International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2016, Vol. 12, Issue 3, pp. 37-57.

# Experiences, perceptions and attitudes on ICT integration: A case study among novice and experienced language teachers in the Philippines

# John Paul Obillos Dela Rosa Dapdap High School and Philippine Normal University, the Philippines

# ABSTRACT

The influence of Information and Communication Technology (ICT) in developing ways on how to better deliver instruction has been regarded as beneficial in education. In language teaching, the use of ICT is an impactful experience. It is therefore the purpose of this study to delve into the experiences, perceptions and attitudes of a novice and an experienced language teacher about ICT integration in teaching English as a Second Language (ESL). Establishing similarities and differences on the experiences, perceptions, and attitudes of the subjects was further aimed in this research. Results revealed that the experienced language teacher had more exposure to ICT use than the novice teacher. However, the novice teacher makes use of more ICT-related materials and activities in her language class. Both teachers also have positive views on the impact of ICT on students' overall learning and achievement. Moreover, the novice teacher views ICT use as time-consuming and does call for a more knowledgeable manipulation of technological devices. The experienced teacher gives more favor to the advantages ICT contributes to language teaching, but views insufficiency of resources and services like limited Internet access as detrimental to effective ICT integration. On the other hand, both subjects also had positive attitudes towards ICT integration in English Language Teaching (ELT) and hoped that ICT use would later be strengthened in the Philippines. At the end of the paper, implications on the use of ICT in education and in language teaching among basic education institutions in the Philippines are presented.

*Keywords:* ICT Integration; Language Teaching; Experiences; Perceptions; Attitudes; Novice Teacher; Experienced Teacher.

# INTRODUCTION

The advent of contemporary ways on delivering education has brought significant changes as to how the world views education and teaching. Globalization has made both teaching and learning intricate and the transformation in part has been driven by technological innovation (Tinio 2002). Technology has given society a wide array of choices, making a scarce resource abundant. With computers and Internet technologies, more people can now have access to available information more quickly, and make the world a reachable global village in just a snap of a finger. Together with this technological revolution is the emergence of one of the most viable technological reforms in education, the use of Information and Communication Technology (ICT).

ICT is considered at present as a potential tool that provides educational opportunities in both formal and non-formal ways. In the teaching-learning process, ICTs can increase learners' 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). Hence, in the landscape of language teaching, ICT is considered as a powerful tool. According to Warschauer (2004), the simultaneous impact of globalization, the spread of English, and technological development have transformed the learning and teaching of English as a lingua franca in an unprecedented way. Thus, both English and ICT have become essential literacy skills for a growing number of non-native speakers of English to ensure full participation in the information society (Jung 2006). The use of ICT in the arena of modern language

education is no longer a choice, but a necessity that gives life to the different vistas on how language is effectively taught and learned.

#### **Computer-Assisted Language Learning**

In the field of language learning, Computer-Assisted Language Learning (CALL) research has typically been enhancing input through technology, using technology to give effects on proficiency and achievement, providing feedback through technology, and integrating technologies (Zhao 2005). Chapelle (2001) considers CALL as an area of technology and second language teaching and learning even though revisions for the term are suggested regularly. For Beatty (2003), CALL encompasses issues of materials design, technologies, pedagogical theories, and modes of instruction. Materials for CALL therefore include those which are purpose-made for language learning and those which adapt existing computer-based materials, videos, and other resources.

The Internet and the rise of computer-mediated communication have reshaped the use of computers for language learning. The recent shift to global information-based economies means that students will need to learn how to deal with large amounts of information and should be able to communicate across languages and cultures. At the same time, the role of the teacher has changed as well. Teachers are not the only source of information any more, but effectively act as facilitators so that students can actively interpret and organize the information they are given, fitting it into prior knowledge (Dole, Duffy, Roeler, & Pearson 1991). Students have become active participants in learning and are encouraged to be explorers and creators of language rather than passive recipients of it (Brown 1991). Integrative CALL stresses these issues and additionally lets learners of a language communicate inexpensively with other learners or native speakers. As such, it combines information processing, communication, use of authentic language, and learner autonomy—all of which are of major importance towards exploring current language learning theories.

In the research article of Lee (2000), he stated that network-based technology, which is one of the features of CALL, can contribute significantly to (1) experiential learning; (2) learner motivation; (3) enhanced student achievement; (4) authentic materials for study; (5) greater interaction; (6) individualization; (7) independence from a single source of information; and (8) global understanding. Such tool has been very powerful in opening doors of educational opportunities for both teachers and learners who are in quest of support that could help them traverse the interlacing and challenging roads of the information superhighway.

## Studies on the integration of ICT in language teaching

Jung (2006) investigated 591 Chinese university students in an in-land city in relation to their technology ownership, usage patterns, and levels of perceived ICT skills. Included in the research foci are their motivational orientations to learn English, their perceptions of English and technology, and their perceived benefits of and barriers to using ICT in learning English. Findings from the questionnaire, which had both open-ended and close-ended questions, unveiled not only students' aspirations toward acquiring English and ICT skills but also problems and challenges they have faced in the age of globalization. In addition, the current study revealed that the economic and socio-cultural contexts in which the students found themselves, greatly influenced their language learning experience through technology. This calls for paradigm shift in English as International Language (EIL), EIL students' motivational orientations, and digital divide. This also concerns the development of multiple literacies in learning English.

Isisag (2011) conducted a study on the positive effects of integrating ICT in foreign language teaching. The purpose of the study was to examine the necessity of ICT and highlight its positive effects to keep up with the modernized communities in the current digital world. In this study, the

enormous advantages of integrating ICT in foreign language teaching are presented. Hence, it is stated that integrating ICT in foreign language teaching will have positive effects on both the teachers and students to help them be aware of the modernized world and meet the current demands of the new era.

Tanveer (2011) explored the perceptions of students and teachers regarding the use of e-learning tools in the language classroom, the challenges they face, and some strategies to enhance practical application of e-learning tools in classroom-based language teaching. Both quantitative and qualitative methods were used to gather pertinent data from eight English lecturers and a total of 46 learners. The study found out that both teachers and learners perceived that e-learning helps students take ownership of their own learning, provide activities for diversification, foster intrinsic impetus for learning, enable introvert students to interact better, permit acquiring valuable study and time management skills, and allow for a more student-centered learning. The researcher concluded that though ICT has great potential to be integrated in classroom language teaching, it is imperative that both teachers and learners build confidence towards the use of technology through proper facilitation using the required electronic equipment, training, and time resources.

