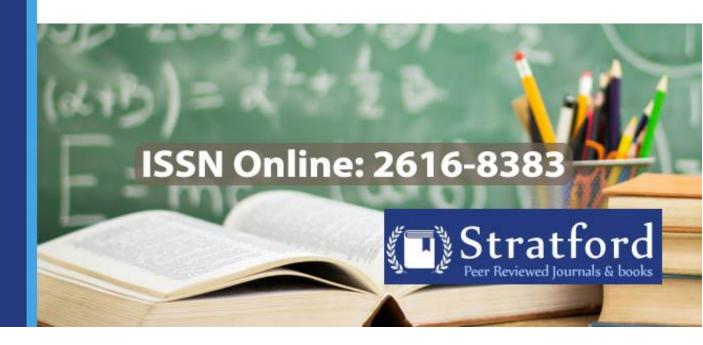
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The Use of Information and Communication Technology English in Colleges' of Education in Ghana: The Case of Upper West Region

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Abstract

The use of information and communication technology English equip student-teachers with the necessary pedagogical knowledge and terminologies to function well in their teaching career. The purpose of this study is to expose student-teachers to the right expressions in relation to ICT-English to adequately prepare them to excel in the teaching of ICT and the English language in order to meet the needs of the 21st century learners. Most of the researchers have focused on the pedagogical relevance of ICT-English language to teachers of English language to the neglect of the impact of ICT-English on the learners. In order to better meet the demands of the existing markets, common knowledge of the global language (ICT English) is believed to play a crucial role in more successful transactions internationally. In today's world, globalization and competitiveness has put more emphasis on preparing students (future specialists) to be innovative, think critically and effectively solve the world's problems. This paper equips students with the historical background of ICT, literature review, the needs, specialist discourse, materials, findings and conclusions. The researcher relied on mixed methodology and used questionnaire and interview guide as tools for the data collection. There is no field in this modern age that does not use ICT. We can even say that every establishment today depends largely on the use of ICT. Hence, education in any field would be incomplete without ICT knowledge. As such, ICT language and for that matter ICT English, has become a prerequisite skill to our development. Findings show

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that most the student –teachers now have mastery of phrasal verbs that have been formed through the combination of ICT terminologies with a verb and a *preposition* **or** *adverb*, or both. Most colleges of education employ the use of sophisticated ICT equipment and have in their custody projectors, laptops, mobile phones and drives.

Keywords: Information, Communication, Technology, ICT English, Student-teachers

1.0 Introduction

The English language has been a lingua franca for us for centuries and is used in all walks of life. As a result, it is used for both professional and academic purposes, especially in information and communication technology. English for Specific Purposes (ESP), which differs from General English, focuses on grammar, vocabulary, writing and communication tasks (Dudley-Evans & John 1998). Bulter-Pascoe (2009: p1) argues that ESP has a "hybrid nature" that requires teaching both language and subject-specific content, facilitating rapid dissemination of information among people.

ICT, the acronym for Information and Communication Technologies, is defined by (UNESCO 2006) as a form of technology used to transmit, store, create, share or exchange information. This broad definition of ICT includes technologies such as: radio, television, video, DVD, telephone (fixed and mobile), satellite systems, computer and network hardware and software, as well as services associated with these technologies, such as video, as well as devices and services associated with these technologies, such as videoconferencing and electronic mail. Computing as information technology is the study, design, refinement, operation, support or management of a fundamental computer information system, primarily software applications and computer hardware (Bon, 2010). Information technology works with the use of electronic computers and computer software to innovate, defend, develop, and disseminate information and other information. Information technology has spilled over to cover many functions of computers and technology and this word is more familiar than ever. The subject of information technology can be quite large and encompass many areas. IT professionals perform different types of responsibilities ranging from installing applications to designing complex computer networks (UNESCO 2006).

