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Teachers' ICT Literacy and Utilization in English Language Teaching

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ABSTRACT

The successful integration of Information and Communications Technology (ICT) into the teaching and learning of English Language is largely dependent on the level of teacher's ICT competence, the actual utilization of ICT in the language classroom and factors that challenge teachers to use it in language teaching. The study therefore assessed the Secondary School English language teachers' ICT literacy, the extent of ICT utilization in English language teaching and the challenges that prevent language teachers to integrate ICT in teaching.

To answer the problems, three sets of survey questionnaires were distributed to 30 English teachers in the 11 schools of Cluster 1 (CarCanMadCarLan). Data gathered were analyzed using descriptive statistics and frequency count.

The results revealed that the teachers' ICT literacy was moderate. The findings provided evidence that there was only a limited use of ICT in language teaching. Feedback gathered from questionnaires show that teachers faced many challenges that demotivate them from using ICT in language activities.

Based on these findings, it is recommended the teachers must be provided with intensive ICT-based trainings to equip them with knowledge of ICT and its utilization in language teaching. School administrators as well as stakeholders may look for interventions to upgrade school's ICT-based resources for its optimum use in teaching and learning. Most importantly, a larger school-wide ICT development plan may be implemented to ensure coherence of ICT implementation in the teaching-learning activities.

Introduction

Information and Communications Technology (ICT) is considered nowadays as a potential tool that provides educational opportunities in both formal and non-formal ways. In the teaching-learning process, ICTs can increase the learner's motivation and engagement in classroom learning. It equips learners with digital age literacy, inventive thinking, higher-order thinking and sound reasoning, effective communication, and high productivity (Tinio, 2002).

Recently, DepED launched the National Strategic Planning Initiative for ICTs in Basic Education as part of a system-wide reform process to bring Philippine basic education out of crisis. Round table discussions and consultative meetings attended by different agencies and organizations formulated the National Framework Plan for ICT in Basic Education which set parameters, goals, and strategies for ICT integration in the Philippine Basic Education. The plan sought to respond to the genuine need of the public school teaching and learning system.

However, despite its rigorous efforts to promote ICT-integration in the school's computerization program, teachers' training, IT curriculum development, and multimedia content development, the Department of Education continues to grapple with the problems related to ICT-based instruction. The result of the National Competency-Based Teachers Standards – Teacher's Strength and Needs Assessment (NCBTS–TSNA) specifically on strand 4.7, shows that the teacher's skills using ICT in teaching and learning falls under the beginner level. This means that the integration of ICT in the classroom is limited. This can be attributed to teachers' low level of ICT competence, insufficient ICT-based training, and limited ICT resources.

The DepEd's vision of increasing the student's academic performance through intervention activities such as the integration of ICT in the teaching and learning process continues to be a challenge. The results of the National Achievement Tests (NAT) in English for the last three years still did not meet the National Planning Standard of 75%. The scenario indicates that the DepEd's dream of increasing the academic performance of pupils in English through the aid of technology has not been realized.

Secondary schools in Cluster 1 – CarCanMadCarLan area consisting of five (5) municipalites (Carrascal, Cantilan, Madrid, Carmen, Lanuza) of Surigao del Sur Division, encountered challenges relevant to the utilization of ICT in classroom instruction. Despite being the beneficiaries of DepEd Computerization Program (DCP), teachers in these municipalities still have limited extent of ICT literacy and utilization based on the consolidated result of the schools' NCBTS-TSNA. Furthermore, the English NAT MPS results of Cluster 1 indicated a very low performance of the pupils for the last three school years. This low academic performance in NAT could be partly attributed to inadequate English language teaching.

This study provides basis for understanding ICT literacy as well as its utilization and the challenges of integrating ICTs into language teaching. Determining teachers' ICT literacy and describing their levels of technology utilization needs to be prioritized to address some of the problems currently affecting the Philippine educational system.

Statement of the Problem

This study determined the ICT literacy of the English teachers, their utilization of ICT and the challenges encountered by them in using ICT in language teaching.

Specifically, the study answered the following research questions:

1. What is the ICT literacy level of Cluster I English teachers in terms of:

    1.1 General Computer Knowledge

    1.2 File Management Knowledge

    1.3 System Maintenance and Security Knowledge

    1.4 Word Processing Skills

    1.5 Communication Skills (E-mail)

    1.6 Web Skills

    1.7 Presentation Skills (PowerPoint)?

2. To what extent do English teachers use ICT into language teaching?

3. What are the challenges encountered by teachers in utilizing ICTs into language teaching?

Framework of the Study

This study is anchored on Gupta's (2006) concept that computer literacy is associated with the ability to use a computer. It includes basic awareness of computer terminologies and competence to operate computer's specific functions. He further emphasizes that computer literacy is an individual's knowledge and ability to operate a computer system, his/her basic understanding of the operating system to save, copy, delete, open, print documents, format a disk, use computer applications software to perform personal or job-related tasks, use Web browsers and search engines on the Internet to retrieve needed information, and his/her ability to communicate with others by sending and receiving email. Further, a computer literate teacher should be able to use a computer to conduct research and to solve problems related to the major discipline. In this regard, computer literacy is associated with application literacy, which is the ability to use specific software applications such as word processing, spreadsheet or presentation software.

Aside from the concept of computer literacy, Grabe and Grabe (2001) believe that incorporating technology into teaching where it is appropriate, helps promote active learning, facilitates student-centered learning and results into more positive attitude toward the subject, better understanding of the concepts and advancement in the use of creative and higher order thinking skills.

Moreover, this study considered the Technology Acceptance Model (TAM) which describes how users come to accept and use technology. Davis (1989) stresses that when users are presented with a new technology, a number of factors challenge their

decision about how and when they will use it. Two challenges are emphasized: the perceived usefulness and the perceived ease-of-use.

Lastly, this study was also influenced by the DepEd's National Competency-Based Teachers Standards – Teacher's Strength and Needs Assessment Tool (NCBTS–TSNA) which identifies, monitors, and evaluates the professional strengths and development needs of the teachers. As reflected on this tool, one strand assesses the teachers' demonstration of ICT skills in teaching and learning. Somehow, this measures the teacher's level of ICT utilization to enhance the quality of teaching and learning.

The specifications of the NCBTS-TSNA influenced the present study in assessing the teachers' ICT literacy, the actual utilization of ICT tools in language teaching as well as the challenges encountered during the application of ICT in language instruction. Strand 4.7, which evaluates the teachers' skills and their use of ICT in teaching and learning, gives insights to the researcher to undertake a similar mode of assessment.

Applying Gupta's (2006) concept, Figure 1 is shown illustrating the framework of the study. Teachers' ICT literacy is determined by two factors. These factors are awareness and competence. Awareness is the teachers' knowledge on computer backgrounds and terminologies while competence is the teachers' skills to manage and operate specific computer operations. This implies that English language teachers are considered ICT literate when they are aware of computer terminologies and competent in managing and manipulating specific computer operations tasks. These literacy factors determine the extent of teacher's ICT use in English language teaching. The lines connecting the boxes indicate the relationship of the factors in the ICT-laden language teaching.