Khalid (2007) investigated some of the factors that influence teachers' integration of computer technology among English language teachers. As a case study, it involved thirteen English language teachers from five primary schools in Satok area in Kuching, Malaysia. Interviews and observations were also conducted. Findings revealed that 77% of the teacher-respondents were not integrating computing for teaching. As such, lack of training and time factors are the main reasons for not integrating computer technology in teaching and learning.

Kolbakova's (2014) research study aimed at reviewing findings carried out among English teachers from Estonia and others across Europe and Asia. The study further identified the relations to ICT use when teaching ordinary students and students with language differences. It was found out that even though preferences of teachers are generally similar, differences still exist on the choice of ICT tools, ICT-related tasks, and activities between the respondents from Estonia and others from Europe and Asia. Finally, it was revealed that teachers from the aforesaid research locales make use of the same ICT-related materials when teaching ordinary students and students with language differences.

In the Philippine context, Correos (2014) 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 from integrating ICT in teaching. 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 showed that teachers faced many challenges that demotivate them from using ICT in language activities. Based on these findings, it was recommended the teachers must be provided with intensive ICT-based trainings to equip them with knowledge of ICT and its utilization in language teaching. It was further suggested that 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.

With regard to the use of social media, platforms that are driven by ICT, the study of Valdez (2010) investigated the use of social networking sites (SNSs) as a means to create digital portfolios for an academic reading and writing class in a tertiary-level institution in the Philippines. Aside from documenting the advantages of digital portfolios on the development of students' writing skills, it also provides inputs on the use of technology towards improving language pedagogy. The results

of the study bring in ideas for further research, highlighting the use of technology in language teaching.

Sipacio (2014) identified the challenges faced by language instructors on the implementation of E-Portfolio via Facebook in a Philippine university. The researcher made use of participatory development framework. Data were taken from the interviews and feedback forms of participants from the department chair and project/program committee, implementers/teachers, and students were subjected to content analysis. Results revealed that students were strongly apprehended to publish their writings online, while the teachers' resistance towards the use of Facebook as an educational tool was dominant among their responses. Some of the challenges perceived by both groups of respondents include the potential threat of academic dishonesty and identity theft in the virtual space. It was therefore recommended that participatory mechanisms be adopted in the university to meet the demands of evFB.

The studies made in lieu of the need to explore the ways, advantages, and challenges met by both teachers and students on the integration of ICT in language education at large reveal a common ground wherein researchers proved that ICT-integration provides learners with richer language learning experiences, diversification, and strengthened learner autonomy. However, the promise of ICT-integration in language teaching should meet the demands of training and acquainting teachers with technology-use in the language classroom, learners building confidence towards ICT exposure, and the imperative that ICT-based programs in schools must be intensified to be able to realize the potentials of ICT as an educational tool. In developing countries like the Philippines, researchers would report that there should be advancement of ICT resources and teacher training towards enhancing ICT's utility and acceptability, not only in language teaching but also on the teaching of other disciplines.

It is therefore of great interest for language scholars and language curriculum planners to consider the problems and key issues that concern the use of technology-mediated approaches such as the integration of ICT in teaching language. More importantly, the teachers who should be leading the way towards strengthened technology-language integration in the academe have varying experiences, perceptions, and attitudes on the modern application of computers and the Internet. Since these conceptions may greatly affect the realization of the said approach to language curriculum, delving into their conceptions and cognitions is definitely timely and relevant. As per Akinbode (2007), language research should focus on the globalization of the teaching and learning of English language and the use of technology to make English Language Teaching (ELT) communicative, functional, and developmental.

This paper specifically reports the differing experiences, perceptions, and attitudes of language teachers on the integration of ICT in their language classrooms. Hence, the present study is an extension of earlier research findings and intends to provide more insights about the variables studied in relation to the number of years teachers have in the field.

#### **Objectives of the study**

The purpose of this study is to describe the experiences, perceptions, and attitudes of secondary school language teachers on the integration of ICT in language teaching. Further, it aims to establish comparability between the experiences, perceptions and attitudes of a novice and an experienced language teacher towards the utilization of ICT in the landscape of language teaching. Hence, the following questions were exhaustively answered in this study:

- 1. What are the experiences, perceptions and attitudes of the novice and experienced language teacher on the integration of ICT in language teaching? Are there similarities and differences with their experiences, attitudes, and perceptions?
- 2. What implications can be presented about the use of ICT in language teaching focusing on the experiences, perceptions and attitudes of the subjects?

## METHODOLOGY

This study is based on a qualitative research which is exploratory in nature. It was used to gain understanding of underlying reasons, opinions, and motivations on a certain theme. This type of research provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. It is further used to uncover trends in thoughts and opinions, and delve deeper into the problem investigated (Wyse 2011).

#### Subjects of the study

The subjects of this qualitative study were two English teachers from a resettlement high school, further identified as "novice" and "experienced" teachers. The novice teacher has been teaching in the said resettlement high school for 10 months. She is a graduate of an Education course with specialization in language teaching in 2014. She is basically labelled as a "novice" teacher in this study based on the number of years that constitute her entire teaching experience. On one hand, the experienced teacher has accumulated a total of 13 years teaching in both private and public educational institutions. He is also a graduate of an Education course with English as his field of specialization. Both teachers are currently teaching English subjects—the novice teacher as a Grade 8 English teacher, while the experienced teacher as a Grade 7 English teacher under the newly implemented curriculum in the Philippines, the K-12 Basic Education Curriculum.

### **Research instruments**

To gather data on the experiences, perceptions and attitudes of both novice and experienced language teachers on the integration of ICT in language teaching, two research instruments were utilized. The first one was a standardized survey questionnaire adopted by the researcher from European Schoolnet's (2013) Survey of Schools: ICT in Education which aims to benchmark progress in ICT in education in some selected European countries by surveying students, head teachers and teachers on availability and use, including opinions and attitudes, of ICT in schools. The survey-questionnaire provides a continuous monitoring system on ICT access, use and impact (EuropeanSchoolnet.com). To align the survey-questionnaire with the objectives of the present study, the researcher purposively modified some of the items in the instrument.

