, the PRS and the traditional lecture method) on pupils' communicative competence in ESL classrooms. The data analysed for presentation were collected through the English Language Listening Tests and the English Language Speaking Tests earlier described (see chapter 4).

5.2 Results

5.2.1 Description of Sample

This section presents the data relating to the demographics of the pupils in the various groups that participated in this study.

Table 5.1: *Descriptive Statistics of Sample by Group, Age and Gender*

Group	N	Age				Gender	
		10 Yrs	11 Yrs.	12 Yrs.	13 Yrs.	Male	Female
Comm. Approach	32	3	12	15	2	11	21
PRS	41	3	14	20	4	14	27
Control	26	2	5	10	9	15	11
Total	99	8	31	45	15	40	59

The total number of pupils who initially participated in the study across the schools was 151 (communicative approach group = 48, PRS group = 58, control group = 45). However, the data in Table 5.1 show that at the end of the pre-test and post-test assessments, as well as the selection of complete sets of valid instruments for the participants, a total of 99 pupils (Male = 40, Female = 59), or about 66% of the original population, fully participated in the study. In the communicative approach group, there were 32 pupils (Male = 11, Female = 21), while there were 41 pupils (Male = 14, Female = 27) in the PRS group and 26 pupils (Male = 15, Female = 11) in the control group who fully participated in the tests and completed all other measures.

Across the groups, there was a range of variability in the distribution. First, the proportion of pupils within the age range of 12 and 13 years was greater in the control group than any other group, while the communicative approach and the PRS groups consisted of more pupils around the ages of 11 and 12 years. Table 5.1 further reveals the age distribution of the sample for this study. Moreover, the control group had the highest proportion of boys, while the other two groups were disproportionately

dominated by girls. Additionally, the class size varied from one group to another, with the control group having the smallest number of participants. The researcher could not control for this variability, because participants were members of intact classes already constituted by the schools and hence could not be randomly assigned into groups. Meanwhile, the results of the Analysis of variance showed no significant difference in the ages of pupils in the communicative approach, the personal response system and the control groups ($F_{(2, 97)} = .44, p > .05$).

Table 5.2: *Descriptive Statistics of Pupils' Pre-test Communicative Competence Scores by Group*

	N	Mean	SD
Comm. Approach	32	49.6	21.8
PRS	41	61.2	24.3
Control Group	26	67.9	21.4
Total	99	59.2	23.7

Table 5.2 presents the descriptive data of pupils' pre-test communicative competence scores across the groups. The results reveal that pupils in the communicative approach group recorded the lowest mean communicative competence pre-test score. The PRS group's mean communicative competence pre-test score was higher than that of the communicative approach group. The highest mean communicative approach pre-test score was recorded by the control group. The results suggest that the pupils' English language communicative competence pre-test scores, across the three groups, were not the same; to check whether the differences were significant, Analysis of variance was conducted and the results are presented Table 5.3 below:

Table 5.3: *Analysis of Variance of Pupils' Communicative Competence Pre-test Scores across the Groups*

Pre-Comm. Competence Scores					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4909.0	2	2454.5	4.9	.01
Within Groups	47225.2	97	497.1		
Total	52134.2	99			

The results of the Analysis of variance of the pre-test communicative competence scores across the three groups, in Table 5.3, showed that there was a significant difference in the communicative competence pre-test scores of pupils across the groups ($F_{(2, 97)} = 4.9, p < .05$). The implication of the Analysis of variance results is that the baseline English language communicative competence experience of pupils in the three groups seems to differ before the introduction of various interventions employed in this study. Though the difference in the English language communicative competence entry experience of pupils is a major concern in a study of this nature, this would be dealt with later by controlling for pupils' pre-test performance when pupils' post-test performances and gains would be comparatively analysed.

To further understand the communicative competence entry performance of pupils in each group, the gross performance of the sample in the previous year was compared with the current term's (year-six, first term) overall scores. Pupils' aggregate average scores of the previous year were treated as the mean entry academic performance scores in all the school subjects, while the mean academic performance scores in all the school subjects in year-six, first term, were treated as the post-research academic performance scores. The results are presented in the table below:

Table 5.4: *Descriptive Statistics of Overall Performance Entry Scores and Post-study Scores in all School Subjects across the Groups*

Treatment		N	Min.	Max.	Mean	SD
Comm. Approach	Overall Performance Entry Scores	32	24.3	90.0	65.7	15.6
	Overall Performance Post-research scores	32	46.0	88.0	69.1	11.6
PRS	Overall Performance Entry Scores	41	35.4	90.6	60.5	12.3
	Overall Performance Post-research scores	41	45.0	90.0	67.4	11.1
Control Group	Overall Performance Entry Scores	26	34.7	87.6	61.3	16.1
	Overall Performance Post-research Scores	26	27.0	81.0	55.2	14.5

The results in Table 5.4 show the overall academic pre- and post-test scores in all the school subjects for pupils in all groups. The results indicate that in the communicative approach and the PRS groups, the mean overall performance entry score was lower than the mean overall performance post-research scores. However, for the control group, the mean overall performance mean entry score was higher than the mean overall performance post-research score. The results show that, while the other groups recorded improved overall academic performance in all school subjects at the post-test, pupils in the control group recorded a negative gain in their overall academic performance in all school subjects. The results further highlight the peculiarity of the control group used in this study. In other words, the difference in the learning outcomes of the control group, compared to the two treatment groups, as will be seen later in this chapter was unlikely due to the way the study was conducted or the manner in which the instruments were administered by the teacher or the teachers' pedagogy.

Communicative Competence Pre-test Scores by Group

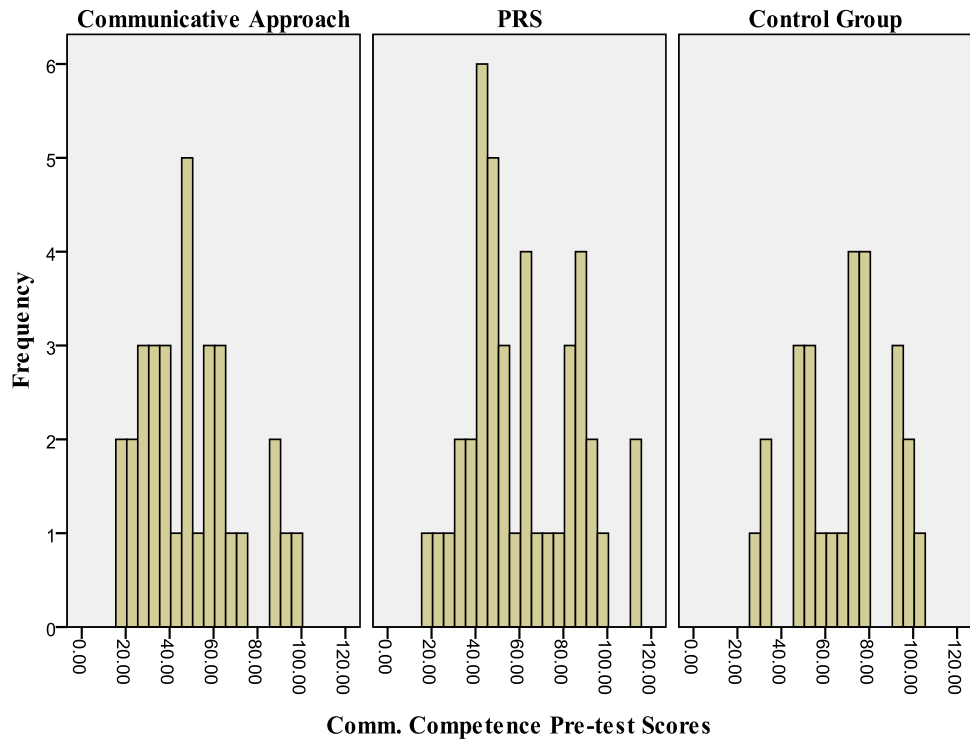


Figure 5.1 *Distribution of Groups' Communicative Competence Pre-test Scores*

Figure 5.1 illustrates the English language communicative competence pre-test scores of pupils across the groups. The distribution of pupils in all the groups did not show strong evidence of departure from normality. The distributions of scores in all the groups seemed to be heavily clustered around the centre. The spread of scores across the groups seemed similar. While there were no outliers in all the distributions, there were gaps in each of the distributions, indicating that there were bins that contain no data values.

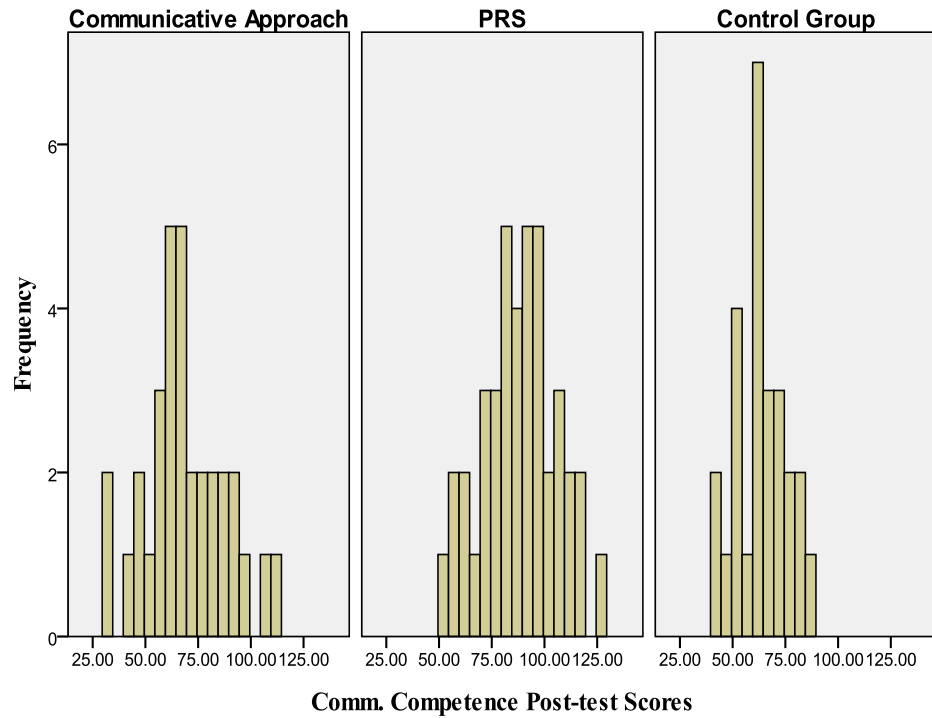


Figure 5.2 *Distribution of Groups' Communicative Competence Post-test Scores*

The results in Figure 5.2 are the distribution of the English language communicative competence post-test scores of pupils in each group. The distribution of pupils in all the groups did not show strong evidence of departure from normality. Across the groups, the distribution of scores was heavy around the centre. The spread of the scores for pupils in the communicative was more when compared to that of the PRS and the control group. The communicative approach group recorded a wider spread of scores when compared with that of the control group. In all the groups, there were no outliers in all the distributions. There were gaps in the distribution of scores for the communicative and PRS groups; thus indicating that there were bins that contained no data values.

To further check whether the groups were normally distributed, as well as needing to determine whether parametric tests were relevant to evaluate the communicative competence data collected in this study, a test of significance of skewness, the Shapiro-Wilk's Test of Normality and Levene's Test of Homogeneity of Variances were conducted

Table 5.5: *Statistics for the Test of Significance of Skewness*

Type of Test Score		Comm. Appr. Group	PRS Group	Control Group
Comm. Competence Pre-test	Skewness	.6	.4	-.1
	Std. Error of Skewness	.4	.4	.5
Comm. Competence Post-test	Skewness	.2	.0	.1
	Std. Error of Skewness	.4	.4	.5

Table 5.5 presents the estimated skew and standard error of skewness of the distribution of scores for pupils' communicative competence pre-test scores across the groups. To determine the level of skew of a distribution, the results of the estimated skew value, divided by the standard error of skew, is checked against the critical value of 1.96 (Schinka & Velicer, 2003). The levels of skew of the communicative competence pre-test scores were not found to be significant for the communicative approach group ($1.5 < 1.96$), the personal response system group ($1.1 < 1.96$) and the control group ($-.3 < 1.96$). Similarly, the communicative competence post-test scores skew level was not significant for the communicative approach group ($.55 < 1.96$), the PRS group ($.07 < 1.96$) and the control group ($.25 < 1.96$).

To further ascertain whether the groups fitted a normal distribution, the Shapiro-Wilk's test was performed on the sample's communicative competence pre-test and post-test data and the results are presented in Table 5.6:

Table 5.6: *Shapiro-Wilk's Test of Normality on Groups' Communicative Competence Pre-test Scores*

Comm. Competence Pre-test and Post-test				
Type of Test Scores	Group	N	W	Sig.
Comm. Competence Pre-test	Comm. Approach	32	.94	.097
	PRS Group	41	.96	.109
	Control Group	26	.96	.346
Comm. Competence Post-test	Comm. Approach	32	.98	.876
	PRS Group	41	.99	.936
	Control Group	26	.97	.694

Table 5.6 shows the results of the Shapiro-Wilk's test on the communicative competence pre-test scores of pupils across the groups. The results indicate that the distribution of the groups' communicative competence pre-test scores did not significantly depart from normality. Regarding the communicative competence post-test scores, the results also showed that the distribution of the groups' scores was normal and did not depart from normality.

Furthermore, when participants in a study are selected from different samples, the need to check for equality of variance becomes a pre-condition, before comparing their means, so as to avoid making faulty inferences (Chan, 2003; Nordstokke, Zumbo, Cairns & Saklofske, 2011). In this study, Levene's test was thus conducted to check the groups' equality of variances (Gastwirth, Gel & Miao, 2009; Nordstokke & Zumbo, 2010).

Table 5.7: *Levene's Test of Homogeneity of Variances*

Comm. Competence Pre-test and Post-test Scores				
Type of Test Scores	F	df1	df2	Sig.
Comm. Competence Pre-test	.69	2	96	.506
Comm. Competence Post-test	1.9	2	96	.163

The results in Table 5.7 showed that the variances of the communicative competence pre-test scores among the three groups were not significant. Similarly, the results showed that the homogeneity of variances of the groups' communicative competence post-test scores were insignificant. The results thus imply that the underlying assumption of homogeneity of variances for the groups' pre-test and the post test scores was not violated.

Considering the results of the histogram displayed in Figure 5.1, the test of significance of skew in Table 5.5, Shapiro-Wilk's test of normality in Table 5.6 and Levene's test of homogeneity of variance in Table 5.7, one could conclude that there was no concrete evidence to think that the distribution of the groups deviated from normality. Since the distribution of all groups did not depart from normality, it therefore implied that it was valid to run parametric tests such as t-tests, Analysis of variance and Analysis of covariance with the data collected for this study.

5.2.2 Comparison of Pupils' Overall Communicative Competence Pre- and Post test Scores by Group

Table 5.8: *Descriptive Statistics of Communicative Approach Group's Communicative Competence Pre-test and Post-test Scores*

Type of Test	N	Min.	Max.	Mean	SD
Comm. competence Pre-test Scores	32	18.0	97.0	49.6	21.8
Comm. competence Post-test Scores	32	32.0	113.0	69.4	19.2

The results in Table 5.8 reveal the communicative competence pre-test and post-test scores of the pupils in the communicative approach group. The communicative approach group's average communicative competence pre-test score was lower than the average communicative competence post-test score. In the same trend, the minimum and maximum communicative competence pre-test scores were lower than their minimum and maximum communicative competence post-test scores for pupils in the communicative approach group. Moreover, the decline in the post-test scores standard deviation also indicates that pupils' scores vary less in the post test than in the pre-test.

Table 5.9: *Descriptive Statistics of PRS Group's Communicative Competence Pre-test and Post-test Scores*

	N	Min.	Max.	Mean	SD
Comm. competence Pre-test Scores	41	19.0	112.0	61.2	24.4
Comm. competence Post-test Scores	41	54.0	128.0	88.1	17.5

Table 5.9 presents the PRS group's communicative competence pre-test and post-test scores. The average communicative competence pre-test score for pupils in this group was lower than their average communicative competence post-test score. Similarly in this group, the minimum communicative competence pre-test and maximum communicative competence pre-test scores were lower than the minimum post-test and maximum communicative competence post-test scores. The results also

showed that the standard deviation declines in the post-test scores; thus implying that the pupils' scores vary less in the post-test as compared to the pre-test.

Table 5.10: *Descriptive Statistics of Control Group's Communicative Competence Pre-test and Post-test Scores*

Type of Test	N	Min.	Max.	Mean	SD
Comm. competence Pre-test Scores	26	29.0	102.0	67.9	21.4
Comm. competence Post-test Scores	26	31.0	84.0	63.8	17.0

The results in Table 5.10 shows the communicative competence pre-test and post-test scores for pupils in the control group. The results indicated that the average communicative competence pre-test score was higher than the communicative competence post-test average score for pupils in the control group. Furthermore, the minimum communicative competence pre-test score was lower than the minimum communicative competence post-test score, while the maximum communicative competence pre-test score was higher than the maximum communicative competence post-test score.

Table 5.11: *Correlations between Communicative Competence Pre-test and Post-test Scores by Group*

Group	Comm. Competence Post-test
Comm. Approach Pre-test comm. competence	.822*
PRS Group Pre-test comm. Competence	.799*
Control Group Pre-test comm. Competence	.420*

* = < .05

Table 5.11 presents the Pearson Product Moment Correlation of the relationship between the communicative competence pre-test and post-test scores for pupils in all the groups. The results showed that there was a statistically significant and positive relationship between the communicative competence pre-test scores and the

communicative competence post-test scores for pupils in the communicative approach group ($r = .822$). Furthermore, the results indicated a statistically significant and positive relationship between the communicative competence pre-test and post-test scores for pupils in the PRS group ($r = .799$). Likewise, the results showed that in the control group, there was a statistically significant and positive relationship between the communicative competence pre-test and post-test scores ($r = .420$). This outcome suggests that pupils with higher communicative competence pre-test scores are more likely to have higher communicative competence post-test scores.

Table 5.12: *t-test Comparison of Communicative Approach Group's Communicative Competence Pre-test and Post-test Scores*

	N	Mean	SD	df	t	Sig.
Comm. competence Pre-test Scores	32	49.6	21.8	31	-8.982	$p < .05$
Comm. competence Post-test Scores	32	69.4	19.2			

The results of the paired samples t-test in Table 5.12 compared the English communicative competence pre-test and post-test scores for pupils in the communicative approach group. The results indicated that there was a statistically significant difference between the communicative competence pre-test scores and communicative competence post-test scores ($t_{(31)} = -8.982, p < .05$). The results suggest that pupils in the group recorded higher communicative competence scores in the post-test than in the pre-test. In other words, pupils' communicative competence in the ESL classroom would improve when they are exposed to the communicative approach.

The results of this study might stem from the fact that the pupils were provided with the opportunity to learn the target language by naturally communicating with other pupils in class.

Table 5.13: *t-test Comparison of PRS Group's Communicative Competence Pre-test and Post-test Scores*

	N	Mean	SD	Df	t	Sig.
Comm. competence Pre-test Scores	41	61.2	24.3	41	-11.232	p < .05
Comm. competence Post-test Scores	41	88.1	17.5			

Table 5.13 presents the results of the paired samples t-test comparison of the communicative competence pre-test and post-test scores of pupils in the PRS group. The results showed that a significant difference ($t_{(41)} = -11.232, p < .05$) existed between the PRS group's pre-test scores and the communicative competence post-test scores. The results therefore suggest that pupils in the PRS group performed better in the post-test than in the pre-test. The outcome of this study indicates that pupils in the ESL classroom would have improved communicative competence if they are taught with the personal response system.

A language is best learned when a child engages in rich and authentic communication with peers, when appropriate technology is employed to enhance the interactive session (Verkler, 2004). Exposing the pupils to graphic illustrations (bar charts) and activity-oriented learning experience, combined with the creative integration of the PRS in class, may have made language learning more interesting to the pupils. Such facilitated zest might have contributed to the improved communicative competence experienced by pupils in the PRS group in their ESL classroom.

Table 5.14: *t-test Comparison of Control Group's Communicative Competence Pre-test and Post-test Scores*

	N	Mean	SD	Df	t	Sig.
Comm. competence Pre-test Scores	26	67.8	21.4	25	.991	p > .05
Comm. competence Post-test Scores	26	63.8	17.0			

Table 5.14 shows the paired samples t-test results of the comparison of communicative competence pre-test and post-test scores of pupils in the control group. The results revealed that there existed no statistically significant difference ($t_{(25)} = .991$, $p > .05$) between the communicative competence pre-test scores and post-test scores for pupils in the control group. In other words, pupils in the control group had very similar communicative competence pre-test and post-test scores. The implication of the results is that there may be no improvement over the time scale of these observations, in the communicative competence of pupils in the ESL classroom, if they are taught with the conventional lecture method.

That the communicative competence of pupils in the control group did not significantly increase from the pre-test to the post-test may be linked with the deficiency of the traditional lecture method, which does not provide opportunity for more learners' verbal contributions and the use of the target language in class. Similarly, pupils in the control group might have been affected by the issue described by Shamim (2011), that most traditional ESL teachers seem not to be concerned about encouraging learners to use the target language in real-life communication. As mentioned earlier, the deterioration in the communicative competence of the pupils in control group may have also been caused by some particular circumstances they experienced.

5.2.3 Comparison of Pupils' Communicative Competence Pre- and Post test Scores in Listening Skills.

In order to identify the individual group's specific area of language skills improvement, after being exposed to the different treatment, paired samples t-test analysis was conducted to compare their pre-test and post-test communicative competence scores in listening and speaking skills' tests. The results of the analyses are presented in Tables 5.15 to 5.20.

Table 5.15: *t-test Comparison of Communicative Approach Group's Communicative Competence Pre-test and Post-test Scores in Listening*

Variable	N	Mean	SD	Df	T	Sig.
Listening Pre-test	32	19.9	11.4	31	-7.184	p < .05
Listening Post-test	32	32.1	12.4			

Table 5.15 reveals the results of the paired samples t-test comparison of the communicative competence pre-test and post-test scores in listening for pupils in the communicative approach group. The listening tests results for the communicative approach group indicated that there was a significant difference ($t_{(31)} = -7.184$, $p < .05$) between the communicative competence pre-test scores and the post-test scores. The outcome of this study suggests that pupils' listening skills improved after they were exposed to the communicative approach of teaching and learning English.

Perhaps the listening skills of the pupils in the communicative approach improved because of their active engagement in instructional activities. Moreover, the pupils may have thought that they needed to be attentive, grasp and have a good understanding of the points made by their peers, while interacting with one another to accomplish their group's tasks.

Table 5.16: *t-test Comparison of for PRS Group's Communicative Competence Pre-test and Post-test Scores in Listening*

Variable	N	Mean	SD	Df	T	Sig.
Listening Pre-test	41	26.6	6.5	40	-.12.458	p <.05
Listening Post-test	41	37.6	4.4	40		

The results of the paired samples t-test in Table 5.16 show the comparison of communicative competence pre-test and post-test scores in listening for the PRS group. The results revealed a statistically significant difference ($t_{(40)} = -12.458$, $p <.05$) between the pupils' communicative competence pre-test scores and post-test scores in listening. In other words, the results point to the fact that pupils in the group experienced improved listening skills after being taught with the PRS in the ESL classroom.

One possible explanation of this outcome is that pupils in the PRS group might have been prompted to listen to the teacher during instruction, because they needed to confirm and justify the correctness of their answer with other learners during the discussion sessions. This outcome may have been so because the pupils might have also assumed that they needed to listen to their peers' opinions, and the counter-points of their peers, while they negotiated meaning. Pupils may have realised that when they listen in class, they had better chances of choosing the correct answers as they negotiated with their peers, who might have been able to convince them to change their initially chosen option before casting their votes at the second opportunity.

Table 5.17: *t-test Comparison of Control Group's Communicative Competence Pre-test and Post-test Scores in Listening*

Variable	N	Mean	SD	df	t	Sig.
Listening Pre-test	26	34.0	6.1	25	4.903	p < .05
Listening Post-test	26	25.2	7.6			

Table 5.17 presents the results of the paired samples t-test comparison of the communicative competence pre-test and post-test scores in listening for the control group. The results indicated that there was a statistically significant difference ($t_{(25)} = 4.903, p < .05$) between the communicative competence pre-test scores and the post-test scores in listening. The results suggest that the listening skills of pupils in the control group declined even after the administration of the post-tests. In other words, there is the likely tendency that the listening skills of pupils in the traditional ESL classroom would depreciate if appropriate intervention is not introduced.

That the listening skills of the control group declined might be connected to pupils' loss of interest in the teacher's long talk. Such loss of interest might have been prompted by the non-engagement of pupils in the instructional process. Pupils' inactivity may have encouraged the pupils' minds to wander even when they were seated in the classroom. In other words, whilst the pupils were physically present in the classroom, their thoughts were engaged in some other things outside the scope of the instructional content.

5.2.4 Comparison of Pupils' Communicative Competence Pre- and Post test Scores in Speaking Skills

Table 5.18: *t-test Comparison of Communicative Approach Group's Communicative Competence Pre-test and Post-test Scores in Speaking*

Variable	N	Mean	SD	Df	T	Sig.
Speaking Pre-test	32	29.7	14.1	31	-6.770	p < .05
Speaking Post-test	32	37.3	11.9			

Table 5.18 reveals the results of the paired samples t-test comparison of the communicative approach group's communicative competence pre-test and post-test scores in speaking. The results indicated that there was a significant difference ($t_{(31)} = -6.770, p < .05$) between the pupils' communicative competence pre-test scores and the post-test scores. The implication of this outcome is that pupils would experience improved speaking competence if they are exposed to the communicative approach in an ESL classroom.

A possible explanation for these results is that the pupils may have been encouraged to speak more because they were presented with concrete objects, images or illustrations that were capable of prompting exchanges of ideas with other people. Moreover, that the pupils had to chat among themselves over concrete issues or think, and design how to get tasks accomplished without the teacher's intrusion, may have catalysed their improved speaking skills.

Table 5.19: *t-test Comparison of PRS Group's Communicative Competence Pre-test and Post-test Scores in Speaking*

Variable	N	Mean	SD	Df	T	Sig.
Speaking Pre-test	41	34.6	22.0	40	-7.155	p < .05
Speaking Post-test	41	50.6	16.1			

The results in Table 5.19 show the paired samples t-test comparison of

communicative competence pre-test and post-test scores in speaking tests for the PRS group. The results indicated that there was a significant difference ($t_{(40)} = -7.155$, $p < .05$) between the speaking pre-test scores and the post-test scores of pupils in the PRS group. The outcome shows that the speaking skills of pupils in the PRS improved after being exposed to the technology in the ESL classroom. In other words, the data suggests pupils' speaking proficiency would improve in an ESL classroom, if they are taught with the PRS.

It is possible that the PRS group's improved speaking skills may have been facilitated by the influence of the peer error correction. Probably, the improved speaking skills were recoded because the pupils had a new experience which was different from what is usually obtained in the traditional ESL classroom; where error correction is mostly done by the teacher. The pupils' ability and boldness to speak English might have increased when they discovered that error correction was minimal when they discussed in groups.

Table 5.20: *t-test Comparison of Control Group's Communicative Competence Pre-test and Post-test Scores in Speaking*

Variable	N	Mean	SD	Df	T	Sig.
Speaking Pre-test	26	33.8	19.9	25	-1.317	$p > .05$
Speaking Post-test	26	38.6	13.9			

Table 5.20 reveals the paired samples t-test comparison of the communicative competence pre-test and post-test scores of pupils in the control group in speaking. The results indicated no significant difference ($t_{(25)} = -1.317$, $p > .05$) between the communicative competence pre-test scores and the communicative competence post-test scores. Though there seemed to be a difference between the speaking pre-test and post-test scores of the control group, the difference was not statistically significant. The

results thus imply that the speaking skills of pupils in the control group did not change at the end of the study.

That the control group's speaking skills did not significantly improve might be connected to the fact that learners in the traditional classroom are treated as second class participants in the instructional process, who can only talk when the teacher wants. The pupils may have preferred to keep quiet because the teacher was in charge of the instructional process. Perhaps the pupils felt that their contributions were not important or useful and were possibly inferior to the opinions of the teacher. Based on previous experience in such a traditional classroom, the pupils may have thought, or realised, that they were only meant to be seen and not to be heard in the classroom.

5.2.5 *Comparison of Pupils' Communicative Competence Post-test Scores across Groups*

A significant difference has been found between the communicative competence pre- and post-test scores for pupils in each group used in the study, while the pupils' communicative competence pre- and post-test scores are significantly correlated. An Analysis of covariance (ANCOVA) was thus conducted to determine whether significant differences exist in groups' communicative competence post-test scores after controlling for the pupils' communicative competence pre-test experience (covariate) across the groups. In other words, Analysis of covariance was conducted at this stage to adjust the post-test means for differences among the three groups on the communicative competence pre-test scores.

Table 5.21: *Analysis of Covariance of the Effect of PRS, the Communicative Approach and Lecture Method on Pupils' Communicative Competence*

Dependent Variable: Comm. Competence Post-test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	26769.7	3	8923.2	54.93	.000	.6
Intercept	20213.1	1	20213.1	124.43	.000	.6
Pre Comm. Competence	15462.2	1	15462.2	95.18	.000	.5
Treatment	12435.9	2	6218.0	38.28	.000	.5
Error	15432.3	95	162.5			
Total	609021.0	99				
Corrected Total	42202.00	98				

a. R Squared = .634 (Adjusted R Squared = .623)

Table 5.21 shows the results of the analysis of covariance conducted for this study. The independent variable (treatment) included three levels: the communicative approach, the PRS and the lecture method. The dependent variable was the pupils' communicative competence post-test scores and the covariate was the pupils' communicative competence pre-test scores. These results showed that the overall model was statistically significant ($F_{(2, 92)} = 54.9, p < .05, \eta^2 = .63$). The results indicated that after adjusting for the communicative competence pre-test scores, there was a statistically significant effect of treatment (the communicative approach, the PRS and the lecture method) on pupils' communicative competence post-test scores ($F_{(2, 95)} = 38.3, p < .05, \eta^2 = .45$). The results further showed that 62.3% of the total variance in the pupils' communicative competence post-test scores was accounted for by the three levels of teaching strategies, after controlling for the effect of pupils' communicative competence pre-test scores.

The outcome of this study thus indicates that the strength of the relationship

between the teaching strategies and pupils' communicative competence post-test scores was very strong. The implication of this outcome is that pupils' improvement in communicative competence would vary based on the teaching strategy they are exposed to in the ESL classroom.

Table 5.22: *Univariate Analysis of Covariance for the effect of PRS, the Communicative Approach and Lecture Method on Pupils' Communicative Competence*

Dependent variable: Comm. Comp. Post-test

	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	12435.896	2	6218.0	38.277	.000	.45
Error	15432.282	95	162.5			

Table 5.22 presents the outcome of the univariate analysis of covariance for the effect of the personal response system, the communicative approach and the conventional teaching method on pupils' communicative competence post-test scores in the ESL classroom. The results showed that there was a significant effect of the teaching strategies on the pupils' communicative competence in the ESL classroom ($F_{(2, 95)} = 38.3, p = < .05, \eta^2 = .45$). The results suggest that pupils' levels of communicative competence differed across the three teaching strategies. In other words, pupils' levels of communicative competence would be determined by the type of teaching strategy they are exposed to in the ESL classroom.

In view of the statistically significant difference in the English language communicative competence post-test scores across the groups, a follow-up test was conducted to evaluate pairwise differences among the adjusted means for communicative competence post-test scores. The Bonferroni procedure was used to

control for Type I error across the three pairwise comparisons. The results of the pairwise comparisons are presented below:

Table 5.23: *Pairwise Comparisons of differences in Communicative Competence Post-test Scores in ESL Classrooms by Group*

Bonferroni:

(I) Treatment	(J) Treatment	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference [*]	
					Lower Bound	Upper Bound
	PRS	-12.3 [*]	3.08	.000	-19.8	-4.8
Comm. App.	Control Group	15.8 [*]	3.52	.000	7.2	24.4
	Comm. Approach	12.3 [*]	3.08	.000	4.8	19.8
PRS Group	Control Group	28.0 [*]	3.22	.000	20.2	35.9
	Comm. Approach	-15.8 [*]	3.52	.000	-24.4	-7.2
Control Group	PRS	-28.0 [*]	3.22	.000	-35.9	-20.2

*= p < .05

Table 5.23 shows the results of the evaluated pairwise differences among the adjusted means of communicative competence post-test scores in all the groups. The Bonferroni pairwise comparisons results indicated that the mean communicative competence post-test scores difference between the communicative approach group and the control group was statistically significant ($p < .05$). Moreover, the results indicated that the mean communicative competence post-test scores difference between the PRS group and the communicative approach group was also statistically significant ($p < .05$). Similarly, the results further indicated a statistically significant ($p < .05$) difference between the mean communicative competence post-test scores of the PRS and the control group.