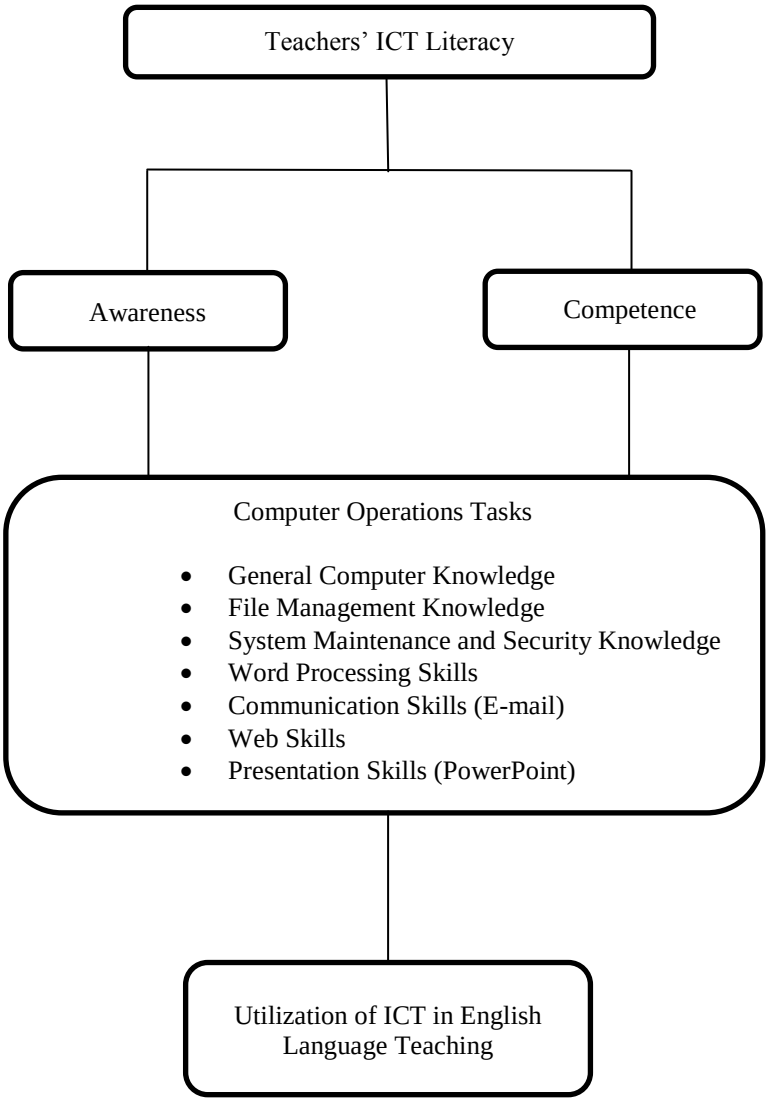

Figure1. The schematic diagram showing the teachers' ICT Literacy and Utilization in English Language Teaching

Review of Literature

On Teachers' ICT Literacy

Perez and Murray (2010) claimed that computer literacy is directly pointed on individual's technology literacy, computer fluency, computer competence, cyber literacy, digital literacy or electronic-literacy. This electronic, digital, or technology literacy is associated with activities such as reading, writing, exchanging information and communicating in online environments. Computer literacy on the other hand has been associated with application literacy which focuses on the ability to use specific software applications such as word processing, spreadsheet or presentation software. With these ideas, teacher's ICT literacy is acknowledged through the mastery level of his manipulation in both electronic, digital or computer technologies.

Earlier concept of computer literacy involves knowledge and awareness of computer's basic operations (LaLomia and Sidowski, 1990). The ability to identify computer peripherals, to operate specific functions and basic programs, to design user preferences and to manage applications are initial factors of computer literacy.

Manley, Sweany, and Valente (2000), presented similar notion that some of the most basic computer literacy skills include using word processor, email, mailing lists, and the World Wide Web. These skills are essential in todays' school systems as more tasks are completed using computer technologies. On Aina's (2001) conclusion, computer literacy could be measured in terms of ability to operate the computers system and use some of its application packages to accomplish a given task. These application packages are Ms-Excel, Microsoft word, Microsoft Power Point etc. Accordingly, computer literacy is the knowledge and ability to use computers and related technology efficiently and effectively. Users should have the ability to operate a computer and understand the language used in working with a specific system. This accounted computer literacy as a very basic understanding of how computers work. Congruently, Al-Alaoui (2006) specified that computer literacy involves familiarity of computer's input devices such as keyboard, mouse, diskette, CD, microphone, and web camera. Furthermore, knowledge on the use of output devices specifically the soft copy devices and hardcopy devices; familiarity with word processing and data entry; ability to save, copy, and move files; navigating the internet through web browsers; and using emails for communication are general scope of computer literacy.

On Teachers' ICT Utilization in the Teaching-Learning Process

According to Becker, Ravitz, and Wong (1999), word processing software, CD-ROM reference software, and World Wide Web browsing software were the most commonly used applications by teachers of all subjects since these were the most available ICT resources accessible everywhere. The use of these ICT tools in language education has developed from the earliest stages in audio tapes, word processing, and CD-ROM to Internet browsing, online interaction with peers and people of similar interests using computer mediated communication (CMC).

Higher forms of ICT usage includes "synchronous" or "asynchronous" process such as involvement of chat, video teleconferencing, whiteboard, discussion forum, social networking sites, email and other forms of technology including blogs, wikis, IPod, and MP3s. The extensive use of Web components, Internet, blogs, e-groups, emails, socializing portals, e-

dictionaries, e-encyclopedias, PowerPoint presentations realizes the thrusts of ICT-mediated language teaching and learning (Murray, 2005). In similar ways, language educators have recognized various uses of network communication tools in the language class. The use of World Wide Web as a virtual library of information, writing project through the use of the Internet, communicating among group of students through email or an online chat-room, web-based course programs, and using web pages for publishing project work were few of the activities that aid the ICT-based approach in language teaching (Lee,2002).

According to Seljan, Berger, Dovedan (2004), the Internet and the World Wide Web have provided an incredible language learning applications, offering a wide variety of educational programs, resources, software, journals, organizations, software tutorials including all types of exercises for grammar drills, vocabulary, listening and pronunciations exercises, games, electronic dictionaries, etc.

Poyatos-Matas and Birch (2000) also emphasized that the internet is an attractive source of information. The web as another powerful tool and a flexible internet application offers authentic multimedia nature that presents text, pictures, sounds, video clips, etc. This web features have the ability to satisfy user's needs and attracts their attentions. These equip both self-learning skills and strategies to effectively promote lifelong learning.

Sinclair (2000) emphasized that the World Wide Web combines a variety of modes linked with learning. It is a reference library that is always open and growing. It provides ways of sharing and communicating visually, textually and symbolically. Learning technologies using asynchronous and synchronous communication tools, such as email and chat, and multimedia technologies, such as graphics, video, and animation, enable the implementation of these strategies (Dabbagh & Bannan-Ritland, 2005).

On Teachers' Challenges of Utilizing ICT

Tinio (2002) categorized five factors which include; (1) the teacher's skills in the actual use of ICT in teaching, (2) the ICT resources, (3) the perceived attitude of teacher's towards the use of ICT in teaching, (4) the technical support and needs and (5) staff development towards ICT use. Teacher's lack of expertise in using ICT hinders teacher's confidence in using it (Hennessy, Harrisson and Wamakote, 2010). The successful integration depends on the ability of teachers to structure their learning environments in non-traditional, merging technology in new pedagogies. Smeets et. al. (1999) further added that the skills of teachers influence most on their uses of computers, specifically those skills related to their competence in classroom management activities, to their pedagogical skills and, less importantly, to their computer-handling technical skills.