Information and communication technology (ICT) currently affects every aspect of human life. It plays a leading role in all aspects of life including workplaces, business, education, tourism, agriculture, medicine and entertainment. It is also in the field of English for Specific Purposes (ESP) language learning (Bon, 2010). Furthermore, many people recognize ICT as a catalyst for change; changing working conditions, information management and exchange, teaching methods, learning approaches, scientific research and access to information and communication technologies. It cannot be denied that ICTs have a big impact on people's lives and the way they communicate. New devices such as computers, tablets, cell phones and the internet have replaced traditional modes of communication. It is the integration of information processing, computer and communication technologies. ICT is changing the way we learn, work and live in society and is often talked about in contexts such as education, healthcare or libraries. A good way to think about ICT is to consider all the applications of digital technology that already exist to help people, businesses and organizations use information (Mishra & Kohler, 2006).



A look at what we use at home, office, school, or a business or social occasion finds many devices that have computer chips. They include access cards, cell phones, point-of-sale scanners, medical instruments, TV remote controls, microwave ovens, DVD players, digital cameras, PDAs. It is therefore absolutely necessary to learn ICT English.

Historical Background

After the 1940s, the military remained the primary source of research and development funding for the expansion of automation to replace manpower with machine power. The term information technology originated in the 1970s. However, the basic concept can be traced back to the military-industry alliance during World War II in the development of electronics, computers and information theory. Four generations of computers have evolved since the 1950s. Each generation reflected a change in hardware that was smaller in size but more capable of controlling computer operations. The first revolution is said to have been cinema, radio, television and satellite broadcasting, while the second was telecommunications and microcomputers in mathematics education (Paisley, 1985). The integration of telecommunications and microelectronic technology into computing has been called a third revolution and created what has been termed information technology (IT).

The third revolution was said to promise not only a more productive person, a problem-solver and a life-long learner, but also a better informed, rational and participative citizen, a modern 'renaissance' person, living in the web and network of a worldwide electronic community (Papagiannis *et al.*, 1987). The current fourth revolution in ICT has a globalization component force that has replaced other revolutions and accelerated its influence worldwide.

Information and communication technologies (ICTs) have greatly accelerated the process of globalization in recent decades. According to Bon (2010) ICTs have increased world productivity and global trade, facilitated business and industry growth, and enhanced education and research collaboration. Countries are benefiting enormously from ICTs through innovation, communication, and access to global information. ICTs are key to ensuring an inclusive global knowledge society.

1.1 Objectives of the Study

- i. Determine the types of ICT materials in colleges of education.
- ii. Identify the usage of ICT English glossary by student-teachers.
- iii. Identify phrasal verbs in ICT English.

2.0 Literature Review

2.1 Theoretical Framework

This study's underlying theory is technological pedagogical content knowledge framework propounded by Mishra and Koehler (2006). According to the TPACK framework, a teacher depends on three domains of knowledge for effective integration of ICT into teaching and learning (IITL). The domains are content knowledge (CK), pedagogical knowledge (PK) and technological knowledge (TK). Mishra and Kohler (2006) defined CK as knowledge about the actual subject matter that is to be learned or taught. They observed that a teacher must know and understand the subject that he/ she teaches, including knowledge of central facts, concepts, theories, and procedures if the teacher is to integrate technology in teaching.

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Mishra and Koehler (2006) defined PK as the deep knowledge about the processes or methods of teaching and learning (e.g. values and aims, classroom management, lesson planning, and student evaluation). They argued that a teacher with deep PK is likely to integrate technology in his or her teaching considering how students can best learn in a given classroom context and nature of learners. They also defined TK as knowledge about standard technologies, such as books, chalkboard, and more advanced technologies such as the Internet and digital video and how to operate those technologies. They asserted that a teacher with TK has good knowledge of operating system and computer hardware, the ability to use standard sets of software tools (e.g. word processors, spreadsheets, browsers, e-mail) and how to install and remove peripheral devices, install and remove programmes, create and archive documents among others.