To further consider the perceptions and attitudes of the subjects on the integration of ICT in language teaching, the researcher drafted semi-structured interview questions. The questions were validated by two experts in the field—one head teacher in English stationed in a public secondary school and a language professor teaching in a government-run university.

#### Procedure

Both the "novice" and "experienced" language teachers were asked to complete the adopted survey questionnaires for 30 minutes following the instructions provided in the instrument. After which, the researcher asked for a separate interview session with each of the two subjects, respectively, following the questions in the semi-structured interview guide. Each of the interview sessions lasted for about 50 minutes, with the researcher comparing the responses of the subjects from the survey-questionnaire and their answers on the questions provided in the semi-structured interview.

After the collection of pertinent data from the subjects, the researcher analyzed and established comparability between the responses of the "novice" language teacher and the "experienced" language teacher on the basis of integrating ICT in language pedagogy.

# **RESULTS AND DISCUSSION**

The following responses and relevant discussions were based on the parts provided in the surveyquestionnaire, one of the research instruments. These parts from the instrument are divided as follows – (1) personal background information of the subjects; (2) information about the target class; (3) perceptions of the language teachers on ICT use in language teaching; and (4) the kinds of attitudes the subjects have towards ICT use.

#### Personal background information of the subjects

Table 1 presents the personal background information of the subjects that were deemed relevant in this qualitative study.

Personal Background Information	Novice Teacher	Experienced Teacher
Gender	Female	Male
Teaching Experience	almost 1 year	11-20 years
Age	22	37
Computer Use in Daily Life	Daily	Almost Monthly

Based on the profile of the subjects, the female novice teacher has been teaching for almost a year now, while the male experienced teacher has been teaching for 11 to 20 years. The difference on the subjects' teaching experiences is further determined by their respective ages. About their use of computers, the novice language teacher responded that she makes use of computers every day, while the experienced language teacher makes use of it almost monthly. Further, when asked if they use computers and the Internet to update their subject matter knowledge or undertake professional development in their field of specialization which is English, both said, "yes."

#### Information about the target class taught and ICT curriculum in the school

Table 2 presents the information about the target class taught by the novice and experienced language teachers in relation to ICT integration in language teaching.

**Table 2:** The target class taught by the novice language teacher and experienced language

 teachers and ICT curriculum in the school

Information	Novice Teacher	Experienced Teacher
Number of students	42	43
Subject taught	English 8	English 7
Teaching hours	Fewer than 2 hours	2-4 hours
ICT in the school curriculum	ICT is integrated in my subject because I choose to do so.	ICT is taught as a separate subject.

Based on the number of students the novice and the experienced language teachers have, no apparent difference could be seen. In relation to the subjects taught, both handle English subjects but from different grade levels. For the number of teaching hours, the experienced language teacher has more hours teaching the target class than the novice teacher, since the former handles a special reading class where students from the target class serve as tutors to identified frustration level readers. This makes the teaching hours of the experienced teacher longer.

As regards their responses on how ICT is offered in school, both do not have the same. Though they both teach at the same school, the novice language teacher responded that ICT is integrated in her subject area as she desires. The experienced language teacher answered that ICT is taught as a separate subject. In their school, ICT is taught within the parameters of a learning area known as Technology and Livelihood Education (TLE). The idea that the novice language teacher chooses to use ICT in her class could mean that more effort is provided by this teacher in using ICT-related resources in her language lessons.

#### **Experiences with ICT in teaching**

The following tables provide data on the ICT experiences of the novice and experienced language teacher. They are categorized as experiences with ICT for teaching, ICT access for teaching, support to teachers for ICT use, ICT-based activities and materials used for teaching, obstacles to using ICT in teaching and learning, learning activities with the target class, and teacher skills.

#### Pedagogical Experiences with ICT

**Table 3:** Pedagogical experiences of the novice language teacher and experienced language teachers with ICT

ICT Experience	Novice Teacher	Experienced Teacher
Experience in the last 12 months	<ul> <li>preparing lessons</li> <li>class teaching in front of/with the students</li> </ul>	preparing lessons
Length of experience with ICT	between 4 to 6 years	between 4 to 6 years
Percent of time using ICT	51% to 75% of all lessons	1% to 5% of all lessons

From the data provided, it is apparent that the subjects differ on how they integrate ICT in their teaching. The novice language teacher uses it in preparing lessons and in class teaching with her students, the experienced teacher only uses it in lesson planning. Further, though they have the same length of experience with ICT, the novice teacher has more time using ICT as compared to the limited percentage of use on the part of the experienced language teacher. Such difference brings in essential discussions on how ICT is experienced by both subjects.

Underwood (2006) provides evidence that many teachers use ICT to support innovative pedagogy. Therefore, ICT can improve teaching by enhancing an already practiced knowledge and introducing new ways of teaching and learning. Preparing lessons using the Internet, providing multimedia presentations, film viewing for literature classes, and interactive games to introduce grammar lessons, are just only few of the possibilities that ICT could offer for a language class. However, not all teachers could access these resources. Further, many of them choose not to engage with it for certain reasons. As evidenced in the study of Salehi & Salehi (2012) on the ICT experiences of Iranian language teachers, it was found that majority of them stated that they never use ICT in the

classroom or they prefer to use it very little despite the confidence they have about the integration of ICT in education in general. Most of the respondents of the said study are experienced teachers; hence, just like the data provided by the experienced language teacher in the present study, ICT is of less utility in their language classes.

To further lay out the preference of the novice language teacher on the use of ICT in her language class more than that of the experienced language teacher, the following responses from the interviews are provided:

[novice language teacher] "I often use laptop for my video clips and audios. I see to it that whenever more videos and audios are needed for the topic, I download videos and audios two days before the day of discussion and present them to my students."

[experienced language teacher] "Internet connection provides teaching multimedia and language more efficiently..."

#### ICT Access for Teaching

Table 4 provides data on the access of the novice and experienced language teachers with ICT.