Khan, Hasan, and Clement (2012) pointed out that effectiveness of using ICT requires the availability of equipment, supplies of computers and their proper maintenance including other accessories. They believed that implementing ICT demands other resources, such as computers, printers, multimedia projectors, scanners, etc - which are not available in all the educational institutions. On the other hand, Becta (2004) stressed that the inaccessibility of ICT resources is not only due to the non-availability of the hardware and software or other ICT materials within the school but a result of poor organization of resources, poor quality hardware, inappropriate software, or lack of personal access for teachers.

As Newhouse (2002) conceptualized, the use of inappropriate hardware, the absence of useful software and the difficulty in gaining adequate access to computer systems are considered major obstacles of ICT integration in schools. Thus, there is a need for a thorough selection of hardware and software tailored for language teaching. ICT requires appropriate and up-to-date

hardware and software. Using up-to-date hardware and software resources is a key feature in the diffusion of technology (Gulbahar, 2007). High-speed internet connection is another prerequisite for integrating ICT into the teaching-learning situation. Unfortunately internet access is very poor in almost all schools. The absence of these ICT tools hampers teacher's goals in integrating ICT in teaching-learning pedagogies.

Moreover, the teachers' attitude towards ICT integration affects this non-traditional approach.

Lee (2001) issued a position stating that teachers must have a comfortable level of ICT competence. Acquiring basic skills in ICT and ensuring the students' learning in their charge can make progress if ICT is used in an incremental way. He emphasized that unless teachers are functioning at the comfortable level of ICT skills and knowledge, they will be unable to integrate ICT as a primary tool for teaching and learning across the curriculum. Teachers need to inculcate the willingness to learn enough about ICT to make effective use of it in the classroom.

There are some existing evidence regarding the access and availability of ICT resources, but teachers cannot use ICT in the classrooms because it may be difficult for them to operate ICT tools. In some cases, technology malfunctions can happen anytime. Technical problems were among the major barrier for teachers to use ICT in teaching (Sicilia, 2005). These technical barriers include prolonged loading of websites to open, failure to connect to the Internet, applications and printers not responding, and malfunctioning computers due to booting errors.

Additionally, Becta (2004) reported that lack of technical support and maintenance available in schools results to higher risk of technical breakdowns. These technical faults may discourage teachers from using ICT in their teaching because of the fear that equipment might break down during the lesson presentation. According to Bingimlas (2009), teachers always need technical assistance to provide appropriate manipulation of the up-to-date equipment in the new world of technology. Technical support allows access to ICT resources and then helps the successful integration of technology in the teaching process.

Cox (2004) finally reported that the continuing need for further professional development of teachers enable them to understand the value of ICT to their curriculum and to their learners making them prepared to use it. Teacher training in the classroom use of modern technology helps increase teacher's efficiency in using ICT in education (Bingimlas, 2009). Training includes basic skills in using technology as well as the integration of those technologies into interactive and effective teaching. Bingimlas also suggested that increasing competence and improving ICT use could be done through self-training.

Methodology

This study used the descriptive method. Data collection was based on the questionnaire that evaluated the English teachers' ICT literacy, ICT utilization and challenges in using ICT in language teaching. The study was conducted in Cluster – I (Carcanmadcarlan Area), Division of Surigao del Sur. Cluster – I consists of five (5) municipalities namely; Carrascal, Cantilan, Madrid, Carmen and Lanuza. It has thirteen (13) secondary schools of which eight (8) are nationalized high schools and six (5) are integrated schools. These schools have been recipients of the DepEd DCP's grants.

The subject-respondents of this study were the thirty (30) English teachers of Cluster – I. These 30 identified teachers were handling English subjects representing all year levels. They were given questionnaires that measure their ICT literacy, their

actual use of ICT, and the challenges they encountered in utilizing ICT. Purposive sampling was used in this research since all English teachers from the schools in Cluster – I were taken as respondents of the study.

A survey questionnaire on Computer Literacy Self-Assessment Tool earlier developed by Postgraduate Diploma in Technology for Language Learning (PGDip TELL) was used to assess the extent of English teachers' ICT literacy level on (a) General Computer Knowledge, (b) File Management Knowledge, (c) System Maintenance and Security Knowledge, (d) Word Processing Skills, (e) Communication Skills-Email, (f) Web Skills and (g) Presentation Skills – Powerpoint. An adapted questionnaire earlier developed by Hutchison (2009) consisting of 22 items soliciting responses on a 5-point Likert Scale was used to assess Teachers' utilization of ICT in language teaching. Open-ended question that allows the teachers to identify and list the challenges that prevent them from utilizing ICT in language teaching consist the third section wherein teachers are free to write the experienced challenges in integrating technologies in English language teaching. These tools underwent reliability examination taking thirty (30) secondary English teachers of Bukidnon Division as respondents.

Mean, standard deviation and frequency count were the statistical tools used for the analysis of data.

Findings and Discussions

English Language Teachers' ICT Literacy

On English Language Teachers' General Computer Knowledge

Table 2 reveals the *English language teachers' general computer knowledge.* Generally, results indicate that to a *large extent*, teachers demonstrated literacy on basic computer operations tasks. This means that teachers were *aware* and *competent* on general computer operations. As shown in the table, the computer task on *opening, using and closing programs using the start menu* has the highest mean. The result implies that the teachers were *aware and competent* on this task. Since the start menu is the basic launching point for computer applications and tasks, providing quicker and easier ways for teachers to launch programs, find files and access the recently opened documents, English language teachers were knowledgeable in handling this operation.

Using the mouse to "drag" an item as well as *understanding the functions of the left and the right mouse buttons* were also exhibited by teachers to a *large extent*. This shows that most teachers can use the mouse to interact with the items on the computer screen. Aside from that, it also indicates that they were able to move objects, open them, change them, throw them away, and perform other actions by pointing and clicking with the use of the mouse.

The task on *rebooting or restarting computers* was performed by teachers *competently*. In cases where minor system problems were encountered, teachers were aware that rebooting/restarting may help computer system administrators to refresh the operating systems or to terminate minor technical problems. As one of the most common "solutions" of treating computer-related problems, rebooting computers was used by the teachers to shut everything down and reset computer systems back to running condition.

Teachers' knowledge on the *importance and uses of computer "icons"* as well as the *ability to adjust monitor, resize and change computer's display properties* was also found to be proficient. This implies that the teachers were aware of the icons' functions

and were able to use these as file shortcut to access directly the program or data. This indicates further that the teachers could move directly into and out of the identified function without knowing the location or requirements of the file or code. Teachers at the same time can create and delete, replicate, select, click or double-click standard computer icons and drag them to new positions on the screen to create a customized user environment. The teachers were also competent in adjusting the size and the shape of the desktop to fit their personal preferences.

These results are substantiated by the baseline data showing that majority of the English language teachers in Cluster 1 - CarCanMadCarLan have attended basic computer literacy crash courses and trainings on basic computer operations for the last three years. These trainings were conducted during Mid-Year Review INSETs (In-service Training for Teachers) either in school or at the cluster-based level. Basic computer operations included in these INSETS were general computer tasks on identifying parts of the computer, booting or opening computers, rebooting or restarting, opening and closing pre-installed programs, clicking and dragging using the mouse, and shutting down computers.