Mishra and Kohler (2006) suggests, observed that the interaction of these three knowledge domains; CK, PK and TK gives rise to three paired knowledge domains namely pedagogical content knowledge (PCK), technological content knowledge (TCK) and technological pedagogical knowledge (TPK). Mishra and Kohler (2006) defined PCK as the knowledge of pedagogy that is applicable to the teaching of specific content such as knowing what teaching approaches fit content, and likewise, knowing how elements of the content can be arranged for better teaching. They also defined TCK as the knowledge about the manner in which technology and content are reciprocally related. They further asserted that a teacher needs to know not just the subject matter he/ she teaches but also the manner in which the subject matter can be changed by the application of technology.

Mishra and Kohler (2006) defined TPK as knowledge of the existence, components and capabilities of various technologies as they are used in teaching and learning settings and conversely, knowing how teaching might change as the result of using particular technology. According to the framework, TPACK is the intersection of all the three bodies of knowledge (CK, PK & TK). Mishra and Kohler argued that the development of TPACK by teachers is central for effective teaching with technology because understanding TPACK is above and beyond understanding technology, content, or pedagogy in isolation, but rather how these forms of knowledge interact with each other. Due to ongoing globalization, our global village today is aimed at continued growth from international market pressure as well as high-tech environments. In order to better meet the demands of markets, common knowledge of the global language (ICT English) is believed to play a crucial role in more successful transactions internationally. According to Zivkovic (2014), today's world of globalization and competitiveness has put more emphasis on preparing students (future specialists) to be innovative, think critically and effectively solve the world's problems and to master the necessary content in their chosen areas.

Butler-Pascoe and Wiburg (2003) posit that some of the characteristics of an ICT English enhanced learning environment include communicative activities which are representative of the stated occupation; make subject-specific inputs understandable to students; facilitate student production; use of authentic materials from specific disciplines and professions; provision of cognitive and critical thinking skills; use of collaborative learning; Taking into account the specific needs of students (student-centred); support different learning styles; support motivation, self-esteem and autonomy as affective needs of students; Support appropriate assessment of professional skills and English proficiency.



2.2 Empirical Review

ICT- English can be implemented in several important domains such as law, medicine, business, journalism, linguistics as well as computational linguistics (Otlogetswe, 2010). Rao (2014) indicates that English Language Communication skills are needed to enhance the industrial technological advancement and boost employability. A study suggests that technical vocabulary needs to be taught for the purpose of a more effective communication.

A study conducted at Harvard University, an essay that was published by the Mathematical Association of America, Oettinger (1965) discussed the relationship between language and computers. In this case, the concept of studying computational linguistics is associated with mathematical linguistics which is also concerned with specialized technical jargon, mathematical or chemical notations, the formal symbol systems of logic, or the various systems for instructing computers which, as products of more self-conscious and deliberate human creation, are called artificial languages.

While computational linguistics is a branch of linguistics in which the techniques of computer science are applied to the analysis and synthesis of language and speech, it is important to define other related concepts that can be used to understand how computers can be manipulated to process natural language. Mathematical linguistics includes the application of statistical techniques to the central linguistic problems of describing the structure of languages and their development, problems which are the domains of conventional historical and descriptive linguistics (Oettinger, 1965). This paper agrees with the study that ICT- English practitioners are linguistic problem solvers who contribute to research and new theoretical discoveries by concluding that Computational linguistics, as the subset of mathematical linguistics, deals with the application of computers to linguistic problems and with the application of linguistics to computer problems (Oettinger, 1965).

Hutchinson and Waters (1987) argue that the role of English for Specific Purposes is not a 'coherent' type of teaching but is an evolution that responded to the needs of learners of language for science, technology and business, especially after the Second World War (1937-1946). They stress that ICT- English is not for prestigious purposes of pleasure but to suit the world of work. This paper fully agrees with this position.

Information and Communication Technology, which has maximized globalization process indicates that businessmen, educationist, agriculturalists, legal practitioners, bankers, and many others ought to learn ICT English so as to communicate effectively with technological tools like the Worldwide Websites, multimedia, information kiosks and transaction machines, telecommunications products and office equipment such as copiers and fax machines to enhance and facilitate their work.