5.2.6 Comparison of Pupils' Communicative Competence Gains

In order to find out whether there is any relationship between pupils' communicative competence gain scores and the communicative competence pre-test scores in ESL, the data for pupils in each group were plotted on the scatter graph and the results are presented below:

The Communicative Approach Group's Gain Scores and the Communicative Competence Pre-test Scores

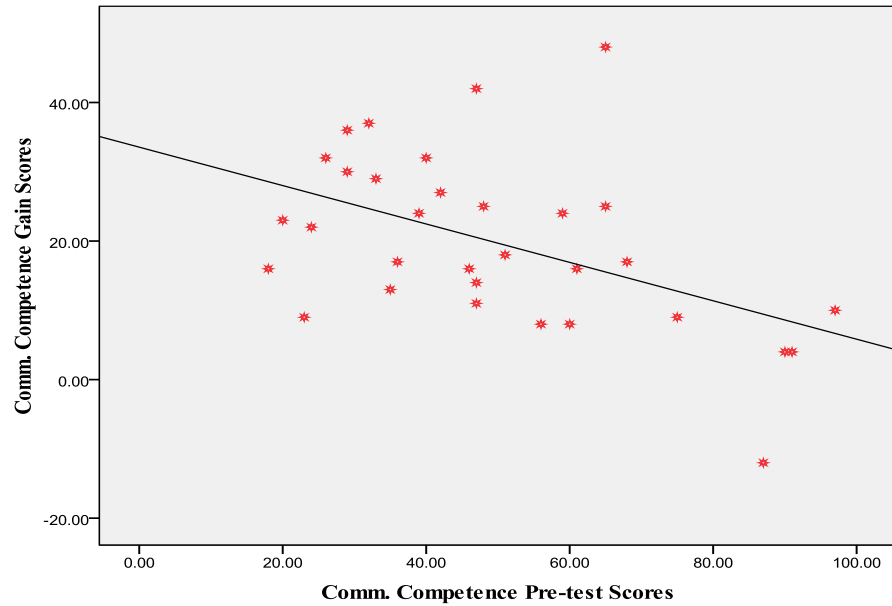


Figure 5.3: *Communicative Approach Group's Gain and Pre-test Scores*

Figure 5.3 presents a scatter graph showing the relationship between communicative competence gain scores and communicative competence pre-test scores for pupils in the communicative approach group. The results indicated a negative linear relationship between the communicative approach group's communicative competence gain scores and the communicative competence pre-test scores. The results suggest that the gain scores of pupils in the communicative approach increase as their communicative competence pre-test scores decrease. In other words, pupils who scored lower in the pre tests gained more from the intervention.

The PRS Group's Gain Scores and the Communicative Competence Pre-test Scores

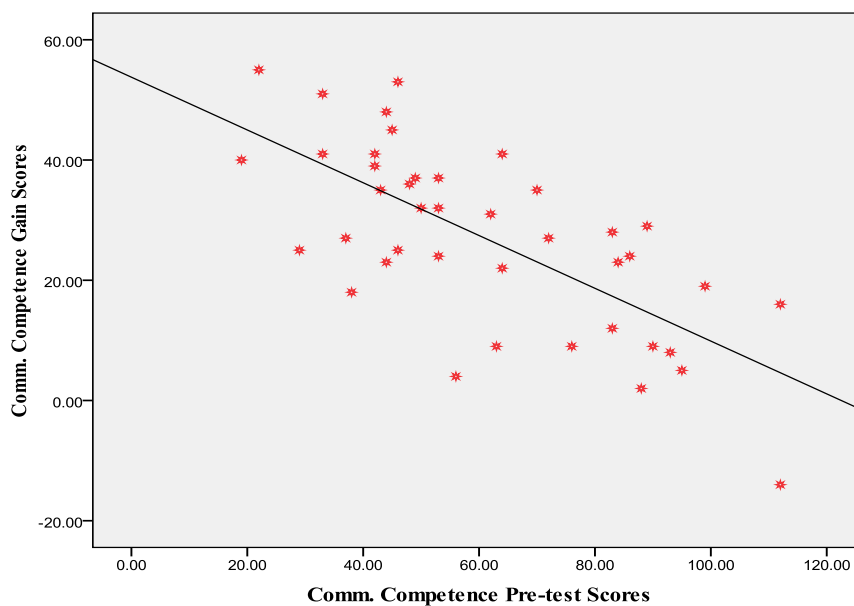


Figure 5.4: *PRS Group's Gain and Communicative Competence Pre-test Scores*

Figure 5.4 shows the scatter graph of the relationship between the communicative competence gain scores and the communicative competence pre-test scores in English language for the PRS's group. The results revealed a negative linear relationship between the communicative competence gain scores and the communicative competence pre-test scores for pupils in the PRS group. In other words, the lower the pupils' communicative competence pre-test scores, the higher their communicative competence gain scores.

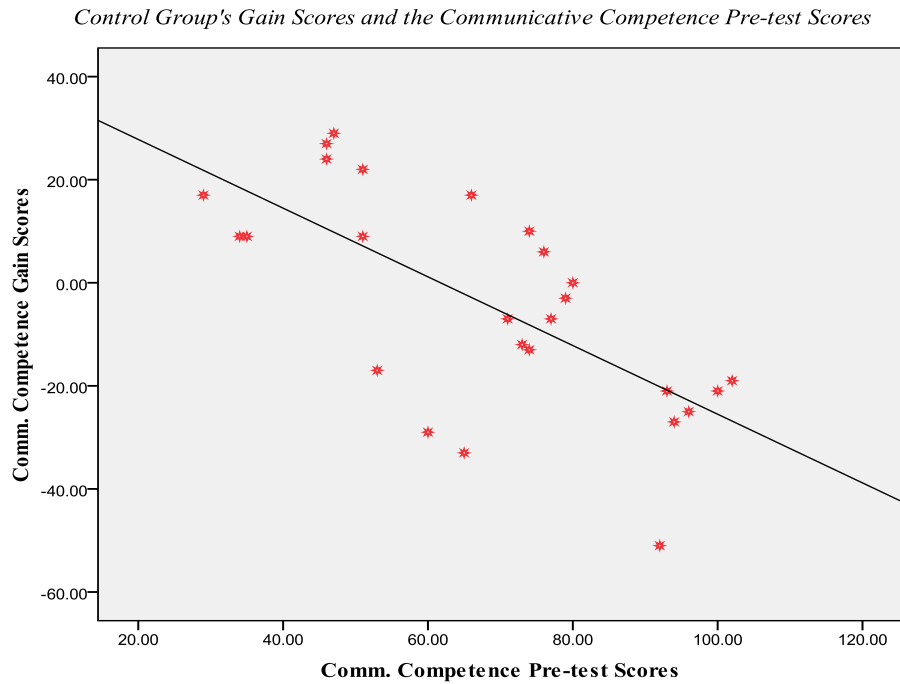


Figure 5.5: *Control Group's Gain and Communicative Competence Pre-test Scores*

The results in Figure 5.5 present the scatter graph of the relationship between the communicative competence gain scores and the communicative competence pre-test scores in ESL for pupils in the control group. The results revealed a negative linear relationship between the communicative competence gain scores and the communicative competence pre-test scores for pupils in the control group. The results imply that among the pupils in the group, high communicative competence gain scores correlated with a low communicative competence pre-test scores. Moreover, most pupils did not experience any gain in the period of the study as shown by the negative values in the vertical axis.

Table 5.24: *Descriptive Statistics of Pupils' Gain Scores by Group*

Group	N	Mean	SD	Std. Error
Comm. Approach	32	19.8	12.5	2.2
PRS	41	26.9	15.3	2.4
Control Group	26	-4.1	20.9	4.1
Total	99	16.5	20.5	2.1

Table 5.24 presents the mean and standard deviation statistics of the mean gain scores for all pupils in the three groups. The results revealed that the mean gain scores were higher for the PRS group than for the communicative approach group, while the control group had the lowest mean gain score as compared to the two intervention groups.

Table 5.25: *Correlations Matrix for the Relationship between Groups' Communicative Competence Pre-test and Gain Scores*

Group	Test	Comm. Competence Gain Scores
Comm. Approach	Comm. Competence Pre-test	-.484**
PRS Group	Comm. Competence Pre-test	-.697**
Control Group	Comm. Competence Pre-test	-.375

** = .p < 0.01

The results in Table 5.25 show the Pearson Product Moment Correlation comparison of the relationship between the communicative competence pre-test and the gain scores in ESL of pupils in the various groups. The results indicate that in the communicative approach and the PRS groups, there existed a statistically significant and negative relationship between pupils' communicative competence pre-test scores and their gains scores. The results suggest that in the two groups, as the pupils'

communicative competence pre-test scores in English language decrease, their gain scores increase. In other words, pupils initially with low communicative competence pre-test scores in English language are benefitting more from being taught with the communicative approach and the PRS in the ESL classroom than those pupils who initially had higher pre-test scores.

However, in the control group, the results showed a statistically insignificant and negative relationship between the pupils' communicative competence pre-test and post-test scores. In other words, there was little or no relationship between the communicative competence pre-test scores and the gains scores for pupils in the control group.

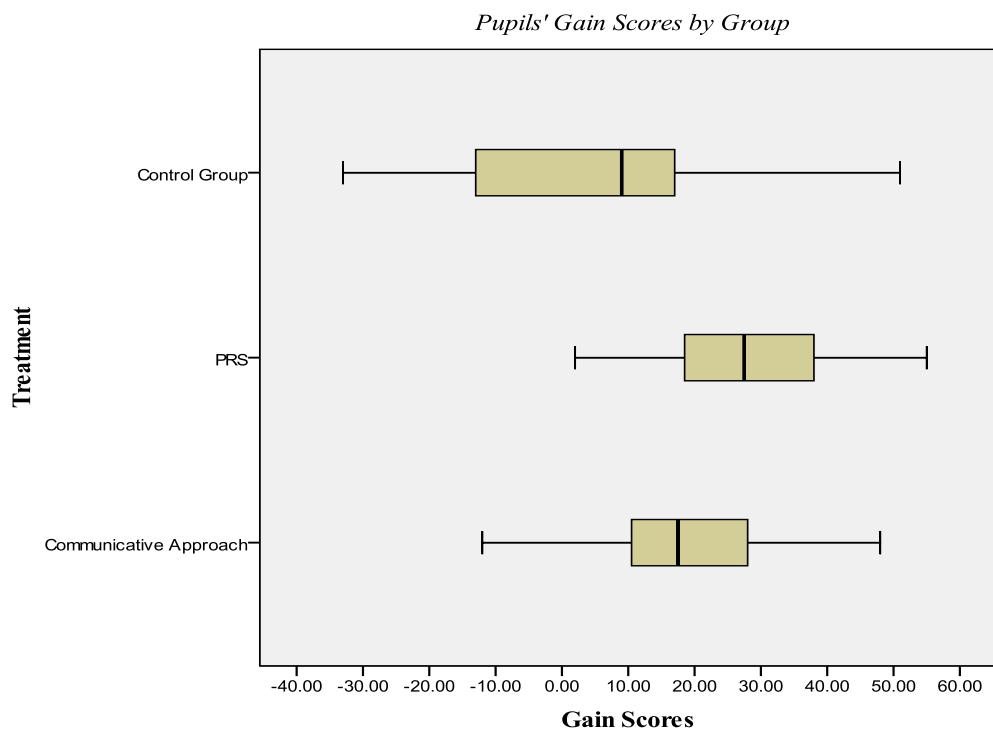


Figure 5.6: Box Plot of *Gain Scores by Group*

Figure 5.6, which shows the box plot comparing pupils' gain scores across the groups, indicates that teaching strategies have effect on the pupils' communicative

competence with respect to location of and variation in the distribution of the gain scores. The results indicate that the PRS group had the highest median gain score, while the control group recorded the lowest median gain score. The median gain score of the communicative approach group was higher than that of the control group. The interquartile range of the pupils' gain scores differed from one group to another. The overall range of the data showed that the control group had the highest range, while the PRS group had the smallest range. The range for the communicative approach group was higher than that of the PRS group. In terms of wider range, the control group had the highest variability of gain scores of all three groups.

Meanwhile, the spread of gain scores in the PRS group was slightly higher than that of the communicative approach group. The gain scores distribution in the control group was positively skewed, indicating that more of the group members had lower gain scores. The PRS and the communicative approach groups appear skewed to the right (negative skew) indicating that a majority of the pupils had higher gain scores. Meanwhile, the gain scores of the PRS group were slightly more negatively skewed than that of the communicative approach group. The results thus revealed that more pupils had higher gain scores in the PRS group than those obtained in the communicative approach group. There were no outliers in the distributions across the groups.

Table 5.26: *Analysis of Variance Statistics of Pupils' Gain Scores by Group*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	15796.4	2	7898.2	30.057	.000
Within Groups	5226.31	96	262.8		
Total	41022.7	98			

The results of the Analysis of variance in Table 5.26 present the English language communicative competence gain scores comparison among the three groups. The results revealed that there was a statistically significant difference in the communicative competence gain scores among pupils in the communicative approach, the PRS and the control groups ($F_{(2, 96)} = 30.057, p < .05$). The implication of this outcome is that the gain scores of the pupils in the ESL classroom varied from one group to another. Meanwhile, in order to identify which groups were different from one another, a Bonferroni pairwise comparison was carried out; hence the results are presented in Table 5.27.

Table 5.27: *Pairwise Comparisons of the Differences in Pupils' Gain Scores*

Bonferroni:

(I) Treatment	(J) Treatment	Mean Diff. (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Comm. Approach	PRS	-7.0	3.8	.200	-16.4	2.2
	Control Group	24.0*	4.3	.000	13.5	34.3
PRS	Comm. Approach	7.0	3.8	.200	-2.2	16.4
	Control Group	31.0*	4.1	.000	21.1	40.9
Control Group	Comm. Approach	-24.0*	4.3	.000	-34.3	-13.5
	PRS	-31.0*	4.1	.000	-40.9	-21.1

* = $p < .05$.

The results of the Bonferroni pairwise comparison of differences in pupils' gain

scores across the groups, presented in Table 5.27, indicated significant differences among the three groups. The results indicated that there was a statistically significant difference between the gain scores of pupils in the communicative approach group and those in the control group (7.0, $p < .05$). Similarly, there existed a statistically significant difference in the gains scores between pupils in the PRS group and those in the control group (31.0, $p < .05$). Moreover, the results indicated that there was no statistically significant difference in the gain scores of pupils in the communicative approach and the PRS groups (7.0, $p > .05$). The results suggest that the gain scores of pupils would be dependent on the type of pedagogy they are exposed to during their instructional process in the ESL classroom. Furthermore, while the two treatment groups were not significantly different from each other, pupils in the control group were distinctively mapped out as being different from the pupils in either the PRS group or those in the communicative approach group.

5.2.7 *Comparison of Pupils' Gain Scores by Classes of Pre-test Scores*

In every educational setting, there are at least two classes of learners; those with high academic performance and those with low academic performance. In order to find out whether pupils with low or high communicative competence in the ESL classroom were more positively influenced in their language skills by the various interventions used in this study, further analysis was conducted to compare the gain scores of low and high pre-test scorers. Pupils whose scores ranged between the minimum and the mean scores were treated as the low pre-test scorers, while those pupils whose scores ranged between the mean and the maximum scores were treated as the high pre-test scorers. The results of the descriptive statistics and the t-test comparisons are presented Table 5.28 to Table 5.33.

Table 5.28: *Descriptive Statistics of Communicative Approach Group's Gain Scores by Classes of Pre-test Scores*

Classes of Pre-test	N	Min.	Max.	Mean	SD
Low Comm. Competence Pre-test	41	8.00	42.00	23.9	9.5
High Comm. Competence Pre-test	41	-12.00	48.00	13.8	14.1

Table 5.28 show the descriptive data of the communicative approach group's communicative competence gain scores by classes of pre-test scores. The mean average communicative competence gain score for the high pre-test scorers was lower than that of the low pre-test scorers for pupils in the communicative approach group. The minimum communicative competence gain score for the low pre-test scorers was high when compared with that of the high pre-test scorers. However, the maximum communicative competence pre-test gain score for the high pre-test scorers was higher than that of the low pre-test scorers. The results also showed that the standard deviation of the gain scores for the high pre-test scorers was high as compared to that of the low pre-test scorers; thus implying that the variation in the gain scores distribution of the high pre-test scorers was more than that of the low pre-test scorers.

Table 5.29: *Descriptive Statistics of PRS Group's Gain Scores by Classes of Pre-test Scores*

Classes of Pre-test	N	Min.	Max.	Mean	SD
Low Comm. Competence Pre-test	32	4.00	55.00	34.9	12.3
High Comm. Competence Pre-test	32	-14.00	41.00	17.6	13.3

The results in Table 5.29 show the descriptive data for pupils in the PRS group's communicative competence gain scores by their classes of pre-test scores. The mean average communicative competence gain score for the high pre-test scorers was low when compared with that of the pupils in the pupils who had low communicative competence pre-test scores. The minimum communicative competence gain score and the maximum communicative competence gain scores for pupils with high

communicative competence pre-test scores were lower than that of the pupils who had low communicative competence pre-test scores. Moreover, the standard deviation of the communicative competence gain scores for pupils who were high pre-test scorers was higher than that of their counterparts who were low pre-test scorers. The results suggest that the variation in the communicative competence gain scores distribution for the high pre-test scorers was more than that of the pupils with low communicative competence pre-test scores.

Table 5.30: *Descriptive Statistics of Control Group's Gain Scores by Classes of Pre-test Scores*

Classes of Pre-test Scores	N	Min.	Max.	Mean	SD
Low Comm. Competence Pre-test	26	9.00	29.00	9.8	20.2
High Comm. Competence Pre-test	26	-33.00	51.00	-1.9	20.9

Table 5.30 illustrates the descriptive data for the control group's communicative competence gain scores and the classes of pre-test scores. The mean average communicative competence gain score for pupils who had high communicative competence pre-test scores was lower than that of their counterparts who recorded low communicative competence pre-test scores. While the minimum communicative competence score for the high pre-test scorers was lower than that of the low pre-test scorers, the maximum scores for the high pre-test scorers was high when compared with that of the low pre-test scorers. There was no obvious difference in the standard deviation of the distribution of the communicative competence gain scores between the two classes of pre-test scorers.

Table 5.31: *t-test Comparison of the Communicative Approach Group's Communicative Competence Gain Scores by Classes of Pre-test Scores*

Variable	N	Mean	SD	Df	t	Sig.
Low Comm. Competence Pre-test	19	23.9	9.5	30	2.44	P < .05
High Comm. Competence Pre-test	13	13.8	14.1			

The results in Table 5.31 show the paired samples t-test comparison of the gain scores between pupils with low and high communicative competence pre-test scores in the communicative approach group. The results indicated that there was a statistically significant difference ($t_{(30)} = 2.44$, $P < .05$) in the gain scores between pupils with low communicative competence pre-test scores and those with high communicative competence pre-test scores in the communicative approach group. The results suggest that the communicative approach not only improved the communicative competence of pupils with high communicative competence pre-test scores, but pupils with low communicative competence benefitted more than their counterparts in the ESL classroom. The results thus substantiate the fact that pupils with low communicative competence would experience improved communicative fluency if they are taught with the communicative approach in the ESL classroom.

A plausible explanation for this outcome is that the pupils with low communicative competence pre-test scores may have found group tasks more enjoyable than being passive during instructional process and hence stimulated their interest in learning English. The gains in the group may be associated with the fact that the low pre-test scorers had the opportunity to communicate with mixed sets of learners in their various groups. Perhaps the mixed grouping provided the pupils with opportunities to interact with one another, by using simple and easy to understand vocabulary, which may have prompted peers' use of the target language. Reflecting on the results in Table

5.28, it is thus obvious that the communicative competence gains were beneficial to both the low and high pre-test scorers in the communicative approach group as pupils with initial communicative competence high scores at pre-test were not affected by “ceiling effect” at the post-test.

Table 5.32: *t-test Comparison of PRS Group’s Communicative Competence Gain Scores by Classes of Pre-test Scores*

Variable	N	Mean	SD	Df	t	Sig.
Low Comm. Competence Pre-test	22	34.9	12.3	39	4.32	P < .05
High Comm. Competence Pre-test	19	17.6	13.3			

The results in Table 5.32 show the paired samples t-test comparison of the gain scores between the low and high communicative competence pre-test scorers in the PRS group. The results revealed that a statistically significant difference ($t_{(39)} = 4.32$, $P < .05$) was found in the gain scores between low communicative competence pre-test scorers and high communicative competence pre-test scorers. The implication of this outcome is that the use of the PRS in the ESL classroom would not only enhance the communicative fluency of high communicative competence pre-test scorers, but also facilitate the improvement of the communicative competence of the low pre-test scorers.

Perhaps the low pre-test scorers in the PRS group gained as much communicative competence as they did because the PRS is designed as one of the electronic games. Playing some of the electronic games requires that the players talk while the games of contest are played. It may have been possible that the pupils felt more comfortable to talk while using the PRS, because of their experience with the use of mobile phones in different forms of communication, as well as their experience with

the use of some electronic games. It is possible that the pupils' familiarity with these handheld technologies enhanced their communicative skills in the ESL classroom. Moreover, the communicative competence gains were beneficial to both the low and high communicative pre-test scorers in the PRS group. In other words, pupils with high pre-test scores at the beginning of the study were more likely to improve their communicative competence as those pupils with low pre-test scores.

Table 5.33: *t-test Comparison of Control Group's Communicative Competence Gain Scores by Classes of Pre-test Scores*

Variable	N	Mean	SD	Df	t	Sig.
Low Comm. Competence Pre-test	12	9.8	20.2	24	1.40	P > .05
High Comm. Competence Pre-test	14	-1.9	20.9			

Table 5.33 presents the paired samples t-test comparison of the communicative competence gain scores between the low and high communicative competence pre-test scorers in the control group. The results indicate no significant difference ($t_{(24)} = 1.44$, $P > .05$) between the gain scores of pupils with low and high communicative competence pre-test scorers. The results suggest that the two classes of pre-test scorers in the control group did not record significant difference in their communicative competence gains.

A plausible explanation for this outcome is that pupils in the traditional classrooms are hardly given the opportunity to interact with the learning environment. Perhaps the non-significant communicative gains observed in the control group were influenced by their non-active engagement in instructional activities. Moreover, based on the informal observation of the researcher, the outcome of this study may have been influenced by the fact that, a few times when the opportunities were provided for the

pupils to contribute during the instructional process, the more self-confident pupils dominated the classroom instruction. And such situation might have been at the expense of the low pre-test scorers.

5.2.8 *Effects of Gender; Interaction of Gender and Treatment on Pupils' Communicative Competence*

Table 5.34: *Descriptive Statistics of the Communicative Competence Pre-test and Post-test Scores by Group and Gender*

Group	Test Type	Gender	N	Mean	SD
Comm. Approach	Pre- Comm. Competence	Male	11	40.4	13.7
		Female	21	54.4	23.9
	Post- Comm. Competence	Male	11	63.3	19.9
		Female	21	72.6	18.5
PRS Group	Pre- Comm. Competence	Male	14	65.4	20.7
		Female	27	59.1	26.2
	Post- Comm. Competence	Male	14	91.9	14.8
		Female	27	86.2	18.8
Control Group	Pre- Comm. Competence	Male	15	68.5	17.9
		Female	11	66.9	26.3
	Post- Comm. Competence	Male	15	64.3	19.3
		Female	11	63.1	14.0

Table 5.34 presents the means and standard deviations of pupils' communicative competence pre-test and post-test scores by group and gender. The results showed that males in the communicative approach group recorded a lower mean communicative competence pre-test scores when they are compared with their female counterparts. The mean communicative competence pre-test scores of males in the PRS group were higher than that of their female counterparts. In the control group, the mean communicative competence pre-test score of the males was higher than that of the females.

With respect to the post-test scores, in the communicative approach group, females recorded a higher communicative competence mean score when compared with that of their male counterparts. Meanwhile, males in the PRS group had a higher mean communicative competence score above the females in the group. In the control group, females had a lower mean communicative competence score as compared with their male counterparts. The results also indicated that the mean communicative competence post-test score for males in the communicative approach group was lower than that of the males in the control group. The mean communicative competence post-test score for females in the communicative approach was higher than that of the females in the control group.

From the results of the descriptive analysis, the communicative competence pre-test and the post-test scores for males and females across the group were different. A factorial analysis of covariance was performed in this section for two reasons. First, the analysis was performed to determine whether the difference in the pupils' communicative competence was significantly affected by gender or not after the introduction of the interventions. Secondly, the factorial analysis was conducted to investigate the extent to which the interaction of the teaching strategies employed in this study and gender affected the pupils' communicative competence in the ESL classroom. The results of the analyses are presented in Table 5.35:

Table 5.35: *Analysis of Covariance of the effect of PRS, the Communicative Approach and Lecture Method, and Gender on Pupils' Communicative Competence*

Dependent Variable: Comm. Comp. Post-test

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	26831.5	6	4471.9	26.77	.000	.64
Intercept	20008.8	1	20008.8	119.76	.000	.57
Pre Comm. Competence	14594.4	1	14594.4	87.36	.000	.49
Treatment	12076.4	2	6038.2	36.14	.000	.44
Gender	2.1	1	2.1	.01	.912	.00
Treatment * Gender	56.5	2	28.2	.17	.845	.00
Error	15370.5	92	167.1			
Total	609021.0	99				
Corrected Total	42202.0	98				

a. R Squared = .636 (Adjusted R Squared = .612)

Table 5.35 presents the results of the factorial analysis of covariance of the effect of treatment (the PRS, the communicative approach and the lecture method) and gender on pupils' communicative competence. The results indicated that the overall model was statistically significant ($F_{(2, 92)} = 26.77, p < .05, \eta^2 = .64$). The results further showed that after controlling for differences in the communicative competence pre-test scores, the main effect of gender was statistically insignificant on pupils' communicative competence post-test scores ($F_{(1, 92)} .01, p > .05, \eta^2 = .00$). Similarly, the interaction effect of gender and teaching strategies on pupils' communicative competence in the ESL classroom was not statistically significant ($F_{(2, 92)} = .17, p > .05, \eta^2 = .00$). The results thus suggest that pupils' communicative competence in the ESL classroom across the groups was neither dependent on their gender nor on the interaction between the teaching strategies and gender.

Table 5.36: *Univariate Analysis of Covariance for the effect of Gender on Pupils' Communicative Competence*

Dependent Variable: Post Comm. Competence

	Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	2.1	1	2.1	.012	.912	.000
Error	15370.5	92	167.1			

The analysis of covariance results in Table 5.36 indicates that the pupils' communicative competences post-test scores do not significantly differ between boys and girls. The results revealed an insignificant effect of gender on pupils' communicative competence in the ESL classroom ($F_{(2, 92)} = .012, p > .05, \eta^2 = .00$). The outcome of this study implied that the communicative competence of male and female pupils in all the groups was very similar.

To further check whether there was significant difference in the pupils' communicative competence post test scores by gender and group, independent t-test analysis was conducted for each group. The results of the independent t-test revealed no significant difference in the post-test communicative competence among males and females in the communicative approach group ($t_{(39)} = -1.318, p > .05$); the PRS group ($t_{(39)} = .982, p > .05$) and the control group ($t_{(24)} = .212, p > .05$). The implication of the outcome of this study is that pupils' communicative competence in the ESL classroom is not likely to be influenced by gender or the interaction of teaching strategies with gender.

The results may be explained by the fact that all pupils in this study, irrespective of their gender, were exposed to an English medium of instruction at the same time; hence with respect to experience in the use of the target language, neither of the gender groups had undue advantage over the other. Perhaps the general initial low level of

English proficiency among the pupils irrespective of their gender may have accounted for the lack of disparity in pupils' communicative competence development based on their gender.

5.2.9 *Effect of Teachers' Use of Teaching Strategies in ESL Classroom on Pupils' Overall Performance in all School Subjects across Groups*

Earlier in this chapter, results of this study showed that the teaching strategies have significant effects on pupils' communicative competence and their gain scores in the communicative competence tests. A number of earlier research findings have shown that good scores in English language indicate that learners possess enough English proficiency to enhance academic success at the college or university level (Francis & Rivera, 2007; Kong, Powers, Starr & Williams, 2012).

A further step was therefore taken in this study to investigate whether pupils' overall academic performance, in all school subjects, was influenced by the teaching strategies they were exposed to during the treatment stage of this study. Specifically, this section of the analysis was performed with a view to checking whether the learning experience gained in the English language lesson could affect pupils' overall academic attainment in all other school subjects. To carry out the analysis, the pupils' overall performances in all school subjects in the previous term (between October 6, 2009 and December 18, 2009) were treated as the overall performance entry scores, while pupils' scores in all subjects for the term in which the study was carried out (between January 11, 2010 and April 4, 2010) were treated as the overall performance post-study scores. Details of the analyses are presented in the sections that follow:

5.2.9.1 *Descriptive Statistics of Pupils' Entry and Post-study overall Academic Performance Scores in all School Subjects*

Table 5.37: *Descriptive Statistics of the Communicative Approach Group's overall Performance Entry and Post-study Scores in all School Subjects*

Type of Test	N	Min.	Max.	Mean	SD
Overall Performance Entry Scores	32	24.3	90.0	65.7	15.6
Overall Performance Post-study Scores	32	46.0	88.0	69.1	11.6

Results in Table 5.37 show the communicative approach group's entry and post-study overall performance scores in all subjects at the end of the term. The results indicated that the overall performance entry score was lower than the overall performance post-study score for the group. Furthermore, while the pupils' recorded minimum overall performance entry score was lower than the minimum overall performance post-study score, the maximum overall performance entry score was higher than the maximum overall performance post-study score. The results suggest that, while there is an improvement in pupils' overall performance from the entry score to the post-study score at the lower end, pupils' overall performance was stable at the upper end. Moreover, the group's standard deviation declines in the post-study scores, and thus indicates that pupils' scores vary less in the post-test than in their entry scores.

Table 5.38: *Descriptive Statistics of the PRS Group's overall Performance Entry and Post-study Scores in all School Subjects*

Type of Test	N	Min.	Max.	Mean	SD
Overall Performance Entry Scores	41	35.4	87.6	60.5	12.3
Overall Performance Post-study Scores	41	45.0	90.0	67.4	11.1

Table 5.38 reflects the PRS group's end of term overall performance entry and post-study scores in all the school subjects. The overall performance entry score was lower than the pupils in the group had as an overall examination post-study score. The minimum and the maximum overall examination entry scores were respectively lower

than the group's minimum and maximum post-study scores. In other words, pupils' overall performance in all subjects improved from the pre-test scores to the post-study scores, at both the lower and upper ends of the group's obtained scores. Meanwhile, there was a slight difference between the entry and the post-study's average overall performance scores for the PRS group.

Table 5.39: *Descriptive Statistics of Control Group's overall Performance Entry and Post-study Scores in all School Subjects*

Type of Test	N	Min.	Max.	Mean	SD
Overall Performance Entry Scores	26	34.7	87.6	61.3	16.1
Overall Performance Post-study Scores	26	27.0	81.0	59.2	14.5

The results in Table 5.39 show the entry and post-study overall performance scores in all the school subjects for the control group. The results revealed that in the control group, the average overall performance entry score was higher than the mean overall performance post-study score. In the same trend, the group's minimum and the maximum overall performance entry scores were higher than the minimum and the maximum overall performance post-study scores. In the control group, pupils' overall performance in all subjects was worse as their minimum, maximum and average scores reduced; all their post-test scores being lower than their pre-test scores.

5.2.9.2 Comparison of Pupils' Overall Performance Entry and Post-study Scores by Group

Table 5.40: *t-test Comparison of Communicative Approach Group's overall Examination Entry and Post-study Scores*

	N	Mean	SD	df	t	Sig.
Overall Performance Entry Scores	32	65.7	15.6	31	-2.08	< 0.05
Overall Performance Post-study Scores	32	69.1	11.6			

Table 5.40 presents the results of the paired samples t-test which compares the communicative approach group's overall performances in all the school subjects at the beginning (overall entry scores) and at the end (overall post-study scores). The outcome of the analysis revealed the existence of a statistically significant difference ($t_{(31)} = -2.1$, < 0.05) between the overall performance entry scores and the overall performance post-study scores. The outcome shows that pupils in the communicative approach group recorded improvements in overall academic performance in all school subjects at the post-communicative approach experience.

Table 5.41: *t-test Comparison of the PRS Group's overall Performance Entry and Post-study Scores in all School Subjects*

	N	Mean	SD	Df	t	Sig.
Overall Performance Entry Scores	41	60.5	12.3	40	-3.736	< 0.05
Overall Performance Post-study Scores	41	67.4	11.1			

Table 5.41 presents the results of the paired samples t-test comparison of the PRS group's overall entry and post-study performance scores in all school subjects. The results illustrate that there exists a statistically significant difference ($t_{(41)} = -4.6$, < 0.05) between the personal response group's overall performance entry scores and the overall performance post-study scores. The implication of these results is that the overall performance post-test scores in all school subjects for pupils in the PRS group

was better than their overall performance entry scores. In other words, effective use of the PRS in an ESL classroom may have had a positive impact on the general performance of pupils in all school subjects.

Table 5.42: *t-test Comparison of the Control Group's Entry and Post-study overall Performance Scores in all School Subjects*

	N	Mean	SD	Df	t	Sig.
Overall Performance Entry Scores	26	61.3	16.0	25	2.31	< 0.001
Overall Performance Post-study Scores	26	55.2	14.5			

Table 5.42 presents the paired samples t-test results of the comparison of the control group's entry and post-study overall performance scores in all school subjects. The results showed the existence of a statistically significant difference ($t_{(25)} = 2.3, < 0.001$) between the control group's overall performance entry scores and the overall performance post-study scores. The results thus suggest that the post-study overall performance of the pupils in the control group dwindled when compared with their entry overall performance scores. That is to say, pupils' overall performance in all other school subjects might depreciate if they are taught with the traditional lecture method in the ESL classroom.

5.3 Summary of Results

The results of this study reveal that, in the classroom where English was taught as a second language (ESL), the communicative competence of pupils who were exposed to the communicative approach and the personal response system significantly improved from the pre-test to the post-test, while that of the pupils in the control group remained stable. When the listening and speaking abilities were tested, this study showed that only the pupils who experienced the communicative approach and the PRS teaching strategies had improved significantly at the post-test. On the other hand, while

the English language communicative competence listening ability of the pupils who were taught with the traditional lecture method dwindled at the post-test, their communicative competence speaking skills in English did not significantly improve at the post-test. Furthermore, the study revealed that the communicative competence gains of the groups significantly differed with the PRS group having the highest gains, while the control group had the lowest gains.