However, *knowledge and skills on running or operating programs through the use of CD*, *using two storage devices*, and *opening more than one program at a time* were few of the tasks in which teachers were found to be *moderately competent*. This was probably the outcome because such computer tasks were not given much focus in basic computer literacy trainings in CarCanMadCarLan during mid-year INSETs since these operations are relatively complex and involve critical understanding of certain functions. Failure to correctly operate these tasks may damage the computer system.

The results indicate further that English language teachers seldom used CD to boot or install computer operating systems which run in the computer memory. They always relied on pre-installed programs available already on computer systems. Whenever canned programs were available on CDs, teachers would look for an expert to operate the CD programs on the computers.

Teachers' knowledge on *using two storage devices* was also found to be *moderate*. This shows that teachers had minimal backgrounds on the functions of computers' primary and secondary devices. These storage devices enable computers to save settings, information and files. Teachers who are not able to identify storage devices for saving files have problems in locating previously saved files.

Multitasking as a special feature of computers allows the users to *simultaneously open and use programs*. The teachers' skill on this task was *moderate.* This means that they rarely open more than one program at a time and seldom move programs on the computer's screen. Lack of ability to use this task consumes much time for teachers to finish computer related activities involving multiple task programs.

The teachers' knowledge of general computer operations is an important step towards integrating ICT into language teaching. The degree of familiarity and the ability to manipulate basic computer tasks will help teachers to incorporate technology into classroom activities and to appreciate the technologies' versatility as an important tool in teaching and learning. This implies that teachers who know the general computer functions will most likely explore the use of the multifaceted computer tasks since they have mastered the basic operation skills. Teachers with enough knowledge about computers are more prepared to handle complex computer operations. They are also able to integrate computer technology in language teaching.

On English Language Teachers' File Management Knowledge

Table 3 shows that the *English language teachers had a large extent of knowledge on computer file management.* It indicates that teachers were aware of file management tasks and were competent in managing files and other related operations. The result reveals that the computer operation task on *searching files on computers* has the highest mean. This means that teachers were *competent* in searching saved files on computer's storage disk and knowledgeable in searching files using the Search bar provided on the Start Menu. In case problems were encountered on looking for saved files or documents, teachers directly used the Search bar to look for misplaced data.

Tasks *on deleting files, emptying recycle bin and restoring items or files from the recycle bin* were also used by teachers to a *large extent*. This means that teachers were aware and competent in freeing up computer storage spaces by removing unnecessary files. Besides, they were also able to empty trashed files in the recycle bin as well as to restore files that were accidentally sent to the recycle bin.

It is also reflected on the table that teachers were *knowledgeable on the acceptable forms of filenames* specially when saving electronic documents. They were also *competent* in *creating folders and saving files to a created folder* either on computer desktop or on its hard drive locations. This tells further that teachers were able to use appropriate directory and file names in storing data in certain folders to keep the files organized. Aside from their competence in creating folders, they were also able to manage their files on the computer's desktop or on the computers' hard disk drives.

The respondents were competent in *copying documents from hard disks to flash drives and vice versa.* This shows that teachers can transfer files from computer to their flash drives commonly termed as USB (Universal Serial Bus). Since most of the teachers owned USBs for storage of their personal files, they were able to handle, organize and copy files from both devices.

On the other hand, the language teachers' competence on *navigating file structures using Windows Explorer* was found to be *moderate*. Most likely, teachers were directly using the Search option at the Start Menu since it provides the quickest way to find files on computers. Windows Explorer was not commonly used since it needs series of instructions before getting into search functions.

Teachers were found to be *moderately competent* in *creating shortcut on the desktop*. This means that they were moderately knowledgeable in creating and using shortcut icons of files and software on the desktop. As desktop shortcuts allow quick access for users to start a program or open a file or folder, teachers preferred to launch and operate programs and files from their exact location on the computer. Further, the result of this task implies that teachers seldom create and use shortcut icons on their computer desktop to open files, folders and programs/applications.

Knowing the difference between file formats is a prerequisite for teachers to manage computer files and documents correctly. On this task, teachers were found to be *moderately competent*. This indicates that teachers hardly identify and understand file formats and the functions of file extensions in every saved document. Since they had moderate knowledge on the importance of file formats and file extensions, they were unaware that computer files need appropriate document format to process application properly.

The result generally implies that the English language teachers in Cluster 1, Division of Surigao del Sur properly managed their personal electronic files or their teaching-related records. Such management tasks include keeping data by using save functions,

transferring data to necessary storage devices by utilizing copy functions, freeing up spaces from computer's storage devices, restoring important files on the computers, and organizing files by using appropriate data filenames and systematic folders.

Other findings of this study show that the teachers' management skills enabled them to operate files quickly according to their classifications and formats. ICT-based activities saved in the computer's system and other external storage devices were made accessible. The easy access to files will provide teachers and learners with fast, comprehensive and efficient process of language instruction.

However, the teachers' moderate competence in handling computer operations need to be appropriately addressed. Providing teachers with comprehensive knowledge in employing related tasks facilitates ICT-mediated instruction. This entails intensive orientation for teachers regarding file directory operations using Windows Explorer and the importance of knowing the different file formats in classifying files. When skills on these tasks are mastered, teachers are able to operate with their files comfortably.

On English Language Teachers' System Maintenance and Security Knowledge

Table 4 shows the *English language teachers' knowledge on computer system's maintenance and security*. As reflected on the table, the teachers had a *limited extent* of computer literacy on maintenance and security tasks. This means that although teachers were aware of computer system management and security issues, they were not competent in handling computer security and maintenance operations. It is clearly reflected on the table that the *teachers' knowledge and ability on computer practices and activities that puts computer into risk for virus infection* were inadequate. This inadequacy shows that they were *not competent* in managing and supervising activities that may harm computer systems. Teacher's activities that may harm computer systems

include visiting infected websites containing illegally obtained software, downloading infected files from the internet, opening and downloading infected files attached to emails, installing applications that have been accompanied by viruses and installing applications masquerading as security or anti-spyware applications.

The teachers' *limited competence* in *using and maintaining up-to-date anti-virus program to check or scan computer applications and files for viruses and infections* threatens their computer systems' safety. In most cases, computers' anti-virus programs used by teachers are free anti-virus software from the internet. These free downloadable softwares masquerading as anti-spyware or anti-malware hide several virus, malware and adware. Installing them to computers may damage systems and corrupt data. Teachers need to be knowledgeable enough to avoid using illegally or internet-free anti-virus programs. They also need to understand the importance of using legitimate and licensed softwares to ensure maximum computer security and protection.

It is also reflected on the table that teachers were *not competent* in *installing programs, upgrading applications and removing unused programs using of add/remove function in Windows*. This shows that they had no capabilities in software installation processes such as copying necessary files, configuring software registry, and creating desktop or Start menu shortcuts. It also indicates that they lacked the ability of modifying installed programs by adding or removing features after the initial installation; repairing installed application through automatic program reinstallation; and upgrading software to keep operating systems and softwares up-to-date. As a result, the teacher's limited competence to install new software hinders them from updating or

upgrading their computer systems. Mastering these tasks enables them to access their required software and ensures them to have the software for their instructional needs even without the help of the administrator or technical support personnel.