According to Bon (2010) ICTs have increased world productivity and global trade, facilitated business and industry growth, and enhanced education and research collaboration. Countries are benefiting enormously from ICTs through innovation, communication and access to global information. ICTs are key to ensuring an inclusive global knowledge society. ICT English is virtually used in almost all professional fields, but this paper will be limited to the need for ICT English in Education.



ICT English in Education

Information and communication technologies (ICT) today occupy an important place in most organizations (Zhang & Aikman, 2007). Computers began to be used in schools in the early 1980s and several researchers predicted that ICT will play an important role in the education of the next generation (Bransford, Brown & Cocking, 2000; Grimus, 2000). Modern technology offers many methods to improve classroom teaching and learning (Ghavifekr *et al.*, 2014). Dawes (2001) found that new technologies have the potential to support education throughout the curriculum and to provide opportunities for effective communication between students and teachers in ways not previously possible. ICT in education has the potential to transform teaching. Schools use a variety of ICT tools to communicate, create, disseminate, store and manage information.

In some contexts, ICT English has also become an integral part of the teaching-learning interaction, through approaches such as the replacement of blackboards with interactive digital whiteboards, the use of smartphones or other student devices for studying during school hours, and the flipped classroom model. Students watch lessons at home on computers and use class time for more interactive exercises. When teachers are digitally inclined (using ICT English) and trained in the use of ICT, these approaches can lead to higher thinking skills, provide creative and personalized options for students to express their understanding and better prepare students to engage with ongoing technological changes in the workplace.

Some educationists consider ICT to be the only way to go if not a substitute for conventional teaching and learning resources (Broekman *et al.*, 2002). ICT's interactive testing and review mechanism, together with a let-s-go-back and look-at-that-again-loop was believed to offer the best of all worlds of learning (ICTs in learning, 2000). The uses of ICT by English teachers, such as online courses, electronic dictionaries, PowerPoint presentations, blogs, wikis and video conferencing, to enhance the learning process of student cannot be overemphasized.

Studies have shown that ICT can contribute to innovative student-centered learning environment where teachers act as coaches, while remaining in firm control of the learning environment (Smeets & Mooij, 2001). ICT programs are said to promise power for students to control over their own learning, that networking replaces hierarchies and promises to give voice to learners (Broekman, 2002). There was evidence that ICT provided motivation and variety, generates enthusiasm, interest and involvement, maintains attention and enjoyment, enhances thinking and problem-solving skills (Sibiya, 2003).

Current technologies in e-learning such as AulaNet provide a groupware for creation, participation and maintenance of Web based courses emphasizing group learning where individuals share ideas online (Gay & Lantini, 1995). They have been described as a way to move from elite to mass education through digital media where more students get access to education for both campus and distance-learning students (Kennedy, 2001).

The success in designing and implementation of online courses has been said to require interpersonal, information collection and problem-solving interactions (Harris, 1995 cited in Afshari *et al.*, 2009). These kinds of interaction provide a large source of reference materials and data required for teaching and learning English. In general, educational studies have indicated that ICT programs can be effective and versatile in English language instruction and the challenge throughout ICMI history has been on how and where to integrate this technology in English language instruction. Another ICT English employed in the field of Education is E-learning. This can strongly be felt in the area of Distance Learning Services (DLS) being run by various tertiary



institutions; a purely online learning programme affording many to enroll in the tertiary courses in the comfort of their homes and convenience.

Digital culture and digital literacy: Computer technologies and other aspects of digital culture have transformed the way people live, work, play and learn, and have impacted the construction and dissemination of knowledge and power in the whole world. Graduates less familiar with digital literacy are increasingly at a disadvantage in the national and global economy. Digital literacy, the ability to seek, discriminate and produce information, and the critical use of new media for full participation in society have therefore become an important aspect of curriculum frameworks. In many countries, digital competence is built through the integration of information and communication technologies (ICT) in schools.

Specialist Discourse

The term "discourse" can refer to everyday conversations when used in the sense of "speech" or "language" (Robinson-Pant, 2010), which represents the micro level of social order. Dominance and inequality belong to the macro level of the social order (Van Dijk, 1998). Other researchers argued that discourse is not an amorphous mass. It has both structural and conceptual patterns, and readers and listeners use both, within a framework of contextual information and within the interpretation of the text. However, it can have a more specific meaning. Discourses are seen as systematically organized sets of statements that express the meanings and values of an institution.