ICT Experience	Novice Teacher	Experienced Teacher
ICT access by teacher and students in the target class	<ul> <li>Students are equipped with computers and/or Internet.</li> <li>Only the teacher uses a computer and/or Internet.</li> <li>Both teacher and students use computers and/or Internet.</li> </ul>	<ul> <li>Students are equipped with computers and/or Internet.</li> <li>Both teacher and students use computers and/or Internet.</li> </ul>
Access to infrastructure	<ul> <li>Desktop computer with Internet access</li> <li>Non-internet connected laptop, tablet, netbook, etc.</li> <li>Internet connected laptop, tablet, netbook, etc.</li> </ul>	<ul> <li>Desktop computer without Internet access</li> <li>Computer laboratory</li> </ul>
Access to different electronic devices (laptops, tablets, netbooks, notebooks, mobile or smartphones, etc.)	The students may use     personally owned     electronic devices.	The students may use     personally owned     electronic devices.

**Table 4:** ICT access for teaching of the novice language teacher and experienced language

 teachers

The quality of access both language teachers have in this study is considerably low. As such, aside from the limited number of devices, both students and teachers do not have a well-established access to the Internet which is very crucial in making ICT work. Some teachers therefore allow their students to bring with them their own gadgets or devices to compensate what is not provided by the school. The teachers, most of the time, do this as well.

It can be gleaned from the data that though there are a lot of resource-related constraints in the school where both subjects are presently teaching, the novice language teacher finds ways or somehow solutions to still integrate ICT in her teaching. Though there is no Internet access in the school, the novice teacher brings with her a laptop and her "pocket Wi-Fi" as a temporary Internet source, which was not mentioned among the responses of the experienced language teacher. Through this, the possibility of exploring language using ICT tools, most especially the Internet, is not compromised. However, this practice does not guarantee holistic ICT experience in language instruction. As claimed by Correos (2014), 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. This means additional effort and expenses on the part of both teachers and students.

About the ways by which the novice language teacher and the experienced language teacher deal with limited number of ICT resources in school, the following responses are hereby presented.

[novice language teacher] "I actually let the others share. For example, two students per computer or I'll group students into two and let each group use the computers first before the second group."

[experienced language teacher] "Peer tutoring, group study or paired learning, are applicable in cases of mismatch of volumes."

#### Support to Teachers for ICT Use

Table 5 illustrates the quality of support the subjects have regarding ICT use.

ICT Experience	Novice Teacher	Experienced Teacher
ICT training	No compulsory training	No compulsory training
Professional development	<ul> <li>Attended trainings on Internet use and general applications, advanced courses in applications</li> <li>Personal learning about ICT</li> </ul>	<ul> <li>Attended equipment-specific trainings and course on multimedia</li> <li>Participated in on-line communities</li> <li>Personal learning about ICT</li> </ul>
Support from colleagues and/or experts	<ul> <li>Sought technical support from a more experienced/knowledgeable teacher, school ICT/ technology coordinator, other school staff</li> <li>Rarely asked help from experts outside the school or an on- line helpdesk, community or website</li> </ul>	<ul> <li>Sought technical support from a more experienced/knowledgeable teacher, school ICT/ technology coordinator, other school staff</li> <li>Rarely asked help from experts outside the school or an on-line helpdesk, community or website</li> </ul>
School shared vision about ICT use	<ul> <li>There is school shared vision on integrating ICT in teaching and learning</li> </ul>	There is school shared vision on integrating ICT in teaching and learning

 Table 5: Support to the novice language teacher and experienced language teachers for ICT use

About the need for professional development such as trainings and seminars on the use of ICT, specifically in the subject area being taught, the support sought from ICT experts, and the school's shared vision about ICT integration, the novice and experienced language teachers have almost

the same responses. Both responded that there are no compulsory trainings for language teachers in the school and that the school itself has shared vision about the use of ICT in teaching and learning. Further, technical support is usually sought from other teachers and experts within the school and rarely from those outside the school. However, differences can be traced on the area of professional development.

The novice language teacher had attended trainings that mostly focused on general computer applications such as word-processing, spreadsheets, presentations, and databases. The experienced language teacher had attended equipment-specific trainings like the use of laptops, interactive white boards, etc. He also participated in on-line communities for professional discussions with other teachers. Both responded that they had personal learning about ICT. It may be drawn out from the responses that the experienced language teacher had attended more trainings relative to ICT as compared to the novice language teacher. The trainings attended by the latter are basic computer applications, while the former engaged in technology-use, multimedia course, and social networking. This relates to the previous response of the experienced language teacher. Since most of the themes of the trainings and courses he attended need Internet access, he cannot apply the knowledge and skills he gained in the actual teaching scenario. This may be the reason why he only makes use of ICT in his language class on a relatively low percentage of time. As such, the situation leads to the idea that computers that are not connected to the Internet need canned software-based language teaching-learning applications to ease language instructions (Correos 2014).

When asked about giving some suggestions which might contribute in developing the teaching of language using ICT in the school, the subjects responded:

[novice language teacher] "As for me, it would be better if all teachers would be given ICT rooms or devices, much better if each teacher would have at least one because it will be easier if the teacher has the device and at the same time, speedy connection to the Internet, so when the learners have queries, it will be easy for the teacher to browse the Internet."

[experienced language teacher] "Wider free Wi-Fi coverage can encourage ICT and research works among students which in turn will empower language teaching. In Dapdap High School, broader free Wi-Fi access is going to be helpful to encourage students to fully participate in learning practices with ICT such as Quipper School, broad network groups, etc."

#### ICT-Based Activities and Materials Used for Teaching

Table 6 provides data on the ICT-based activities and materials utilized by the novice and experienced language teachers.

From the activities done and materials used by the subjects, the novice language teacher had more activities done every day relevant to ICT use. Most of these activities focus on using the Internet to prepare lessons and collect learning materials or resources. These include downloadable activity sheets in grammar and readily-available PowerPoint presentations. The experienced teachers' ICT-related activities are only done at least once a week. These include preparing exercises and tasks for students, download/upload/browse material from the school's website, and look for on-line professional development opportunities. This may mean that more interaction with ICT resources and services such as the Internet is more apparent from the responses of the novice language teacher than the experienced one.