Although teachers were aware that removing programs free spaces in computer storage devices, they encountered difficulties in uninstalling unnecessary programs. Teachers were incapable of removing the software completely and safely from computers when it is no longer needed. This includes the removal of all the files, registry entries, and key shortcuts associated in the software. Failure to perform this task may diminish the performance of the computer and may also jeopardize its speed and multitasking functions due to prolonged data loading caused by the presence of excessive but unnecessary files.

Computer maintenance activities like *diagnosing and correcting common software and hardware problems using the online and offline self-help resources* obtained the *lowest means*. This suggests that teachers were not competent in basic troubleshooting activities using device manuals, internal system troubleshooters, or online help provided by the company's costumer network services. This will limit the teachers' productivity because they will need computer experts to troubleshoot the problems. In times that no troubleshooting experts are available, malfunctioning computer units tend to be left unused until such time that experts are hired to examine and fix them.

The extent of teachers' *understanding on how programs differ from data and how they are organized, stored and accessed* was *moderate*. This result parallels with the teacher's competence on file management specifically on the awareness of different file formats. When teachers are skilled in identifying different file formats, they can understand distinctions between programs and data. They can also recognize how these programs and data are arranged by the computer systems and how they are accessed safely.

Creating back up files is an important activity for teachers to avoid losing files in case the computer system malfunctions. The table reveals that teachers' competence on this task was *moderate.* This means that they did not always create duplicate copies of files in their personal storage devices such as CDs or USB drives to ensure data safety. Their moderate ability to perform this task will most likely result to hassles in finding and restoring lost files and programs. Incidences of losing files can happen anytime. Teachers need to realize that the more important the data, the greater is the need for creating back up files for their data when storing them in the computer.

When teachers are less competent to perform computer maintenance and security operations, computer integration in teaching and learning may be hindered. Since there are sensitive technical glitches that may harm computers when not given immediate actions, teachers need to be knowledgeable in maintenance activities and security tasks. Teachers must not always be dependent on computer technicians or other ICT experts to troubleshoot problems. They themselves must learn to fix problems that may occur when an ICT gadget malfunctions in the middle of a lesson.

On English Language Teachers' Word Processing Skills

Table 5 shows the *English language teachers' skills on word processing.* The result reveals that the teachers had a *large extent* of literacy in terms of word processing skills. This means that they were aware and competent in doing word processing tasks. The teachers were aware and competent in *changing and using different fonts, font styles, sizes and colors* within the document. This means that they could classify and use different fonts from the series of font choices available on the formatting toolbar.

Their knowledge on font or typeface options enables them to perform this task comfortably. The results also showed that the teachers were competent in using font toolbars and in specifying different font styles such as the use of bold, italics or underline icons. They were also found to be competent in changing sizes as well as changing font colors according to their preferences

Since teachers were *competent* in using the mouse buttons to interact with the computer items, similar level was manifested in *dragging a block of text within a document through the use of the mouse.* This shows that teachers can easily interchange texts or characters within the document by simply blocking the items and dragging them to another location.

Editing, copying, deleting, cutting and pasting block of texts are some of the distinctive features of word processors. It is evident that teachers were *knowledgeable and competent* on these features. This shows that they were skilled in inserting text elsewhere in the document (editing), duplicating sections of texts (copying), erasing characters, words, lines or pages (deleting), removing a section of text from one place in a document (cutting) and inserting it somewhere else (pasting).

The table also reveals that teachers were also *aware* and *competent* in *inserting, removing and modifying margins, using tabs, headers and footers, inserting page numbers and applying desired line spacing* into word processor. Teachers were capable to define various page sizes and were able to insert, to customize and to specify different margin sizes within the document and to apply these methods to indent paragraphs.

They were also competent in using tabs to align the document's marginal spacing and in inserting headers and footers to customize the top and bottom spaces of every document page. They could insert page numbers and keep track of them to see if the correct number appears on a page. Application of proper line spacing into word documents has also been mastered. This permits them to apply and to adjust spacing between line rows to achieve their chosen designs.

Moreover, teachers were aware and competent in *creating table in a word processing document*. This indicates that teachers were able to automatically insert or draw tables within the document. They were also skilled in laying out table sizes and customizing required number of columns and rows.

The teachers were also found to be *competent* in terms of their *knowledge on the importance and use of clipboards* in making word-based documents. This implies that they utilized the clipboard in creating their documents and in doing other tasks in word processing. .The clipboard enables them to cut, copy, format painter and paste characters and items in different sites.

Spell checking and proofreading are very important activities in the content writing on word processing. As can be seen in the table, teachers were also *competent* on these tasks. They were aware of the spell checker utility's function and its task of checking errors on the texts of characters being encoded. When teachers encountered highlighted words in either green or red on their outputs, they were aware that their work contained errors in character spacing, spelling, wrong use of punctuation mark and even grammar. They were also aware that these colors indicate that texts and characters encoded were not recognized by the computer system dictionary. They then used the spell checker to automatically correct error or give suggestions regarding the highlighted characters.

The results reveal that the teachers widely used word processing in doing both personal and job-related activities. Encoding examinations, preparing reports and other documents related to school works were done using the word processor. This capability enabled the teachers to easily create and produce documents relevant to their teaching requirements.

Although teachers were competent in most of the word processing tasks, they were found to have *moderate competence* on i*nserting graphics and other files into documents.* Teachers were moderately skilled in embedding illustrations, pictures and graphs into documents. They had moderate ability to create illustrations within the word processor or to insert illustrations produced by other programs such as spreadsheets, PowerPoint, etc. This moderate competence can be attributed to the complexity of the task's feature. Inserting pictures and creating or inserting illustrations are crucial operations requiring advanced manipulative skill in order to integrate graphics appropriately. Insufficient skill on this task warps the overall appearance of the document. Output produced may contain pixelated graphics and illustrations due to inappropriate application of critical operations.

As word processing offers high versatility and flexibility, teachers can use it to support any kind of directed instruction. It can also be useful for designing constructivist- based activities. Word processing skills will enable them to save time in creating or modifying materials to be used in language teaching. These will also permit teachers to produce a document with a much enhanced appearance. Materials created with the word processing software are more appealing to students because they look more polished and professional than the traditional handwritten or typed materials.

On English Language Teachers' Communication Skills (E-Mail)

Table 6 presents the *English language teachers' literacy level on communication skills using electronic mails or e-mails.* The result indicates that the general communication skills of teachers were developed to a *moderate extent.* This means that the extent of the teachers' familiarity and understanding of tasks relevant to the use of e-mails was *average.* It is interesting to see that teachers' knowledge on the *importance of email address for communication* got the *highest mean*. This illustrates that teachers were aware of the benefits of communicating through electronic mailing channeled by the Internet or the World Wide Web. Most teachers had their own e-mail addresses used only for connecting and communicating with relatives or friends.

Although teachers knew the importance of e-mail address for communication, teachers were still *moderately skilled* in performing tasks related with electronic mailing. It is evident that teacher's knowledge and competence on composing, sending, replying and forwarding e-mail messages were moderate. This may result to limited skills in creating new messages, sending messages to the designated recipients, replying to the sender or to all recipients of the message and forwarding messages to someone who had not copied the original message.