In this sense, the preparation of student-teachers for more specialized communication in ICT English must be the subject of planned and strategic teaching, so that they meet the challenges of our globalized world while achieving better professionalization. ICT English has been developed to enable student-teachers, educators and others to become familiar with the ever-growing lists of information and communication technology (ICT) terms. Whether these professionals play technical roles or not, it is essential for them to know the basic terms in the field of ICT in an environment where the world has been globalized by ICT.

3.0 Materials and Methods

Training is an essential ingredient in helping student-teachers acquire the necessary skills and view technology as an agent of change. This means that training is a way to ensure users are able to use technologies such as the Internet, CD-ROMs and other electronic devices. Professionals such as teachers and educators need specific professional development opportunities in the ICT sector, such as participation in workshops, to improve their ability to use ICT for assessments of formative learning, personalized instruction, access to online resources, and to promote student interaction and collaboration. Such ICT training should have a positive influence on the general attitude of professionals towards ICT in their teaching disciplines.

Ojo (2005) stated that, having technologies is one thing, but whether or not people can use them effectively is another. The availability of technology has not automatically led students and professionals from the continent to use technology. Therefore, organizing workshops for people on the use of ICT equipment is not to be underestimated in this global era. Professionals and educational institutions need to be trained to use networked and electronic information services as effectively and productively as possible. Ongari and Okemua (2000) argue that an organization without relevant and appropriate training of its employees will lead to underperformance and collapse of that organization. Hence, student-teachers who are not well equipped with the relevant content in ICT English will always underperform in the English language classroom.



Study Design

To gain an in-depth understanding of the topic, this study has been carried out using the convergent parallel design. The research process can be symbolized as qualitative and quantitative (QUAL+QUAN; Morse, 1991). A convergent parallel design entails that the researcher concurrently conducts the quantitative and qualitative elements in the same phase of the research process, weighs the methods equally, analyzes the two components independently, and interprets the results together (Creswell & Pablo-Clark, 2011). With the purpose of corroboration and validation, the researcher aims to triangulate the methods by directly comparing the quantitative statistical results and qualitative findings. In the research process, two data sets have been obtained, analyzed separately, and compared. The research process in this study is given in Figure 1 below.

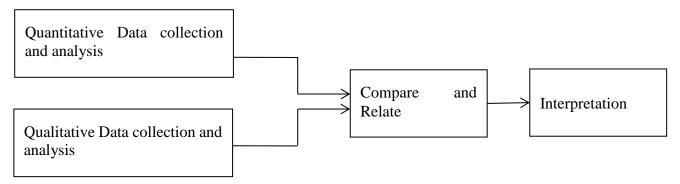


Figure 1.0: Conceptual Framework

4.0 Findings and Discussions

The study looked into the use of information and communication technology English in colleges' of education in Ghana. The results from each data collection instrument were further explained separately to answer the research questions. The results were presented in themes where each theme answered a research question. In all, answers to three research questions which include the types of ICT materials used by student-teachers in English language classroom, determine the usage of ICT English glossary by student-teachers and to identify phrasal verbs in ICT English used by college student-teachers were discussed.

In order to understand this, questionnaire was administered to three hundred (300) level 300 college students and three (3) ICT teachers from three Colleges of education in Upper West Region-Ghana. In a Similar way, three (3) English language teachers were also interviewed using an interview guide on how the student-teachers perceived the use of ICT English. In addition, the respondents made suggestions on how student-teachers' ICT English could be improved and possible causes of poor use of ICT English. The interview schedule allowed the researcher to obtain information that could not be captured in the questionnaire. Saunders (2009) posits that a return rate of fifty percent can be said to be adequate, sixty percent is good and seventy percent and above can be described as very good. The return rate for this study was 289 (87.5%) and can therefore be said to be very good and thus produced the desired result for analysis. The results of the questionnaire were analyzed using SPSS while the interview was analyzed thematically after they had been transcribed.