Overall, the teaching strategies (the communicative approach, the PRS and the lecture method) used in this study had significant effect of the pupils' levels of communicative competence development in the ESL classroom. The results further indicated that the effect of the teaching strategies on pupils' communicative competence development in the ESL classroom was not significantly influenced by their gender. The findings thus imply that, there were significant differences among the communicative competence scores of pupils exposed to different teaching methods in ESL classrooms.

The results of this study regarding the effect of teaching strategies on pupils' overall academic performance in all school subjects showed that, at the end of the term, the mean academic performance scores in all school subjects for pupils in the two experimental groups were significantly higher when compared with their initial mean academic performance scores in all school subjects before the commencement of the study. Meanwhile, at the end of the term, the mean academic performance score in all school subjects for pupils in the PRS group was higher than that of their counterparts in the communicative approach group. However, the mean academic performance score in all school subjects for pupils exposed to the lecture method dwindled at the end of the term. The findings of this study suggest that, pupils' academic performance scores in

all school subjects are more likely to be influenced by the type of teaching strategy they are exposed to in the ESL classroom.

Chapter Six

PUPILS' ATTITUDES TO ENGLISH LANGUAGE LESSONS

6.1 Introduction

The aim of this study is to compare the effect of teachers' use of the communicative approach, the personal response system and the lecture method on the pupils' academic attainment with respect to their communicative competence in the ESL classroom. A second aim is to investigate pupils' attitudes to the learning of English as a second language and to the interventions introduced in the course of the research. The previous chapter revealed that the teaching strategies (the communicative approach, the PRS and the lecture method) had an influence on pupils' post-test scores and gains with respect to communicative competence improvement in the ESL classroom. This chapter thus investigates the differences in the disposition towards the learning of English as a second language among pupils in the three groups.

The attitudes of the pupils, on entry to study in the English language lesson were first explored with a view to establishing whether the three groups were equivalent in terms of their attitudes before the introduction of the interventions. Thereafter, data analyses were performed to check the effect of the various teaching strategies on pupils' attitudes towards learning English as a second language. All the attitudinal items used to assess pupils' disposition towards the learning of English language were "True" or "False" type of response-oriented questions. The coding of the responses followed the binary coding form (1 or 0). So the option "True" was coded "1" indicating a higher score, while "False" was coded "0" indicating a lower score. In order to ensure that all items for each of the attitudinal questionnaires were in the same direction, all negatively-worded items were re-coded into a positive direction. Since the

negatively worded items have been reversed into the positive direction, higher scores in the results therefore signifies more positive attitudes, and lower scores reflect more negative attitudes.

6.2 Results

6.2.1 Description of Sample

The results of the variances of pupils' pre-attitude scores in all the groups tested at .05 significance level show that the variances of pupils' initial attitudes to English language lessons scores, across the groups, are not significant ($F = 1.96, p = .144$); hence, the assumption of homogeneity of variances among the groups was not violated. Similarly, the results of the analysis of variance show no significant difference in the attitude to English language lesson entry experience of pupils across the groups ($F_{(2, 96)} = 1.30, p > .05$). The results thus suggest that the attitudes of pupils in all the three groups towards English language lessons were the same at the beginning of the research.

In view of the outcomes of Levene's test of homogeneity of variance and the Analysis of variance test, there was no evidence to suggest that the distribution of groups' attitudes to English language lessons at the beginning of the study departs from normality; hence parametric test analysis could be conducted to compare the post-intervention attitude scores of the pupils across the groups.

6.2.2 Pupils' Pre- and Post Intervention Attitudes to English Language Lesson

Table 6.1: *Descriptive Statistics of Communicative Approach Group's Attitude to English Language Pre-intervention and Post-intervention Scores*

Type of Intervention	N	Min.	Max.	Mean	SD
Attitude Pre- intervention Scores	32	3.0	16.0	6.9	2.5
Attitude Post- intervention Scores	32	3.0	11.0	6.6	2.1

Table 6.1 presents the results of the attitudes to English lessons pre-test and post-test scores for pupils in the communicative approach group. The results revealed that the average attitudes to English language lessons pre-intervention score was similar to the attitudes to English language lessons post-intervention score for pupils in the communicative approach group. The results thus suggest no differences between the pre-intervention and post-intervention attitudes to English language lessons among the pupils exposed to the communicative approach in the ESL classroom.

Table 6.2: *Descriptive Statistics of PRS Group's Attitude to English Language Lesson Pre-intervention and Post-intervention Scores*

Type of Intervention	N	Min.	Max.	Mean	SD
Attitude Pre- intervention Scores	41	4.0	10.0	7.2	1.5
Attitude Post- intervention Scores	41	4.0	13.0	7.3	1.9

The results in Table 6.2 show the attitudes to English language lessons pre-test and post-test scores for pupils in the PRS group. The mean attitudes to English language lessons pre-intervention and the post- intervention scores, for pupils in the personal response system group, were almost the same. By implication, the results reflect that there was no change of attitudes to English language lessons before and after pupils were exposed to the PRS technology in their ESL classroom.

One possible explanation for the similar pre-test and post-test attitudes displayed by the pupils in the communicative approach and the PRS groups is that

perhaps the pupils' positive attitudes to English language lessons were not so noticeably observed due to the previous pedagogical experiences they were initially exposed to in their schools.

Table 6.3: *Descriptive Statistics of Control Group's Attitude to English Language Lesson Pre-intervention and Post-intervention Scores*

Type of Intervention	N	Min.	Max.	Mean	SD
Attitude Pre- intervention Scores	26	5.00	10.0	7.7	1.5
Attitude Post- intervention Scores	26	3.00	10.0	6.5	1.6

The results in Table 6.3 show the control group's attitudes to English language lessons pre-test and post-test scores. The results indicate that the group's mean attitudes to English language lessons pre- intervention score was slightly higher than the attitudes to English language lessons post- intervention score. The results imply that the attitudes of the pupils to English language lessons at the end of term, when compared to their entry-point attitudes to English language lessons had diminished.

One possible reason for the control group's lower attitude mean score at the post-test may be connected to the argument of Narayanan, Rajasekaran and Nair (2008) that learners' positive attitudes towards learning English are unlikely when the instructional process is void of communicative activities, explanations and practice.

Table 6.4: *Analysis of Variance of Pupils' Attitudes to English Language Lessons Post-test Scores across Groups*

Dependent Variable: Post-Attitude					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.2	2	8.2	1.80	.171
Within Groups	433.7	96	4.5		
Total	450.0	98			

The results of the Analysis of variance of the pupils' attitudes to English language lessons post-test scores across the groups, presented in Table 6.4, indicate that

there was no significant difference in the pupils' attitudes to the English language lessons post-test scores in all the groups ($F_{(2, 96)} = 1.80, p = .171$). By implication, the results did not provide strong evidence to show that teachers' use of the communicative approach and the PRS in the classroom made any significant changes in pupils' attitudes towards learning the English language. In other words, the results showed that there was no strong evidence to support the idea that the introduction of the two interventions (the communicative approach and the PRS) in the classroom within ten weeks would in a positive direction significantly influence pupils' attitudes towards English language lessons.

Secondly, children with high levels of English proficiency are likely to have positive attitudes towards learning English as L2 (Ghadessy & Nicol, 2002). Probably the attitudes of the pupils in the two intervention groups were influenced by some home factors. For instance, the sets of pupils involved in this study were children of artisans, and parents with low educational backgrounds, where the children are less motivated to speak English. Moreover, the pupils reside in an environment where English was not the main language of communication. Since language is related to sociocultural context, despite the introduction of the interventions in this study, it may therefore be plausible to associate the pupils' attitudes towards the learning of English language to some home factors.

Though the means of the post-test attitude scores across the three groups showed no significant differences, it should be noted that the means are mere summaries of scores; hence they may not tell us a great deal about the differences in the responses to different items. Therefore, pupils' responses to individual items of the Pupils' Attitude to English Language Lesson Questionnaire were further probed. Analysis was done to identify items which could possibly indicate dependence between

the teaching strategies and “changes” (positive change-score, zero-change score, and negative change score on pupils’ attitudes to English language lessons) among the groups through Fisher’s Freeman-Halton exact test.

The purpose of using Fisher’s Freeman-Halton exact test at this stage to analyse individual items has been discussed earlier (see section 4.11). To do this, the pre-test score for each pupil in each group was subtracted from the post-test score (= change score). Based on the change that occurred in individual pupil’s scores, the results were categorised into three. The first was the positive change-score which implies an increase from pre-test to post-test (the movers up = MU), while zero change-score indicates no change from pre-test to post-test (the stable = ST). The last category was the negative change-score which suggests a decrease from pre-test to post-test (the movers down = MD). Freeman-Halton extension of Fisher’s exact test, also known as Fishers’ Freeman-Halton exact test, was thus conducted on the frequencies of the results to identify items which showed evidence of significant differences among the groups.

The results of the Fisher’s Freeman-Halton exact test results of the pupils’ attitudes to the English language lessons change scores across the groups indicated that the p-values of 8 items were significant enough to show the dependence between the teaching strategies and the change scores. The results of the items showing significant differences among the groups are presented in Tables 6.5 to 6.15.

Table 6.5: Fisher's Freeman-Halton Exact Test of Pupils' Interest in English Lessons' Activities across Groups

Group	N	Movers		Movers	Sig.
		Down	Stable	Up	
Comm. Approach	32	2	28	2	< 0.001
PRS	41	3	22	16	
Control Group	26	5	20	1	

Item: Activities during English language lesson are interesting to me

Table 6.5 shows the results of the Fisher's Freeman-Halton exact test performed to determine whether pupils' interest in activities during English language lessons was the same across the groups. The outcome of the analysis indicated that there existed a statistically significant difference (< 0.001) in how activities during English language lessons were of interest to pupils in the different groups. The results of this study revealed that the proportion of positive change-score for pupils in the PRS group was higher when compared with those of the pupils in the communicative approach and the control groups. In other words, the attitudes of pupils in the PRS group toward activities that went on during their English language lessons were more positive than the attitudes of the pupils in the other two groups. Moreover, no significant differences existed between the communicative approach and the control groups with respect to being interested in the ESL lessons' activities.



Figure 6.1a: *Pupils Listening to the Teacher with Rapt Attention*



Figure 6.1b: *Pupils having Fun and Learning with the PRS*

In addition to the quantitative data analysis results in Table 6.5, Figures 6.1 (a) and (b) show still images from the video recording of the informal observation of the pupils' mood during the instructional process in the PRS classroom. The still images reveal that, contrary to what happens in the traditional lecture classroom, pupils in the PRS group are more focused, display high levels of attention and concentration during

the instructional process.



Figure 6.1c: *Pupils in Sitting Posture Portraying Tiredness in the Traditional Classroom*



Figure 6.1d: *Pupils in Sitting Posture Portraying Tiredness*



Figure 6.1e: *Pupils Bored in the Classroom*

Meanwhile, pupils in the traditional lecture classroom were observed to display verbal and non-verbal forms of communication to indicate boredom, tiredness and lack of interest in the teacher-talk environment they were experiencing. Behaviour displayed by some pupils in the control group included body-stretching, leaning on the bench or desk, clasping of the two hands behind or at the back of the head, ‘silent’ talk with friends, short-time play with biros or pencils, gazing through the window to have a glance at passersby and other distracting events going on outside the classroom (see Figures 6.1c, d and e). On the other hand, pupils in the PRS and the communicative approach classrooms turned their heads towards the direction of the teacher, displayed posture and gesture to ensure they gave a reasonable level of attention to what went on in the classroom. Some of the expressed attitudes of the pupils in the intervention groups included the adjustment of the body to fix their eyes on the teacher, dropping of biros on desks to avoid being distracted and deliberate avoidance of side-attractions or any other events happening outside the classrooms.

Informal observation revealed that pupils in the PRS and the communicative

approach groups tended to look forward to having their say during the peer or classroom discussions. Moreover, pupils in the PRS group tended to exhibit higher levels of interest, during English language lessons, than pupils who were either in the communicative approach group or the control group. In the PRS group, many pupils seemed to look forward to the teacher's question(s), further instruction on when to answer questions so that they could use the technology for learning. The pupils were also observed to have explored the PRS further to have fun while learning. For instance, some pupils punched the keypads in admiration of the technology, while some of them observably attempted to change answers (see Figure 6.1b). Some pupils were also eager to see what other pupils thought to be the answer to a question when the feedback was displayed as they stretched their necks towards the projection screen.

Overall, the researcher as a non-participant observer, noted that the behaviour of pupils in the three groups was apparently different during the English lessons, as typified in the still images (Figures 6.1a, b, c and d). The behaviour of pupils in the control group was manifestly different from those either in the communicative approach group or the PRS group. Moreover, one might be prompted to infer that the PRS group, compared to the communicative approach and control groups, felt more comfortable and interested in the activities that occurred during English language lessons. The findings thus provide evidence to justify the point that pupils would be more interested in activities in the ESL classroom if they are taught with the PRS than the teacher's use of other pedagogy.

Table 6.6: Fisher's Freeman-Halton Exact Test of Pupils' Intention to Read Books

Group	N	Movers		Movers	Sig.
		Down	Stable	Up	
Comm. Approach	32	7	21	4	< 0.001
PRS	41	0	29	12	
Control Group	26	0	14	12	

Item: I like reading books written in English language

Table 6.6 reveals the results of the Fisher's Freeman-Halton exact test performed to investigate whether pupils' disposition towards reading books written in English language was the same across the communicative approach, the PRS and the control groups. The result was statistically significant (< 0.001), indicating that the pupils' disposition towards reading books written in English language was not the same across the groups. Furthermore, the results showed that the proportion of positive change-score for the control group was higher than that of the PRS group. The communicative approach group had the least proportion of positive change-scores. In other words, the attitudes of pupils in the control group towards reading books written in English language was more positive than both the PRS and the communicative approach groups.

A possible explanation for this outcome is that pupils in the traditional classroom are used to taking turns to read passages aloud after the teacher might have read the passages. And since pupils in the traditional classroom are conditioned to reading aloud, one may probably expect them to have a liking for such an experience. Moreover, this outcome is not surprising in that reading aloud in the traditional classroom is easier than getting involved in peer discussion and critical thinking, which occur when the PRS or the communicative approach models are adopted as L2 teaching strategies. Therefore, pupils in the PRS and the communicative approach group were

more negatively disposed to reading aloud, because the classrooms were more task-oriented and facilitated with dialogic communication than that which occurs in the traditional classroom.

Table 6.7: *Fisher's Freeman-Halton Exact Test of Pupils' Understanding of other Subjects*

Group	N	Movers		Movers Up	Sig.
		Down	Stable		
Comm. Approach	32	7	21	4	< 0.001
PRS	41	32	9	0	
Control Group	26	23	3	0	

Item: Knowledge in English language helps me to understand other subjects

Table 6.7 presents the results of the Fisher's Freeman-Halton exact test performed to determine whether pupils' opinions about understanding other subjects, based on their knowledge in English language, was the same across the groups. The results indicated a significant difference in pupils' opinions across groups, about understanding other subjects, with respect to their knowledge in English language (< 0.001). According to the results, the proportion of the positive and zero change-scores in the communicative approach group was greater than those of the PRS group and the control group. The highest proportion of positive attitudes was recorded by pupils in the communicative approach group, while the control group had the least proportion of positive responses regarding the usefulness of the knowledge of English language in other school subjects. Meanwhile, the results of the 2 x 3 Fisher's Freeman-Halton exact test also revealed no significant difference between the PRS and the control groups' proportions of change-scores. The results therefore suggest a differentiated effect of teaching strategies on pupils' beliefs about the importance of English knowledge for understanding the other subjects, with the communicative approach group being at an advantage, as compared to the other groups.

A possible reason for the results might be linked to the communicative approach group's improvement in English proficiency, as earlier reported in the previous chapter (see Tables 5.12, 5.15 and 5.18). Improved English language communicative skills in the group may have increased the pupils' levels of concept and content comprehension and understanding, while learning other school subjects. However, it is surprising that the PRS and control groups had similar perceptions and attitudes, but specific reasons for the disposition of the PRS group, in this respect are yet to be fathomed.

Table 6.8: Fisher's Freeman-Halton Exact Test of Pupils' Liking to Learn English

Group	N	Movers		Sig.
		Down	Stable	
Comm. Approach	32	5	16	< 0.001
PRS	41	0	35	
Control Group	26	4	21	

Item: I like to learn English language both at home and in the school

Table 6.8 shows the results of the Fisher's Freeman-Halton exact test conducted to find out whether the attitudes of pupils in the communicative approach, the PRS and control groups were the same regarding their liking to learn English language both at home and in the school. From the results, the pupils' disposition towards learning English language at home and in the school was not the same across the three groups (< 0.001). In addition, the Fisher's Freeman-Halton exact test 2 x 3 results further revealed a significant difference between the communicative approach group and the control group, between the PRS group and the control group, and between the communicative approach group and the PRS group, with respect to pupils' liking to learning English language at home and in the school.

Despite the fact that the PRS group did not record negative change-scores, the communicative approach group had the highest proportion of positive change-scores, while the pupils in the control group had the lowest proportion of positive change scores. The proportion of the positive change-score for pupils in the PRS group was higher than that of the pupils in the control group. In other words, the students with the highest level of positive attitudes towards learning English language at home and in the school belonged to the communicative approach group, followed by pupils in the PRS group. The results thus suggest that pupils who are taught ESL using the communicative approach and the PRS technology would like to learn English language both at home and in the school.

One of the possible reasons for the results might be that pupils in the two experimental groups, exposed to a series of interesting and interactive communicative activities, might have realised that language learning becomes easier and enjoyable the more frequently individuals use the target language in real life situations.

Table 6.9: *Fisher's Freeman-Halton Exact Test of Pupils' Level of Discussion*

Group	N	Movers		Sig.
		Down	Stable	
Comm. Approach	32	2	28	< 0.001
PRS	41	1	16	24
Control Group	26	3	21	2

Item: I discuss better with friends during the English lesson

Table 6.9 reveals the results of the Fisher's Freeman-Halton exact test conducted to assess the level of opportunity pupils in the different groups had to access and / or enhance discussion with friends in the ESL classroom. The results indicated a statistically significant difference (< 0.001) in the opinions of pupils in the different groups about the extent to which they discussed their work with friends during the

English lessons. The results further showed that the proportion of ‘movers up’ with respect to discussing with friends during the English lesson was more in the PRS group than what was recorded in either the communicative approach group or the control group.



Figure 6.2a: *Pupils Discussing in the PRS Class.*



Figure 6.2b: *Pupils' Discussing in Groups in Communicative Approach Classroom*



Figure 6.2c: *Pupils' in the Traditional Classroom Listening to the Teacher*

Apart from the quantitative data analysis results presented in Table 6.9, Figures 6.2 (a), (b) and (c) are the still images from the video recordings in the PRS, the communicative approach and the traditional classrooms. The difference in the classroom behaviours of pupils in the three groups was overwhelmingly obvious; the still images (Figures 6.2a and 6.2b) reflect the description of happenings in the classrooms. For instance, contrary to what occurred in the traditional classroom, there was a high level of dialogic communication among pupils in the communicative approach and the PRS groups as illustrated in the still images. Nearly all pupils in the PRS group and the communicative approach group appeared to be outgoing as they were obviously seen to be drawn into discussion with peers or involved in general class discussion. Pupils felt excited to have their voices heard among themselves during instructional process.

The special interest here is that the pupils in the PRS group were more engaged in discussion with friends, than those in the communicative approach and the control

groups. Perhaps pupils in the PRS group were influenced by the creative manner in which the technology triggered and initiated discussion among the class members. However, the issue of who should initiate discussion among the group members may have been a challenge to pupils in the communicative approach classroom; whereas, in the PRS group the feedback displayed on the projection screen by the teacher might have been able to spark discussion among the pupils. With the lecture method employed in the control group's ESL classroom, pupils may have been either deprived of interaction with one another, or were not encouraged to interact.

Table 6.10: *Fisher's Freeman-Halton Exact Test of Pupils' Happiness in ESL Classroom*

Group	N	Movers		Sig.
		Down	Stable	
Comm. Approach	32	3	27	< 0.003
PRS	41	1	27	
Control Group	26	1	20	

Item: I am happy whenever I am in the English language lesson

Table 6.10 presents the results of the Fisher's Freeman-Halton exact test performed to find out whether pupils across the groups were happy during English language lesson. The results indicated that pupils' happiness during English language lessons was not the same across the groups. The results revealed that the proportion of positive change-scores of the PRS group was the highest when compared with those of the communicative approach group and the control group in relation to how they thought they were happy in the English language lesson.

This is an interesting finding since, as pupils in the communicative approach and the PRS groups experienced learner-centred instruction, one would have expected the groups to have similar levels of happiness during their English language lessons. The outcome of this study might indicate that integrating interactive technology within

the communicative approach setting would encourage learners to have a more comfortable feeling of control of their learning environment. Perhaps the remarkable increase in the number of people who declared to be happy recorded by pupils in the PRS group might be connected to their opportunity to learn at their own pace, whilst enjoying freedom from the teacher's negative feedback.

Furthermore, the observation of the researcher as a non-participant observer of the classroom instructional process revealed that pupils in the traditional classroom expressed verbal and non-verbal forms of communication to signify boredom and lack of interest in their instructional process. However, pupils in the PRS group showed enthusiasm towards having fun and play while learning with the PRS. Similarly, pupils were excited when feedback was displayed on the projection screen, having noted that they chose the correct answers. This outcome will be exemplified in the analysis results of responses to an item measuring pupils' attitudes to the PRS in Figure 6.6. The results thus imply that pupils are more likely to be happy in the English language classroom when the PRS technology is used than when either the communicative approach or lecture method is employed by an ESL teacher.

One possible reason for the results is that many children naturally like electronic games because of the fun they have while playing them. Such opportunities provided by the use of the PRS technology in the ESL classroom may have provoked a livelier and more enabling learning environment that is capable of helping the pupils to enjoy the instructional process to a reasonable level of satisfaction.

Table 6.11: *Fisher's Freeman-Halton Exact Test of Pupils' Attempts to Answer Questions in ESL Classroom*

Group	N	Movers		Movers	Sig.
		Down	Stable	Up	
Comm. Approach	32	5	15	12	< 0.021
PRS	41	0	14	27	
Control Group	26	2	13	11	

Item: I try to answer teacher's questions more during English language lessons

The results in Table 6.11 show the results of the Fisher's Freeman-Halton exact test conducted to compare the degree at which pupils in the different groups attempted to answer questions during English language lessons. The results indicated significant differences (< 0.021) in the ways in which the different groups attempted to answer teachers' questions in the ESL classroom. The highest proportion of positive change-score was recorded in the PRS group, while the communicative approach group had the least proportion of positive change-scores regarding how the pupils attempted to answer teachers' questions in the ESL classroom. The proportion of the control group's positive change-scores was higher than that of the communicative approach group in relation to pupils' claim about how they tried to answer teachers' questions in the ESL classroom. However, the results of 2 x 3 Fisher's Freeman-Halton exact test further showed that there existed no significant difference in the attempts made by pupils in the communicative approach group and the control group to answer questions during their English language lessons.

The non-significant difference between the communicative approach group and the control group in their attempts to answer teacher's questions may be because pupils in the two groups were most likely to raise their hands to indicate their willingness to answer teacher's questions. However, the results suggest that pupils in the PRS group and those in the control group try to answer more of teacher's questions during English

language lessons as compared to the communicative approach group. It therefore follows that pupils would probably answer more questions in the ESL classroom, if the PRS technology is employed by the teacher over a period of time.

Fear of being harassed or ridiculed when wrong answers are given may have been a tenable explanation for the control group's disposition towards answering questions in the ESL classroom. This is probably because pupils in the control group may have not gained reasonable competence, and the confidence to communicate in the target language. The surprising aspect of the findings is the communicative approach group's display of attitudes similar to that of the control group regarding the extent at which they answered questions in class.

The outcome of this study was unanticipated and therefore requires further investigation. Unlike the behaviour of students who experience teaching in a lecture-oriented classroom, one would have expected pupils being exposed to the communicative approach to have gained reasonable levels of understanding and competency in English in order to answer more of the teacher's questions. However, the results of this study seem to direct our attention to the fact that the PRS blended with peer discussion, compared to other teaching approaches used in this study, tends to be a more viable teaching strategy in developing learners' courage to answer questions in the ESL classroom.

Table 6.12: *Fisher's Freeman-Halton Exact Test of Pupils' Attitude towards Attending in English Language Lesson*

Group	N	Movers		Movers	Sig.
		Down	Stable	Up	
Comm. Approach	32	5	24	3	< 0.001
PRS	41	2	34	5	
Control Group	26	12	12	2	

Item: I always attend English language lesson

The results presented in Table 6.12 show the outcome of the Fisher's Freeman-Halton exact test carried out to compare whether the rate of attendance during English language lessons was the same across the three groups. The outcome of the analysis revealed that there was a significant difference (< 0.001) among pupils in the communicative approach, the PRS and control groups' rates of attendance in the ESL classroom. The highest proportion of positive and zero change scores was recorded in the PRS group about the disposition of the pupils towards their attendance during English language lessons. The control group recorded the lowest positive and zero change-scores with respect to how pupils thought they regularly attended the English language lesson.

Moreover, the positive and zero change-score of the pupils in the communicative approach group were higher when compared with those of the control group regarding how pupils felt they regularly attended the English language lesson. The results thus imply that pupils with the most prominent attendance in the ESL classroom were those who were exposed to the two interventions. In essence, pupils are more likely to attend English language lessons if they are exposed to the communicative approach, while remarkable attendance would result if ESL teachers integrate the PRS technology into instructional processes.

One of the possible explanations for the outcome might be that pupils in the two experimental groups were more engaged in the learning activities than they would in the traditional classroom. However, in the conventional ESL classroom, as it may have been in the control group, learners are mostly treated as mere passive listeners. Secondly, in the communicative approach and the PRS groups, the pupils had ample opportunity to communicate with peers without interruption from the teacher. Such classroom experience may have increased pupils' desire to attend the English language

lessons more than they would if the lecture method was employed.

Besides the 3 x 3 Fisher's Freeman-Halton exact test conducted to compare the three groups' responses to some items measuring attitudes towards English language lessons, a 2 x 3 Fisher's Freeman-Halton exact test was also performed. The 2 x 3 Fisher's Freeman-Halton exact test was conducted to compare two of the three groups at a time with a view of possibly finding significant differences between two groups' attitudes toward some items which initially showed insignificant differences in the attitude towards English language lessons among the three groups. The results of items significantly differentiating between two groups' attitudes to English language lesson are presented in Tables 6.13 to 6.15.

Table 6.13: *Fisher's Freeman-Halton Exact Test of Pupils' Liking of English Language lessons*

Group	N	Movers		Sig.
		Down	Stable	
PRS	41	35	6	< .003
Control Group	26	26	0	

Item: I like English lessons

Table 6.13 show the Fisher's Freeman-Halton exact test results comparing the degrees of liking English language lessons between the PRS and the control groups. The results showed that there was a significant difference (< .003) in the disposition of pupils in the PRS and the control groups towards liking English language lessons. In the two groups, no positive change-score was recorded, but pupils in the PRS group had a zero change-score with respect to liking the English language lesson. The zero change score recorded by the PRS group gives pupils in that group an edge over their counterparts in the control group; hence the significant difference. The results thus imply that pupils in the PRS group displayed a greater level of positive attitudes

towards liking English language lessons than pupils taught by a teacher using the traditional lecture method.

With the increased level of discussion and attendance in the English language classroom (see Tables 6.9 and 6.12) in the PRS group, one would have expected an overwhelming positive-change score with respect to the liking of English lessons. The degree to which the PRS group and the control group recorded negative change scores is quite surprising. It was not unlikely that the results was affected by the way the question was asked; in that majority of the pupils whose proficiency in English was low may have found the item difficult to understand and interpret. Perhaps the difference between the PRS group and the control group might be because some of the pupils in the former group felt more comfortable with being engaged in activities which motivated their use of the target language without interruption, rather being in an ESL classroom where emphasis is on grammatical structure.

Table 6.14: *Fisher's Freeman-Halton Exact Test of Pupils' Liking to do English Language Assignments*

Group	N	Movers		Movers Up	Sig.
		Down	Stable		
Comm. Approach	32	3	29	0	< .004
PRS	41	5	29	7	

Item: I like to do my English language assignments on time

The results of the Fisher's Freeman-Halton exact test comparison of pupils' disposition towards getting English language assignments done on time revealed no significant difference across the three groups (see appendix VIII-b). The results of the Fisher's Freeman-Halton exact test, presented in Table 6.14, show a significant difference (< .004) in the disposition towards getting English language assignments done on time, between pupils in the communicative approach group and the PRS group.

The outcome of this study implies that a larger proportion of pupils in the ESL classroom, where PRS was adopted, got assignments done on time compared to those pupils in the communicative approach group.

One possible explanation for this result might be that there was an increased level of awareness among pupils in the PRS class that the teacher was not interested in the errors they commit when they communicate. The pupils may have realised that the interest of the teacher was in their ability to appropriately express their thoughts in English; hence they did not delay in getting assignments done. On the other hand, pupils in the control groups might have delayed in getting assignments done because they might have wanted to avoid or minimise grammatical mistakes that may adversely affect their academic grades. In essence, pupils in the control group might have the thought that the teacher was not going to test their knowledge in the classroom based on the content of the assignments. Moreover, pupils in the control group may have also been unbothered about getting their assignments done probably they felt the teacher would as usual get the assignments done in the class if the assignment content and concepts were important.

Table 6.15: *Fisher's Freeman-Halton Exact Test of Pupils' Correction of Mistakes*

Group	N	Movers			Sig.
		Down	Stable	Up	
Comm. Approach	32	2	27	3	< .004
PRS	41	13	24	4	

Items: English language lesson helps to correct my mistakes when I write or speak

Table 6.15 presents the results of the Fisher's Freeman-Halton exact test which compared the change-scores in groups' disposition towards how English language lessons helped to correct pupils' mistakes. The results showed that the proportion of positive and zero change-scores of the PRS group was lower when compared with that

of the communicative approach group with respect to pupils' attitudes towards how English language lessons helped to correct their oral and written mistakes. The results thus suggest that pupils feel that they are more likely to have their errors corrected by peers in the class when they learn in groups, than if they only learn with just a few peers when the PRS is used, or when they learn as independent individuals in the classroom.

However, the issue addressed here is not specifically about the degree in which learners in the different groups have their mistakes corrected. Rather, it is about the disposition of learners to "mistakes" and the correction of those "mistakes" in the class. The outcome of this study might be because pupils in the PRS group have assumed that the aim of using the PRS was to provide them the opportunity to actively engage in dialogic communication, rather than correcting their mistakes. Alternatively, pupils in the communicative approach group may have thought that they had a better chance of having their mistakes corrected by their peers when they learn in groups.

Chapter Seven

ATTITUDES TO THE PERSONAL RESPONSE SYSTEM AND THE COMMUNICATIVE APPROACH IN THE ESL CLASSROOM

7.1 Introduction

One of the purposes of undertaking this study was to investigate the attitudes of each of the experimental groups towards the personal response system (PRS) and communicative approach (CA) in the ESL classroom. The previous chapter reveals no immediate significant differences in the aggregate attitudinal scores, across the three groups of the study, towards the English language lesson. However, individual analysis of each attitudinal item shows that, in the ESL classroom, pupils in the PRS group, when compared to other groups, had higher levels of positive attitudes towards being interested in classroom activities, discussing better with friends, being happy, answering teacher's questions, regular attendance, liking English language lessons and doing assignments on time. Students in the control group had the highest attitudinal point with respect to liking to read aloud from books written in the English language, while the communicative approach group most claimed that the knowledge in English language helps in understanding other subjects. This chapter therefore focuses on finding out the attitudes of the pupils in the experimental groups to the interventions (communicative approach and PRS) introduced in this study.

In conducting the analysis to independently examine pupils' attitudes to the PRS and to the communicative approach, descriptive statistics (frequency count) were used to measure pupils' attitudes towards the use of PRS and the communicative approach in ESL classrooms. Besides, data from the video recordings and audio-

recorded interview responses of the pupils and teachers in the intervention groups were also presented to augment the data generated from the attitudinal questionnaires. The attitudinal items, for each of the questionnaires used to assess pupils' disposition towards the PRS and the communicative approach, were the "True" or "False" type of response-oriented questions, which were coded (1 or 0).

7.2 Results

7.2.1 *Attitude towards the Use of the Personal Response System*

7.2.1.1 *Pupils' Responses to the PRS Attitudinal Questionnaire Items Based on Dimensions*

Descriptive statistics, in the form of frequency distribution, were used to present the raw counts of pupils' responses to the survey items in different dimensions, measuring attitudes toward the use of the personal response system in the ESL classroom.

Table 7.1: *Items on General Attitude Dimension (n = 41)*

GA 1	The use of clickers makes me to like the English language lessons more.
GA 2	I do not like the use of clickers for teaching and learning.
GA 3	I like English lesson whenever the teacher does not teach us with clickers.