The ability to s*end attachments as part of e-mail messages* was also developed by teachers at a *moderate level*. This means that the teachers had moderate skills to enclose any digitally-mastered files such as photos, maps, programs, music or formatted documents. Furthermore, they were also moderately skilled in opening attachments bounded from an e-mail and decoding it for reading. Moreover, the teachers' inadequate knowledge on this task limits their access to stored attachments on the e-mail Settings, Preferences or Options menu.

Using electronic address book to store individual and group e-mail addresses is a distinctive feature of e-mails. To a *moderate extent*, teachers were knowledgeable and competent in handling the task. This shows that they rarely kept and placed e-mail addresses on Address Book for saving and other related personal references. As such, adding new contacts to e-mail Address Books were also claimed by the teachers to be seldom used.

The teachers' use of s*etting up e-mail preferences for delivery, formatting, spellcheck, security, message handling, and file management* was also found to be *limited.* Teachers were having limited knowledge and competence in ensuring correctness of e-mail outputs regarding their construction, general appearance, delivery and processing instruction. Error monitoring through spell checking, intensive security and close file management supervision to avoid spam mails was seldom applied.

The overall result can be attributed to the teacher's insufficient training on the use of e-mail since majority of the English teachers in CarCanMadCarLan were only trained on basic computer operations wherein applications of advanced computer-based communication skills were not included. Although teachers were knowledgeable on the importance of e-mail address for communication, their competence in operating e-mail related tasks were moderate.

Furthermore, operations tasks involving the use of e-mail entail advanced computer procedures which are complicated to handle when knowledge is just moderate. Since using e-mail requires advanced computer skills, teachers may need to master their specific functions and processes.

On the English Language Teachers' Web Skills

Table 7 reflects the awareness and competence level *of English language teachers on web skills.* Results indicate that teachers' had *moderate* knowledge on all web-related operations. This means that teachers were moderately knowledgeable and competent on web-based tasks. Although teacher's web-related computer skills were on the *moderate level*, it is evident that teachers' knowledge *on using internet browsers like Yahoo, Netscape, Mozilla* and the like got the highest mean. Teachers were aware of the importance of web browsers but encountered some challenges on task browsing websites. They also understood that web browsers give them instant access to the World Wide Web, where specific information is provided by available web servers. However, teachers were moderately knowledgeable of the critical issues that other websites threaten the security of the computer's systems. In this case, teachers need considerable competence in selecting and securing safe web browsers, and taking appropriate measures to increase protection of computers against online threats.

The teachers' knowledge and competence *on viewing, downloading, decompressing and opening documents and programs from internet sites* was *moderate*. Teachers manifested moderate ability to preview documents and programs before downloading them from the websites to the computer's storage systems. These documents include pictures, PowerPoint presentations, personal data files (PDF), excel files and the like. Programs however are downloadable softwares that could be used by teachers for personal consumption or for teaching-related jobs.

Knowledge and competence on *saving a web page* was also *moderate*. This implies that teachers had *moderate* skills in keeping selected webpage and storing them to computer's storage drives after web items were viewed. They were also moderately aware that internet browsers provide options for saving webpages either temporarily or permanently through rendering texts without

formatting and saving entire webpage including all images, style sheets and scripts. This skill enables teachers to book into the computer's document some necessary webpages for the purpose of viewing even in the absence of internet connections.

Teachers were also *moderately aware and competent* in *customizing Web browsers*. This result implies that many teachers did not have preferred sites for the computer features they need. These features allow them to work on certain tasks like making improvements on their browsing, ensuring security settings, directing home page for surfing or research and customizing toolbars for easy access of locations to safe sites. This customizing skill allows teachers to browse quickly and receive immediate response from site links without redundancy, saliency of ads on and repetitive tasks.

Moderate competence was manifested by teachers on *saving data from the web to a folder.* This moderate level of performing the task shows that teachers were not totally equipped with the necessary ability to store data from the web to a folder. Storing web-based data to computer folders guarantees time saving activities since site locations are already provided for them to log on. This facilitates the recovery of previously viewed websites.

Relevant to saving data from web, *bookmarking webpages* also offers direct access to sites. This enables teachers to save time with quick links to their favorite websites. As can be seen on the table, teachers' skill on this task got the *lowest mean*. This means that this was the least used application among the web operation skills. Teachers seldom saved sites or rarely used web history to find the sites most frequently visited and bookmarked as favorites. The result indicates further that teachers seldom utilized the Google Toolbar for quick access of bookmarked sites for direct connections.

With the advent of web technology, the teachers' ability in manipulating its operations empowers them to integrate the World Wide Web in the classroom instruction. As the web provides comprehensive and authentic teaching and learning materials, the teachers' job will be made easier and information will be more accessible. Thus, teachers' computer literacy is a prerequisite for establishing connections with global education.

The teachers' knowledge and competence in employing web-based tasks innovate, transform and revolutionize the traditional approaches of teaching into a comprehensive and authentic process. Mastery of necessary skills in both technical and cognitive aspects of computer technology should be inseparable to guarantee computer competency and develop ICT literacy.

On English Language Teachers' Presentation Skills (PowerPoint)

Table 8 reveals the *English language teachers' skills on making presentation through the use of PowerPoint*. As shown in the table, all tasks were done to a *moderate extent*. This is an indication that the presentation skills of English teachers were at a moderate level. Although teachers were aware of the importance of PowerPoint in teaching, moderate competence in manipulating specific presentation operations was evident.

Although task on *changing text fonts, adding bullets or numbers to slide content* got the *highest mean*, the teachers' competence relevant to this activity was *moderate*. This demonstrates that the teachers had average competence in using different font sizes and font types to improve clarity and structure of their slide presentations. Their moderate ability to apply appropriate font size, to use bullets properly and to include numbers suitably within templates may result to excessive texts, overcrowded presentations, and visually unappealing slides.

The teachers' competence on *creating individual slides using standard layouts and designs* was also *moderate*. This level of competence may lead teachers to create PowerPoint-based presentations where slides contain characters and contents against the prescribed criteria. As templates are provided already by PowerPoint applications, designs to good presentation standards are embedded in each slide. These standard designs refer to specific number of lines of information and appropriate styles on every PowerPoint slide. The teachers' moderate knowledge on this task prompts them to create slides that do not correspond to the appropriate PowerPoint presentation criteria.

Adding objects to presentations including tables and charts lends authenticity to language instruction. *Moderate competence* of teachers on these operating tasks was also indicated here. This shows that teachers encountered some difficulties in inserting pictures, clip arts, video clips and sounds in texts. These difficulties may result to PowerPoint outputs with pixelated pictures and clip arts, blurry or inoperative videos, and tangled audio materials. When presentation requires tables and charts, teachers may find it hard to attach, to design and to redesign objects placed on the slides. The current level of teachers' competence defeats the purpose of the presentation to incorporate sophisticated visual and auditory media for a more stimulating appearance.

Teachers also had *moderate* ability to *edit, to insert and to re-sequence slides*. These tasks challenge teachers to revisit their slides, to add templates in cases something important had been missed and to rearrange templates according to their proper sequence. Failure to master this operation may result to poor and uninteresting presentation outputs.