The discussion of the results was carried out based on the research questions. The first section discussed the results of research question one (1) which sought to find out the kinds of ICT materials in colleges of education. The second part discussed the results obtained from the research question (2). This research question sought to determine the usage of ICT English glossary by student-teachers in colleges of education. Finally, the third part discussed the results from the research question three (3) which was to identify phrasal verbs in ICT English used by college students in the various colleges of education.

Kinds of ICT materials used by teachers in English language classroom

The first research question of this study was to establish the Kinds of ICT materials used by teachers in English language classroom in the three colleges. This research question has four themes. To answer this research question, students' questionnaires were used to identify the kind of materials which were available and used in the three colleges. The first theme consists of questionnaire on projectors available in the colleges. The second theme consists of laptops in the colleges for students and teachers to use. The third and fourth themes covered mobile phones and pen drives respectively. This enabled the researcher to ascertain how participants made use of the tenets of technological pedagogical content knowledge framework propounded by Mishra and Koehler (2006). According to the TPACK framework, a teacher depends on three domains of knowledge for effective integration of ICT into teaching and learning (IITL).

The domains are content knowledge (CK), pedagogical knowledge (PK) and technological knowledge (TK). Mishra and Kohler (2006) defined CK as knowledge about the actual subject matter that is to be learned or taught. They observed that a teacher must know and understand the subject that they teaches, including knowledge of central facts, concepts, theories, and procedures if the teacher is to integrate technology in teaching. It also revealed participants understanding and knowledge of the fundamental principles of the theory. The study findings from the four themes indicated that the types of ICT materials included; projectors, laptops, mobile phones and pen drives. These resources were adequately available and relevant to meet the ICT English needs of the student-teachers.

Table 1: Kinds of ICT materials in the colleges of education

ICT materials	Frequency	Percentage	
Projectors	152	86.3%	
Laptops	72	41	
Mobile phones	171	97.1	
Pen Drives	80	45.1	

The data from table 1 above indicates that most of the students 152 (86.3 %%) identified that projectors were available for use in the college, 72 (41%) respondents identified laptops, 171(97.1%) identified mobile phones and 80 (45.1%) pen drives. These findings showed that most schools had projectors, laptops, mobile phones and pen drives. From the study, these materials were adequate enough for use by teachers and student-teachers to improve their level of communication with regards to ICT English.



Similarly, the interview results with the teachers in the various colleges of education indicate that student-teachers are well exposed to these ICT tools in the English language classroom to give them the necessary vocabularies to effectively communicate with the rest of the world.

Some of the comments from the interview session with teachers were:

One teacher said "students now read from the internet; they use the laptops and projectors on their own. The use of ICT English by students has improved compared to those days of complete absence of technology".

Another teacher said "We are only limited to bundle usage. Apart from that teaching with respect to the use of ICT and English language is far more than encourage. Just engage any of these students and see the kind ICT-English they will spew...."

To determine the usage of ICT English glossary by student-teachers in colleges of education

Table 2: The usage of ICT English glossary by student-teachers in colleges of education

Statement	SD	D	NS	A	SA	Mean	Sd.
ICT-English help me to acquire more vocabularies	F % 27 9.3	F % 0 0.0	F % 0 0.0	F % 144 49.8	F % 118 40.8	4.128028	3.773427
I use ICT-English glossary and terminologies to enable me pass	127 43.9	90 31.1	18 6.2	45 15.6	9 3.1	1.217993	1.711957
exam alone Through ICT- English I gather more phrasal verbs	18 6.2	28 9.7	26 9.0	81 28.0	13647.1	3.536332	3.582928
ICT and English are difficult to integrate when teaching	82 28.4	12643.6	27 9.3	54 18.7	0 0.0	1.031142	1.589324
ICT-English do not assist me in any way	10837.4	118 40.8	36 12.5	27 9.3	0.0	1.04745	1.222624

ICT-English help me to acquire more vocabularies

First and foremost, findings from the questionnaire indicated that 144 (49.8%) students agreed with the statement that they acquire more vocabularies through the use of ICT-English, 118 (40.8%) students strongly agreed with the statement and 27 (9.3%) students strongly disagreed with the statement. This has a cumulative mean value of 4.1 indicating that majority of the respondents agreed with the statement. Similarly, data from the interview results showed that



students acquire more vocabularies through the use of ICT-English and that helped them interact with people in the society.