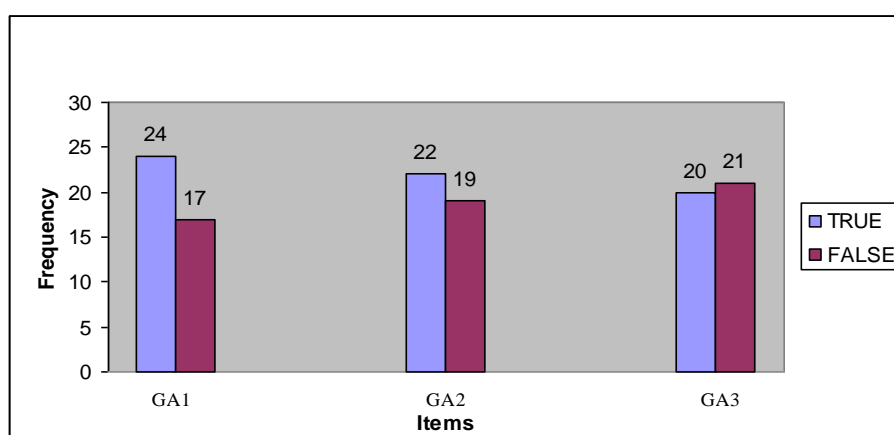


Figure 7.1: *Pupils' General Attitude to the PRS*

Figure 7.1 presents pupils' responses to the items in Table 7.1. The results reflect pupils' general thoughts about the use of the PRS in an English language classroom. The results reveal that more pupils indicated their liking for English language lessons because of the use of the PRS in the class. However, a majority of the pupils claimed not to like the use of PRS for classroom instruction. Meanwhile, the proportion of pupils who felt comfortable with the teacher's non-use of PRS during English lesson was slightly more than the proportion of pupils who felt otherwise. The results thus seem to suggest inconsistency in pupils' general attitudes towards the use of PRS for improving communicative competence in English language.

Critical examination of the results in Figure 7.1 shows a trend of inconsistencies in pupils' responses to some of the items. Pupils' responses to the negatively worded items contradict their answers to the positively worded questions probing similar

issues. Such inconsistencies might result from the negative form of some items; hence pupils might have had difficulty in understanding the meaning of the negatively worded items. Such inconsistencies might have been a reflection of the English language proficiency level of pupils within the context understudied. However, the proportion of pupils' positive response about how the use of clickers makes them like English language lessons more was higher when compared to the proportion of their responses to items which elicited their opinions about whether or not they liked the use of clickers for teaching and learning, and whether or not they liked English lesson whenever the teacher does not teach them with clickers. In other words, it can be inferred that the overall results show that majority of the pupils claimed to like the use of PRS in the ESL classroom.

Table 7.2: *Items on Active Engagement Dimension (n = 41)*

EG 1	I participate more in the class when I use clickers.
EG 2	I am not afraid to answer questions using clickers because nobody in the class knows my answer
EG 3	The use of clickers helps me to talk more in the class.
EG 4	I like the way our teacher allows us to discuss with one another whenever clickers are used in the class.
EG 5	I try to answer all teachers' questions when clickers are used in the class.

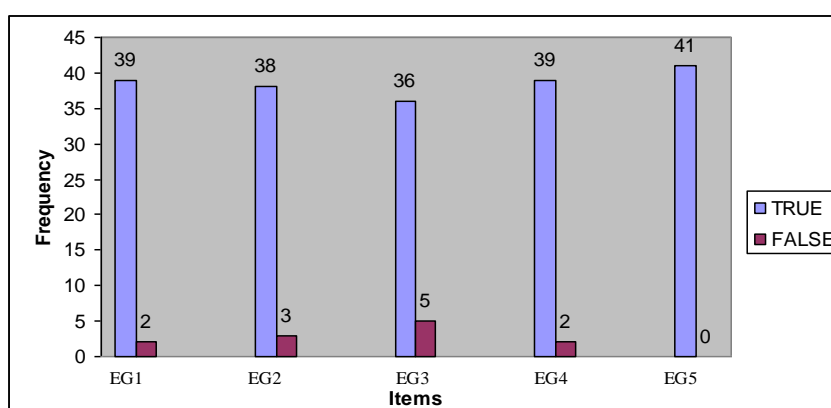


Figure 7.2: *Engagement in the Class with PRS*

Figure 7.2 presents pupils' responses to the item in Table 7.2. The results reveal pupils' opinions about the impact of the PRS on learners' engagement in their English language lessons. The results show that a larger number of the pupils agreed that the use of PRS during their English lessons encouraged participation in the class. Similarly, a majority of the pupils claimed that they did not experience fear when it came to answering questions in the class. All the pupils indicated that, they attempted answering all questions posed by the teacher during the teaching and learning process when the PRS was used. A majority of the pupils expressed satisfaction with the opportunity PRS gave them to discuss during teaching and learning, while a higher number of the pupils concurred with the fact that they talked more when the PRS was

used during English language lessons.



Figure 7.3a: *Pupils Responding to Teacher's Questions using PRS*



Figure 7.3b: *Peer Discussion in the PRS Classroom*

Observation from the video recordings of the classroom process in the PRS classroom also indicated the existence of a high level of pupils' engagement and involvement in instructional activities. Response rates in the PRS classroom were

noticeably high as many pupils voluntarily pressed their keypads to answer the teacher's displayed questions (see Figure 7.3a). At the same time pupils, irrespective of their learning ability and seating location, were encouraged to get involved in peer or classroom discussions. The discussions among the pupils after the first round, but before the second round of voting, seemed very exciting, collaborative and participatory, as reflected in the still images of Figures 7.3a and 7.3b. By implication, the outcome of this study reveals pupils' positive attitudes towards the use of the PRS in promoting active engagement in the ESL classroom.

Perhaps the teacher's interest in ensuring that the pupils were actively involved in the discussions, by regularly motivating the pupils to exchange opinions with each other, might have spurred the pupils to answer more questions. Similarly, the teacher's positive disposition towards the use of the PRS may have facilitated the pupils' increased involvement in the negotiation of meaning and increased engagement in learning activities without fretting, during the ESL instructional process.

Table 7.3: *Items on Assessment and Feedback Dimension (n = 41)*

AF 1	Clickers are good tools for answering teachers' questions.
AF 2	I like writing tests with pencil/ biro and paper more than clickers' test.
AF 3	Many students like to answer questions in the class using clickers
AF 4	Using clickers in the class to correct mistakes is better than when my teacher corrects me because nobody knows when my answers are wrong.

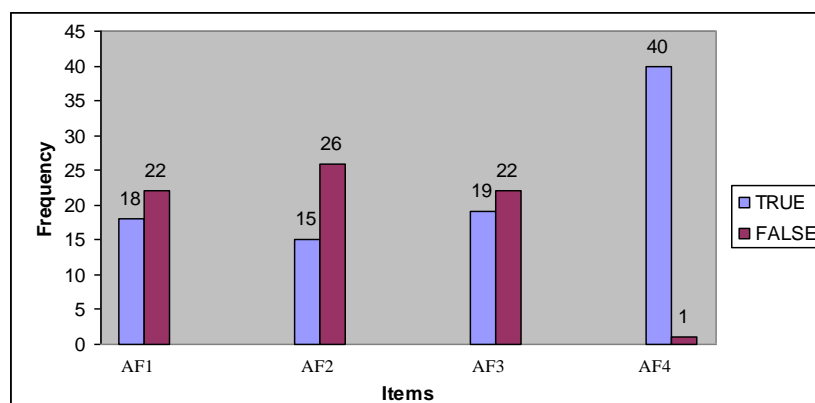


Figure 7.4: *Assessment and Feedback with the PRS*

Figure 7.4 shows pupils' responses to the items in Table 7.3. The graph displays pupils' attitudes towards the use of PRS for assessment and feedback purposes in their English language classroom. The results indicate that many pupils did not perceive the PRS to be good for answering their teacher's questions, while a majority of them disliked writing the pencil/biro and paper test but preferred the use of the PRS. A slightly higher number of the pupils did not feel that many students liked to answer questions in the class via the PRS. However, almost all the pupils were of the view that they preferred having their mistakes corrected secretly by the PRS, rather than receive the teacher's public correction.

Furthermore, informal observations by the researcher, as a non-participants observer in the classroom, and the video recordings of instructional process in the PRS

classroom revealed that most pupils displayed excitement whenever a correct answer was displayed. However, pupils who chose incorrect options, stylistically tended to be calm, dropped or scratched their heads, opened their mouth in surprise or showed other related attitudes of disappointment.

The pupils were not consistent in their responses to different items which addressed similar issue. Such inconsistencies may have been a reflection of English proficiency level of the pupils which affected their understanding of the negatively worded items. Pupils' preferences for the PRS form of assessment over the biro and pencil assessment and the idea of liking the PRS error correction procedure rather than when the teacher corrects them 'in public', might be connected to the autonomy in learning experience. With the PRS being used as a feedback and assessment tool, the pupils may have liked not only being in control of their learning process, but also being able to monitor and manage the process of their assessment and feedback.

Table 7.4: *Items on Attention and Learning Dimension (n = 41)*

AL1	I learn more when clickers are used in the class
AL2	I do not pay attention in the class when clickers are used.
AL3	Clickers' questions are not easy to understand.
AL 4	Clickers' questions are easy to answer.
AL 5	Whenever clickers correct my mistakes, I refuse to answer questions again.
AL 6	I think more when I use clickers in the class.
AL 7	I understand the meaning of things better when clickers are used during English lessons.

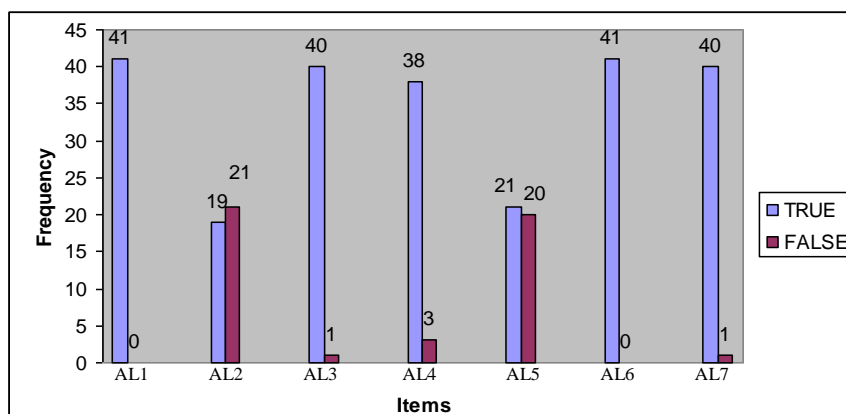


Figure 7.5: *Attention and Learning in Class with the PRS*

The results shown in Figure 7.5 are the responses of the pupils to the item in Table 7.4. The results reflect the attitudes of the pupils towards the use of the PRS in their English language classroom, with respect to issues focusing on attention and learning. The results revealed that all the pupils claimed to learn more when the PRS was used in the class. By slim chance, a higher number of the pupils were of the view that they paid more attention when the PRS was used in the class. Almost all the pupils were of the view that the PRS' questions were not easy to understand; whilst a majority of the pupils felt that the PRS questions were easy to answer. By narrow margin, a

higher number of the pupils claimed they refused to answer questions whenever they made mistakes while answering the PRS' questions in the class. Moreover, all the pupils reported that they thought more when the PRS was used in their English language classroom. All the pupils except one of them indicated that they understood the meaning of things better when the PRS technology was used for instructional purposes during their English language lessons.

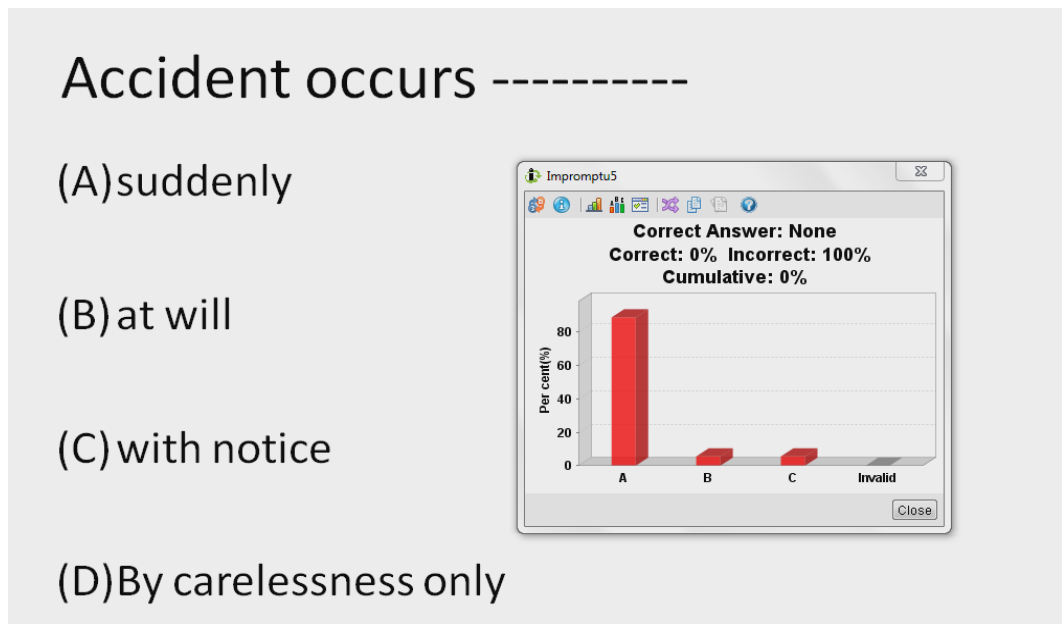


Figure 7.6a: *Frequency Distribution of Pupils' Responses at the First Attempt*

Accident occurs -----

(A) suddenly

(B) at will

(C) with notice

(D) By carelessness only

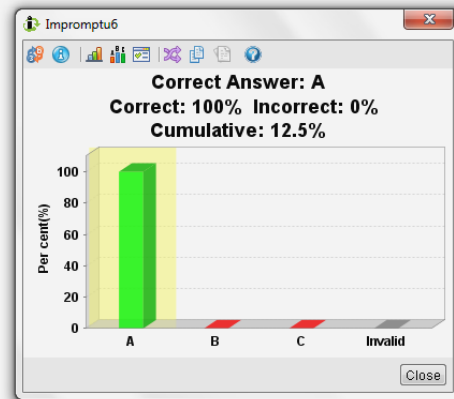


Figure 7.6b: Frequency Distribution of Pupils' Responses at the Second Attempt

Ocean water are -----

(A) sweet

(B) salty

(C) tasteless

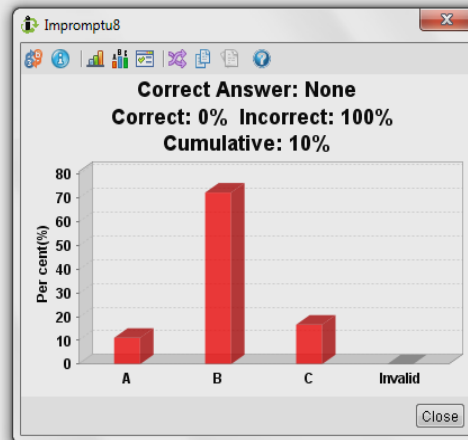


Figure 7.6c: Frequency Distribution of Pupils' Responses at the First Attempt

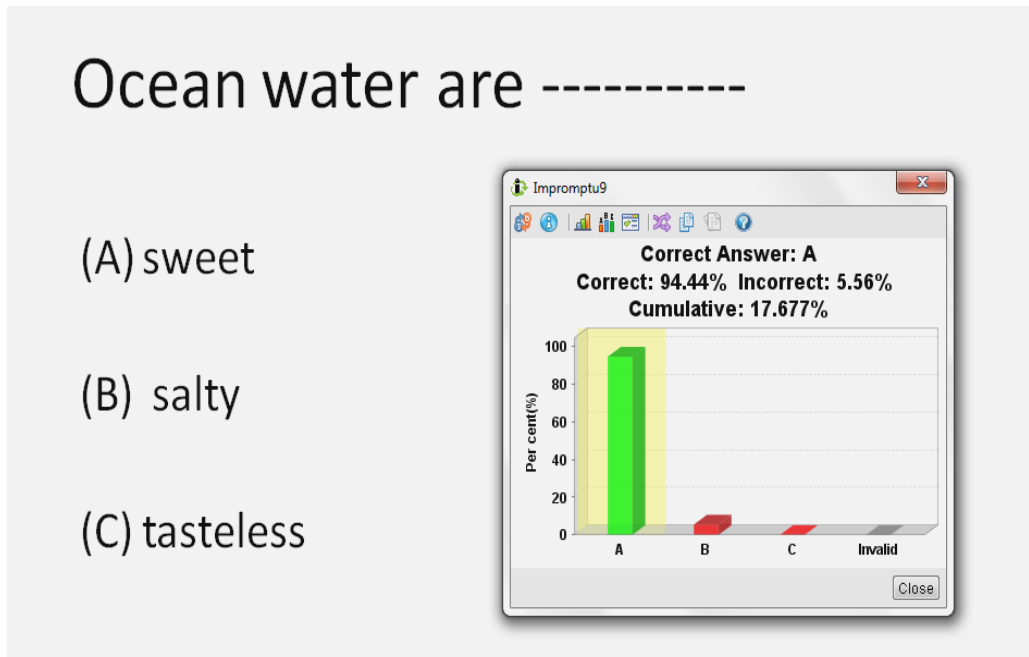


Figure 7.6d: *Frequency Distribution of Pupils’ Responses at the Second Attempt*

In addition to quantitative data analysis results presented in Figure 7.5, observation of the video recordings as reflected in the still images, tagged Figures 7.6a and 7.6c compared to 7.6b and 7.6d, reveal positive change when the frequencies of the distribution of pupils’ responses in the first attempts (Figures 7.6a and 7.6c) are compared with the second attempts (Figures 7.6b and 7.6d). Informal observation of the researcher also revealed that the pupils who initially chose incorrect options changed their answers after the discussion that preceded the second attempt at response selection. In fact, it was observed that pupils who chose wrong options in the first instance got the answer correct at their second attempts. The results thus imply that the use of PRS in the ESL classroom would make pupils think, understand and learn better. Overall, the results do not show strong evidence to support pupils’ negative attitudes towards the use of the PRS, but orient towards establishing pupils’ positive attitudes towards the use of the PRS during their English language lessons.

Table 7.5: *Items on Behavioural Intention Dimension (n = 41)*

BI 1	I like our teacher to continue to use clickers to ask us questions in the class.
BI 2	I will like my teacher to use clickers in other subjects
BI 3	I will do better in English language if clickers are used in the class by my teacher
BI 4	I will learn better if clickers are used in the class.

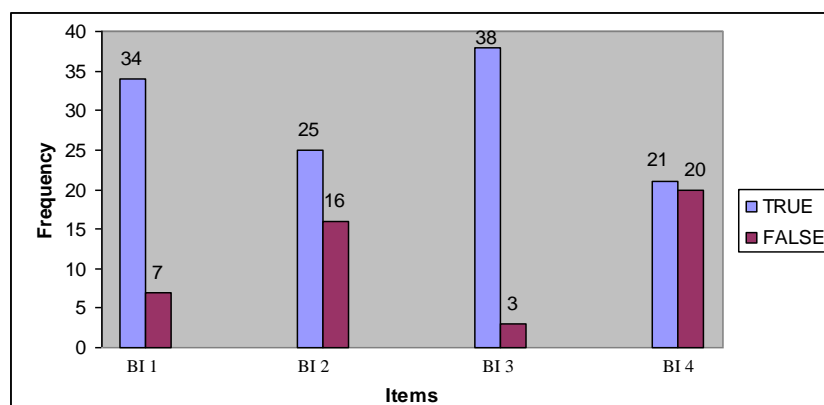


Figure 7.7: *Behavioural Intention about PRS Use*

Figure 7.7 presents pupils' responses to the items in Table 7.5. The descriptive results reveal the pupils' views about their behavioural intentions regarding the use of the PRS. The results showed that 34 of the 41 pupils would want the teacher's continued use of the PRS for questioning during their English language lessons. Likewise, majority of the pupils wished the teacher would extend the use of the PRS for instructional purposes to other school subjects. A higher number of the pupils reported that they would do better in English language if the teacher used the PRS in the class. Similarly, there were more pupils who claimed to learn better when the PRS was used in the class than those who felt otherwise. It is evident from the results that a large number of the pupils were positively disposed to future use of the PRS for instructional purposes during their English language lessons.

One plausible explanation regarding pupils' expressed intentions to use the PRS in their future learning process is that they may have been motivated by the various learning activities the technology exposed them to in the ESL classroom. As a result, the pupils had the mind to further explore the technology in order to improve their communicative competence in the English language.

7.2.1.2 Interview Results

At the end of the tenth week of the research, semi-structured interviews were conducted with the teacher and some pupils. Five pupils involved in the interview were randomly selected among pupils in the PRS group who overwhelmingly volunteered to participate in the interview process. The interview was conducted to further evaluate the value of the use of PRS as a teaching and learning tool in ESL classroom. A critical examination of the views of the interviewees reveals that the issues raised include active participation, fun and enjoyment, discussion and speech confidence, critical thinking, immediate feedback, increased attendance and interest in the English language lessons. The responses of the pupils and the teacher are presented below:

7.2.1.2.1 Pupils' Interview Results

One of the claims common to the pupils, when asked about the usefulness of the PRS in English language lessons was that the PRS enabled active participation in the class. The pupils emphasised the importance of active participation during the instructional process in their submissions:

Before the introduction of PRS, our teacher was mainly reading passages to us, but now we are involved in different activities during English language lesson. We now discuss more; we do not read after the teacher again, we now learn to speak in the class to sort out things by ourselves.

One of the pupils claimed that:

I wish our teacher could continue to use this PRS technology because it makes me to participate more than ever before.

Another pupil commented that:

I attempt all questions whenever the teacher makes use of the PRS because I now have the opportunity to talk with friends before I finally choose my answer to a question.

The majority of the pupils claimed to have had lots of fun while using the personal response system in ESL classroom. Pupils were of the view that they enjoyed clicking the PRS keypads and, as well, they preferred being able to answer their teacher's questions anonymously, without being exposed to any form of harassment from either the teacher or their peers. Some of the pupils' comments included observations such as:

I like English language lesson more when PRS is used than when it is not used. I like the way we press the PRS buttons.

I so much enjoy how we punch the buttons easily to answer questions, and how I can easily change my answer before the time runs out.

I do not like to answer questions in the class when the clicker is not used because I do not want my classmates to make jest of me when I make mistakes. I prefer clicker's questions, and

I do not regularly raise my hand to answer questions when we do not use the PRS, especially when I am not sure of the answer or when I don't have a clear mind of what the teacher wants.

All pupils remarked that the PRS is a teaching tool that encourages and promotes interaction in the classroom. Pupils regard the use of the PRS in their English language lessons as an opportunity to share opinions with friends and build confidence to speak English openly in the class. One of the pupils' explained:

During the discussion period, I have the opportunity to compare my opinion with those of my classmates. Sometimes, when I discover that I am wrong, I quickly change my answer. Before, I was not talking in the class, I was afraid to talk because I did not want to commit mistakes. Now, I am not afraid to answer teacher's questions with the PRS, I now talk with other pupils.

Nearly all pupils agreed that teacher's use of the PRS in the English language

class helped a lot in promoting critical thinking. Pupils were of the view that, unlike what happens in the traditional classroom, they first engaged in rational thinking, before answering questions with the PRS. Below are some of the pupils' quotations:

I don't just choose an option, rather I think a lot. Whenever I first choose the wrong answer and the PRS feedback shows that my answer is wrong, I always look forward for the discussion time to sort things out.

The use of PRS during English language lesson gives us the opportunity to think very well before choosing an option as well as the correct answer to any question. Whenever our teacher asks us to discuss, I think a lot because I don't want my friends to confuse me.

Another theme that emerged in pupils' responses is that of immediate feedback. A majority of the pupils reiterated the importance of immediate feedback received in the PRS classroom. Improvements in academic performance during their English language lessons were explained as a function of the influence of the immediate feedback received via the PRS technology. One pupil commented:

The use of PRS gives me the opportunity to know whether my answer is correct or not at the first instance of answering the teacher's question. After the discussion, most of the time, I get the answer right. PRS makes me to do better in the class.

The issue of increased attendance in the class was observed and echoed by some of the pupils. Pupils claimed that since the introduction of the PRS technology during English language lessons, pupils who were truants had a change of attitude towards schooling. In other words, such truants are now regular and punctual in coming to school. Here is a typical comment from one of the respondents:

Since we start to use PRS, my classmates now come to school every day and promptly. Some of my friends even told me that, they come to school frequently now because they would like to use the PRS in the class.

Pupils' claims regarding increased attendance in the classroom, as a result of the use of the PRS during English language lessons were corroborated by the results of the

analysis of the quantitative data. Pupils' overall attendance scores in the previous term were obtained and treated as the attendance pre-test scores, while the overall attendance scores from the beginning to the end of term when the study was conducted were also obtained and treated as the attendance post-test scores. The results of the analysis of covariance analysis reveal a statistically significant difference in the attendance post-test scores across groups ($F_{(2, 95)} = 23.17, p = 0.001$). The results further show that pupils in the PRS group recorded the highest mean attendance post-test scores (Mean = 90.6, SD = 6.4), followed by the communicative approach group (Mean = 74.9, SD = 6.1), while the control group had the lowest average attendance post-test scores (Mean = 67.0, SD = 15.0).

All interviewees claimed to have developed an interest in their English language lessons as a result of their teacher's adoption of the PRS technology for instructional purposes. Pupils were of the view that they preferred to learn English language when the PRS was used, rather than learning English without the PRS technology. Two of the pupils commented that:

I like English lesson more when the PRS is used than when our teacher teaches us English without it because the PRS makes the class to be interesting and encourages us to participate.

Whenever we have English language lesson, many of us are encouraged to stay in the class because we expect that the PRS would be used. When the PRS is used, we are very happy.

7.2.1.2.2 *Teacher's Interview Results*

The responses of the teacher involved in the use of the personal response system for teaching and learning are quite revealing. Besides the issues raised by the pupils, some other themes emerged from the teacher's responses. The teacher viewed the effectiveness of the PRS technology in the English language classroom from different perspectives. The teacher saw the PRS as a tool that encourages pupils' active

participation in the class. The teacher said:

In the traditional class, pupils do not talk, they keep quiet, but since we started using the PRS, I observe that, almost all the pupils participate in the class activities right from the point of “joining” the class to before and after the discussion. The use of PRS makes pupils to participate very well in whatever one teaches them.

The teacher also brought into focus the issue of the essence of effective utilization of the PRS technology before pupils’ active participation becomes a reality; hence he explained:

When the PRS is well utilized in the class, each pupil given the handset will participate. Though, some of them may choose the wrong option, but rather than being engaged in some other activities as it happens in the traditional classroom, nearly all pupils are likely to go along with the instructional process.

The teacher believes the PRS technology had a positive impact on pupils’ academic performance in English language, as may be judged from his comment “There has been improvement because after they first select options and they are afterwards given opportunity to discuss, by the time they choose the options again, many of them now get the answer correct”.

Moreover, the teacher viewed the PRS as a tool that promotes interaction in the class. The teacher described the PRS as a good instructional facility that encourages two-way interaction among the pupils and between the teacher and the pupils. The teacher explained that:

Unlike in the traditional classroom where pupils work independently and in quietness, with PRS, pupils are free to interact with one another. Moreover, PRS builds pupils-teacher relationship because it encourages good communication between the teacher and the pupils.

Furthermore, the teacher identified collaborative learning as one of the benefits of using PRS in the class. He thus stated that:

With the use of PRS, it is true that there are some pupils who are not so good, but the fact is that, during the discussion, the good pupils always

help others to find their way out of difficulty.

The teacher also mentioned that the PRS classroom is more interesting as pupils often smile and were sometimes enthusiastic when they discover that their chosen option is the correct answer. The teacher remarked that:

What I observe is that any time we have English language, pupils are very happy, unlike in the past, English language class was very boring.

Pupils were reported to gain more understanding and comprehension during the English language lesson with the use of the PRS. The teacher explained that:

PRS is very effective in teaching because pupils easily understand whatever you teach them. I mean, what pupils gain while discussing with one another is better than what the teacher tells them. They easily understand and do not easily forget what they contribute in the class.

Additionally, PRS technology is perceived as a tool that reduces teacher's instructional stress and burdens. The teacher remarked that:

The use of PRS lessens the teacher's burdens. For instance, teaching comprehension in the traditional classroom, it is the teacher that does everything, he spoon-feeds the pupils as he/she reads the passage, identifies the difficult words, explains the meaning of the difficult words etc., but in the PRS class, the teacher guides the pupils to go through tasks.

However, when asked about challenges involved in effective use of the PRS in the class, the teacher commented about the pupils' initial difficulty in the use of the technology:

At the initial stage of the use of PRS, some of the pupils did not find it easy to operate, but with time, they are able to catch up.

The teacher also identifies cost as a challenge to the use of the PRS; hence he said that:

Though, the use of PRS is good for classroom instruction, but the cost of purchase is high. I doubt if individual school can afford to purchase the technology for use without the assistance of the government.

Moreover, the teacher did not mince words when explaining that to

use the PRS for teaching and learning would not be a successful venture for the lazy teacher. The teacher remarked that:

The teacher intending to use personal response system needs to prepare very well before coming to class. The teacher must think of suitable questions that would make pupils think and get involved in discussion. The teacher must think of the tasks that would engage the pupils. He or she must spare time to prepare the PowerPoint slides if there is no one to assist.

7.2.2 *Attitude towards the Communicative Approach*

7.2.2.1 *Pupils' Responses to the Communicative Approach Questionnaire Items Based on Dimensions*

The frequency distribution of the raw counts of pupils' responses to individual items in each of the dimensions of attitude towards the use of the communicative approach is presented in tables and graphs. The frequency counts shown on the bars correspond to pupils' responses to each of the items.

Table 7.6: Items on General Attitude Dimension (n = 32)

-
- GA 1** I do not like talking in pairs or in group during English language lessons
- GA 2** I love to attend English language lessons because we work in group with different materials.
- GA 3** I enjoy learning in small groups.
- GA 4** Learning in small groups is not interesting
- GA 5** I don't like learning in groups
- GA6** My friends correct my mistakes easily whenever we are in small groups
- GA 7** I don't think learning in small groups is useful.
- GA 8** When teacher corrects mistakes during English lessons, it wastes time
-

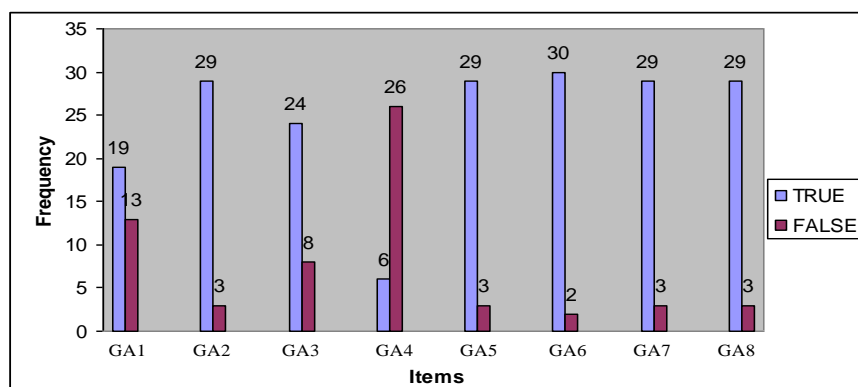


Figure 7.8: General Attitude towards Communicative Approach

Figure 7.8 shows the pupils' responses to the items in table 7.6. The results reflect pupils' general attitudes towards the use of the communicative approach in their English language classroom. The results indicated that majority of the pupils claimed to dislike talking in pairs or in groups, while a higher number of the pupils also indicated that they loved to attend English language lessons because they worked in groups. In the same trend, more of the pupils were of the view that they enjoyed learning in small groups, and that learning in groups was interesting. Almost all the pupils expressed dislike towards learning in groups. Also, majority of the pupils were favourably disposed to the idea that they were at ease when their group members corrected their

mistakes. Furthermore, almost all the pupils thought group learning during English language lessons was not useful, while a vast number of them also perceived teacher's correction of learners' mistakes in the class as a waste of time.

As observed earlier in Figure 7.4, the results in Figure 7.8 also show a trend of inconsistencies in pupils' responses to some items. In Figure 7.8, some of the pupils' responses to the negatively worded items were at variance with their answers to the positively worded items focusing on the related issues. Also bearing in mind the level of pupils' proficiency in English language within the context of this study, pupils' positive attitudes towards the communicative approach can be inferred to be an expression of their love for, and enjoyment of group work during English language lessons. The pupils might have well expressed their preference for peer error-correction, rather than when the teacher corrects their mistakes.



Figure 7.9: *Excitement in Communicative Approach Classroom*

Besides the results of the quantitative data analysis in Figure 7.8, observation of the video recordings as well as the informal observation of the researcher as a nonparticipant-observer of the instructional process in the communicative approach classroom, all show that pupils in the group overwhelmingly expressed delight as they

got engaged in various classroom activities, after gaining necessary momentum. The pupils felt excited fixing themselves into groups and working with other pupils to accomplish assigned tasks. Despite pupils' negative views about "liking" and the "usefulness" of learning in pairs or groups, as reflected in Figure 7.8, the overall results provide strong evidence of the pupils' generally favourable disposition towards the use of the communicative approach in their English language lessons, because the strength of the pupils' positive views outweighs their negative opinions.

One of the possible reasons for the pupils' general positive disposition to their English language lessons is that the pupils may have developed the urge to improve their communicative competence for academic or personal reasons. With such an urge, combined with their readiness for improvement in the language skills, the pupils' increased interest in the ESL might have influenced their general disposition towards learning the language.