Adding animations and transitions to presentation templates, navigating between slides and switching them between different views are the most distinctive functions of PowerPoint presentations. These features capture interesting moods as they offer eye-catching audio and visual effects. *Moderate* skills were shown by teachers on these tasks. This moderate competence may prevent them to apply animations and transitions due to insufficient knowledge on how to operate the functions. Although they understand the importance of these PowerPoint features, their moderate competence in manipulating the tasks could not guarantee optimal use of these features. The teachers' presentation may always remain simple, boring and uninteresting if these tasks are not integrated.

Two of PowerPoint-related tasks got the *lowest means*. The teachers' skills in *creating presentations using design wizards, design templates or blank layout* and *modifying standard layout and design templates* were found to be *moderate*. Teachers found it hard to add new slides with specific layouts. Even if templates were available, they had insufficient knowledge to change or even modify the built-in styles of the slides.

Generally, teachers' limited competence in managing the necessary PowerPoint skills may result to poorly created presentations. Insufficient training is a factor that affects this level of competence. Since few of the language teachers were trained on computer applications using PowerPoint, literacy level on presentation-related tasks was moderate. Trainings on this topic are also limited because they only introduce the basics of slide-based presentation due to time constraint in conducting comprehensive computer-based workshops. Other teachers who own computers learn to practice PowerPoint tasks by exploring the site, yet only simple tasks are utilized. Modified and complex tasks are least learned because they entail functional specificity and crucial application of sequential instructions. Insufficient knowledge to perform accurate operations may disorganize the overall appearance of the presentation.

English Language Teachers' ICT Utilization in Language Teaching

Table 9 exhibits the results of *language teachers' utilization of ICT in language teaching*. Findings show that the utilization of most ICT-mediated activities was of *limited extent*. Though most items were used in limited extent, some ICT-based activities were moderately utilized in language teaching. As shown on the table, *creating word documents* got the highest mean. This shows that of all the ICT-mediated activities, the use of word processing for document production is *moderately* integrated in language teaching. This ICT-mediated activity is primarily used in paper requirements, research writing and paper-based projects.

Since teachers were competent in handling word processing skills, integration of word processing activity was also utilized. Generally, this is the easiest and the most basic activity in all ICT-based operations for both teachers and students. This is also the most useful medium for teachers and students to create documents, input and edit files, duplicate sources and finalize data for production.

Online-mediated activities for research and instruction were also utilized to a moderate extent. *Surfing the internet and searching the web to get information* and *gathering pictures through the Web* were *moderately used* in teaching. These activities were commonly practiced by most teachers. The internet was often a recommended source of information when teachers assigned research work to their students. Availability of pictures from the web enabled them to let students see and recognize objects that were not present in the classroom or in the community. Teachers relied most on these activities since these can be done anytime and anywhere. Even without internet-connected computers available in the school, students can work on these activities in any internet establishments in the locality.

Since teachers' web literacy was at a moderate extent, the use of internet and the web in language teaching was of the same level. This implies that interventions have to be planned to help improve the teachers' literacy and utilization of these learning tools.

Creating multimedia presentation through the use of PowerPoint was utilized by language teachers to a limited extent. The limited use PowerPoint presentation in the classroom can be traced to teacher's moderate literacy in manipulating presentation-related skills. As this issue arises, teachers need sufficient trainings on specific PowerPoint operations to help them prepare attractive and informative multimedia presentations.

Aside from teachers' competence, other factors also affect the moderate use of multimedia presentation in teaching. Granting that most schools in the localities have available LCD/DLP projectors for multimedia-based presentations, the number of these units is often limited. In reality, most schools have only one LCD/DLP projector and teachers need to schedule reservations before the gadget can be used. In most cases, gadgets are not available on the target date and thus, teachers shift from planned multimedia-mediated lesson to traditional mode of language teaching.

Reading books, stories and newspapers online was utilized to a *limited extent*. This result implies that teachers still preferred reading books and newspapers in traditional ways. Resorting to paper-based reading is a result of teacher's limited competence on viewing, downloading and opening related materials from internet sites. These limited skills prevent teachers to preview and

to screen in advance available sites for online books or articles used for reference. Teachers' lack of knowledge in advanced viewing of important reference web page sacrifices quality time, quality teaching, and quality learning.

The *use of reference sites online* and *online search for word meanings and pronunciations* was also *limited*. This influences some ICT-mediated activities such as *practicing grammar exercises* and *playing educational games online* both located on specific sites and reference. This is probably the result of the teacher's inadequate skills in bookmarking webpages to store their most visited reference sites.

The use of reference sites enables teachers and learners to have specific webpages that provide materials for teaching and learning. These sites on grammar exercises and educational games efficiently and effectively offer teaching resources. Free online tutorials and activities for student's practice on core content and skills are made available. Reference sites also provide remedial instructions and enhancement activities for low-performing students to master the desired learning targets.

Other common online-mediated activities such as *using specific search strategies to look for information, formulating questions, synthesizing information and evaluating information* were utilized to a *limited extent*. This reflects that these ICT-mediated activities were seldom used by teachers in language teaching. Findings can be attributed to the teacher's insufficient training on ICT-integration especially on integration of web-based resources in teaching English language. Other factors can be the school's limited internet services and shortage of computer facilities in schools.

Communicating using Instant Messenger (IM) or other chat tools and *sending e-mails* were also utilized to a limited extent. This implies that language teachers were integrating these ICT-based activities minimally. This situation can be associated to teacher's moderate competence in using e-mails for communication and operating chatting softwares for online connections. Their moderate ability to manipulate such softwares prevents them from using e-mails and chat connections as part of teaching and learning.

Other online activities like *publishing information on websites* and *writing English articles to be posted on blog sites* were few of the least used ICT-mediated activities in language teaching. As reflected on the table, these ICT mediated activities were *not used* in language teaching. This result can be linked to teachers' moderate skills on web-related operations so with the insufficient computer facilities available at school and the teacher's lack of knowledge on blogging articles to webpages. These limited skills and inadequate facilities hamper the teachers' use of web-based tasks in teaching.

Language teachers need to encourage students to get involved in publishing articles, information and postings in the blog sites. The use of blogging and publishing allows reflection, stimulates opinion, crystalizes thinking, opens up new audiences, creates personal momentum, gives valuable feedback, and promotes creativity. This will lead the students to gain profitable insights that will help develop their cognitive maturity.

Collaborating online with students from other classes had the lowest mean. The result implies that this ICT-mediated activity was not used in language teaching. Aside from the teachers' inadequate ability to incorporate the skills in teaching, this activity needs sufficient computer facilities and excellent internet connections, which may not always be available in most schools.

Generally, the overall means reflected on the tables are declining as the presentation progressed. This indicates that there was a limited use of ICT-mediated activities involving advanced ICT skills, sufficient resources and internet connections. Since web-related skills of CarCanMadCarlan teachers were moderate, the use of web-based language activities was limited. Other reasons can be attributed to insufficient computer units and limited internet connections in schools of Cluster – 1. To ensure the optimum use of ICT in language teaching, English teachers need to be competent on web-based skills and schools need to have available ICT resources and sufficient internet connections.

Challenges Encountered by the English Language Teachers in Utilizing ICT in Language Teaching

The successful integration of ICT in language teaching depends largely on some factors that challenge the drive to integrate ICT into actual teaching and learning activities. The need to identify the challenges that prevent ICT utilization in schools was also considered in this study.