ICT-Based Activities and Materials	Novice Teacher	Experienced Teacher
Activities done every day or almost every day	<ul> <li>Browse/Search the Internet to collect information to prepare lessons</li> <li>Browse or search the Internet to collect learning material or resources to be used by students during lessons.</li> </ul>	
Activities done at least once a week	<ul> <li>Use applications to prepare presentations for the lessons.</li> <li>Prepare exercises and tasks for the students.</li> </ul>	<ul> <li>Browse/Search the Internet to collect information to prepare lessons.</li> <li>Browse or search the Internet to collect learning material or resources to be used by students during lessons.</li> <li>Prepare exercises and tasks for the students.</li> <li>Download/Upload/Browse material from the school's website.</li> <li>Look for on-line professional development opportunities.</li> </ul>
Activities done several times a month	<ul> <li>Create digital learning materials for students.</li> <li>Post homework for the students online.</li> <li>Use ICT to provide feedback and/or assess students' learning.</li> <li>Evaluate digital learning resources in the subject taught.</li> </ul>	<ul> <li>Use applications to prepare presentations for lessons.</li> </ul>
Materials	<ul> <li>Materials searched over the Internet</li> <li>Existing online material from established educational resources</li> <li>Material that is available on the school's computer network database</li> </ul>	<ul> <li>Materials searched over the Internet</li> <li>Existing online material from established educational resources</li> <li>Material that is available on the school's computer network database</li> <li>Electronic offline material (e.g. CD-ROM)</li> </ul>

**Table 6:** ICT-based activities and materials used for teaching by the novice language teacher

 and experienced language teachers

About the materials accessed, most of them are downloaded from the Internet. Since the school had created a Facebook group where teachers share resources and interact with one another thru real-time chat messaging, both language teachers have access to such resources. The experienced language teacher responded that he also uses electronic offline materials like CD-ROMs.

The limited use of both novice and experienced language teachers of ICT-based activities and materials, may then be linked to the limited ICT resources in their school and the unavailability of a wide-range of Internet access.

# **Obstacles to Using ICT in Teaching and Learning**

Table 7 consolidates the problems or obstacles encountered by the novice and experienced language teachers in using ICT.

Table 7: Obstacles to using ICT te	aching and learning of the novice language teacher and
experienced language teachers	

Obstacles to ICT Use	Novice Teacher	Experienced Teacher
Extremely inadequate	<ul> <li>Insufficient number of interactive whiteboards</li> <li>Insufficient number of laptops/notebooks</li> <li>Lack of adequate content/material for teaching</li> <li>Lack of content in national language</li> <li>School space organization (classroom size and furniture, etc.)</li> </ul>	School computers out of date and/or needing repair
Partially inadequate	<ul> <li>Too difficult to integrate ICT in the curriculum</li> <li>Lack of pedagogical models on how to use ICT for learning</li> <li>School time organization (fixed lesson time, etc.)</li> <li>Pressure to prepare students for exams and tests</li> </ul>	<ul> <li>Insufficient number of computers</li> <li>Insufficient number of Internet-connected computers</li> <li>Insufficient Internet bandwidth or speed</li> <li>Lack of adequate skills of teachers</li> <li>Insufficient technical support of teachers</li> <li>Insufficient pedagogical support for teachers</li> <li>Lack of adequate content/material for teaching</li> </ul>
A little inadequate	<ul> <li>Insufficient number of internet- connected computers</li> <li>Lack of adequate skills of teachers</li> </ul>	<ul> <li>Lack of content in the national language</li> <li>Too difficult to integrate ICT use into the curriculum</li> </ul>

Obstacles to ICT Use	Novice Teacher	Experienced Teacher
	<ul> <li>Insufficient technical support of teachers</li> <li>Insufficient pedagogical support for teachers</li> </ul>	<ul> <li>Lack of pedagogical models on how to use ICT for learning</li> <li>School time organization (fixed lesson time, etc.)</li> <li>Pressure to prepare students for exams and tests</li> </ul>

For conciseness in the presentation of the result in this sub-category, the focus of the discussion will be on the activities and materials that are extremely inadequate in the present research scenario. For the novice language teacher, problems on the inadequate number of computers, laptops, and other resources impede her integration of ICT in language teaching. Also, there is a need to ease and make comprehensive the highly technical language ICT-based lessons possess. The experienced language teacher solely identified out-of-date computers that need repair. Hence, in the school, most of the time, there is a great number of computers, but most of them are idle or are no longer functional.

These problems are said to be common among public schools where support for ICT is yet to be strongly realized. However, for schools where the number of students is relatively low and budget constraints do not usually affect the delivery of education, providing teachers and students with sufficient materials like computers and services like constant access to the Internet are readily attainable. Similar to the findings in the study of Correos (2014), the most prevalent problem encountered by English language teachers in most schools was insufficient resources, specifically Internet connections and computer units.

# Learning Activities with the Target Class

Table 8 shows the type of learning activities used by the novice and the experienced language teachers in their language classes.

Type of Learning Activities	Novice Teacher	Experienced Teacher
I present, demonstrate and explain to the whole class.	Practiced a lot	Practiced a lot
Students take tests and assessments.	Practiced a lot	Sometimes practiced
Students participate in assessing their work.	Practiced a lot	Practiced a lot
Students reflect on their own learning.	Sometimes practiced	Practiced a lot

**Table 8:** Learning activities with the target class of the novice language teacher and experienced language teachers

With the activities practiced by the novice and experienced language teachers, it is apparent that traditional teaching activities are integrated with ICT. The novice language teacher practices a lot presenting, demonstrating, and explaining to the whole class through PowerPoint presentations, video clippings, and audio recordings. Also, it was reported that her students take tests and participate in assessing their work through interactive activities downloaded from readily available files for language teaching. It is only "sometimes" that she asks students to reflect on their own

learning either through keeping a journal diary or an on-line journal using social networking sites. As connected to ICT use, this may be due to the fact that Internet access is not that stable in the school and not all students have access to the Internet. The experienced language teacher also practices a lot of presentation, demonstration, and explanation of the whole class but with less use of ICT tools. In his class, students participate in assessing their work and in reflecting on their own learning, but anchored on a more traditional approach. Giving tests and assessments to students is sometimes practiced, with less focus on materials downloaded from the Internet.

# Teacher Skills in Relation to ICT

Table 9 provides data on the perceived skills of the novice and experienced language teachers on the use of ICT.