Table 7.7: Items on Active Engagement Dimension (n = 32)

EG 1	I do not get involved in the class activities as much as possible whenever our teacher makes us to work in group or in pairs.
EG 2	Learning in groups or pairs makes pupils to be more involved in class activities/work.
EG 3	Learning in groups or pairs makes pupils to talk more during class activities/work.
EG 4	I hate talking to people during English lessons when we are in pairs/groups
EG 5	I discuss better with friends in small groups during English lessons
EG 6	I take part a lot during English lessons when we work in small groups or pairs.
EG 7	During English lessons, I ask people for help whenever I have problems

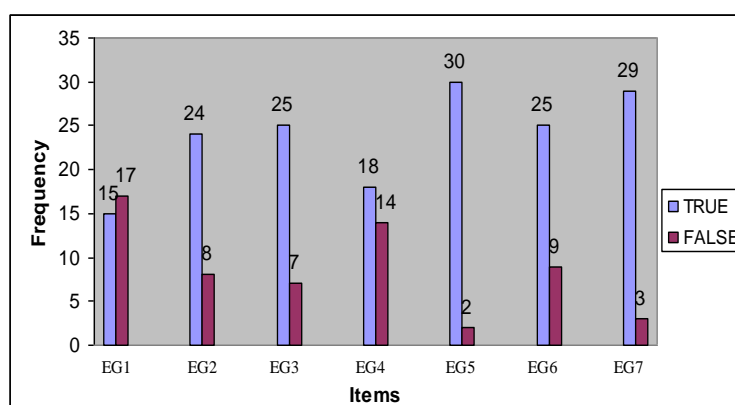


Figure 7.10: Active Engagement in Communicative Approach Classroom

Pupils' responses to the item in Table 7.7 are presented in Figure 7.10. The results reveal pupils' views about the possible influence of the communicative approach on learners' engagement in the English language classroom. The results show that many of the pupils reported that they got involved in class activities whenever they worked in pairs or groups, while majority of the pupils further indicated that pupils got more involved in class work when they learned in groups. Furthermore, a majority of the pupils were of the view that pupils were encouraged to talk more in the target

language during their English language lessons when they learn in groups. However, many of the pupils claimed to hate talking to people while they learned in groups. Almost all the pupils were of the opinion that they discussed better with friends in small groups during their English language lessons. Meanwhile, a higher number of the pupils indicated that they participated a lot during English language lessons when they are in groups. In the same manner, majority of the pupils reported that they were able and willing to ask people for help during the English language lesson when they had problems.



Figure 7.11a: *Groups' Discussion in Communicative Approach Classroom*



Figure 7.11b: *Group's Task Performance*

Figures 7.11(a) and (b) are still images extracted from the video recordings in the communicative approach classroom. Observation of the video recordings revealed that the teacher often encouraged all the pupils to get involved in the group discussions. As shown in Figure 7.11a, pupils in different groups talked, with or without taking turns, with a view to making contributions to get the assigned task(s) accomplished; hence the rowdiness of the class, in most cases, was observed in the video records. Most pupils in the class participated in the group discussions, and where unnecessary silence prevailed, the teacher prompted discussion among the group members. Sometimes, in order to ensure pupils' use of the target language, group tasks were directed towards play-way method, dramatization, and role play (Figure 7.11b). By implication, the results generally show pupils' positive attitudes towards learning English language with the teacher's use of the communicative approach, because they were more actively engaged in classroom instructional activities.

Table 7.8: *Items on Speech Confidence Dimension (n = 32)*

SC 1	I am afraid to speak English when I work with my classmates during English language lessons
SC 2	I explain the meaning of things better in English when I discuss in pairs or in group during English language lessons.
SC 3	I speak freely with friends in small groups or pairs during English lessons
SC 4	Learning in groups or pairs allows me to tell my friends what I have in mind.
SC 5	Learning in groups or pairs makes it easier for me to speak in the class
SC 6	I am afraid to take part in small group discussions

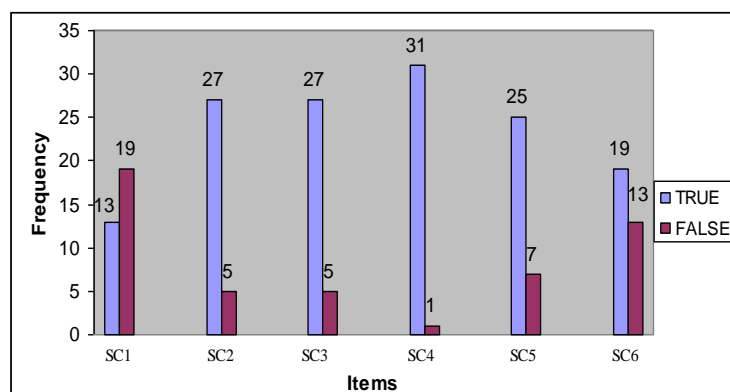


Figure 7.12: *Speech Confidence in Communicative Approach Classroom*

Figure 7.12 shows pupils' responses to the items in table 7.8. The results reflect pupils' attitudes towards the use of the communicative approach with respect to developing speech confidence in the ESL classroom. There seems to be an indication of inconsistency in pupils' responses about being afraid to speak during their English language lessons. For instance, in the first item of this dimension, few of the pupils claimed to be afraid to speak English while working with other students. However, the results further show that many of the pupils thought that they explained the meaning of things better in English, while discussing in pairs or groups. The results also revealed

that many of the pupils agreed that they spoke freely with friends, in pairs or small groups, during the English language lesson. Almost all the pupils disclosed that they expressed themselves among friends when they learnt in groups or pairs, while a majority of the pupils were of the view that learning in groups made it easier for them to speak in the class. On the other hand, a higher number of the pupils indicated they were afraid of taking part in small group discussions.



Figure 7.13: *Discussion without Interruption*

Figure 7.13, showing groups' discussions, is a still image from the video recording of the instructional process in a communicative approach classroom. Observations from video recordings reveal that most pupils talked more among themselves when the teacher was less involved in the classroom talk. Though there seems to be inconsistency in pupils' responses with respect to their feelings about being afraid to talk during groups' discussion, the results showed evidence to support the belief that pupils in an ESL classroom would be more engaged in classroom-talk

whenever the teacher employed a communicative approach as a teaching tool. Moreover, the still image (Figure 7.13) further illustrates the obvious dialogic communication that take place in an ESL classroom, when pupils have the opportunity to learn in groups. In other words, with respect to gaining speech confidence, pupils' attitudes are positive towards the use of the communicative approach in the ESL classroom.

The findings of this study may have stemmed from the pupils' possible awareness of their teacher's change of interest from the pupils' ability to accurately communicate in English to focusing on their ability to express themselves in the target language.

Table 7.9: *Items on Learning Dimension (n = 32)*

LE1	I understand the meaning of things better when I discuss with my classmates during English language lessons
LE2	I learn better during English language lessons when the teacher asks us to talk to ourselves in pairs or groups.
LE3	Learning in small groups helps me to understand English language
LE 4	I play and learn during English lessons when we are in groups or pairs

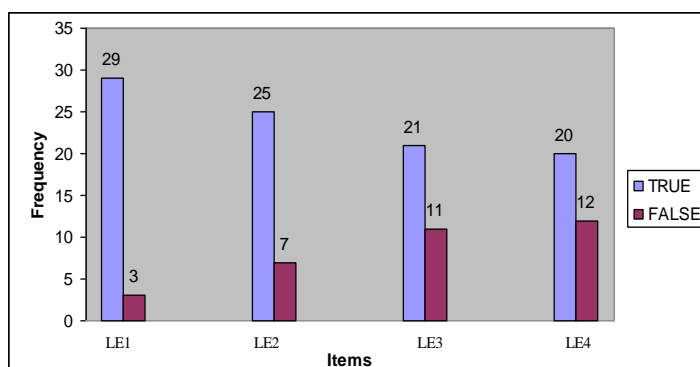


Figure 7.14: *Learning in Communicative Approach Classroom*

Figure 7.14 displays pupils' responses to the items in Table 7.9. The results illustrate pupils' opinions about the influence of the communicative approach on learning performances in the English language classroom. It can be seen from the results that majority of the pupils suggested they understood the meaning of things better while discussing with their classmates during English language lessons. Moreover, many of the pupils responded that they learned better in their ESL classroom whenever the teacher gave them the opportunity to talk among themselves. Similarly, more pupils were of the opinion that learning in pairs or groups enhanced their understanding of the English language. In addition, a higher number of the pupils supported the idea that students learned while playing in pairs or group. The outcome of the study thus shows pupils' positive attitudes towards the communicative approach as a good teaching tool that enhances and improves pupils' learning outcomes in the

ESL classroom.

One possible explanation of this outcome might be that pupils' learning was fostered as they actively engaged in such challenging instructional activities. Engagement in such activities during the instructional process may have led the respondents to search for justifiable reasons to support their opinions during the discussion sessions. Besides, in the process of the pupils' involvement in co-construction of their own knowledge, their understanding of the subject content and concepts might have been enhanced.

Table 7.10: *Items on Behavioural Intention Dimension (n = 32)*

BI 1	Learning in small groups during English lessons will not help me in other subjects.
BI 2	I like our teacher to continue to teach us in pairs/groups during English language lessons
BI 3	Learning in groups or pairs will help me to speak English language better

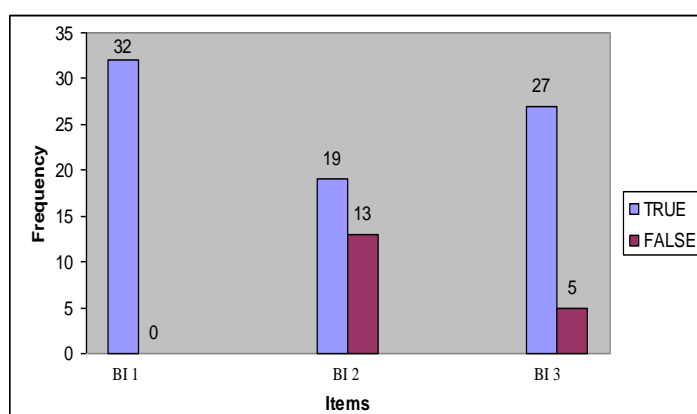


Figure 7.15: *Behavioural Intentions about Communicative Approach*

Pupils' responses to the items in table 7.10 are shown in Figure 7.15. The results present show pupils' behavioural intentions about the communicative approach. The data reveal that all 32 pupils concurred that the communicative approach would not be useful in other school subjects. Despite that, a large number of the pupils indicated

their desire to continue to learn in pairs or groups during their English language lessons. In any case, the majority of the pupils were of the view that learning in pairs or groups would enhance the development of their speaking skills. The pattern of pupils' responses to the items reflects a favourable disposition towards a continued and future use the communicative approach during English language lessons, but possibly not in all other school subjects.

7.2.2.2 Interview Results

During the last week of the research, one-to-one semi-structured interviews were also conducted with the communicative approach teacher and five pupils from the class. Five pupils were randomly selected among volunteers who indicated interest in participating in the interview process. The themes that emerged from the interviewees' responses include better understanding and comprehension, active participation, boldness and self-confidence to talk, error correction preference, learning with fun, and critical thinking development. Details are presented below:

7.2.2.2.1 Pupils' Interview Results

Pupils indicated that they preferred the use of the communicative approach in their English language class to the lecture method, because the former enhances their level of understanding and comprehension whereas the latter does not. To the pupils, the communicative approach facilitated improved learning of the English language, as portrayed in the opinion of this pupil:

I prefer learning in groups than learning with the method our teacher was using because I easily remember whatever we discuss in groups, but when the teacher tells us everything, I quickly forget so many things.

Another pupil reiterates that:

Learning in groups enhances better understanding of subject content because when we discuss, we find solution to problems easily.

All pupils posited that the communicative approach encouraged active participation in the English language classroom. The pupils commented thus:

We like learning in groups because many of us now answer questions in the class. In the groups, we have those who are very good and some people who are not so good. Those who are so good learn a lot during discussion.

Unlike before when few of us were answering teacher's questions, many of us now raise hands in the class to answer questions. I like learning in groups because I have the opportunity to discuss with my friends.

Most of the pupils claimed to prefer the communicative approach of teaching English language to the traditional method because they are encouraged to speak in the class. A pupil remarked that:

I love attending English language lessons now because I am able to share whatever I have in mind with other pupils in the class. I now speak in the class like never before.

Another pupil explained that:

I like learning in groups because I am no longer afraid and shy to talk in the class since the discussion is among few of us.

One of the common points raised by the pupils about the communicative approach was their preference for error correction from peers rather than the teacher correcting them. Pupils' remarks include:

My major problem is that I do not like the way our teacher corrects us when we make mistakes, but when we are grouped, I do not find it difficult to talk, even when my group members correct my mistakes.

The use of communicative approach is so useful to me because when I make mistake while speaking, my group members correct me. When my friends correct my errors, I do not get hurt.

Some of the pupils expressed a liking for learning English with the communicative approach because English language lessons became interesting and lively. One of the pupils echoed that:

Learning in group is interesting to me because we have opportunity to

engage in plays and at the same time work with many things when attempt to accomplish tasks

Pupils felt that the communicative approach gave them the opportunity to make critical analysis of issues, events and things. Their comments include:

I like learning in groups because we are able to identify areas of difficulty when we discuss, every one of us reason together as one in a group and find solution to the problems. And in the process, we are forced to think.

7.2.2.2.2 Teacher's Interview Results

At the end of the study there was the need to sample the views of the teacher who adopted the communicative approach in the teaching of English as a second language; hence the teacher was engaged in an audio-recorded one-to-one interview that lasted for about 20 minutes.

The comments of the teacher likewise revealed the importance of the communicative approach in the teaching and learning of the English language. The teacher acknowledged the communicative approach as a pedagogy which facilitated effective interaction in the class. The teacher remarked:

With the use of communicative approach during English language lesson, pupils now discuss among themselves as they are engaged in the tasks assigned to them.

The teacher further mentioned that the approach promotes pupils' active engagement and participation during the process of teaching and learning in the English language class. She explained that:

One of the things I observe is that since we started using communicative approach, pupils who used to keep quiet in the class now talk and participate in class activities when they are grouped to accomplish tasks. I am so impressed to see such pupils take part in class activities.

The teacher also reported that the communicative approach enhanced pupils' understanding of subject content. The teacher observed that:

Pupils now respond better to answer questions probably because

comprehension passages are now being presented in story-telling form, plays or dialogue.

Related to that point, the teacher also mentioned how pupils are beginning to show interest in English language lessons since the introduction of the communicative approach in the class:

Classroom teaching and learning is becoming lively and interesting to the pupils with this new method. Communicative approach makes the class more lively, pupils are very happy as they rush to form groups. Some of them like to move from one group to another on different days.

Moreover, the teacher regarded the communicative approach as a good teaching tool that improved pupils' communicative skills:

There has been a lot of improvement in pupils' level of communication. I used to be the only one talking in the class, but now, pupils feel free speaking English to one another. Those who could not express themselves before in English now answer questions in the class.

The teacher explains that with the use of communicative approach in English language class, teaching becomes less stressful:

I feel relieved now because I was doing everything all alone in the class, but now, pupils do most of the activities.

The teacher stressed that the adoption of the communicative approach in the English language class had been very effective because the impact of the strategy on pupils' performances and attitudes had been visibly noticed. However, the teacher observed some factors that could impede the effective utilization of the approach in the class. The teacher thus remarked that:

The use of communicative approach is time taking because the traditional teacher comes to the class to read passages and asks pupils questions, but now, one has to think of suitable tasks that would reflect the topic content, go round the groups because pupils who would want to talk have to be encouraged to come up. All these and many more consume lots of time.

Chapter Eight

DISCUSSION OF FINDINGS

8.1 Introduction

The purpose of this study, as earlier mentioned in the background chapter, was to determine whether teachers' adoption of the personal response system (PRS) and the communicative approach could improve pupils' communicative competence and attitudes towards the learning of English as a second language. This study specifically investigated whether differences existed among the communicative competence scores of pupils exposed to the lecture method, the PRS and the communicative approach. Similarly, any significant differences that existed in pupils' overall academic performance scores in other school subjects, and their attitudes towards learning English as a second language (ESL) across the groups, were also studied. Moreover, this study also examined teachers' and pupils' attitudes toward the two interventions (the PRS and the CA), that were introduced during the research. The discussion of findings presented in this chapter is structured around the research questions and the hypothesis that guided this study (see 1.8).

8.2 Teaching Strategies and Communicative Competence Scores

The first research question of this study is whether there are significant differences in pupils' communicative competence levels, based on the teaching strategies they were exposed to in their ESL classroom. The second aspect of the research question checked if gender differences existed in the communicative competence levels of pupils in different groups (see 1.8). In this section, discussion of the research question is presented to reflect the two strands of the research question.

8.2.1 Effect of Teaching Strategies on Pupils' Communicative Competence

Analyses were performed to check whether significant differences exist in the

groups' pre-test and post-test scores in overall communicative competence, listening, speaking, gains and overall academic performance in all school subjects. The discussion of findings in this section reflects the analyses highlighted above.

8.2.1.1 *Pre-test and Post-test Communicative Competence Outcomes*

The results of this study reveal that the mean communicative competence post-test scores of the communicative approach and the PRS groups were higher than their mean communicative competence pre-test scores. However, the mean communicative competence post-test score of the control group was lower than the mean communicative competence pre-test score. The outcome of this study supports the findings of Livingstone (2010) and Edwards (2005) which suggest that students who were exposed to task-based learning experienced increased communicative competence scores at the post-test in listening, speaking, speaking and writing skills.

Similarly, Farahani and Nejad (2009) found that task-based pedagogy was more effective in developing learners' speaking skills, as compared to the lecture method. Also corroborating the outcome of this study, earlier research findings show that students who experienced the PRS instruction had increased performance scores from pre-test to post-test (Barragues, Morais, Manterola & Guisasola, 2011; Buhay, Best & McGuire, 2010). Contrary to the outcome of this study, Hudson, McGowan and Smith (2011) found that the scores of the students who were exposed to the PRS course dwindled at the post-test, in a library instruction course.

There are possible explanations for the experimental groups' significantly improved communicative competence scores. At first, pupils in the communicative approach and the PRS groups were exposed to a series of interactive tasks, such as role-play, drama, dialogues, games, and game-like activities during their English lessons. Besides, tasks in the communicative approach classroom were sometimes supported

with pictorial illustrations, which could have enhanced pupils' understanding and comprehension of concepts. The tasks could have provided the pupils with the opportunity to make more input and increased time of oral production of the target language. Such opportunities were lacking in the traditional classroom, where the teacher did most of the talking and the pupils sat and passively listened. And where pupils had the opportunity to talk, their utterances were well tailored by the teacher for grammatical correctness.

Perhaps what affected the pupils in the control group may be linked with what Krashen (1985) identified as a problem in language teaching and learning. Krashen remarked that, rather than paying attention to the use of a language, the focus of some language teachers is more on the significance and accuracy of input to determine the extent of learners' level of language acquisition. The outcome of this study further provides evidence to support the assertion of Payne and Whitney (2002) and Swain and Lapkin (1995) that input without output is insufficient for second language (L2) learners to attain high levels of proficiency in a target language. In this study, it is probable that, in contrast to the lecture methods, the improved communicative competence of the pupils in the intervention groups was due to their exposure to interactive tasks.

Secondly, the PRS has interactive and active aspects which enable learners to showcase their levels of understanding of the lesson and to develop new knowledge, while they test out their knowledge by sharing information with others. As the pupils in the PRS group discussed and shared opinions collaboratively, after casting their votes to respond to teacher's questions in the first instance, they learned a lot from one another. Similarly, the involvement of the communicative approach group in group work could have increased the quantity of language practice opportunities which the

pupils needed to improve their oral communication fluency in English language.

However, pupils in the control group did not have the opportunity to explore the linguistic items in their English language textbook in order to express ideas, because the instructional process was teacher-centred. In most Nigerian ESL classrooms, learners perceive language learning through the teacher, rather than through a collaborative communication among themselves. Most pupils find it difficult to ask teachers questions; they are also denied the opportunity to negotiate meaning. Uso-Juan and Martinez-Flor (2008) reiterate that communication is very important in language learning and the degree of language proficiency is dependent on the range of opportunities provided for the negotiation of meaning.

8.2.1.2 *Listening and Speaking Skills' Outcomes*

The results of this study also indicate that pupils in the communicative approach and the PRS groups experienced significant positive changes in listening skills from mean pre-test score to mean post-test score. The average listening skills score for pupils who were exposed to the traditional lecture method in ESL classroom dwindled at the post-test. Increased pupils' listening ability in English indicates that interactive approaches such as the communicative approach and the PRS are capable of fostering L2 learners' listening skills. Lending credence to the outcome of this study, Bahrami (2010), Livingstone (2010), and Liqun and Xiubo (2011) reported that students who were exposed to varieties of pair work and group tasks, experienced improved listening skills compared to those students who were taught by a teacher using the lecture method. The outcome of this study is consistent with earlier findings which suggest that the listening ability of students, who were exposed to interactive online resources (Phuong, 2011) and digital stories (Abidin et al., 2011; Verdugo & Belmonte, 2007) was more proficient than those in the traditional classroom.

The difference in the listening abilities of the experimental groups (the communicative approach and the PRS) and the comparison group can probably be explained by the fact that the former set of pupils was exposed to language learning in playful and enjoyable contexts. The use of the communicative approach and the PRS within task-based learning might have demanded more of the learners' attention during the instructional process. Nunan (1999) explains that when students are exposed to tasks, they are provided the opportunity to comprehend, manipulate and interact in the target language. It therefore follows that, as the pupils were engaged in tasks and took turns to exchange ideas, their attention would have been more focused on decoding the linguistic items they needed in order to communicate in the target language. The outcome of this study reflects the stance of Bahrami (2010) that, when classroom exercises are constructed around tasks which demand students' responses, learners tend to pay more attention in the classroom.

Perhaps the improved listening skills, experienced by pupils in the communicative approach group, were due to the fact that the students initially read the comprehension passages as a whole. Thereafter, the teacher assigned tasks to the different groups in the class for further and detailed consideration of paragraphs, in order to accomplish the assigned task(s). Similarly, asking provocative questions or introducing background knowledge relating to the topic at the beginning of the lesson, via the PRS, must have helped to keep the pupils alert for the lessons.

Gilakjani and Ahmadi (2011) assert that students' attention is sustained when they are actively involved in the learning process and anticipating their teacher's questions. However, the instructional process in the control group followed a typical Nigerian ESL classroom, with emphasis on the development of reading skills. Intensive and extensive reading has gained a space of priority in Nigerian primary schools. Wang

(2008) argues that high proficiency in reading does not always indicate that learners are good listeners. The teacher of the control group might have done little or nothing to attract the attention and develop the listening skills of the pupils, while dominating the instructional process with much explanation and talk. The listening skills of pupils in the control group must have also been influenced by the mode of language assessment in Nigerian primary schools, which measures students' success in English based on their overall grades. As a matter of fact, such a mode of language assessment does not cater for listening skills.

The finding of this study, regarding pupils' speaking skill development, reveals that pupils in the communicative approach and the PRS groups experienced significant improvement in speaking ability at the post-test, as compared to the pre-test. On the other hand, this study also revealed that pupils in the control group, who were taught with the lecture method, did not experience significant increments in speaking skills from the pre-test to post-test stages of their programme. The outcome of this study corroborates the finding of Vhanabatte (2011) who found that students who were exposed to an electronic software programme experienced improved speaking skills, compared to those in the traditional classroom. Similarly, the findings show that students who were exposed to small groups, episodes from video clips and role play improved in speaking ability when compared to those taught with the lecture method (Tsou, 2005).

One of the possible reasons for this outcome is that the communicative approach and the PRS classroom settings, which were student-centred learning environments, provided the pupils with ample opportunities for more talk time than they would have had in the traditional classroom. Developing learners' speaking abilities requires sufficient time to practice the language use in real-life situations,

rather than exposing them to repetition, memorisation and drills. Mitchell (1988) remarked that communicative tasks help to develop learners' linguistic and social knowledge, as well as their communication skills. Moreover, Vygotsky (1978) emphasises the significance of scaffolding in learning. The series of interactive activities the intervention groups of this study engaged in, might have facilitated their access to support from peers and unhindered interaction. As the pupils became involved in the negotiation process, communication was probably maintained and sustained among the pupils, as well as between the teacher and the pupils. Richards (2008) and Uso-Juan and Martinez-Flor (2008) declared that communication is a key element in language learning and the degree of language proficiency is dependent on the range of opportunity provided for the negotiation of meaning.

8.2.1.3 Overall Post-test Communicative Competence Outcomes

This study shows significant differences in the overall English language communicative competence scores (listening and speaking skills) among pupils in the communicative approach, PRS and traditional classrooms. The English communicative competence of pupils in the PRS group improved significantly, when compared to those in the communicative approach and the control groups. At the post-test, pupils in the communicative approach also experienced significantly improved English communicative proficiency, as compared to those in the control group. These findings were in accordance with previous research, which indicate that the communicative competence level of students who were taught with the lecture method was low when compared with those who were exposed to electronic board (Zha, Kelly, Ko Park & Fitzgerald, 2006) and task-based learning (Livingstone, 2010; Liqun & Xiubo, 2011). Also, in harmony with the outcome of this study, earlier studies indicate that the use of the PRS facilitated learners' increased interaction, discussion, and active participation

in the classroom, when compared to the traditional method of teaching (Stuart, Brown & Draper, 2004; Laxman, 2011).

One of the possible reasons for this outcome is that both the PRS and the communicative approach exposed the pupils to high levels of interaction which they would not have had in the traditional classroom. Informal observation of the research and teachers' comments during the interviews revealed that within group or peer discussion, the pupils were more relaxed, freer and more willing to communicate in the target language with classmates than pupils in the traditional classroom. During interaction, the pupils in the intervention groups gradually adjusted to the new learning environment and gained more linguistic items to communicate in English, with little or no display of speech anxiety. In the control group, the pupils mostly acted the teacher's scripts by doing whatever she wanted in the way the teacher desired. Long and Porter (1985) remarked that the traditional teacher often asks information questions which have only one answer known to the teacher and the pupils (e.g. Yes or No). And when the instructional process is at the mercy of the teacher, learners' perceptions of the teacher as judge constitute a limitation to learners' speech confidence.

The control group's low communicative competence may be associated with discipline anxiety, often prompted by teacher's negative criticisms or corporal punishment meted out for pupils who gave wrong answers. In such a learning environment, pupils are likely to be unwilling to answer or to talk in class. However, in the PRS and the communicative approach classrooms, the pupils worked in groups with less intrusion from the teacher. Teachers of the intervention groups mostly acted the role of what Giri (1996) and Littlewood (1981) referred to as facilitator or "referee" who offers suggestions regarding solutions to the assigned tasks. In this study, the researcher informally observed that the learning activities in the experimental groups

were seemingly given up by the teachers to the learners. While the teachers of the intervention groups were less involved, the pupils were more engaged in the interpretation of questions (See Figures 6.2a, 6.2b and 7.3). Although pupils' active participation in the experimental groups makes the classes noisy during peer or group discussion, Ellis (2003) notes that such occurrence is inevitable when peer discussion is employed in an instructional process. It has been emphasised that incremental language skill is achieved in meaningful communication and not when individuals talk in isolation (Hinkel, 2006).

One other possible factor, which might have contributed to the improved communicative competence of pupils in the communicative approach and the PRS groups, is the pupils' involvement in repeat dialogue and negotiation of meaning while discussing with one another. The pupils learn and gain from peers' proper use of words, sentences as well as being able to master language structure in the process of their engagement in social interaction. Linnell (1995) and Nicol and Boyle (2003) are of the view that language learners are likely to modify their language structure or sentence composition as they respond to some confirmation checks, clarification requests and repair from peers.

In addition, the non-threatening classroom atmosphere which promotes cooperative and collaborative learning among the pupils in the communicative approach and the PRS groups might have also contributed to their observed improved communicative proficiency. Pupils in the communicative approach group had the opportunity to receive immediate feedback from peers and the teacher. Similarly, pupils in the PRS group received feedback from the PRS responses displayed on the projection screen. Since the pupils were learning in pairs or groups, they were not embarrassed about making mistakes; hence the less confident pupils might have been

more encouraged to interact with classmates in the target language. The PRS learning environment was positive, conducive and enabling; hence pupils were less apprehensive about answering questions. Warshauer and Meskill (2000) contend that a comfortable learning environment provides learners with the opportunity to make comprehensible input and real-life communication that exists outside the classroom.

8.2.1.4 *Communicative Competence Gain Scores Outcomes*

Regarding the relationship between the mean communicative competence pre-test scores and gain scores for the pupils, the results are quite revealing. The findings show a significant negative relationship between the communicative competence pre-test scores and gain scores for the experimental groups. This implies that low pre-test scorers in the communicative approach and the PRS groups benefitted more from being exposed to the interventions than did the pupils with initial higher pre-test scores. However, in the control group there was no significant difference in the gain scores between the low and high pre-test scorers. An earlier research finding noted that the oral proficiency of students with low reading span was greater than that of the students with high reading span after being exposed to synchronous computer-mediated communication (Payne & Ross, 2005). Also lending support to the outcome of this study Roschelle et al. (2009) reveal that students scoring low on pre-test had higher learning gains at the post test than those who scored high on the pre-test after being taught with TechPALS interactive technology.

There are some plausible interpretations of the outcome of this study. First, teachers' explanations that the pupils might not improve in English if they refused to express themselves in the target language, might have had an influence on the low pre-test scorers in the communicative approach and the PRS groups. To that effect, pupils with low communicative pre-test scores in the experimental group were more

encouraged to share their views and ensure they were more engaged in negotiating meaning during discussions. Perhaps pupils with low pre-test scores in the experimental groups seized the opportunity of the lower cognitive load involved in interpreting and understanding some communicative tasks, as introduced by the communicative approach and the PRS technology to express themselves in the target language.

Moreover, unlike the independent form of learning in the traditional classroom, the high achievers in the experimental groups might have had some influence upon the low scorers. The explanations of the high pre-test scorers during the discussions could have enhanced the understanding and learning ability of the pupils with initial low pre-test scores. Invariably, the two sets of pre-test scorers have benefitted from the interactive and cooperative approaches. The outcome of this study emphasises the fact that the mixed-ability form of discussion facilitates pupils' level of comprehension and understanding of learning content. This outcome is best explained through the zone of proximal development (Vygotsky, 1978) which allowed the low pre-test scorers to experience developmental movement, beyond their initial level of achievement, in the process of interacting with high achievers.

In the communicative approach and the PRS groups, the pupils collaboratively worked in pairs or groups to ensure that the assigned tasks were accomplished. During the cooperative learning process, the pupils with low communicative competence might have made their deficiencies known to their peers, rather than telling their teacher openly. Milner-Bolotin, Antimirova and Pelrov (2010) remarked that during pair or group discussion, students identify their weak points and follow up to clarify the concept. In addition, Duncan (2006) opined that when students are allowed to discuss

their answers with classmates, before making further input, the outcome of their instructional process is stronger or more qualitative. On the other hand, comprehension and understanding of concepts might seem difficult for pupils in the control group because the instructional process was teacher-centred and learners regard themselves as independent members of the class.

Another finding of this study is that the mean communicative competence gain scores of the pupils in the communicative approach and the PRS groups were significantly higher than that of the pupils taught by a teacher using the lecture method. The outcome of this study corroborates earlier research findings which showed that the learning gains of students who were taught by the lecture method were lower than the gains of students exposed to the PRS instruction (Barragues, Morais, Materola & Guisasola, 2011) and interactive whiteboard and active studio software (Dhinsa & Haji-Emram, 2006). Also lending support to the outcome of this study are earlier findings which reveal that students taught by the lecture method, compared with those exposed to electronic board (Zha, Kelly, Ko Park & Fitzgerald, 2006) and task-based learning (Livingstone, 2010), did not experience improved communicative competence.

Possible explanations for the outcome of this study include the fact that the instructional process in the experimental groups exposed the learners to practical experience, social interaction and communication. Dhindsa & Haji-Emram (2006) remarked that effective learning, as perceived by the constructivists, is best achieved when learning is interactive and experiential. In the same trend, Dale (1969) and Freeman and Herron (2007) posit that learners' active engagement in classroom interaction gives them access to between a 70% and 90% retention rate. However, in the traditional classroom, learners may not access more than a 50% retention rate. In this study, rather than rote learning, the PRS, pictorial and graphical illustrations may

have served as authentic material. Felder and Brent (2009) echoed that authentic materials promote learners' transformation of raw information, acquired during instruction, to a body of new knowledge transferable for use in different situations. Leonard, Gerace and Dufresne (1999) argue that, in a teacher-centred classroom, the knowledge the teacher tries to pour into the heads of the students not only spills out, but that a greater percentage of the passive students do not understand what the teacher teaches.

However, the nature of interaction that exists in most ESL classrooms in Nigeria is more teacher-centred. The teachers often initiate and dominate classroom instruction with explanations, frequent questioning, prompting and a chalkboard summary. The major role of the learners has been the usual chorus responses of "Yes" or "No", engagement in recitation and writing of the chalkboard summary in their notebooks. The teacher decides who responds to questions or who should not. Pupils are less privileged to critically think about the question before the teacher calls another person to answer. Pupils' responses are interfered with by teacher's comments or error-correction. Most Nigerian English teachers seem not to be conscious that learners will learn more when teachers talk less. The improved gains of the experimental groups are portrayed by a saying attributed to the sage Confucius, which indicates that learners forget what they hear, remember what they see and understand what they do. According to Laxman (2011), the worst interactive instructional process yields increased students' learning, as compared to results obtained from the traditional classroom.

Moreover, the learning environment in the communicative approach group seemed conducive because of the feedback the pupils received from group members and the teacher. Similarly, pupils in the PRS classroom received un-delayed feedback

through the displayed responses on the projection screen. The immediate feedback provided by the PRS might have encouraged the pupils to engage in clarification and modification of their thoughts, while discussing with other pupils. According to Chi, de Leeuw, Chiu, and LaVancher (1994) and Kluger & deNisi (1996), feedback which requires learners' self-explanations may provide learners with the important resources for solving problems; facilitate increased efforts and correcting errors. The findings of this study thus underscore the importance of interaction and communication in language learning, as emphasized by Caldwell (2007) and Vygotsky (1978).