Table 10 shows the *factors preventing teachers to utilize ICT in language teaching*. The findings reveal that the most prevalent problem encountered by English language teachers in most schools was the *insufficient resources,* specifically *internet connections and computer units.* The limited internet services and inadequate number of computers hinder the teachers' use of ICT in language teaching. In public schools, the number of computers could not cater to the needs of the entire student-population. Computer and student ratio is often one is to twenty (1:20).

In CarCanMadCarLan, only two (2) out of eleven (11) schools are Wi-Fi zone campuses. Other schools have only their Internet connections at the computer laboratory with limited number of computer units. This limited number of computers cannot serve majority of the students in one session. Internet connections may even be limited due to insufficient funding for related expenses.

Teachers experience difficulties in integrating ICT-based lessons in language teaching since resources are very limited. Since computer units and internet services are limited, the utilization of ICT and other web-based language activities in schools are also predominantly limited. Other Internet-based activities may be done in some instances, but students do not do these in schools. Instead, they prefer working on the activities during their free time in internet cafés available in the school vicinity. Because of this situation, teachers seldom assign ICT-based or web-based activities because these need additional expenses for students to pay the hourly charges of internet cafés.

Lack of time for preparing lessons using technology was the second factor most English language teachers considered as barrier. English language teachers render six hours for classes and spend the remaining two hours on paper works such as reports and documents required for their ancillary assignments. Other teachers have more than two preparations of subject matter daily. This condition leads teachers to prefer traditional teaching since lessons mediated with technology consume considerable time for creating, designing, producing and evaluating ICT-based materials and activities.

Relevant to lack of time in preparing lessons using technology, *lack of time conducting class using technology* was also a factor since using technology requires time for preparation of necessary technologies and programs to be used in language teaching and learning activities. When teachers have not mastered the operation of computers and its components, time is just going to be spent on loading softwares and searching for files. Quality time then for language learning will be sacrificed.

Lack of training was another factor that contributed to the teachers' non-use of ICT in language teaching. This affects several other factors such as *teacher's ICT literacy, inconvenience to use technology, lack of knowledge in integrating technology into language teaching, lack of technology skills and lack of confidence, self-motivation* and *interest in using ICT.*

For the past three years, more than half of the total number of English language teachers in Cluster 1 has attended computer-related trainings and seminars. These trainings were mostly basic computer operations and not on ICT integration which is the use of technology in the teaching. Other teachers stated they had no training at all. This factor prevents them to use computers in the language class affecting their interest and confidence in integrating ICT in the modern pedagogy of teaching and learning. This scenario resulted to the limited utilization of ICT-based activities in language teaching.

Lack of hardware and software for language instruction was also identified as another problem. Computers that are not connected to the internet need canned software-based language teaching-learning applications to ease language instructions. These canned softwares assist teachers in maximizing quality learning with the aid of technology.

The *absence of schools computer or technology coordinator* was another reason for non-use of ICT in language teaching. In most schools, only the ICT teacher is the available technology expert who assists with technology in planning, implementing, directing and assessing of teacher's use of technology within the desired curriculum. Since this expert may not be always available, teachers tend to resort to traditional language teaching methods.

Lack of funding was another challenge in the list. Insufficient funds results to insufficient resources. The effective integration of ICT into education systems requires considerable funding. Procurement of ICT-supported hardware, software, internet connections, multimedia materials, audio-visual teaching aids and other related accessories demand adequate finances. Besides, technology training and teacher's professional development can be costly. Teachers ICT-based enhancement courses essential for designing, developing, delivering, managing and evaluating instruction will involve appropriate budget. Moreover, purchase of technology-based textbooks, student's manuals, teachers' expenses for in-service trainings, maintenance and repairs, electricity supply, and teachers' support materials also requires additional funding.

Schools in Cluster 1 are only receiving a budget of P 48,000.00 annually from the DepEd's Computerization Program. This budget is intended only for the provision of internet connections in schools through the DepEd's Internet Connectivity Project. Ten (10) of fifteen (15) computer units are handed over by DTC and DOTC to most schools under the terms and conditions specifying that the schools are responsible for their maintenance. Unfortunately, the schools cannot provide budget for repairs in case technical problems occur. The tendency is malfunctioning units are not fixed immediately. They are instead set aside until such time that budget will be allocated and a hired maintenance personnel is available.

Lack of technical support was also a factor teachers identified as one of the problems encountered. Since most schools have no technicians, computer units that are malfunctioning were not given proper and immediate maintenance.

Lack of support from administrators was also identified by language teachers as barriers that challenge the implementation of ICT in teaching and learning. This can be attributed to existing school conditions like lack of funds, school leaders' limited ICT competence and unavailability of item for a computer teacher.

Lack of knowledge on evaluating students' work online was also determined by language teachers as a barrier in using online-mediated activities in teaching. When teachers gave online-based activities, students misused technology with leisure time activities and spent less time to learn and do the assigned tasks. Students were tempted to open websites they liked while others opted to visit social networking sites to check their accounts and view latest updates.

Lack of knowledge on students' technological competence was the least cited reason of not using ICT in language teaching. This factor led to teachers' non-use of ICT due to insufficient knowledge of who among the students were skilled in computer operations and who were still beginners. Aside from that, whenever teachers decided to use technology which was unfamiliar to students, teaching and learning time was compromised due to insufficient ability of beginner users to operate technology-mediated lessons. Teachers' time was devoted more on mentoring and monitoring students who were not able to do the activity because of technological incompetence.

To overcome this problem, teachers need a thorough assessment of students' technological competence to ensure the effective use of ICT in language teaching.

Conclusions

The following conclusions were drawn based on the findings:

1. English language teachers were aware and competent in general computer, file management and word processing operations. They are knowledgeable and skillful in manipulating their individual computer tasks. They were also moderately competent on communication skills, web skills and presentation skills or PowerPoint. Furthermore, English language teachers were aware on the importance of system maintenance and security but were not competent in handling specific computer maintenance and security operations.

2. ICT-mediated activities were seldom used in language teaching.

3. English language teachers considered insufficient resources, lack of time in preparing lessons using technology, lack of ICT training, as the most dominant challenges that prevent them from using ICT in language teaching. Therefore, teachers need to seek assistance from possible sources and look for appropriate interventions to overcome the challenges of integrating ICT in language teaching.

Recommendations

In view of the findings and conclusions drawn, the following recommendations are given:

1. Intensive computer-based/ICT-based trainings specifically on ICT skills where English language teachers are moderately competent and not competent in computer operations may be provided. Hands-on crash courses to develop teacher's e-mail skills, web skills and presentation or PowerPoint skills would be thoroughly provided. Trainings on computer maintenance and security purposes should also be included to provide teachers with knowledge on minor troubleshooting activities.

2. Provision of technical support for computer maintenance and security purposes should be provided to ensure immediate troubleshooting when system problem occurs.

3. School administrators may initiate partnership with the LGU, the PTA and other organizations in looking for appropriate interventions to upgrade and add computers, internet connections and other ICT-based hardware and software resources so that there would be optimum use of ICT in language teaching.

4. School administrators can incorporate a larger school-wide ICT development plan to ensure coherence of ICT implementation in the language teaching-learning activities. School heads together with English language teachers should craft action plans, implement the goals, monitor the implementation and evaluate the effectiveness of the activities.

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