ICT-Related Skills	Novice Teacher	Experienced Teacher
Use e-mails to communicate with others	Highly Confident	Highly Confident
E-mail a file to someone, another student or teacher	Somewhat Confident	Highly Confident
Organize computer files in folders and subfolders	Somewhat Confident	Highly Confident
Participate in a discussion forum on the Internet	A Little Confident	Highly Confident
Participate in social networks	Highly Confident	Highly Confident
Download and install software on a computer	Somewhat Confident	Highly Confident
Download or upload curriculum resources from/to websites or learning platforms for students to use	A Little Confident	Highly Confident
Produce a text using a word processing program.	Highly Confident	Highly Confident

**Table 9:** Skills of the novice language teacher and experienced language teachers in relation to

 ICT

The experienced language teacher has more perceived confidence in showcasing the given ICTrelated skills. Out of the eight listed ICT-related skills, only three were perceived by the novice language teacher as skills in which she is highly confident with. Though it was reported previously that she integrates ICT in her language class more than the experienced language teacher, still, her perceived abilities about the use of ICT-related skills are not that high. This may be due to the limited number of trainings that she had before and during her deployment as a public school teacher, as compared to the good number of trainings and seminars the experienced language teacher had attended. Also, the skills where the novice teacher is highly confident are basic computer skills like how to produce texts in computer programs and on how to communicate using e-mails and social networking. This leads to the idea that the novice language teacher's inclination towards the use of ICT is on the entertainment side which is also possessed by other ICT users even those who did not finish an education course. Conversely, it is interesting to note that though the experienced language teacher is highly confident in using ICT-related skills, this does not guarantee that he uses it to prepare for his instruction and actual teaching. Reasons may be due to lack of ICT resources and Internet access in his station.

#### **Teacher Perceptions about ICT use**

Table 10 summarizes the perceptions of the novice and the experienced language teachers about ICT use.

**Table 10:** Perceptions of the novice language teacher and experienced language teachers on

 ICT use

Positive Impact of ICT Use	Novice Teacher	Experienced Teacher
Students concentrate more on their learning.	Very True	Very True
Students try harder on what they are learning.	Somewhat True	Very True
Students feel more autonomous in their learning.	Somewhat True	Very True
Students understand more easily what they are learning.	Very True	Very True
Students remember more easily what they've learned.	Somewhat True	Very True
ICT facilitates collaborative work between students.	Very True	Very True
ICT improves the class climate (students more engaged, less disturbing).	Somewhat True	Very True

Based on the perceptions of the subjects on the positive impact of ICT use to student learning and achievement, the experienced language teacher has consistent, positive perceptions on the use of ICT more than the novice language teacher. As regards retention and over-all learning, the experienced language teacher perceived ICT use as essential and effective. The novice language teacher only perceived students concentrating more in learning, understanding more easily what they are learning, and the facilitation of collaborative learning as "very true." The novice language teacher has strong perception that with ICT, students try harder on what they are learning, that they feel more autonomous in their learning, they remember more easily what they are learning, and that ICT improves the class climate.

The responses of the novice language teacher may have been so, since there are also perceived drawbacks on the integration of ICT in language teaching. These disadvantages are usually experienced when there are no enough resources and materials to back-up teaching and learning. As justified by Khan, Hasan, and Clement (2012) the effectiveness of using ICT requires the availability of equipment, supplies of computers and their proper maintenance including other accessories. They asserted that implementing ICT demands other resources, such as computers, printers, multimedia projectors, scanners, etc., which are not available in all educational institutions especially among public schools in the Philippines. This may be the reason why the novice language teacher, though still positive on her perceptions about ICT use in learning, did not consistently agree with the given premises from the research instrument. Further, the consistent responses of the experienced language teacher relate to the positive conceptual knowledge of the teacher which would later be validated through correct and consistent teaching practice.

When asked about the interesting aspects of teaching language with technology, the novice and experienced language teachers perceived the use of ICT as:

[novice language teacher] "First, it gives excitement to the learners for they will see new strategy in teaching language except for talk and chalk. Second, it makes the teacher's work easier because with the use of technology, the teacher will not write repeatedly on the board in every class she teaches. Lastly, the discussion becomes livelier because the ways of communication, between the teacher and the students, when it comes to recitation, is more authentic and real, because learners nowadays really learn more when they use technology."

[experienced language teacher] "Innovation of teaching strategies is the most interesting and remarkable aspect of technology-assisted language teaching. Technology provides real-time interaction and coaching, audio-visual stimulation, and reinforced imaginative dimensions to teaching-learning process."

When asked about their perceptions on the challenges provided using ICT in language teaching, the novice and experienced language teachers answered:

[novice language teacher] "The preparation is time-consuming. I am not fully knowledgeable in manipulating ICT devices especially the LCD projector, and scarcity of rooms wherein there must be a room designated for a language teacher if he/she wants to use ICT."

[experienced language teacher] "Hardware availability and software trainings are the usual but critical challenges about integrating ICT in language teaching."

#### Attitudes towards ICT

Table 11 presents the attitudes of the novice and experienced language teachers towards ICT use in language instruction.

Consistent with the perceptions of the novice and experienced language teachers, both also have the same positive attitudes towards ICT, but in slightly different degrees. Generally, the experienced language teacher strongly agreed that ICT should be used to do exercises and practice, retrieve information, work in a collaborative way, and learn in an autonomous way. The novice language teacher also has almost the same attitudes towards ICT use for students. However, on the premise that ICT should be used to retrieve information, the novice language teacher deliberately disagreed. This may be due to the fear of the said teacher on the detrimental effects of such opportunity towards developing academic misconduct or intellectual dishonesty among students. As per Bushweller (1999), academic dishonesty is a growing concern amongst students for better grades. With technology evolving making it easier to have access to different tools, adolescents are faced with a decision to choose academic integrity or academic dishonesty. Such misconduct is usually practiced in language subjects, especially when they are asked to write book reviews, reports, and most of the time, research papers.