One striking finding of this study is the PRS group's outstanding improvement in English communicative competence, compared to the learning performance of students in the communicative approach and control groups. Earlier research findings have established that the use of the PRS, with peer instruction, enhances students' learning gains (Laxman, 2011; Pollock, Chasteen, Dubson & Perkins, 2010); and students valued the use of the PRS because it facilitates better understanding of concepts (Barragues, Morais, Materola & Guisasola, 2011). It is interesting to note that pupils in the communicative approach and the PRS groups took advantage of the interventions to access necessary support (scaffolding) to enhance their communicative skills in the ESL classroom.

The significant learning gains of the PRS group may have been prompted by the flexible manner in which the technology was applied by the teacher. Unlike the communicative approach classroom, where pupils' chances of discussion were limited to the group members, pupils in the PRS group had the opportunity to discuss with whoever they wanted, without restriction. However, Basta (2011) reported that students did not find the communicative approach as much fun, or as interesting, because the students only interacted with the people they knew and neglected those they were not

familiar with.

Moreover, perhaps the PRS group recorded the highest learning gains because the PRS blended with peer discussion or class wide discussion, which was fun, while teacher's support combined to promote lively, fascinating and real-life interaction. As earlier mentioned in chapter three, many Nigerian children are familiar with the use of mobile phones for communication purposes; as a result, it can be argued that pupils in the PRS classroom felt more comfortable playing with the technology to actively interact with peers and their teacher. The outcome of this study buttresses the view of Ellis (2003), Hamada (2012), and Hinkel (2006) that language teachers should not rely on one approach to bring out the best performance in learners. Rather, multiple approaches, or integrated or multi-skill instruction, should be employed to improve learners' language skills.

8.2.2 Effect of Gender and the Teaching Strategies on Pupils' Communicative Competence

The results of the analysis relating to gender, treatment and pupils' communicative competence in chapter five indicate that gender has no significant effect on pupils' communicative competence improvement in the ESL classroom. This finding is consistent with earlier research outcomes which indicate that the language proficiency development of students who were exposed to task-based teaching approaches was not influenced by gender (Farahani & Nejad, 2009). Research findings also indicate that students' English vocabulary development was not dictated by gender when online games were used (Muhanna, 2012) and where cell-phones and computers were integrated into the instructional process (Hijazi, 2011). The finding of Sarahani and Sahebi (2012), which shows that male students taught with task-based learning increased their language skills more than their female counterparts, disagrees with the

finding of this study. Male students have also been reported to be more motivated and more engaged than females when using technology in education (Kay, 2009; Koohang, 2004; Shashani, 1994).

The results of this study further indicate that pupils' communicative competence development in an ESL classroom was not significantly affected by the interaction between gender and the teaching strategies employed in this study. The outcome of this study matches research findings which show no significant interaction effect of gender and teaching methods on language skills' development of students taught with cell-phones and computers (Hijazi, 2011); or a task-based approach (Farahani & Nejad, 2009). Also corroborating the outcome of this study is the finding which reveals that the efficacy of the PRS in the instructional process is not gender based (MacGeorge et al., 2008).

It is worth noting that research findings about technology's acceptance, adoption and integration, with respect to gender, are inconclusive. The difference between the finding of this study and some earlier research findings may be linked with cultural and social backgrounds. For instance, the effect of gender in the finding of Sarahani and Sahebi (2012) was influenced by the conservative nature of the Iranian culture and customs, which significantly limits females' levels of social interaction. However, in the southern parts of Nigeria, where this study was conducted, gender bias does not exist regarding learners' social interaction.

Despite the fact that the PRS is a new technology, and the integration of the communicative approach in Nigerian primary schools is rare, it is interesting to note that there was no significant gender difference among the pupils' communicative competence. The finding of this study might have stemmed from the fact that both girls and boys had similar experience with the interventions. Evidence from this study

clearly shows that both boys and girls were actively involved in the instructional activities in the communicative approach and the PRS classrooms (see Figures 6.1, 6.2a, and 6.2b). Boys and girls, in the communicative approach group, spent more time on the assigned tasks. Similarly, both boys and girls were clicking to respond to the teacher's questions and were actively engaged during the discussion sessions in the PRS group. Boys are regarded to be more socialised and familiar with the use of computer games and other computer-related technologies than girls (Koohang, 2004; Shashani, 1994). From the results of this study, this researcher thus speculates that the increased popularity and ownership of mobile phones is possibly bridging the gender disparity in technology use among Nigerian children.

Perhaps the non-significant effect of the interaction between gender and teaching strategies on pupils' communicative competence, in the context of this study, was facilitated by the collaborative nature of interaction that existed among the pupils in the intervention groups. As peer discussion was prompted and encouraged without gender bias in the PRS group, group formation, as well as communication among pupils in the communicative approach group, was not predetermined by the pupils' gender. Although females might have been assumed to be less confident to use technology for learning, it was possible for the girls in this study to have perceived language learning as a collaborative exercise. In other words, the outcome of this study seems to establish the fact that the interventions introduced in this study are effective in creating leverage between primary school boys and girls, with respect to communicative competence development. Supporting the finding of this study, King and Joshi (2008) remarked that the PRS provides equal opportunity for all students to express their views, receive equal measure of feedback and enhanced positive reinforcement.

8.3 Effect of Communicative Competence Scores on Overall Academic Achievement

The second research question of this study relates to investigating possible significant differences in the overall academic achievement scores among pupils in different groups, as influenced by their post-treatment communicative competence levels. The results of the analysis indicate that, pupils' communicative competence levels based on the teaching strategy may have had influence on their overall academic achievement in other school subjects. Critical examination of the results show that pupils in the intervention groups who experienced improved communicative competence recorded increased academic achievement scores at the post-test in other school subjects (see Tables 5.24 & 5.30). In harmony with the outcome of this study, positive association between students' IELTS scores and students' future academic success has been reported (Feast, 2002; Kong, Powers, Starr & Williams, 2012). Earlier research findings have also shown that limited proficiency in English language adversely affects students' academic attainment (Beals, Arruda & Peluso, 2002; Stephen, Welman & Jordaan, 2004).

The finding of this study is likely to be connected to the fact that, in Nigeria, English language is the medium of instruction in all school subjects, excluding the indigenous languages. In that way, if pupils must do well in tests and examinations in other school subjects, they need to be competent users of the language of instruction in order to comprehend, understand, and answer examination questions appropriately, both orally and in writing. Vidanapathirana and Gamini (2009) suggest that the presence of high proficiency in English enhances learners' capacity to pursue studies in the medium of English. Additionally, in this study, the method of teaching employed by the various teachers in different classroom settings might have contributed in a

major way to the various groups' overall performance in other school subjects.

It should be noted that teacher's levels of proficiency in English language alone may not exert a significant positive influence on learners' development of communicative competence. It is important to note that it may be difficult too, for a very proficient language teacher to promote learners' communicative competence development if he or she fails to employ appropriate instructional strategies. For instance, in the control group, the pupils were regularly subjected to rote learning, regurgitation of information and high levels of passivity. In such a traditional classroom, Jackson (2000), cited in Stephen, Welman and Jordaan (2004), argues that learners are not likely to improve their proficiency in English language. Deverell (1989) also states that students with low levels of fluency in English often encounter problems in their studies. Therefore, the poor overall performance in other subjects observed in the control group might be connected with their exposure to the lecture method, the form-focused language instructional process and teacher-centred instruction. In other words, this finding may explain the effect of limited English language proficiency levels, of pupils in the traditional classroom, on their academic performance.

Fakeye and Ogunsiji (2009) reiterate the fact that overall success of Nigerian ESL students is, to a reasonable extent, dependent on their level of proficiency in English language. In countries like Nigeria, where English is the medium of instruction, learners require proficiency in English language to further their education beyond the primary and secondary levels. Therefore, the findings in this current study strongly indicate that Nigerian pupils need to acquire high levels of proficiency in English language, in order to be more assured of academic excellence in other school subjects.

8.4 Attitudes towards the English Language Lessons

The third research question of this study seeks to determine whether significant differences exist in the attitudes of pupils towards the English language lesson, after exposing them to the three different conditions.

8.4.1 Overall Attitudes to the English Language Lessons

At first, the results of the analysis of covariance revealed that there was no strong evidence to imply that the communicative approach, the PRS and the lecture method influenced pupils' attitudes towards English language lessons (see Table 6.4). Such a non-significant difference may be attributed to the short period, of 10 weeks, during which the interventions were administered. Duncan (2006) argued that much positive disposition should not be expected from students who are newly introduced to interventions with little experience of such pedagogy. Beatty (2004) and Allen and Tanner (2005) also remarked that students do not find it easy to shift to a new method of teaching / learning.

8.4.2 Individual Attitudinal Item's Outcomes

However, in this section further discussions on pupils' attitudes are based on the outcomes of the analysis performed on some individual items of the questionnaire, which showed significant differences in groups' attitudes towards the learning of English language.

8.4.2.1 Interest in the English Language Lessons

One of the findings of this study reveals that pupils' level of interest in activities in English language lessons varied significantly across the groups. Pupils in the PRS group expressed the most significant positive attitudes, while those in the control group displayed the least positive attitudes towards English language lessons and their related activities. The findings of this study are consistent with earlier findings which indicate

that learners were positively disposed to the use of the PRS (Albon & Jewels, 2007); learners in the PRS classroom exhibited increased interest and attention in the learning process, as compared to the traditional classroom (Duncan, 2006; Johnson & Robson, 2009). Other research findings that match the outcome of this study show that learners are more comfortable with being exposed to group work in language classrooms, as compared to being taught with the lecture method (Edwards, 2005; Maden 2010).

That the pupils in the communicative approach and the PRS classrooms were more interested in English language activities is to be expected. This can probably be explained by pupils' involvement in various interactive activities such as role-play, mini-drama, discussion, engagement with game-like PRS and other communicative activities in the ESL classroom. Clair and Chihara (2012) reiterate that discussion during pair or group work is often lively and interesting, as learners share and compare views among themselves. In this study, pupils' engagement in the interactive activities might have provided them with the opportunity for real-life communication that is free from social anxiety. Moreover, such interactive activities are capable of stimulating pupils' interest in language learning. To a great extent, pupils in the intervention groups were encouraged by their teachers to interact among themselves, at their own pace. However, in the control group, the classroom communication was teacher-fronted and all activities were centred and focused on the teacher.

The outstanding interest from the PRS group members in activities in the ESL classroom, as compared to the communicative approach group, may be as a positive result of how the teacher combined the PRS with peer instruction. Such a combination might have laid a good foundation for a more meaningful interaction among the pupils than relying on pair work or group work alone. It is very probable that introducing learners to communicative activities and peer discussion, blended with the use of the

PRS, motivated the pupils' interest more than exposing them to the communicative activities without technology or the lecture method. Moreover, Clair and Chihara (2012) remarked that when students work in groups, weaker students tend to lag behind and may feel intimidated to ask other group members for help. The situation seemed to be different with the use of the PRS in the ESL classroom, because the opportunity for experiencing intimidation may have been prevented by the anonymity of pupils' responses.

One other possible explanation for the PRS group's increased interest in English language lessons is that the PRS acted as a stimulant to the pupils during the instructional process. As mentioned earlier, researchers (D'Inverno, Davis & White, 2003; McLaughlin & Mandin, 2001) are of the view that children's attention span in the classroom is between 10 to 20 minutes depending upon the pedagogy employed by the teacher (see 3.6). The various interactive sessions, combined with the use of the PRS in the ESL classroom, served as "ice breakers" to the instructional process in the traditional classroom. Moreover, pupils' interest and attention might have been stirred up by combining the PRS with peer instruction. Bruff (2009) emphasised that learners' interest and attention in the learning process can be enhanced by using the PRS technology. In this study, the classroom instructional process seemed unimpressive to many of the pupils in the control group, because it was characterised with more drills and written work than learners being exposed to interactive tasks and activities (see Figure 6.1c, 6.1d, and 6.1e).

8.4.2.2 *Reading of Books Written in English*

Another finding of this study is that pupils in the control group were most positively disposed towards reading books written in English language, compared to the pupils in the PRS and the communicative approach groups. As a matter of fact,

pupils in the communicative approach group had the least positive attitude towards reading books, compared to pupils in other groups. In line with the outcome of this study, Irmawati (2012) found that the communicative approach was not an effective strategy in teaching reading because of the teacher's prominent role in the reading exercise. Similarly, Lafayette and Buscaglia (1985) reported that students who were taught with the lecture method slightly improved their reading skills, as compared to those exposed to the discussion method. That the pupils in the communicative approach group were exposed to tasks and worked in groups, might explain why they were not so positively disposed to reading books.

The increased liking for reading books by pupils in the control group might stem from their target need, which is their desire to make efforts to pass the qualifying examinations to secondary school education. Moreover, in the traditional ESL classroom the development of pupils' communicative skills seems not to be a major concern to the teachers; hence the pupils in the group seemed complacent about being spoon-fed by their teachers. There seems to be a dearth of research findings on the influence of the PRS on learners' attitudes towards the reading of books in the classroom. Besides the explanation presented earlier about this outcome (see Table 6.6), the finding can also be attributed to the influence of an instructional process which was not totally disconnected from the reading of the English language textbook. Although the teacher in the PRS group engaged the pupils in tasks and discussions, the pupils were more engaged in individual reading of the comprehension passages, as compared to the communicative approach group. Moreover, the teacher in the PRS group often used the technology to ask questions at the beginning of the lesson, in order to check whether the reading assignment and other homework were done. Using the PRS in such a manner could have contributed to pupils' positive attitudes towards

reading.

8.4.2.3 Influence of the English Language Knowledge on Other Subjects

The results of this study further show that pupils in the communicative approach group were positively disposed to the fact that they understood other subjects as a result of the influence of the knowledge gained in English language lessons. Whereas pupils in the PRS and control groups were not convinced that their levels of English language skills helped them to understand other subjects. Consistent with the results from the communicative approach group, earlier findings revealed that learners' level of academic performance in other academic disciplines was influenced by their level of English language skills (Barwell, 2008; Lafayette & Buscaglia, 1985).

Contrary to the outcome of this study, Berman and Cheng (2010) found no statistically significant association between students' perceived difficulty in ESL and their academic performance. That the finding of this study was a result of analysing post-intervention responses of the pupils, might have contributed to the disparity observed between the outcome of this study and that of Berman and Cheng. Moreover, since the end of term scores were used as a measure of pupils' academic performance in this study, the impact of the interventions may have been recent in the memory of the pupils when the examinations were conducted. It is therefore possible that the impact of such a memory may have influenced the outcome of this study.

Nevertheless, the outcome of this study is not surprising in that the pupils in the communicative approach group, with their improved levels of communicative competence, are expected to transfer the skills gained in English language lessons to the learning of other subjects. Moreover, the textbooks of other subjects are written in the English language, while English language is also the medium of instruction. One should therefore expect that the pupils who were exposed to the interventions, which

enhanced their communicative competence, should transfer the skills gained in the ESL classroom to facilitate their understanding of other subjects. The results in Table 5.14 indicate that the pupils in the control group recorded no significant improvement in their communicative competence. Such a result is a reflection of the impact of the lecture method on the control group's learning process.

Furthermore, it might be on account of low levels of proficiency in English that results in the displayed control group's less positive disposition towards the value of English language knowledge in other subjects. Setati (2003) remarked that students who are weak in the language of instruction have the tendency of poor comprehension and less participation in the learning process. For instance, Mathematics is one of the subjects most dreaded by Nigerian students, but Barwell (2008) emphasises that mathematical symbols are interpreted linguistically. Latu (2005) contends that if learners are deficient in English language skills, they are most likely to be frustrated in the understanding of sentences and statements relating to the concepts of other subjects. Learners need high levels of language skills to read and understand learning material, before adequate knowledge of the subject matter can be developed and before such learners are able to answer questions relating to other school subjects. It therefore follows that the pupils in the communicative approach programme might have realised that their success in other subjects had been enhanced by their improved communicative competence.

As mentioned in the earlier discussion of the results presented in Table 6.7, it is quite surprising to find that pupils in the PRS group were not affirmative about the usefulness to other school subjects of the knowledge gained in the ESL classroom. Perhaps the pupils' responses are a demonstration of the degree of their self-efficacy in their communicative skills. This assumption is made because the final examination for

the term had not been conducted. Hence pupils' inability to access their overall performance at the end of the term, to justify the impact of the PRS in other subjects, might have influenced their disposition. Probably the views of the pupils in the PRS group would have been otherwise if they had had the opportunity to access the results presented in Tables 5.47 and 5.48 before the questionnaire was administered. It is worth noting that the assumption made about the PRS group is cautionary, because of the positive disposition of the communicative approach group in this respect.

8.4.2.4 *Learning of the English Language at Home and in the School*

One of the findings of this study reveals that pupils in the communicative approach and the PRS groups were more positively disposed to the idea of learning English at home and in the school. The pupils' perceptions echo the research claim of Wu (2010) which indicates that students with low communicative skills seldom communicate in English in the classroom or outside of the classroom. Likewise, earlier research findings indicate that learners believed that the use of the PRS facilitated their interest in learning more (Bojinova & Oigara, 2011; Prather & Brissenden, 2009). Besides the already given explanations to support the results in Table 6.8, there are two other possible reasons to take into account when considering the finding.

Perhaps this finding was influenced by the pupils' consciousness that they worked in pairs or groups; hence they might be required to contribute or share their opinions during the discussion sessions. Therefore, to meet up with the next day's learning challenges in the classroom, the pupils might have been prompted to equip themselves with the necessary information by reading their textbooks after school hours. The stance of Bain and Przybyla (2009) and Trees and Jackson (2007) who suggest that teachers who use the PRS questions at the beginning of the lessons do more to ensure that learners complete their reading at home, support the outcome of

this study. It is apparent that the learners in the teacher-centred classroom are often reticent; hence they depend on the teachers for solutions to challenges rather than engaging themselves in further information searching exercises to boost their academic success.

The second explanation of this finding is that pupils in the intervention groups, who experienced improved communicative competence scores and gains at the post-test (see chapter 5), might have overcome their language anxiety. The intervention groups' increased speech confidence might have been facilitated by the reasonable and ample time they had to practice the use of the target language. Wu (2010) reiterates that language anxiety has a serious negative influence on students' academic pursuits. Based on the improved communicative competence scores and gains experienced by the intervention groups, the pupils in the two groups may have grasped the principles involved in the use of English to overcome their communicative challenges. As such, their confidence might have improved sufficiently to either allow them to learn English independently or with other people after the class.

8.4.2.5 *Participation in Discussions*

The findings of this study also reveal that the pupils in the PRS group, when compared to the other two groups, were the most engaged in discussions during the instructional process in their ESL classroom. This finding is also reflected in the PRS group's attitude to the PRS technology. The pupils had earlier affirmed that, with the use of the PRS, they were not afraid to answer questions, participate in the lesson and talk more in the class (see Figure 7.2; items EG 1, 3 and 4). The outcome of this study is supported by earlier findings which show that the PRS provided students with the opportunity to be more engaged in classroom discussions than they would be in the traditional classroom (Gachago, Morris, & Simon, 2011; Johnson & Robson, 2008;

Mollborn & Hoekstra, 2010).

Moreover, the finding of this study reveals that during the English lessons, the communicative approach group was more actively engaged in discussion than were members of the control group. This outcome is also exemplified in pupils' attitudes towards the communicative approach (see Figure 7.8; items GA1, EG 1, 2, 3, 5, and 6). The outcome of this study corroborates earlier findings which revealed students' agreement with the fact that the communicative approach enhanced their participation in classroom discourse (Basta, 2011; Wu, 2010).

There are two other possible reasons for this outcome, besides those raised while discussing the results in Table 6.9. First, the pupils in the intervention groups may have found the small group discussions and the PRS approach, blended with peer discussion more comfortable because of the teacher's limited interference, whenever the pupils were engaged in discussion. For instance, pupils in the intervention groups may have been relieved from the tension, generated by the teacher's comments and error correction, which characterise the traditional ESL classroom. Informal observation of the intervention groups' classroom instruction showed that when pupils made mistakes, correction was either self-made or contributed by their peers. As a result, the pupils in the communicative approach and the PRS groups were more encouraged to actively participate in discussions during the learning process. Zhu (2012) argues that, whilst the traditional teaching method in ESL equips learners with grammatical rules, they may well lack the ability to communicate in the target language. Interestingly, Savignon and Wang (2003) reports that language students dislike the time the teacher devotes to the explanation and practice of linguistic rules.

The second plausible explanation for this finding is that the experimental groups were engaged in interactive tasks and they had access to immediate feedback.

That the pupils were exposed to interactive tasks might have provided them with opportunities that were rare in a traditional classroom, to share views among themselves. The low level of discussion expressed by the pupils in the communicative approach group was unexpected. Perhaps the communicative approach group's discussion sessions may have been dominated by a few confident pupils who could express themselves in English for a longer period of time. Moreover, immediate feedback, which revealed the correct answer on the projection screen, might have provided an equal chance to more learners in the PRS group to engage in the interactive sessions. Engaging pupils in short-time interactive session, as was the case in the PRS group, might have promoted more pupils' involvement in meaningful discussion without communication breakdown. The outcome of this study further confirms the view of Robinson (2007) and Warschauer and Meskill (2000) that the display of the PRS results stimulates a democratic form of discussion; also those flexible discussions deprive the teacher or few outspoken learners from dominating the instructional process.

8.4.2.6 *Happiness in the ESL Classroom*

Another finding of this study indicates that pupils in the PRS group, when compared to the other two groups, prominently indicated that they were always happy during the English language lessons. Some research findings have also revealed that students are generally happy for being exposed to PRS instruction (Albon & Jewels, 2007; Gachago, Morris & Simon, 2011; Kaleta & Joosten, 2007; Martyn, 2007). Perhaps the degree of happiness expressed by the pupils in the PRS classroom was due to the high level of rapport that existed between them and their teacher. The PRS allowed the pupils to interact freely with the teacher, without being subjected to social anxiety. As Wei (2011) puts it, students' attitudes to learning would improve where a

cordial relationship exists between the teacher and the students.

With the use of the PRS during the ESL learning process, a healthy and strong relationship might have been developed among the pupils. With the everyday interactive discussion, the pupils might have established new relationships with other pupils with whom they initially did not have a good rapport. Therefore, building a good social network could have fostered their level of happiness. Moreover, providing immediate feedback to enable the pupils to know whether their performance was good or bad might have influenced their positive emotion during the learning process. When pupils recast their votes to answer teacher's questions, and they discovered that their answers were right after displaying the distribution of their responses on the screen, their enthusiasm was observed to be overwhelming and was reflected in their behaviour. In such situations, the pupils found it hard to hide their feelings; hence the expression of their joyfulness was informally observed and was clearly shown.

With respect to the item which queried how well the pupils were involved in answering the teacher's questions, the finding of this study reveals that pupils in the PRS group were more involved in answering teacher's questions than their counterparts in other groups. This outcome is also reflected in their attitude towards the PRS (see Figure 7.2; EG2, EG5 and 7.2.1.2.1). Earlier research findings suggest that the use of the PRS leads to increased students' participation in answering questions in classroom (Kaleta & Joosten, 2007; McGowan & Gunderson, 2010).

Besides the reasons discussed about the results in Table 6.11, there are two other plausible explanations of this finding. The first explanation is that the anonymity feature of the PRS might have increased the willingness and the readiness of the pupils to participate in the instructional process. Since the pupils have noted that their errors were safe from public ridicule, they may have been encouraged to answer more of the

teacher's questions. Stagg & Lane (2010) note that such an anonymous environment is essential to encourage the participation of L2 learners who are unwilling to participate in classroom. However, pupils using the communicative approach might at least be partially scared of responding because of social anxiety associated with their errors being known to classmates, with whom they did not have a good rapport. Pupils in the control group might have been threatened by the teacher's regular negative criticisms and the accompanying public embarrassment that followed when they gave wrong answers in the classroom.

Additionally, it is probable that giving all the pupils in the class the opportunity to simultaneously answer the teacher's questions must have been a motivating factor that facilitated the PRS group's active responses to the teacher's questions. It is worth noting that the use of the PRS in this study was done in such a way that each pupil had a handset (transmitter) with which to choose and send his or her answer to the teacher's questions, without being delayed by other pupils. The finding of this study might have been otherwise if a handset was shared among two or more pupils during the teaching and learning process.

8.4.2.7 Attendance in ESL Classrooms

The finding of this study, about students' levels of attendance in the ESL classroom, reveals that pupils in the PRS group, compared to other groups, displayed the highest levels of attendance. The attitude of the pupils in the PRS group, with respect to attendance in the English class, was also confirmed in their responses during the interview (see 7.2.1.2.1). However, pupils in the control group were less positive about their willingness to be in an English language lesson. Some research evidence indicates that the PRS increases students' attendance and decreases attrition in class (Burnstein & Lederman, 2001; Gachago, Morris & Simon, 2011). However, the finding

of Morgan (2008), which indicated that there was no significant difference in the attrition rate between the PRS and non-PRS groups, is incongruent with the outcome of this study. Majerich, Stull, Varnum and Ducette (2011) also found that the mathematics students' attrition rate in the PRS class was similar to that observed among students taught with the lecture method. In this study, pupils were supplied with PRS handsets at no cost; whereas learners involved in some studies, whose outcomes contradict the finding of this study, were compelled to purchase the PRS handsets. Compelling learners to bear the cost of the PRS technology may have been an impediment to students' regular or increased attendance in class.

There are two other possible reasons for the pupils' claimed increased attendance in the PRS classroom. The first is that the game-features of the PRS might have been entertaining to the pupils. As a matter of fact, Nigerian children like playing with mobile phones and games because they are fun activities (see chapter 3); hence the novelty of the PRS might have been both fascinating and useful in capturing the interest of the pupils. Martyn (2007) reiterates the fact that the use of the PRS is fashioned after game-based learning. The pupils in the PRS group were exposed to multiple means of learning, which included communicative tasks and dialogue, through the technology which provided them the opportunity to learn the target language with increased interest. Wright (2006) emphasises that games help, as well as support, learners' interest and work. It is therefore not surprising that pupils in the PRS group were more interested than the other group members in attending English language lessons. The second reason might be connected with the fact the pupils might have realised that the use of the PRS contributed to their increased learning outcomes and active engagement in learning activities, more than the experiences they had in the traditional classroom.

8.4.2.8 *Liking the English Language Lessons*

It is interesting that the PRS was more associated with greater liking of English language lessons than the other teaching strategies. This result was also confirmed in the pupils' attitudes to PRS, which indicated that the group liked English language lessons because of the teacher's adoption of the PRS (see Figure 7.1; GA1 and GA3). Although there is a dearth of findings relating to students' disposition towards English language lessons, based on the use of the PRS, there is research evidence which indicates that students show a great level of liking to their instructional process because of the use of the PRS technology (Gachago, Morris, & Simon, 2011; Johnson & Robson, 2008). Similarly, supporting the outcome of this study, Wu (2010) reported students' positive attitudes towards the communicative approach, in a classroom where English was taught as a foreign language (EFL).

There are possible reasons for this outcome. This finding might have stemmed from the fact that the pupils were provided with various activities that enabled them to work at their own pace, be in control of the learning process and made them better learners psychologically. The researcher's informal observation shows that children seem to like being in control of events whenever they can be and wherever it is possible. The pupils in the PRS group experienced a form of instructional process different from that which gives the teacher the opportunity to exercise ultimate authority, that keeps learners passive, like robots, which act under instructions without sense of, or opportunities to exercise, initiatives.

Moreover, pupils' liking of English language lessons may be due to the fact that every pupil had equal opportunity to experience the same quality of learning. This is in contrast with the traditional classroom, where the vocal or more confident pupils dominate the learning process, or at least the learning environment. Additionally, the

teacher's attitude towards the learning activities might have influenced the attitudes of the pupils. The newness of the PRS technology might not be the only factor having its influence upon the pupils. That the teacher was committed to effective use of the PRS technology in the ESL classroom, because he was convinced about the potential benefits of the technology, might have had a positive influence on the pupils' attitudes.

8.4.2.9 *Getting the Assignments Done on Time*

Another finding of this study is that the pupils in the PRS group were more positively disposed towards getting assignments done on time, than their counterparts in the other groups. Lending support to the outcome of this study, Albon and Jewels (2007) report that students who prepared very well from home preferred PRS questions at the beginning of the class. The outcome of this study tends to relate to what some researchers refer to as 'flipping the classroom' (Alvarez, 2011; Tucker, 2012). In a flipped classroom, students access the overview, the content and the summary of the lesson in advance via the teacher-created video, take notes from home and later come to the class to discuss and answer questions on the topic.

Similar to what happens in a "flipped classroom", the pupils in this study might have been conscious that the teacher was going to ask them questions. Moreover, the pupils may have realised that the teacher's questions, via the PRS were mostly related to the take-home assignment and associated with topic to be discussed. In order to perform better in the class, the pupils may have wanted their assignments to be done without delay. Additionally, it was possible that pupils' knowledge of that the teacher usually asked them questions before the learning process began might have encouraged them to like to do their assignments on time.

8.4.2.10 *Learning of ESL and the Correction of Mistakes*

One other finding of this study is the communicative approach group's claim

that the correction of mistakes was facilitated when the pupils studied in pairs or groups, rather than being in the traditional classroom. This outcome tallies with earlier findings which indicate that students displayed favourable attitudes towards error correction when they worked in groups or pairs (Katayama, 2006, 2007; Zhu, 2010). The findings of this study further revealed that pupils in the PRS group seemed not to think that the use of the technology was an opportunity to have their errors corrected. It is expedient to note that the perceptions of participants involved in earlier research investigating the relevance of the PRS in error correction, might have been influenced by their age and level of education. Most of the earlier studies were conducted on post-secondary school learners, whereas the current study was carried out among primary school children, whose ages ranged between 10 and 13 years.

Perhaps the attitudes of the PRS group stemmed from the teacher's lack of emphasis that the peer discussion sessions, provided by the PRS technology, were not only to enable them discuss with their classmates but also to help them crosscheck misconceptions. Chasteen (n.d) remarked that the use of the PRS, as a component of instruction, may not yield the expected results if the teacher fails to explicitly explain the reasons why the technology is being integrated in class. The disposition of the pupils in the control group might be borne out of the fact that they were not actively involved in the learning process, which was more teacher-centred than interactive. Zhu (2010) observed that students who are used to teacher correction are reticent in the class.

8.5 Attitudes towards the Personal Response System

The fourth research question of this study investigated the attitudes of the teacher and the pupils toward the use of the PRS in the teaching and learning of English as a second language (ESL). Overall analysis of the data, collected through the

questionnaire and interviews, revealed that the teacher was favourably disposed to the use of the PRS, while the pupils expressed mixed reactions towards the use of the PRS in their ESL classroom. One exciting finding of this study is that the teacher and pupils generally claimed to like the experience of using the PRS in the ESL classroom.

The responses of the pupils about their general attitudes towards the use of PRS were inconsistent. As mentioned earlier, one possible reason for this inconsistency was their low level of proficiency in English language. Despite the inconsistency, this study reveals that the pupils like English language lesson because the PRS was integrated into the instructional process. Earlier research has shown that both students and their tutors were favourably disposed to the use of the PRS in class (Kaleta & Joosten, 2007; Keller et al., 2007). Other research outcomes, lending support to the finding of this study, suggest that students liked the classroom more when the PRS was used, than when the instructional process took place without the PRS (Johnson & Robson, 2008; Laxman, 2011; Morgan, 2008).

There are two possible reasons for this outcome. First, the effectiveness of the PRS in enhancing the instructional process might have motivated the teacher's positive attitude. Similarly, the teacher's ability to effectively integrate the technology into the teaching / learning environment to enhance the pupils' learning outcomes may have influenced the pupils' attitudes towards using the PRS. Laxman (2011) also posits that sound PRS technology-supported pedagogical principles are capable of fostering students' support for its use in the learning process. Keller et al. (2007) remarked that students' perceptions of the utility of the PRS improve when the technology is effectively used to promote successful discussion in the classroom.

Moreover, it is likely that the pupils were positively disposed to the use of the PRS because of its regular use in their ESL classroom. That the PRS was used every

day during this study might have increased the pupils' interest in the device. Duncan (2006) states that the changes the PRS produces in instruction may be limited if the technology is only used occasionally, whereas when it is used regularly, the technology makes a significant impact on learners' attitudes. It is therefore assumed that everyday use of the PRS might have provided pupils with the opportunity to identify the wide margin of potential benefits that exists between being taught English with the device and the lecture methods.

The findings of this study also show that the teacher and the pupils consented to the notion that the integration of the PRS in an ESL classroom promotes learners' active participation, involvement in interactive discussion and elicitation of more responses from more learners. Similar issues relating to this finding have been discussed earlier in this chapter while addressing pupils' attitudes to English language lessons. Besides the points discussed earlier, a possible reason for this outcome is the non-threatening environment created by the use of the PRS. Dunn and Griggs (2000) argue that a variety of pedagogical approaches and strategies provide a more enabling learning environment to learners. The pupils in the PRS group might have found the instructional process more pleasing, livelier and satisfactory than the traditional classroom, because the PRS in anonymous mode was blended with peer discussion. Similarly, since the teacher was not greatly involved in correcting pupils' mistakes, pupils might have been more encouraged to discuss, without worry, their grammatical errors as well as answering teacher's questions anonymously but with confidence.