ICT-English glossary and terminologies to enable me pass exam alone

From the Table 2 above, the data revealed that majority of the students (75.0%) were in disagreement with the statement implying that most of the time students do not use ICT-English glossary and terminologies to enable them pass exam alone but they either use it to communicate and interact with people in the society. This is made of 127 (43.9%) students who strongly disagreed with the statement that ICT-English glossary and terminologies to enable them to pass exam alone, 90 (31.1%) students disagreed with the statement and 45 (15.6%) students strongly agreed with the statement. Also, 18 (6.2%) students were not sure on the statement while 9 (3.1%) students agreed with the statement. The cumulative mean value of 1.2 is an indication that majority of the students strongly disagreed with the statement. Some ICT English glossary identified were:

Access Point: A wireless access point is a networking hardware/software device that allows a Wi-Fi-compliant device to connect to a wired network.

Cache: The temporary storage space or memory allows fast access to data. A common use is to store information in a web browser.

Cloud Computing: Storing and accessing information and services via remote servers hosted in the cloud or high seas and providing 24/7 internet service. The servers are not operated, backuped, or maintained by the SCOE IT department. Aerie's student information system and Escape are two applications that are currently based in the cloud. Boot: To start up a computer.

Cold Boot: Powering a computer up from the off position. A cold boot runs additional internal routines that are not otherwise run with a warm boot.

Warm Boot: Restarting a computer that is already turned on without first turning it off.

Kicking: Re-booting a device either with a cold or warm boot

Cookies: Text files retained on computers by browsers containing various information with regards to a

specific website visited.

Content Filtering: A technique whereby media is blocked or allowed based on analysis of its content, rather than its source or other criteria. It is most widely used on the internet to filter email and web access.

Firewall: A part of a computer system or network designed to block unauthorized access while still allowing authorized communications.

Peripheral: Any device in a computer system that is not essential to the operation of the computer. Printers and scanners are just two examples.

Router: A network device whose software and hardware are customized to the tasks of routing and forwarding information, similar to the USPS.

Virtual Server: A server which recreates the functionality of one physical server that shares its resources amongst multiple applications rather than being a dedicated server running only one application.

Hotspot: An area on a digital device that has an available wireless signal for Internet access (usually public or protected by using a password).

Internet: A global interconnection of computer networks through servers and routers. Two popular services of the Internet are the World Wide Web and electronic mail.



Memory: Memory is for the temporary/permanent storing of information while a computer is being used.

Modem: Equipment connected to a computer for sending/receiving digital information by telephone line. You may need a modem to connect to the Internet, to send electronic mail and to fax.

Virus: A small, unauthorized program that can damage a computer.

Through ICT-English I gather more phrasal verbs

A phrasal verb is a phrase with two or more words: a verb and a preposition **or** adverb, or both. This paper is focused on current phrasal verbs used with technology. The digital age has created many new words and phrases in English. The world of technology is fast-changing, and it has broken many traditions. It is natural that the language of computers would also change and be informal. Not only is the language of technology full of phrasal verbs, it is also full of new nouns. Many of those nouns grew out of phrasal verbs.