On the premise that ICT use in teaching and learning positively impacts on student's motivation, both subjects "strong agreed." This could be justified by the previous responses of the novice and experienced language teachers on how ICT use makes learning interesting and imaginative for students. For academic achievement, the novice language teacher "agreed," while the experienced language teacher "strongly agreed." About developing higher-order thinking skills and competence in transversal skills, both agreed that ICT use is advantageous. This may be anchored on the idea that ICT use promotes media literacy where students learn how to access, create, and evaluate media messages in novel ways. The social aspect of ICT use through social networking sites like the use of Twitter, Facebook, and Instagram to teach language concepts and consolidate students' opinions stimulate interaction of students with different people. This aspect of ICT should therefore be further validated. For example, based on the study of Martin (2009), there is no direct correlation

between active involvement of college students to social media and their academic achievement in general.

**Table 11:** Attitudes towards ICT of the novice language teacher and experienced language teachers

Attitudes towards ICT	Newies Teacher	Function and Tasahan
ICT should be used for students to:	Novice Teacher	Experienced Teacher
Do exercises and practices.	Strongly Agree	Strongly Agree
Retrieve information.	Disagree	Strongly Agree
Work in a collaborative way.	Strongly Agree	Strongly Agree
Learn in an     autonomous way.	Strongly Agree	Strongly Agree
ICT use in teaching and learning positively impacts on student's		
Motivation	Strong Agree	Strongly Agree
Achievement	Agree	Strongly Agree
<ul> <li>Higher-order thinking skills (critical thinking, analysis, problem solving)</li> </ul>	Agree	Agree
Competence in transversal skills (learning to learn, social competences, etc.)	Agree	Agree
ICT use in teaching and learning is essential to prepare students to live and work in the 21 <sup>st</sup> century.	Strong Agree	Strong Agree
For ICT to be fully exploited for teaching and learning, radical changes in schools are needed.	Strong Agree	Agree

The necessity of acquiring technological know-how through ICT in the 21<sup>st</sup> century arena may have been considered extremely important by the novice and experienced language teachers—the reason why they "strongly agreed" on the said premise. On another note, the idea that radical changes should be initiated in the school to accommodate ICT use was also perceived as necessary by both subjects. Hence, the novice language teacher "agreed" with it, while the experienced language teacher "strongly agreed." Bonifacio (2013) therefore believes that ICT must be used and taught in powerful and meaningful ways. This may only be done through changing curricular standards for ICT or as he calls it, a result-oriented paradigm shift.

To further deal with the attitudes of the subjects of the study towards ICT use, the following extracts from the interviews including discussions of similarities and differences on the responses of the novice and experienced language teachers are provided:

On the question that deals with the "ease" of integrating ICT in language teaching-learning methods, the subjects responded:

[novice language teacher] "Not all the time, because sometimes the preparation takes time. Integrating ICT for this matter is not applicable. On the other hand, when ICT is used in teachinglearning methods, the discussion becomes easy because the interest of the learners is apparent and since they know how to manipulate computers, they really involve themselves in the learning process."

[experienced language teacher] "Nowadays, ICT is almost a natural feature of learning among the students as they are exposed to learning with ICT inside and outside the school. Relatively, it is very easy to integrate ICT in my teaching-learning methods mainly because of the students' familiarity to Internet and ICT."

Regarding the question that deals with the pieces of advice the subjects could give to teachers who have just started teaching language with ICT, they stated:

[novice language teacher] "Ask. Don't be hesitant to ask even to older teachers if they know how. Explore. Sometimes, it is better to just try and explore because in a way, you will learn by yourself. Use ICT in teaching language most of the time so that learners will be more interested in your discussion."

[experienced language teacher] "Undergo basic training or go into a self-help webpage or website in the application of different web designs for teaching language. In ICT, practice and exposure time are important learning factors."

Finally, when asked about the future of ICT in language teaching, the novice and experienced language teachers claimed:

[novice language teacher] "I hope it will become real. Because we are in the 21<sup>st</sup> century, we learn that all learners know how to use ICT. So, if ICT will be integrated in language teaching, perhaps more students will be interested in learning the English language."

[experienced language teacher] "I believe that this trend will evolve even more complex and in a much faster pace. The government will soon mandate interactive web-based student accounts for education or a portfolio on web page."

#### IMPLICATIONS

This qualitative study considers the experiences, perceptions and attitudes of a novice and an experienced language teacher on the integration of ICT in language teaching. The similarities and differences on the responses of the subjects of the study therefore provide essential data on the current issues and considerations about ICT use, especially in a public educational institution where technology-mediated approach in language instruction is yet to be fully implemented due to certain constraints. Hence, the following implications are presented.

First, a language teacher's knowledge and exposure to ICT play an important role in enriching their experiences. The trainings, seminars, availability of resources and materials all influence the

breadth of experience a language teacher may have towards ICT. In the present study, the experiences of a novice language teacher and an experienced one were described. It was revealed that though the novice language teacher had less exposure towards ICT, she uses more instruction time capitalizing on ICT integration in her language class more than the experienced language teacher, who apparently had more exposure. This may mean that language teachers, like the novice language teacher in the present study, capitalize on the use of ICT resources like downloadable activities in grammar and literature, videos, and audio-clippings, and PowerPoint presentations, despite having attended fewer trainings and seminars on ICT and despite having less number of years teaching in the field. Though the experienced language teacher had more trainings and seminars and teaching experiences, he does not use most of the time ICT tools and activities in his language class. As such, though there are a lot of constraints on the use of ICT in language teaching in the present context, the novice language teacher becomes more resourceful and innovative, while the experienced language teacher becomes less motivated and would resort to using traditional resources and activities, instead.

Second, both the novice and experienced language teachers' perceptions on the impact of ICT use in their students' over-all learning and achievement are both on the positive side. Though the subjects sounded optimistic about ICT use, a lot must be done to stabilize effective integration. Thus, the barriers perceived by the subjects call for a more intensified training for language teachers with special attention on how to utilize both hardware and software components of technology in language teaching. The barriers featured also raise the need to provide first appropriate ICT resources and tools to stimulate use and practice among language teachers.

Third, the positive attitudes of the novice and experienced language teachers on the use of ICT reveal that the said approach is essential in making learners deal with the challenges posed by contemporary education. Both agreed that ICT use stimulates collaborative and autonomous learning, ensures achievement and motivation, and helps speed up the acquisition of higher-order thinking skills and social competences. These findings imply that more studies should be done to investigate the relative effects of ICT-integration to students' overall language learning.