The outcome of this study also shows that pupils were inconsistent in their responses with respect to the usefulness of the PRS in classroom assessment and feedback. A majority of the pupils seemed not to view the PRS as a good tool for assessment; hence they preferred pencil and biro forms of assessment. One plausible

explanation for this result is that using the PRS daily, for short-time assessments or quizzes, might have been burdensome to many of the pupils. Perhaps, if the number of questions used during each lesson was limited to two, pupils' attitudes might have been different. Secondly, the pupils' negative attitudes might be connected with some technical challenges they encountered while using the device. For instance, the teacher of the PRS group raised concern about certain issues which initially challenged his effective implementation of the PRS in the ESL classroom. Such issues, which include pupils' experience of handsets with low battery strength and a student's inability to quickly register to join the class, might have had some adverse effect on the attitudes of the pupils with respect to the use of the PRS for assessment. Earlier researchers (Preis, Gregory & Crosby, 2011) concur that students are not so positively disposed to the PRS when its use is complicated by technical problems.

However, the pupils were far more positively disposed to the PRS form of assessment and correction of mistakes than the traditional forms of assessment and error correction. It is worth noting that the attitude of the pupils, with respect to how the PRS helped to correct their mistakes when measuring their attitudes to their English lesson, was inconsistent with their positive disposition in this section. Nevertheless, the favourable disposition of the pupils is supported by earlier findings which reveal that students were positively disposed towards the PRS because it enhanced their active participation in answering questions, as well as providing access to immediate feedback (Kaleta & Joosten, 2007; Keller et al., 2007). A plausible explanation for this finding is the immediate feedback provided by the PRS, which might have allowed the pupils to quickly gauge their understanding of the concepts and prompt them to seek support from peers to enhance their learning gains. Perhaps, if the feedback were delayed to produce lower levels of learners' comprehension, understanding of concepts and

participation in class, the pupils might have felt otherwise.

Another finding of this study is that both the teacher and the pupils agreed that the use of the PRS enhanced pupils' learning and increased attention in class. This outcome is consistent with some findings which indicate that faculty members and students were of the view that the use of the PRS enhanced students' learning (Crossgrove & Curran, 2007; Kaleta & Joosten, 2007) and increased attention in class (Kaleta & Joosten, 2007; Preis, Gregory & Crosby, 2011). In addition to the earlier discussed points under the sub-section 'the pupils' attitude to English language lesson', probably the nature of tasks, peer discussion and collaborative attempts to accomplish tasks, might have compelled the pupils to engage in critical thinking. As the pupils interacted to negotiate meaning, exchanged ideas and brainstormed over issues, they might have developed their reasoning abilities and gradually mastered the concepts. In the process, their input and output during the instructional process might have increased, as reflected in their communicative competence scores and gains (see chapter 5).

Bruff (2007) emphasises the relevance of the PRS in developing a learner's critical thinking ability. Researchers have also reported that student collaboration in class leads to increased cognitive gains (Johnson & Robson, 2008; MacArthur & Jones, 2008). Furthermore, pupils' increased attention might have been facilitated, because they were engaged in interactive tasks; hence they may have focused their attention on the ideas they were sharing, the mode of presentation and how to get the best from other pupils with whom they discussed.

Both the teacher and the pupils were favourably disposed to the continued and future use of the PRS for instructional purposes in English and other school subjects. The outcome of this study resonates with an earlier research finding, which suggested

that students are more willing to attend classes where the PRS is used (Patry, 2009). The finding of Gok (2011), which reveals that students are willing to recommend the PRS to friends, confirms the outcome of this study. Plausible reasons for this outcome might include the novelty element of the PRS, which may have been so motivating to the pupils. Moreover, reflecting on the high level of discussion, anonymity of responses, display of enthusiasm during the learning process, learning gains, a lively and enabling learning environment created by the use of the PRS and other reasons mentioned above, it is not surprising that the pupils are more willing to continue to use the device for instructional purposes in English and other subjects.

8.6 Attitudes towards the Communicative Approach

The fifth research question of this study relates to the attitudes of the teacher and the pupils towards the use of the communicative approach in the ESL classroom. Attitudes toward the communicative approach were similar to those offered about learning in the PRS classroom. Generally, the pupils expressed mixed feelings, while the teacher was favourably disposed towards the use of the communicative approach in the ESL classroom. It is worth noting that emerging issues, which were not much discussed while examining attitudes towards the English language lessons (see 8.4), are discussed in this section. Findings from this study suggest that the teacher and pupils are of the opinion that the use of the communicative approach in the classroom is more interesting, enjoyable, and encourages higher levels of pupils' attendance. Earlier research findings also revealed that language students enjoyed working in groups (Nakamura, 2005; Xiao, 2006).

Probably the collaborative environment of group work, and the new role assumed by the pupils, might have motivated the favourable disposition of the teacher and the pupils towards the intervention. The situation in the communicative approach

cannot be compared with the traditional classroom, where learners are mere recipients of information. The pupils in the communicative approach classroom, who had the opportunity to negotiate among themselves during the group's discussion, may have compared their new role to the passive nature they were used to in the traditional classroom setting. Chang (2011) argues that group work or pair work is interactive, learner-centred and thus allows students to take-over the ownership of learning.

It is quite surprising to discover that the same set of pupils, who were favourably disposed to the communicative approach, also claimed not to like talking in pairs and learning in groups. Such varied dispositions may be linked with what Houldsworth and Mathews (2000) called "social loafing", which is caused when some learners consciously limit their involvement in the learning process for unknown reasons. Another factor which may have contributed to this situation has been called the "sucker effect"; this refers to what happens when some learners withdraw from making significant contributions, because they feel other students are parasitic to them. In other words, it is possible that the pupils with low pre-test scores were feeling uncomfortable with peer-error correction while they worked in groups, or that the high pre-test scorers among the pupils felt they were not gaining as much as they should, so decided to limit their contributions because of perceived low input from other members of the group.

This study reveals that the pupils, to an extent, and the teacher agreed that pupils were more actively engaged in the ESL classroom after the adoption of the communicative approach. This present finding corroborates those of Maden (2010), Safranji (2009) and Wu (2011), which indicated that students claimed to be more engaged in class when they worked in pairs or groups, than when they were in a traditional lecture-oriented classroom. Possible reasons for the active involvement in discussion among pupils in the experimental groups have been discussed earlier in this

chapter (see 8.4). Nevertheless, another plausible explanation to this finding is that the assistance and support (scaffolding) the pupils received from the teacher and peers might have enhanced the pupils' active engagement in, and successful accomplishment of tasks. Moreover, the scaffolding, to an extent, may have helped to limit communication breakdown among the group members and also bridge the interaction gap between the teacher and the pupils.

With respect to pupils' ability to communicate in English with other people in class, the results show a pattern of inconsistency in pupils' responses (see chapter 7): the pupils indicated that they were afraid to take part in small group discussion, so contradicting their earlier claim that they were not afraid to speak when working with friends. As mentioned in the previous chapter, the inconsistency in pupils' responses cannot be disconnected from their low proficiency in English. However, a general overview of all items relating to pupils' engagement in class, revealed the pupils' favourable disposition to being able to speak freely and express themselves in English when among group members. Also supporting this study, earlier researchers (Edwards, 2005; Shen & Suwanthep, 2011) reported that students claimed to be more confident, to communicate in the target language, after being exposed to communicative activities. Similarly, the finding of Ismail and Tahir (2011) revealed that learning in small groups produced more proficient language students than being in the traditional classroom.

This finding is not unexpected when one considers the fact the group members were of mixed ability; hence it might have been possible for the very confident pupils to have encouraged the shy ones to give input and become more involved in the discussion relating to the learning tasks. Unlike when the teacher talks and asks questions in class, pupils working in groups, often may have found it difficult to continually keep quiet when their peers initiated interaction. As pupils negotiated

meaning with group members, they might have developed the ability and confidence to communicate in the target language. The significance of learning L2 in small groups can be understood in terms of Vygotsky's (1978) sociocultural theory (see 3.15). It is thus apparent that the more the pupils of mixed ability socially interact, the more their communicative skills and speech confidence proceed from the current level to the potential level of development.

The results also revealed that the teacher and the pupils agreed that learning in small groups enhanced pupils' understanding and learning of concepts. Research findings have revealed that teachers were positive about the relevance of the communicative approach in facilitating learners' levels of understanding in class (Al-Maklafi & Ramani, 2011). Also in agreement with the outcome of this study, research findings have shown that students concurred with the suggestion that learning in pairs or small groups enhanced conceptual understanding in class (Wu, 2010; Xiao, 2006). This outcome is interesting in that it highlights the feasible effectiveness of the communicative approach in Nigerian primary schools. Learning in small groups is more collaborative than the individualistic approach in the traditional classroom. As the pupils collaborated to discuss and share views in groups, other group members might have built on the ideas of the speakers to develop their own opinions about the topic content. Moreover, the feedback from peers and the teacher might have provided the pupils with opportunities to socially construct knowledge and have a deeper understanding of what was being discussed and what the learning process was focused on.

With respect to future involvement in group work, pupils were inconsistent in their responses. The pupils believed that learning in small groups would enhance their oral communication skills; hence they wanted the teacher to continue to use the

approach in the ESL classroom. However, the pupils' negative disposition towards the effectiveness of the communicative approach in other subjects calls for attention. Perhaps the pupils felt that if the communicative approach was introduced in all other school subjects, the workload of assignments from the teacher, on a daily basis, might be too much for them to cope with. In other words, the pupils might be more comfortable with their teacher's use of the traditional teaching method in other subjects. Wu (2010) and Zhu (2012) argued that it is easy to get a new method heard, but it is difficult to get it accepted and understood. That is why students find it difficult to adapt to new teaching methods, when they are satisfied with the traditional lecture methods. On the other hand, pupils' desire to continue to learn in groups in the ESL classroom may be connected with the emerging teacher's partnership with the pupils, increased levels of attention from the teacher and exposure to a more relaxed learning environment.

Generally, it is worth mentioning that the attitudes of the teachers in the intervention groups were positive towards the use of the communicative approach and the PRS. This might probably stem from the fact that the teachers felt Nigerian pupils, who are L2 learners of English, need to interact in the nation's official language and medium of instruction to enhance their chance of success in life. The training session conducted at the beginning of this study, on effective integration of the interventions, might have made the teachers realise that the traditional teaching methods are inadequate to meet the communicative needs of the pupils. This was also reflected in the responses of the teachers during the post-test interviews conducted for the intervention groups' teachers.

Chapter Nine

CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

9.1 Conclusion

This study investigated the effect of the communicative approach and the personal responses system (PRS), as compared to the lecture method, on Nigerian pupils' communicative competence development and their attitudes towards learning in the English as a second language (ESL) classroom. The focus of the study was on pupils from primary schools located in sub-urban locations in a local government in Ogun State, Nigeria. There is a dearth of standardised instruments which measured primary school learners' communicative competence in the ESL classroom where the teacher employed either the communicative approach or the PRS technology. Therefore, the first stage of this study involved the piloting of the developed measuring instruments. The results, from stage one of the research, provided the basis for necessary modifications which were made to improve the quality of the instruments used for this study. The second stage was the main study, which was carried out with another set of schools, different from those initially involved in the first pilot stage of the study.

The results of this study indicated that pupils who received the personal response system (PRS) instruction, blended with peer discussion, had significantly higher communicative competence post-test scores in English, compared to the pupils who were taught with the communicative approach and the lecture method. The findings further showed that the English language communicative competence post-test scores, of pupils who were exposed to the communicative approach, were statistically higher than those in the traditional ESL classroom. The findings of this study also

demonstrated that the mean post-test scores in English language listening and speaking tests for pupils in the PRS group were statistically higher, when compared to those pupils who experienced the communicative approach and the traditional lecture teaching strategies. Similarly, pupils who were exposed to the communicative approach had higher mean post-test scores in English language listening and speaking tests, compared to the pupils in the traditional ESL classroom.

Moreover, findings of this study indicated that the English language communicative competence gains for pupils who were exposed to the PRS, the use of which was embedded in a communicative approach setting, was higher than those of the pupils who received the communicative approach and lecture method of teaching. Findings from this study suggest that pupils' academic performance in other school subjects assessed at the end of the term was influenced by their levels of communicative competence and the type of teaching strategy they experienced in their ESL classroom.

With respect to attitudes toward the learning of English language, overall pupils' attitudes across the groups did not differ significantly. However, pupils across the groups displayed mixed feelings towards some attitudinal items which significantly differentiated the groups. In the same trend, pupils' dispositions towards the use of the PRS and the communicative approach, in the ESL classroom were mixed. On the other hand, the teachers of the two experimental groups expressed favourable disposition towards the effectiveness of the communicative approach and the PRS in promoting learners' communicative competence in their ESL classroom.

This study thus revealed that the communicative approach and the PRS were effective in causing significant changes in pupils' communicative competence performance in the ESL classroom, whereas teacher's adoption of the lecture method of

teaching could not. It is equally evident that the effect of the PRS on pupils' development of communicative competence is stronger than the communicative approach. However, the two interventions could not show significantly strong evidence to cause overall attitudinal changes in pupils in the ESL classroom. It is therefore hoped that the outcomes of this study have provided significant insights into the nature of English language teaching and learning in a small sample of Nigerian primary schools. The study may have also provided convincing evidence to support the efficacy of the PRS, blended with peer discussion, as a better teaching strategy for developing the English language communicative competence of Nigerian pupils attending remotely located public schools.

9.2 Recommendations

Everybody is born to vocalise, but the ability to communicate effectively is learned and must be appropriately taught (Morreale, Osborn & Pearson, 2000). In view of the findings of this study, Nigerian Ministries of Education (Federal and State) and head-teachers should collaborate to encourage teachers' adoption and successful integration of multidimensional pedagogies, such as the communicative approach and the PRS, in the ESL classroom. It is hoped that the adoption and integration of the communicative approach and the PRS, blended into the instructional process, would greatly enhance the quality of instruction and the quantity of pupils' oral production in English.

The use of the communicative approach and the PRS technology is still at the infancy stage in Nigeria. One area that may be of concern to the stakeholders in the education sector in Ogun State and Nigeria is how to build the capacity of the teachers to enable them to effectively integrate the new strategies into the ESL classrooms. Probably, strategic plans on how to engage teachers in capacity building programmes

relating to effective integration of the communicative approach and the PRS should be considered. Moreover, teachers' certified attendance and ability to demonstrate effective transfer of knowledge, gained from the capacity building programmes, into the ESL classroom, may be considered as major prerequisites to teacher's annual promotions.

Regardless of where and when the PRS is accepted and integrated into the ESL instructional process in Nigerian primary schools, the question is whether necessary machineries are in place to sustain its use. Such a question becomes paramount, because effective and continued integration of technology in education can be hampered by a breakdown of the device. Therefore, to ensure a continued effective and efficient use of the PRS in Nigerian primary schools, issues relating to technical support should be of concern to policy makers and stakeholders in the education sector. Perhaps technical assistants, who are knowledgeable about the best practices relating to the use of the PRS in classrooms, may be considered to further encourage teachers' adoption of the PRS in the ESL classroom.

The study revealed that majority of the pupils liked the use of the PRS in the ESL classroom. It is also important to reflect on the other side of the coin, about the same pupils who claimed to dislike the use of the PRS in all school subjects. The two expressions from the same set of pupils are contrasting and may seem confusing. The issue of interest here is the desire of the pupils to be free from pedagogical monotony that may result from everyday use of the PRS in every subject. Perhaps, teachers may need to consider the fact that learners are likely to continue to be more positively disposed to the PRS if other interactive approaches are employed in the teaching of some school subjects. Absolute reliance on the use of the PRS may not only lead to

learners' negative attitudes to the technology, but also to some school subjects.

Findings from this study underscore the relevance of high levels of communicative competence in English in learners' academic attainment. It thus implies that where more pupils are weak in English language skills, teachers' effectiveness in other school subjects is likely to be at risk. To this effect, pupils' low levels of communicative competence in English call for the attention of the various stakeholders in the Nigerian education sector. We are all aware that primary education is the bedrock of the education system in any part of the world. Giving Nigerian pupils' low levels of communicative competence the attention such a critical issue deserves may catalyse the revamping of the primary education system and rescue it from imminent collapse.

How does an individual decide whether the attitude of the teacher or the learners is more important when considering the effectiveness of a new teaching approach in the classroom? The discussion in chapter three clearly shows that attitude is crucial in determining human behaviour towards the use of technology and that the sophistication of the PRS is not enough to produce an effective instructional process. Although learners' belief about new technology is important, without the teacher's positive support, learners may find it uneasy to explore the PRS technology to enhance their learning outcomes. From the results of this study, it is reasonable to suggest that the PRS is the best teaching strategy to facilitate learners' active engagement in the lesson, increased responses to questions, improved communicative competence, immediate feedback and increased attention to what is going on in the classroom. Similarly, the PRS has been claimed to ease the teacher's workload and enhance teacher's effectiveness in the classroom. With the PRS seemingly meeting the needs of both the teacher and the pupils in the ESL classroom, one may be prompted to advance that investing financial resources to ensure the integration of the technology in ESL

classrooms is a worthwhile venture.

This study corroborated earlier findings to show that the use of the PRS facilitates effective teaching and learning because of benefits the teacher and the learners gain from its adoption in the classroom. Again, assuming funds are available to provide the PRS technology to some disadvantaged schools. Then, should the remotely located primary schools in Nigeria continue to spend money on the PRS? Would the rural primary schools in Nigeria be able to raise or access enough funds to sustain the use of the PRS in classrooms? Whether the answers to these questions are affirmative or not, teachers may have been trained on how to effectively integrate both the communicative approach and the PRS blended with peer discussion. One of the best ways of engaging teachers in the use of the communicative approach is to simultaneously expose them to the two new teaching approaches. And since cost is a big issue relating to continued use of the PRS, when learners' interest has been stimulated, their attention caught and they have been encouraged to become actively engaged in the learning process with changed attitudes, the PRS may then be set aside. At this stage, the teachers can then continue the classroom instructional process with the communicative approach.

9.3 Suggestions for Further Research

The findings of this study support the fact that the communicative approach and the PRS, blended with peer discussion, are capable of improving pupils' communicative competence in their ESL classroom. Since there is an association between pupils' levels of communicative competence and their academic performance, future studies should be extended to other school subjects in such a way that the PRS is combined with other pedagogies, other than the communicative approach.

The outcome of this study revealed that the PRS and the communicative

approach promote pupils' active engagement and interaction in the ESL classroom. Further research may also be conducted to investigate the effectiveness of the interventions on the learning outcomes of Junior Secondary School students in Nigeria. If the approaches are effective at this stage of education, it is promising that the performance of Nigerian students, in examinations organised and coordinated by national and international bodies would be greatly improved.

There is a dearth of standardised instruments that investigate the effectiveness of the PRS and the communicative approach on primary school pupils' English language communicative competence in a developing nation. In view of this challenge, research should be conducted to develop and validate relevant instruments to assist further research on the use of the interventions and also enhance the validity and generalisability of future research outcomes in such contexts.

The outcomes of this study have demonstrated that the PRS is an effective teaching strategy in the Nigerian ESL classroom. As earlier mentioned in chapters one and three of this thesis, the teacher-centred instructional process is not only peculiar to Nigerian ESL classroom; rather it is a cross-cutting challenge to many Nigerian teachers. This study may thus be considered as a trial-test of the efficacy of the interventions within the Nigerian educational context. Going by the outcomes of this study, relating to the pupils' learning outcomes in the ESL classroom, it may perhaps be a profitable exercise to take a similar look at the science subjects.

This study was carried out with small groups of pupils in a local government district in Nigeria. Attempting to generalise the findings of this study may raise some other issues; it is therefore suggested that future research should consider involving reasonably large but equivalent numbers of group members. Moreover, future research should consider replicating this study, using a longer-term longitudinal study design,

using pupils in different classes and at different levels of primary education, using an individual PRS handset and paired-PRS-handset strategy and other series of possible situational variations.

The efficacy of the personal response system has to an extent been justified by the outcomes of this study. Similarly, pupils' responses have indicated that their interest in the use of the PRS technology in the ESL classroom. One of the issues that may be of concern now is the extent at which learners' interest can be sustained with the continued use of the PRS in the ESL classroom. In this study, no evidence has been provided regarding when the innovation or the change might decay over time. Moreover, over time, the technology may eventually have its place in a cupboard in the teacher's office or the head-teacher's office. It also becomes necessary to carry out longitudinal study on the use of PRS technology in order to find out how this innovation would be able to sustain pupils' interest, positive attitudes in ESL classrooms as well as teachers' positive disposition to its continued use.

From this study, it is evident that teachers' effective implementation of technological innovations in teaching and learning requires training. In other words, the adoption and integration of technology in instructional process attracts a training cost. Teachers in the traditional classroom setting are trained and re-trained most times on effective content delivery even in the conventional setting. Motivating teachers to integrate the personal response system may be costly and time-taking; however, there seems to be little or no evidence that shows the gap between the cost of training teachers to use the PRS and that involved in re-training of teachers in the use of the traditional approach in the classroom. Perhaps further studies may be conducted in this direction with a view of justifying whether the cost of training teachers in the use of the PRS in a developing country like Nigeria is worthwhile or not.

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Appendix I (A)

TEACHERS' CONSENT TO PARTICIPATE IN RESEARCH

You are invited to participate in a research study conducted by Alaba Agbatogun; a PhD student from the Higher and Community Education Department of the Moray House School of Education, the University of Edinburgh, United Kingdom. Alaba is carrying out this research for his doctoral dissertation. This study is funded by the Nigerian Education Trust Fund. This research study will examine the effectiveness of Personal Response System and Communicative Approach in improving the communicative competence of pupils during English language lessons.

Importantly, your participation in this study is purely voluntary. Therefore, it is advised that you take some minutes to read the information below and ask questions about anything you do not understand, before indicating your willingness to participate or otherwise. You are being approached to participate in this study because you are a teacher of one of the educationally disadvantaged schools selected for this study.

This research study will involve the introduction of Personal Response System (PRS) and the Communicative Approach into the teaching and learning process during English language lessons. PRS is similar to the audience response system used for polling audience responses during a TV programme known as "Who wants to be a millionaire". The device will be used by learners to transmit their responses to questions posed by the teacher unto the projection screen. Communicative Approach is a classroom strategy that involves pairing and grouping of learners to enhance negotiation of meaning, development of confidence by engaging in tasks and activities that are fluency-based. The goal of CA is to prompt learners' to communicate without restraint. Pupils will be introduced to these teaching strategies in different schools.

PRS as a technological device has been used as a teaching tool at higher level of education in some developed countries, while Communicative Approach is widely used from elementary level of education in many of such countries. If you are willing to participate in the study, you will be taken through the necessary training on how to effectively use these methods. The duration of the training will be between 3 and 5 five days. A demonstration of your understanding, good mastery and knowledge of appropriate use of the strategies will be of significant importance at the end of the training and as means of assurance of the success of this experiment. The study is planned for a period of eight weeks inclusive of the pre-test and post-test period.

At the end of the training, you will be made to know the specific strategy you will introduce in your school. The process of assigning strategy to selected schools has been carried out and concluded by the researcher in conjunction with his supervisors.

- **PURPOSE OF THE STUDY**

The purpose of this study is to examine how pupils' communicative competence in English language can be improved through the use of PRS and Communicative Approach. It is hoped that the introduction of these strategies will promote more of classroom interactions, help learners use English language more frequently without restraints and positively influence pupils' academic performance.

- **PROCEDURES**

If you volunteer to participate in this study, you will be required to do the following:

1. Undergo some days training on effective use of the two teaching and learning approaches
2. Teach the pupils using the specified strategy during English language lesson for about 10 weeks.
3. Assist in designing the pre-test and post-test questions
4. Conduct the pre-test and post-test at the first and the last weeks of the study respectively.
5. Answer questions about your attitudes and opinions in respect of the introduced instructional strategy.
6. Assist the researcher in the process of selecting pupils to be interviewed
7. Sometimes, your lessons will be video recorded. The video-recorders will be placed at strategic location within the classroom and will be operated by the researcher or research assistant(s).
8. Sometimes the researchers will observe you while you teach in the class.
9. The researcher will ask your permission to obtain pupils' records; current and previous academic records (report sheets/cards and attendance register).

- **POTENTIAL RISKS AND DISCOMFORTS**

It is expected that no risk will be involved in the study, but discomforts or inconveniences will be minor if at all they happen. However, if discomforts become a problem, you may discontinue your participation.

- **POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

It is not likely that you will benefit directly from participation in this study, but the research should help you learn and understand how better to prompt interactions in English language classrooms as well as improve learners' ability to use the English fluently to enhance their academic performance in English language as a subject, and in other school subjects.

- **PAYMENT FOR PARTICIPATION**

You will not receive any payment or other compensation for participation in this study. There is also no cost to you for participation.

- **CONFIDENTIALITY**

In all forms, any information obtained in connection with this study and that can be identified with you and your pupils will remain confidential. However, where need be for third party disclosure; this will be done only with your permission. In the process of writing this research report, names will not be mentioned in any way. The researcher however, will use the information collected in his dissertation and other publications. Furthermore, any information gathered from this study may be used for further academic purposes. The recoded videotapes will not be viewed by anyone outside the study unless we have you sign a separate permission form that allows such.

- **PARTICIPATION AND WITHDRAWAL**

Your participation is voluntary; hence you have the choice to either be or not to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer. There is no penalty if you withdraw from the study and you will not lose any benefits to which you are otherwise entitled.

- **IDENTIFICATION OF INVESTIGATOR**

If you have any questions or concerns about the research, please feel free to contact

Mr. Alaba Agbatogun

Principal Investigator

Department of Higher and Community Education

Moray House School of Education

Edinburgh University

United Kingdom

alabaagbatogun@yahoo.com, s0971425@sms.ed.ac.uk

RIGHTS OF RESEARCH SUBJECTS

The Moray School of Education Ethics Committee, Edinburgh University has reviewed my request to conduct this project. If you have any concerns about your rights in this study, please email Sandra.Orr@ed.ac.uk.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Printed Name of Subject

Date

Signature of Subject

Date

Signature of Witness

Date

Appendix I (B)

PARENTAL PERMISSION FORM

Dear Parent or Guardian:

I am Alaba Olaoluwakotansibe Agbatogun, a doctoral student from Edinburgh University, United Kingdom. I request permission for your child to participate in a research study to be used for my doctoral dissertation. I am conducting a research project on how communicative competence of pupils can be improved by using Personal Response System and Communicative Approach teaching methods.

The study consists of the following activities:

1. We will ask your permission for your child to take part in the use of either of these teaching methods during English language lessons for about 8 weeks. Your child will be tested and also be asked questions about how he/she feels about the teaching method(s) and best ways of learning.
2. Sometimes the researcher will observe your child while he or she takes part in activities in the classroom.
3. Your child may be interviewed after the school hours in the last week of the research period and the interview process will be audio-recorded.
4. Some classroom lessons will be videotaped. The video-recorders will be placed at strategic places within the classroom and will be operated by the researcher or the class teacher.

I and possibly my supervisors will be the only person(s) that will have access to information from your child. At the conclusion of the study, children's responses will be reported as group results only. At the conclusion of the study a summary of group results will be made available to all interested parents. Please indicate at the end of this consent form whether you wish to have these results. If so, please provide your mailing address.

It is interesting to note that your child will no doubt find it fun to be working in these new ways during his or her lessons. Nevertheless, participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect the services normally provided to your child in the school. Meanwhile, if you give your permission for your child to participate, your child is free to refuse to participate. If your child agrees to participate, he or she is free to end participation at any time. You and your child are not waiving any legal claims, rights, or remedies because of your child's participation in this research study.

Should you have any questions or desire further information, please feel free to contact

Mr Alaba Agbatogun

Department of Higher and Community Education

Edinburgh University

Moray House School of Education

EH8 8AQ, Edinburgh.

alabaagbatogun@yahoo.com, s0971425@sms.ed.ac.uk

Keep this letter after completing and returning the signature page to me.

Yours,

Alaba Agbatogun

----- CUT THIS END-----

Please indicate whether or not you wish to allow your child to participate in this project by checking one of the statements below, signing your name and returning it to me. Sign both copies and keep one for your records.

_____ I do grant permission for my child to participate in Ms. May Flower's study of the Transitional Living Program.

_____ I do not grant permission for my child to participate in Ms. May Flower's study of the Transitional Living Program.

Signature of Parent/Guardian

Printed Parent/Guardian Name

Printed Name of Child

Date

_____ Yes, I would like a copy of the results of this study. My mailing address is below.

Appendix II (A)
SPEAKING TEST 1

For Administrative Use Only

School: (A), (B), (C)

Student's Class Number -----

The following sentences are meant to be said by the teacher to individual students in order to prompt students' appropriate responses. Each student should be scored as he/she gives appropriate responses to teacher's statements. Marking and award of scores should be based on learner's comprehensibility, pronunciation, ability to convey meaning and explain idea, vocabulary and appropriate use of words to suit the presented situation rather than formal linguistic accuracy and accuracy of language form. Response(s) to each sentence attracts a maximum of 5 marks; hence teachers should rate pupil's performance on a scale of 0 to 5 (**0** = No Response, **1** = Very Poor, **2** = Poor, **3** = Fair, **4** = Good and **5** = Very Good).

Student's Class Number -----

SN	Item	0	1	2	3	4	5
1	What do you do at home after school hours?						
2	Where do you live?						
3	What good things do you like to tell people about your school?						
4	Describe the way to the post office.						
5	Tell me all that you can see in the picture labelled "A"						
6	How do you intend to celebrate the coming Christmas?						
7	What happened during the school's last inter-house sports festival?						
8	Would you like to be a friend to a medical doctor?						
9	Are you attending any birthday party this weekend?						
10	What type of game do many people like watching on television and why?						

Appendix II (B)
SPEAKING TEST 2

For Administrative Use Only

School: (A), (B), (C)

Student's Class Number -----

Test A

The following sentences are meant to be said by the teacher to individual students in order to prompt students' appropriate responses. Each student should be scored as he/she gives appropriate responses to teacher's statements. Marking and award of scores should be based on learner's comprehensibility, pronunciation, ability to convey meaning and explain idea, vocabulary and appropriate use of words to suit the presented situation rather than formal linguistic accuracy and accuracy of language form. Response(s) to each sentence attracts a maximum of 5 marks; hence teachers should rate pupil's performance on a scale of 0 to 5 (**0** = No Response, **1**= Very Poor, **2** = Poor, **3** = Fair, **4** = Good and **5** = Very Good).

Student's Class Number -----

SN	Item	0	1	2	3	4	5
1	I did not see you in the school yesterday. Why?						
2	Where is your friend?						
3	Tell me how I can get to the nearest bank.						
4	What did you do this morning before coming to school?						
5	Where were you at break time?						
6	You were not at the morning assembly. Why?						
7	Tell me how you greet your father/mother when you first see him/her in the morning?						
8	In the picture labelled "A", what will happen to those things on the table?						

PICTURE "A" FOR SPEAKING TEST 2



Appendix II (C)

LISTENING COMPREHENSION TEST 1

For Administrative Use Only

School: (A), (B), (C)

Student's Class Number -----

Test B

Your teacher would read a conversation to you. You are to pretend or assume to be in one of the banks in Ijebu-North local government, overhearing the discussion between an official of the bank and a woman. Your teacher would read the conversation to you twice. As you listen to your teacher while he/she reads the conversation, you should write down the following information:

1. The time of the day the woman went to the bank

2. The woman's occupation

3. Where the woman lived

4. The woman's nationality

5. Why the woman was in the bank

CONVERSATION (3 marks per correct information provided)

Official: Good morning madam, are you a teacher?

Woman: No, I am a medical doctor.

Official: Do you live in Ijebu- Igbo?

Woman: I live in Lagos.

Official: You must be a Nigerian!

Woman: No, I am a citizen of Ghana.

Official: Can I help you in any way?

Woman: I wish to withdraw some money from my account.

Appendix II (D)

LISTENING COMPREHENSION TEST 2

For Administrative Use Only

School: (A), (B), (C)

Student's Class Number -----

Test B

Your teacher would read a conversation to you. You are to pretend or assume to be overhearing the discussion between two of your friends who came to visit you in your house. Your teacher would read the conversation to you twice. As you listen to your teacher while he/she reads the conversation, you should write down the following information:

1 The name of the boy that went to a village school.

2 The reasons Wole liked town schools.

3 What did Wole say about village teachers?

4 Why was Lekan afraid of schools in town?

5 How do students in town learn bad behaviours?

CONVERSATION (3 marks per correct information provided)

Wole: I would have wished to be in the town school like you.

Lekan: Why?

Wole: There are many reasons.

Lekan: Do you mean it? I will love to know your reasons.

Wole: Don't you know that town schools are usually big and beautiful, unlike village schools which are small and ugly.

Lekan: That's true, you sound reasonable.

Wole: Moreover, unlike town schools, village teachers come to school whenever they like.

Lekan: I am afraid of town schools because life in such schools is full of dangers.

Wole: How do you mean?

Lekan: There are many bad boys in the schools in town. Many students in the town learn bad behaviours from watching television, movies and cinemas.

Wole: At any rate, I would wish to attend town schools, if I had my way.

Appendix II (E)

LISTENING COMPREHENSION TEST 3

For Administrative Use Only

School: (A), (B), (C)

Student's Class Number -----

Test B

Your teacher would read a conversation to you. You are to pretend or assume to be at the school gate waiting for your parents to pick you up and overhearing the discussion between a teacher and another pupil. Your teacher would read the conversation to you twice. As you listen to your teacher while he/she reads the conversation, you should write down the following information:

1. Why Amina has not gone home when the teacher saw her.

2. The number of times Amina's mummy came so late to pick her.

3. What Amina ate after school before the teacher saw her.

4. The type of food the teacher wanted to give Amina.

5. The last thing Amina said to the teacher.

CONVERSATION (3 marks per correct information provided)

Teacher: Amina, you have not gone home yet?

Amina: Mummy hasn't come to pick me.

Teacher: Doesn't she always come on time?