From the table 2 above, 136 (47.1%) students strongly agreed with the statement that they through ICT-English they gather more phrasal verbs and 81 (28.0%) students agreed with the statement. Again, 28 (9.7%) disagreed with the statement, 26 (9.0%) students were not sure on the statement and 18 (6.2) strongly disagreed with the statement. All these have a cumulative mean value of 3.5. It can therefore be concluded that majority of the students (75.1%) from public colleges of education agreed that they gather more phrasal verbs through ICT-English to boost their communication competences. Some phrasal verbs that student-teachers have gathered through ICT-English were as follows:

Phrasal Verbs for Technology and Computers

Phrasal V	Yerb Meanings/Word Class	Example
log sign sign-in	in password in page or act of registering permis program	username and To begin, log in to your desktop sion to use a system.
hook up	v. to connect wires from machines to a or other machines	power source Would you please help me hook up the Internet cable?
power turn on	up v. provide power to a machine	Press the red button to power up your tablet.
boot start up	up begin running a computer system	Wait a second, my computer is booting up.
Set up	v. to install a new computer program computer systemn. the process of adding information usi program	This application took a long time to set
pull pulldown	v. choose from a menu of options idown application extending down from the acwindown. a menu of options	n a computer stion bar like a Look for the file menu and pull down blind to "Save As"



click on	move a mouse over an item and press to select	Click on the start menu to begin.
scroll up scroll down	to move slowly to the top or bottom of a text	The news story was so long I had to scroll down a lot to read it all.
run out of	exhaust a supply of something	You will run out of disk space if you save copies of all your emails.
back up backup	v. make an extra copy of a filen. an extra copy of a file	Be sure you back up your files before you change systems.
print out printout	v. send an electronic document to a printern. a printed document	I have to print out the directions before I leave home.
hack into	enter a computer or network illegally	Someone hacked into my bank and stole millions of dollars.
go down	stop operating properly	I cannot send any emails because the server went down.
wipe out	completely erase or delete files	Before you donate your computer, be sure you wipe out the hard drive.
pop up popup	v. to appear suddenly n. an advertisement that appears suddenly on a computer screen	If you do not want to see the ads, turn on your pop up blocker.
plug in plug-in	v. insert a cord into an outlet or portn. an addition to a software program that performs a certain task	Plug in your laptop over there.
sign up	register with a service	She signed up for an online dating service.
key in	type or enter characters using a keyboard	It takes too much time to key in that long password.
opt in / out	choose to receive advertising or messages	The company asked me to opt in to ge special offers by email.
filter out	remove unwanted email messages	Can we filter out all the spam on thi account?
turn off shut down power down	end a session on the computer by closing an application or removing power	I'm tired, so I'm going to shut down the computer for today.
go online/offline	to use the Internet / not use the Internet	I will send you that information as soon as I can go online .

ICT and English are difficult to integrate when teaching

From Table 2 above, 126 (43.6%) students disagreed with the statement that ICT and English are difficult to integrate when teaching, 82 (28.4%) students strongly disagreed with the statement and 54 (18.7%) students agreed with the statement. On the other hand, 27 (9.3%) students were undecided on the statement. With the mean value of 1.0, it can therefore be argued that majority of the students (72.0%) disagreed with the statement that ICT and English are difficult to integrate when teaching implying that majority of the students can actually integrate when teaching. The



study findings also showed that majority of the college students (90.6%) believed that ICT and English are very easy to integrate when teaching.

ICT-English do not help me in any way

The data from the Table 2 above further showed that, 118 (40.8%) students disagreed with the statement that ICT-English do not help them in any way, 108 (37.4%) students strongly disagreed with the statement, while 36 (12.5%) students were not sure and 27 (9.3%) students agreed with the statement. With the cumulative mean value of 1.04, it can be said that majority of the students (68.2%) from colleges of education strongly disagreed with the statement that ICT-English do not help them in any way.

5.0 Conclusions

The following key conclusions have been formed considering the findings: ICT English usage has undoubtedly made a lot of student-teachers to acquire more vocabularies to enable the function well in the society as well confidently interact with the outside world. Findings show that most the student-teachers now have mastery of phrasal verbs that have been formed through the combination of ICT terminologies with a verb and a preposition or adverb, or both. The digital age has created many new words and phrases in English. Most colleges of education according to this study employ the use of sophisticated ICT equipment and have in their custody projectors, laptops, mobile phones and drives. The world of technology is fast-changing, and it has broken many traditions. It is natural that the language of computers would also change and be informal. Not only is the language of technology full of phrasal verbs, it is also full of new nouns. Many of those nouns grew out of phrasal verbs.

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