#### CONCLUSION

This qualitative study reveals that in a developing nation like the Philippines, the role of ICT in language teaching is deemed vital. However, the scarcity of ICT resources, such as the limited number of computers and the unavailability of Internet services, hinder the effective integration of ICT in language pedagogy. The experiences, perceptions and attitudes of the subjects uncover their limited know-how about ICT-use and at the same time, the optimism they have about the future of ICT in language teaching, if downsides will be given appropriate solutions. Finally, this study needs further investigation to justify and validate conclusions made. Hence, suggestions for further research are highly encouraged. Having more research participants for the same study would strengthen data presented about the actual experiences, perceptions and attitudes of language teachers towards ICT use. Moreover, matching the perceptions and attitudes of the language teachers with their actual classroom practices would give more depth to this study.

#### REFERENCES

- Akinbode, JO 2007, 'The impacts of Information Communication Technology (ICT) on the teaching and learning of English as a second language in Nigerian secondary schools'. *African Research Review*, vol. 1, no. 3, pp. 139-152.
- Beatty, K 2003, *Teaching and researching computer-assisted language learning*, Longman, New York.
- Bonifacio, AL 2013, *Developing Information Communication Technology (ICT) curriculum* standards for K-12 schools in the Philippines. Available from: linc.mit.edu/linc2013/proceedings/Session7/Session7Bonifacio.pdf. [9 May 2016].
- Brown, HD 1991, 'TESOL at twenty-five: What are the issues?', *TESOL Quarterly,* vol. 25, no. 2, pp. 245-260.
- Bushweller, K 1999, 'Student cheating: a morality moratorium?', *The American School Board Journal*, vol. 186, pp. 24-32.
- Chapelle, CA 2001, Computer applications in second language acquisition: foundations for teaching, testing and research. Cambridge University Press, Cambridge.
- Correos, C 2014, 'Teachers' ICT literacy and utilization in English Language Teaching, ICT & Innovations in Education', *International Electronic Journal*, vol. 2, no. 1, pp. 1-25.
- Dole, JA, Duffy, GG, Roehler, LR & Pearson, PD 1991, 'Moving from the old to the new: Researc h on reading comprehension instruction', *Review of Educational Research*, vol. 61, no. 2, pp. 239-264.
- Isisag, KU 2011, The positive effects of integrating ICT in Foreign Language Teaching. Available from: http://conference.pixel-online.net/ICT4LL2012/common/download/Paper\_pdf/235-IBT107-FP IsisalCT2012.pdf. [23 June 2016].
- Jung, S 2006, Information and Communication Technology Use and Skills (ICTUS) for learning English, Ph.D. Thesis, University of Maryland. Available from: http://drum.lib.umd.edu//handle/1903/3885. [21 June 2016].
- Khalid, NB 2007, The integration of ICT among English language (ESL) teachers in primary schools in Satok Area in Kuching. Available from: http://ir.unimas.my/4215/1/The%20integration%20of%20ICT%20among%20english%20I anguage%20(ESL)%20teachers%20in%20primary%20schools%20in%20Satok%20area %20in%20Kuching.pdf. [30 June 2016].
- Khan, S, Hasan, M & Clement, CK 2012, 'Barriers to the introduction of ICT education in developing countries: The example of Bangladesh', *International Journal of Instruction*, vol. 5, no. 2.
- Kolbakova, F 2014, The use of ICT among the teachers of English in Estonia by comparison with Europe and Asia. Available from: http://dspace.ut.ee/bitstream/handle/10062/46990/Master's\_Thesis\_Kolbakova.pdf. [30 June 2016].

- Lee, K 2000, *English teachers' barriers to the use of Computer-assisted Language Learning*. Available from: http://iteslj.org/Articles/Lee-CALLbarriers.html. [25 May 2016].
- Liu, M, Moore, Z, Graham, L & Lee, S 2003, 'A look at the research on computer based technology use in second language learning: A review of the literature from 1990-2000', *Journal of Research on Technology in Education*, vol. 34, pp. 250-273.
- Martin, C 2009, Social networking usage and grades among college students. Available from: http://www.unh.edu/news/docs/UNHsocialmedia.pdf. [23 July 2016].
- Salehi, H & Salehi, Z 2012, 'Challenges for using ICT in education: Teachers' insights', International Journal of e-Education, e-Business, e-Management, and e-Learning, vol. 2, no. 1, pp. 40-43.
- Sipacio, PJF 2014, 'Confronting challenges in implementing e-portfolio via Facebook in a Philippine university'. *Indonesian Journal of Applied Linguistics*, vol. 4, no. 2, pp. 44-55.
- Tanveer, M 2011, Integrating e-learning in classroom-based language teaching: Perceptions, challenges and strategies. Available from: http://conference.pixelonline.net/ICT4LL2011/common/download/Paper\_pdf/IEC141-252-FP-Tanveer-ICT4LL2011.pdf. [23 June 2016].
- Tinio, VL 2002, Survey of ICT utilization in Philippine public high schools. Available from: http://www.fit-ed.org/downloads/ICT%20Utilization%20Survey.pdf. [15 April 2016].
- Underwood, AH 2006, Advantages of using ICT in learning-teaching processes. Available from http://edtechreview.in/trends-insights/insights/959-advantages-of-using-ict-in-learningteaching processes. [2 June 2016].
- Valdez, PN 2010 'Reflections on using the digital portfolio in academic writing in a Philippine university: Problems and possibilities'. *Philippine ESL Journal*, vol. 5, pp. 160-170.
- Warschauer, M 1996, 'Computer assisted language learning: an introduction' In Fotos, S, (ed.), *Multimedia language teaching*. Logos International, Tokyo.
- Wyse, SE 2011, What is the difference between qualitative research and quantitative research? Available from: http://www.snapsurveys.com/blog/what-is-the-difference-betweenqualitative-research-and-quantitative-research/. [21 June 2016].
- Zhao, Y 2005, Research in technology and second language learning: Developments and directions. Information Age Publishing, Connecticut.

Copyright for articles published in this journal is retained by the authors, with first publication rights granted to the journal. By virtue of their appearance in this open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings.

Original article at: http://ijedict.dec.uwi.edu/viewarticle.php?id=2204