Amina: She does. She has never been this late.

Teacher: You haven't eaten since after school?

Amina: No. I only drank some water.

Teacher: Do you mind coming with me to the office?

Amina: No. Are you going to telephone my mummy?

Teacher: Do you know her phone number?

Amina: I only know where her office is.

Teacher: Can I get you some biscuits and cake then?

Amina: I like biscuits, Fanta or Coke.

Teacher: Look, could that be your mummy's car coming?

Amina: It is mummy. Mummy, why didn't you come on time? Thank you, Teacher.

Appendix II (F)

LISTENING COMPREHENSION TEST 4

For Administrative Use Only

School: (A), (B), (C)

Student's Class Number -----

Test B

Your teacher would read a conversation to you. You are to pretend or assume to be at one of the bus-stops in Ijebu-Igbo overhearing the discussion between a man and a woman. Your teacher would read the conversation to you twice. As you listen to your teacher while he/she reads the conversation, you should write down the following information:

- 1 The time of the day the man and the woman met.

- 2 The number of people that arrived from Lagos.

- 3 Where the woman was going.

- 4 The school/university that was on the right side of the road.

- 5 Who was to finally take the woman to Joe's College?

CONVERSATION (3 marks per correct information provided)

Woman: Good afternoon, Sir. Please help me.

Man: What can I do for you?

Woman: My daughter and I have just arrived from Lagos. Please, where is the way to Uncle Joe's College here?

Man: Oh! It's on the other side of the road. Go up the road and turn left at the first turning.

Woman: Will the taxi take straight road to the school?

Man: No, ask the taxi driver to take you to Akure- Benin road junction.

Woman: But the school address shows that the school is on Akure/ Benin road.

Man: Yes, Asiwaju University is on the right side of the road. Uncle Joe's College is still a long distance from that junction.

Woman: What should I tell the taxi driver?

Man: Tell him to take you to Uncle Joe's College. It's on the left side of the road.

Woman: Thank you very much for your help.

Appendix III (A)

GUIDELINES FOR TEACHERS ON CONDUCTING LISTENING TEST

- 1.** Pupils should be first allowed to individually read the questions
- 2.** The teacher should now read the text at the first instance while the pupils listen for comprehension.
- 3.** Teachers should read the text to the pupils at the second instance to identify the needed information/answers.
- 4.** Teachers pauses in between each question for a maximum of 90 seconds to allow pupils write down their answers
- 5.** Teacher's reading speed should not be too fast
- 6.** Where need be, the instructions can be interpreted/read to the learners in their first language.

Appendix III (B)

GUIDELINES FOR TEACHERS ON CONDUCTING SPEAKING TEST

- 1.** Teacher should explain the purpose of the test to the pupils; an attempt to test their speaking ability.
- 2.** Teacher should ask the pupils to be confident and be expressive as much as they can.
- 3.** Teacher should conduct the test on individual basis while much effort should be made to ensure confidentiality while conducting the test.
- 4.** Each pupil should be encouraged to speak as much as possible to respond to each question within the specified time frame.

Appendix IV (A)



PUPILS' ATTITUDE TO COMMUNICATIVE APPROACH QUESTIONNAIRE

For Administrative Use Only

School: (A), (B), (C)

Student's Class Number:-----

This questionnaire is designed to find out how you feel about your teacher's use of communicative method during the English language lessons. Your teacher will read each statement to you. For each of the statements, please tick to indicate whether you agree or disagree with the statement based on how you feel about working in small groups during the English language lessons by choosing either "True" or "False". Your answers will not be made known to anyone. I am the only person that will have access to your responses.

SN	STATEMENT	True 	False 
1	I do not like talking in pairs or in group during English language lessons		
2	I understand the meaning of things better when I discuss with my classmates during English language lessons.		
3	I do not get involved in the class activities as much as possible whenever our teacher makes us to work in group or in pairs.		
4	I am afraid to speak English when I work with my classmates during English language lessons.		
5	I explain the meaning of things better in English when I discuss in pairs or in group during English language lessons.		
6	I speak freely with friends in small groups or pairs during English lessons.		
7	I like our teacher to continue to teach us in pairs/groups during English language lessons		
8	I learn better during English language lessons when the teacher asks us to talk to ourselves in pairs or groups.		
9	I love to attend English language lessons because we work in group with different materials.		
10	Learning in small groups is not interesting.		
11	Learning in groups or pairs allows me to tell my friends what I have in mind.		
12	Learning in groups or pairs makes pupils to be more involved in class activities/work		
13	Learning in small groups during English lessons will not help me in other subjects.		
14	I enjoy learning in small groups.		

15	I don't like learning in groups.		
16	Learning in groups or pairs makes pupils to talk more during class activities/work.		
17	Learning in small groups helps me to understand English language.		
18	I hate talking to people during English lessons when we are in pairs/groups.		
19	Learning in groups or pairs makes it easier for me to speak in the class.		
20	I play and learn during English lessons when we are in groups or pairs.		
21	I discuss better with friends in small groups during English lessons.		
22	My friends correct my mistakes easily whenever we are in small groups.		
23	Learning in groups or pairs will help me to speak English language better.		
24	I am afraid to take part in small group discussions.		
25	I take part a lot during English lessons when we work in small groups or pairs.		
26	During English lessons, I ask people for help whenever I have problems.		
27	When teacher corrects mistakes during English lessons, it wastes time.		
28	I don't think learning in small groups is useful.		

Appendix IV (B)

PUPILS' ATTITUDE TO CLICKERS QUESTIONNAIRE



For Administrative Use Only

School: (A), (B), (C)



Student's Class Number:-----

This questionnaire is designed to find out how you feel about the use of clickers by your teacher during the English language lessons. Your teacher will read each statement to you. For each of the statements, please tick to indicate whether you agree or disagree with the statement based on how you feel about the use of clickers during the English language lessons by choosing either “True” or “False”. Your answers will not be made known to anyone. I am the only person that will have access to your responses.

SN	STATEMENT	True 	False 
1	The use of clickers makes me to like the English language lessons more.		
2	I like our teacher to continue to use clickers to ask us questions in the class.		
3	Clickers are good tools for answering teachers' questions.		
4	Using clickers in the class to correct mistakes is better than when my teacher corrects me because nobody knows when my answers are wrong.		
5	I learn more when clickers are used		
6	I will like my teacher to use clickers in other subjects		
7	I do not like the use of clickers for teaching and learning.		
8	I participate more in the class when I use clickers.		
9	I like writing tests with pencil/ biro and paper than		

	clickers' test.		
10	I do not pay attention in the class when clickers are used.		
11	I am not afraid to answer questions using clickers because nobody in the class knows my answer		
12	I will do better in English language if clickers are used in the class by my teacher		
13	I like English lesson whenever the teacher does not teach us with clickers.		
14	Clickers' questions are not easy to understand.		
15	Many students like to answer questions in the class using clickers		
16	The use of clickers helps me to talk more in the class.		
17	Clickers' questions are easy to answer.		
18	I will learn better if clickers are used in the class.		
19	I like the way our teacher allows us to discuss with one another whenever clickers are used in the class.		
20	The use of clickers does not help in learning because it does not allow me to ask questions in the class.		
21	Whenever clickers correct my mistakes, I refuse to answer questions again.		
22	I think more when I use clickers in the class.		
23	I try to answer all teachers' questions when clickers are used in the class.		
24	I understand the meaning of things better when clickers are used during English lessons.		

Appendix IV (C)

PUPILS' ATTITUDE TO ENGLISH LANGUAGE LESSON QUESTIONNAIRE



For Administrative Use Only

School: (A), (B), (C)

Student's Class Number:-----

Male **Female**

This questionnaire has been designed to find out how you feel about English language lessons. Your teacher will read each statement to you. For each of the statements, please tick to indicate whether the statement is "true of you" or "not true of you" based on how you feel about English language lessons. Your answers will not be made known to anyone. I am the only person that will have access to your responses.

SN	STATEMENT	True 	False 
1	I like English lessons		
2	I do not want to study English language any more in the future		
3	Knowledge in English language helps me to understand other subjects		
4	I always attend English language lesson		
5	I learn a lot during English language lesson than other lessons		
6	I am afraid of attending English language lesson		
7	I want my teacher to teach us English language every time		
8	English language helps me to do better in other subjects		
9	I discuss better with friends during English lesson		
10	I like to do my English language assignments on time		
11	Activities during English language lesson are interesting to me		
12	I want the time for English lesson on the timetable to be increased		
13	English language lesson helps to correct my mistakes when I write or speak		
14	I pay more attention in the class during English language lesson		
15	I understand the meaning of things easier whenever the teacher reads to us during English lesson		
16	I do not like to learn English language everyday		
17	I think faster during English language lesson		
18	I enjoy doing my English language assignments		
19	English language makes me to understand things		
20	I like to learn English language both at home and in the school		

21	Reading passages during English language lesson helps me to read other textbooks better		
22	I will like to read more of textbooks written in English language		
23	I am happy whenever I am in the English language lesson		
24	I find it difficult to understand English language		
25	I try to answer teacher's questions more during English language lessons		
26	I like reading books written in English language		

Appendix V

TEACHERS' PERFORMANCE ASSESSMENT SHEET

Teachers' Performance Indicators	Poor (1)	Fair (2)	Good (3)	Very Good (4)
<ol style="list-style-type: none">1. Knowledge of Subject Matter2. Instructional Skills3. Command of Language4. Motivational Skills5. Organisation and use of relevant learning activities/tasks6. PRS/CA impact of learning process7. Technical Skills8. Encouragement of Interaction9. Attention and response to learners' needs10. Coordination skills11. Classroom Management Skills12. Correction and Effective feedback Skills13. Timing				

Appendix VI (A)

PUPILS' INTERVIEW GUIDE

1. What do you think about the use of PRS/communicative approach in English language class?
2. How has the use of PRS/communicative approach influenced your communication in the class?
3. How does the teacher's use of PRS/communicative approach affected the teaching and learning of English language?
4. What do you about the response rate to teacher's questions since you have started to use PRS/ learning in groups during English language lesson?
5. What is the attitude of your classmates to the use of PRS/communicative approach in English language class?
6. What would you suggest about the continued use of PRS/communicative approach in the school?

Appendix VI (B)

TEACHER'S' INTERVIEW GUIDE

1. What is your opinion about the use of PRS/communicative approach in English language classroom?
2. How does the use of PRS/communicative approach affect pupils' responses in English language class?
3. How does the use of PRS/communicative approach contribute to pupils' level of communication in the class?
4. How does the use of PRS/communicative approach affect pupils' performance in English language?
5. What would you suggest to be the attitude of the pupils towards the use of PRS/communicative approach in English language class?
6. What are the challenges involved in the use of PRS/communicative approach for teaching and learning English language?
7. What would suggest about the continued use of PRS/communicative approach in the school?

Appendix VII (A)

CLASSICAL ITEM ANALYSIS FOR ENGLISH LANGUAGE SPEAKING TEST ONE

SN	Item	Item Difficulty Level (Pi)	Item Difficulty Level (Di)
1	What do you do at home after school hours?	.67	.48
2	Where do you live?	.66	.34
3	What good things do you like to tell people about your school?	.64	.38
4	Describe the way to the post office.	.43	.76
5	Tell me all that you can see in the picture labelled "A"	.49	.60
6	How do you intend to celebrate the coming Christmas?	.50	.62
7	What happened during the school's last inter-house sports festival?	.63	.46
8	Would you like to be a friend to a medical doctor?	.62	.50
9	Are you attending any birthday party this weekend?	.50	.83
10	What type of game do many people like watching on television and why?	.66	.62

Appendix VII (B)

CLASSICAL ITEM ANALYSIS FOR ENGLISH LANGUAGE SPEAKING TEST TWO

SN	Item	Item Difficulty Level (Pi)	Item Difficulty Level (Di)
1	I did not see you in the school yesterday. Why?	.42	.50
2	Where is your friend?	.63	.48
3	Tell me how I can get to the nearest bank.	.49	.48
4	What did you do this morning before coming to school?	.43	.78
5	Where were you at break time?	.64	.34
6	You were not at the morning assembly. Why?	.62	.52
7	Tell me how you greet your father/mother when you first see him/her in the morning?	.49	.87
8	In the picture labelled "A", what will happen to those things on the table?	.66	.62

Appendix VII (C)

CLASSICAL ITEM ANALYSIS FOR PUPILS' ATTITUDE TO COMMUNICATIVE APPROACH QUESTIONNAIRE (N = 36)

SN	STATEMENT	Item Difficulty Level (Pi)	Item Difficulty Level (Di)
1	I do not like talking in pairs or in group during English language lessons	.55	.38
2	I understand the meaning of things better when I discuss with my classmates during English language lessons.	.59	.34
3	I do not get involved in the class activities as much as possible whenever our teacher makes us to work in group or in pairs.	.59	.42
4	I am afraid to speak English when I work with my classmates during English language lessons.	.50	.33
5	I explain the meaning of things better in English when I discuss in pairs or in group during English language lessons.	.41	.34
6	I speak freely with friends in small groups or pairs during English lessons.	.54	.46
7	I like our teacher to continue to teach us in pairs/groups during English language lessons	.46	.33
8	I learn better during English language lessons when the teacher asks us to talk to ourselves in pairs or groups.	.55	.38
9	I love to attend English language lessons because we work in group with different materials.	.46	.38
10	Learning in small groups is not interesting.	.56	.34
11	Learning in groups or pairs allows me to tell my friends what I have in mind.	.42	.34
12	Learning in groups or pairs makes pupils to be more involved in class activities/work	.59	.34
13	Learning in small groups during English lessons will not help me in other subjects.	.46	.38
14	I enjoy learning in small groups.	.63	.38
15	I don't like learning in groups.	.59	.42
16	Learning in groups or pairs makes pupils to talk more during class activities/work.	.59	.34
17	Learning in small groups helps me to understand English language.	.59	.42
18	I hate talking to people during English lessons when we are in pairs/groups.	.42	.34
19	Learning in groups or pairs makes it easier for me to speak in the class.	.62	.38
20	I play and learn during English lessons when we are in groups or pairs.	.63	.38
21	I discuss better with friends in small groups during English	.46	.46

	lessons.		
22	My friends correct my mistakes easily whenever we are in small groups.	.59	.34
23	Learning in groups or pairs will help me to speak English language better.	.46	.38
24	I am afraid to take part in small group discussions.	.63	.38
25	I take part a lot during English lessons when we work in small groups or pairs.	.55	.38
26	During English lessons, I ask people for help whenever I have problems.	.59	.42
27	When teacher corrects mistakes during English lessons, it wastes time.	.59	.34
28	I don't think learning in small groups is useful.	.63	.38

Appendix VII (D)

**CLASSICAL ITEM ANALYSIS FOR PUPILS' ATTITUDE TO CLICKERS
QUESTIONNAIRE (N = 42)**

SN	STATEMENT	Item Difficulty Level (Pi)	Item Difficulty Level (Di)
1	The use of clickers makes me to like the English language lessons more.	.61	.32
2	I like our teacher to continue to use clickers to ask us questions in the class.	.68	.36
3	Clickers are good tools for answering teachers' questions.	.57	.36
4	Using clickers in the class to correct mistakes is better than when my teacher corrects me because nobody knows when my answers are wrong.	.65	.36
5	I learn more when clickers are used	.50	.36
6	I will like my teacher to use clickers in other subjects	.61	.32
7	I do not like the use of clickers for teaching and learning.	.57	.43
8	I participate more in the class when I use clickers.	.65	.36
9	I like writing tests with pencil/ biro and paper than clickers' test.	.53	.40
10	I do not pay attention in the class when clickers are used.	.65	.36
11	I am not afraid to answer questions using clickers because nobody in the class knows my answer	.61	.40
12	. I will do better in English language if clickers are used in the class by my teacher	.57	.43
13	I like English lesson whenever the teacher does not teach us with clickers.	.54	.33
14	Clickers' questions are not easy to understand.	.54	.40
15	Many students like to answer questions in the class using clickers	.61	.32
16	The use of clickers helps me to talk more in the class.	.61	.36
17	Clickers' questions are easy to answer.	.65	.36
18	I will learn better if clickers are used in the class.	.68	.32
19	I like the way our teacher allows us to discuss with one another whenever clickers are used in the class.	.61	.40
20	Whenever clickers correct my mistakes, I refuse to answer questions again.	.57	.36
21	I think more when I use clickers in the class.	.68	.32
22	I try to answer all teachers' questions when clickers are used in the class.	.61	.36
23	I understand the meaning of things better when clickers are used during English lessons.	.57	.43

Appendix VII (E)

CLASSICAL ITEM ANALYSIS FOR PUPILS' ATTITUDE TO ENGLISH LANGUAGE LESSON QUESTIONNAIRE (N = 136)

SN	STATEMENT	Item Difficulty Level (Pi)	Item Difficulty Level (Di)
1	I like English lessons	.74	.48
2	I do not want to study English language any more in the future	.63	.56
3	Knowledge in English language helps me to understand other subjects	.69	.50
4	I always attend English language lesson	.73	.51
5	I learn a lot during English language lesson than other lessons	.75	.36
6	I am afraid of attending English language lesson	.60	.36
7	I want my teacher to teach us English language every time	.57	.41
8	English language helps me to do better in other subjects	.70	.39
9	I discuss better with friends during English lesson	.65	.41
10	I like to do my English language assignments on time	.66	.65
11	Activities during English language lesson are interesting to me	.66	.50
12	I want the time for English lesson on the timetable to be increased	.70	.46
13	English language lesson helps to correct my mistakes when I write or speak	.79	.62
14	I pay more attention in the class during English language lesson	.70	.36
15	I understand the meaning of things easier whenever the teacher reads to us during English lesson	.76	.37
16	I do not like to learn English language everyday	.67	.49
17	I think faster during English language lesson	.66	.63
18	I enjoy doing my English language assignments	.68	.59
19	English language makes me to understand things	.67	.54
20	I like to learn English language both at home and in the school	.73	.55
21	Reading passages during English language lesson helps me to read other textbooks better	.78	.34
22	I will like to read more of textbooks written in English language	.71	.60
23	I am happy whenever I am in the English language lesson	.63	.32
24	I find it difficult to understand English language	.65	.53

25	I try to answer teacher's questions more during English language lessons	.65	.55
26	I like reading books written in English language	.67	.64

Appendix VIII (A)

Descriptive Statistics of Freeman-Halton Extension of Fisher's Exact Test Analysis for Attitude to English Language Lessons Across Groups (N = 99)

SN	Items	Comm. App			PRS			Control			Sig.
		MU	ST	MD	MU	ST	MD	MU	ST	MD	
	AFFECTIVE										
1	I like English lessons	0	5	27	0	6	35	0	0	26	.08
2	I am afraid of attending English language lesson	6	22	4	7	29	5	2	20	4	.80
3	I like to do my English language assignments on time	0	29	3	7	29	5	2	21	3	.13
4	Activities during English language lesson are interesting to me	2	28	2	16	22	3	1	20	5	.00
5	I do not like to learn English language everyday	7	18	7	5	23	13	2	15	9	.57
6	I like reading books written in English language	4	21	7	12	29	0	12	14	0	.00
	COGNITIVE ATTITUDE										
1	Knowledge in English language helps me to understand other subjects	4	21	7	0	9	32	0	3	23	.00
2	I learn a lot during English language lesson than other lessons	3	24	5	4	30	7	3	17	6	.94
3	English language helps me to do better in other subjects	5	26	1	7	30	4	1	23	2	.40
4	English language lesson helps to correct my mistakes when I write or speak	3	27	2	13	24	4	6	19	1	.14
5	I understand the meaning of things easier whenever the teacher reads to us during English lesson	7	25	0	12	27	2	3	21	2	.25
6	I think faster during English language lesson	3	28	1	4	36	1	3	21	2	.88
7	English language makes me to understand things	5	23	4	4	33	4	7	16	3	.43
8	Reading passages during English language lesson helps me to read other textbooks better	7	23	2	7	32	2	6	19	1	.97
9	I find it difficult to understand English language	5	16	11	7	23	11	4	17	5	.06
	BEHAVIOURAL ATTITUDE										
1	I do not want to study English language any more in the future	3	25	4	3	30	8	2	18	6	.88
2	I want my teacher to teach us English language every time	2	28	2	6	34	1	1	22	3	.38

3	I want the time for English lesson on the timetable to be increased	4	25	3	7	30	4	4	19	3	.98
4	I like to learn English language both at home and in the school	11	16	5	6	35	0	1	21	4	.00
5	I will like to read more of textbooks written in English language	10	19	3	3	36	2	5	19	2	.06
	GENERAL ATTITUDE	MU	ST	MD	MU	ST	MD	MU	ST	MD	Sig.
1	I always attend English language lesson	3	24	5	5	34	2	2	12	12	.00
2	I discuss better with friends during English lesson	2	28	2	24	16	1	2	21	3	.00
3	I pay more attention in the class during English language lesson	4	26	2	4	30	7	7	16	3	.24
4	I enjoy doing my English language assignments	6	23	3	8	30	3	5	18	3	.99
5	I am happy whenever I am in the English language lesson	2	27	3	16	25	0	5	19	2	.00
6	I try to answer teacher's questions more during English language lessons	12	15	5	27	14	0	11	13	2	.02

Appendix VIII (B)

Descriptive Statistics of Freeman-Halton Extension of Fisher's Exact Test Analysis of the Communicative Approach and the PRS Groups' Attitude to English Language Lessons (N = 73)

SN	Items	Comm. App			PRS			Sig.
		MU	ST	MD	MU	ST	MD	
	AFFECTIVE							
1	I like English lessons	0	5	27	0	6	35	.75
2	I am afraid of attending English language lesson	6	22	4	7	29	5	1.0
3	I like to do my English language assignments on time	0	29	3	7	29	5	.04
4	Activities during English language lesson are interesting to me	2	28	2	16	22	3	.00
5	I do not like to learn English language everyday	7	18	7	5	23	13	.44
6	I like reading books written in English language	0	5	27	0	6	35	.00
	COGNITIVE ATTITUDE	MU	ST	MD	MU	ST	MD	Sig.
1	Knowledge in English language helps me to understand other subjects	4	21	7	0	9	32	.00
2	I learn a lot during English language lesson than other lessons	3	24	5	4	30	7	.92
3	English language helps me to do better in other subjects	5	26	1	7	30	4	.59
4	English language lesson helps to correct my mistakes when I write or speak	3	27	2	13	24	4	.04
5	I understand the meaning of things easier whenever the teacher reads to us during English lesson	7	25	0	12	27	2	.41
6	I think faster during English language lesson	3	28	1	4	36	1	1.0
7	English language makes me to understand things	5	23	4	4	33	4	.66
8	Reading passages during English language lesson helps me to read other textbooks better	7	23	2	7	32	2	.91
9	I find it difficult to understand English language	5	16	11	7	23	11	.81
	BEHAVIOURAL ATTITUDE	MU	ST	MD	MU	ST	MD	Sig.
1	I do not want to study English language any more in the future	3	25	4	3	30	8	.71
2	I want my teacher to teach us	2	28	2	6	34	1	.65

3	English language every time I want the time for English lesson on the timetable to be increased	4	25	3	7	30	4	.85
4	I like to learn English language both at home and in the school	11	16	5	6	35	0	.00
5	I will like to read more of textbooks written in English language	10	19	3	3	36	2	.01
	GENERAL ATTITUDE	MU	ST	MD	MU	ST	MD	Sig.
1	I always attend English language lesson	3	24	5	5	34	2	.30
2	I discuss better with friends during English lesson	2	28	2	24	16	1	.00
3	I pay more attention in the class during English language lesson	4	26	2	4	30	7	.40
4	I enjoy doing my English language assignments	6	23	3	8	30	3	1.0
5	I am happy whenever I am in the English language lesson	2	27	3	13	27	1	.01
6	I try to answer teacher's questions more during English language lessons	12	15	5	27	14	0	.00

Appendix VIII (C)

Descriptive Statistics of Freeman-Halton Extension of Fisher's Exact Test Analysis of the Communicative Approach And Control Groups' Attitude to English Language Lessons (N = 58)

SN	Items	Comm. App			Control			Sig.
		MU	ST	MD	MU	ST	MD	
AFFECTIVE								
1	I like English lessons	0	5	27	0	0	26	.06
2	I am afraid of attending English language lesson	6	22	4	2	20	4	.50
3	I like to do my English language assignments on time	0	29	3	2	21	3	.36
4	Activities during English language lesson are interesting to me	2	28	2	01	20	5	.36
5	I do not like to learn English language everyday	7	18	7	2	15	9	.29
6	I like reading books written in English language	0	5	27	0	0	26	.00
COGNITIVE ATTITUDE								
1	Knowledge in English language helps me to understand other subjects	4	21	7	0	3	23	.00
2	I learn a lot during English language lesson than other lessons	3	24	5	3	17	6	.70
3	English language helps me to do better in other subjects	5	26	1	1	23	2	.22
4	English language lesson helps to correct my mistakes when I write or speak	3	27	2	6	19	1	.40
5	I understand the meaning of things easier whenever the teacher reads to us during English lesson	7	25	0	3	21	2	.23
6	I think faster during English language lesson	3	28	1	3	21	2	.75
7	English language makes me to understand things	5	23	4	7	16	3	.52
8	Reading passages during English language lesson helps me to read other textbooks better	7	23	2	6	19	1	.82
9	I find it difficult to understand English language	5	16	11	4	17	5	.47
BEHAVIOURAL ATTITUDE								
1	I do not want to study English language any more in the future	3	25	4	2	18	6	.67
2	I want my teacher to teach us English language every time	2	28	2	1	22	3	.86
3	I want the time for English lesson on the timetable to be increased	4	25	3	4	19	3	.82
4	I like to learn English language both at	11	16	5	1	21	4	.01

	home and in the school							
5	I will like to read more of textbooks written in English language	10	19	3	5	19	2	.55
	GENERAL ATTITUDE	MU	ST	MD	MU	ST	MD	Sig.
1	I always attend English language lesson	3	24	5	2	12	12	.04
2	I discuss better with friends during English lesson	2	28	2	2	21	3	.07
3	I pay more attention in the class during English language lesson	4	26	2	7	16	3	.23
4	I enjoy doing my English language assignments	6	23	3	5	18	3	1.0
5	I am happy whenever I am in the English language lesson	2	27	3	5	20	1	.24
6	I try to answer teacher's questions more during English language lessons	12	15	5	11	13	2	.71

Appendix VIII (D)

Descriptive Statistics of Freeman-Halton Extension of Fisher's Exact Test Analysis of the PRS and the Control Groups' Attitude to the English Language Lesson (N = 67)

SN	Items	PRS			Control			Sig.
		MU	ST	MD	MU	ST	MD	
AFFECTIVE								
1	I like English lessons	0	6	35	0	0	26	.03
2	I am afraid of attending English language lesson	7	29	5	2	20	4	.62
3	I like to do my English language assignments on time	7	29	5	2	21	3	.54
4	Activities during English language lesson are interesting to me	16	22	3	01	20	5	.00
5	I do not like to learn English language everyday	5	23	13	2	15	9	.81
6	I like reading books written in English language	0	6	35	0	0	26	.20
COGNITIVE ATTITUDE								
1	Knowledge in English language helps me to understand other subjects	0	9	32	0	3	23	.34
2	I learn a lot during English language lesson than other lessons	4	30	7	3	17	6	.73
3	English language helps me to do better in other subjects	7	30	4	1	23	2	.26
4	English language lesson helps to correct my mistakes when I write or speak	13	24	4	6	19	1	.44
5	I understand the meaning of things easier whenever the teacher reads to us during English lesson	12	27	2	3	21	2	.41
6	I think faster during English language lesson	4	36	1	3	21	2	.56
7	English language makes me to understand things	4	33	4	7	16	3	.14
8	Reading passages during English language lesson helps me to read other textbooks better	7	32	2	6	19	1	.89
9	I find it difficult to understand English language	7	23	11	4	17	5	.17
BEHAVIOURAL ATTITUDE								
1	I do not want to study English language any more in the future	3	30	8	2	18	6	.83
2	I want my teacher to teach us English language every time	6	34	1	1	22	3	.13

3	I want the time for English lesson on the timetable to be increased	7	30	4	4	19	3	.92
4	I like to learn English language both at home and in the school	6	35	0	1	21	4	.01
5	I will like to read more of textbooks written in English language	3	36	2	5	19	2	.31
	GENERAL ATTITUDE	MU	ST	MD	MU	ST	MD	Sig.
1	I always attend English language lesson	5	34	2	2	12	12	.00
2	I discuss better with friends during English lesson	24	16	1	2	21	3	.00
3	I pay more attention in the class during English language lesson	4	30	7	7	16	3	.19
4	I enjoy doing my English language assignments	8	30	3	5	18	3	.92
5	I am happy whenever I am in the English language lesson	16	25	0	5	19	2	.04
6	I try to answer teacher's questions more during English language lessons	27	14	0	11	13	2	.05

Appendix VIII (E)

Descriptive Statistics of Pupils' Attitude to the Communicative Approach

SN	Items	True (f)	False (f)
GENERAL ATTITUDE			
GA 1	I do not like talking in pairs or in group during English language lessons	19	13
GA 2	I love to attend English language lessons because we work in group with different materials.	29	03
GA 3	I enjoy learning in small groups.	24	08
GA 4	Learning in small groups is not interesting	06	26
GA 5	I don't like learning in groups	29	03
GA6	My friends correct my mistakes easily whenever we are in small groups	30	02
GA 7	I don't think learning in small groups is useful.	29	03
GA 8	When teacher corrects mistakes during English lessons, it wastes time	29	03
ACTIVE ENGAGEMENT			
EG 1	I do not get involved in the class activities as much as possible whenever our teacher makes us to work in group or in pairs.	15	17
EG 2	Learning in groups or pairs makes pupils to be more involved in class activities/work.	24	08
EG 3	Learning in groups or pairs makes pupils to talk more during class activities/work.	25	07
EG 4	I hate talking to people during English lessons when we are in pairs/groups	18	14
EG 5	I discuss better with friends in small groups during English lessons	30	02
EG 6	I take part a lot during English lessons when we work in small groups or pairs.	25	7
EG 7	During English lessons, I ask people for help whenever I have problems	29	03

SPEECH CONFIDENCE

SC 1	I am afraid to speak English when I work with my classmates during English language lessons	13	19
SC 2	I explain the meaning of things better in English when I discuss in pairs or in group during English language lessons.	27	05
SC 3	I speak freely with friends in small groups or pairs during English lessons	27	05
SC 4	Learning in groups or pairs allows me to tell my friends what I have in mind.	31	01
SC 5	Learning in groups or pairs makes it easier for me to speak in the class	25	07
SC 6	I am afraid to take part in small group discussions	19	13

LEARNING

LE1	I understand the meaning of things better when I discuss with my classmates during English language lessons	29	03
LE2	I learn better during English language lessons when the teacher asks us to talk to ourselves in pairs or groups.	25	07
LE3	Learning in small groups helps me to understand English language	21	11
LE 4	I play and learn during English lessons when we are in groups or pairs	20	12

BEHAVIOURAL INTENTION

BI 1	Learning in small groups during English lessons will not help me in other subjects.	32	00
BI 2	I like our teacher to continue to teach us in pairs/groups during English language lessons	19	13
BI 3	Learning in groups or pairs will help me to speak English language better	27	05

Appendix VIII (F)

Descriptive Statistics of Pupils' Attitude to the Personal Response System

SN	Items	Mean	SD	True (f)	False (f)
GENERAL ATTITUDE					
GA 1	The use of clickers makes me to like the English language lessons more.	.59	.50	24	17
GA 2	I do not like the use of clickers for teaching and learning.	.54	.50	22	19
GA 3	I like English lesson whenever the teacher does not teach us with clickers.	.49	.51	20	21
ENGAGEMENT					
EG 1	I participate more in the class when I use clickers.	.95	.22	39	02
EG 2	I am not afraid to answer questions using clickers because nobody in the class knows my answer	.93	.26	38	03
EG 3	The use of clickers helps me to talk more in the class.	.88	.33	36	05
EG 4	I like the way our teacher allows us to discuss with one another whenever clickers are used in the class.	.51	.51	39	02
EG 5	I try to answer all teachers' questions when clickers are used in the class.	1.00	.00	41	00
ASSESSMENT AND FEEDBACK					
AF 1	Clickers are good tools for answering teachers' questions.	.44	.50	18	22
AF 2	I like writing tests with pencil/biro and paper than clickers' test.	.37	.49	15	26
AF 3	Many students like to answer questions in the class using clickers	.46	.51	19	22
AF 4	Using clickers in the class to correct mistakes is better than when my teacher corrects me because nobody knows when my answers are wrong.	.98	.16	40	01

AF 5	The use of clickers does not help in learning because it does not allow me to ask questions in the class.	.51	.51	21	20
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ATTENTION AND LEARNING

AL1	I learn more when clickers are used in the class	1.00	.00	41	00
AL2	I do not pay attention in the class when clickers are used.	.46	.51	19	21
AL3	Clickers' questions are not easy to understand.	.98	.16	40	01
AL 4	Clickers' questions are easy to answer.	.93	.26	38	03
AL 5	Whenever clickers correct my mistakes, I refuse to answer questions again.	.51	.51	21	20
AL 6	I think more when I use clickers in the class.	1.00	.00	41	00
AL 7	I understand the meaning of things better when clickers are used during English lessons.	.98	.16	40	01

BEHAVIOURAL INTENTION

BI 1	I like our teacher to continue to use clickers to ask us questions in the class.	.83	.38	34	07
BI 2	I will like my teacher to use clickers in other subjects	.61	.49	25	16
BI 3	. I will do better in English language if clickers are used in the class by my teacher	.93	.26	38	03
BI 4	I will learn better if clickers are used in the class.	.51	.51	21	20
