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TECHNOLOGICAL PEDAGOGICAL AND CONTENT KNOWLEDGE (TPACK) OF ENGLISH LANGUAGE TEACHERS AND THEIR TEACHING PRACTICES

[1]Willow F. PANGKET

[1]Mountain Province State Polytechnic College, CAR, Philippines, w3pangket@gmail.com

Abstract

This study determined the technological pedagogical and content knowledge of the Public Junior and Senior High School teachers in Bontoc, Mountain Province, specifically, the English teachers. It also looked into the integration of technology in the teaching and learning activities employed by language teachers. A total of 25 language teachers were the respondents in this study. Using a quantitative and qualitative methods, the self-perception of the language teachers gathered in this study shows that they are more competent in their content and pedagogical knowledge. Though the language teachers integrate available technology in their class, it focuses more on exploring the contents than pedagogical. The integration of technology in teaching and learning has a long way to go and still continue to be a challenge to language teachers. Teachers need to improve their technological pedagogical practices that enhance engaging teaching-learning encounters with learners. It is important for school administrators and curriculum planners to put more emphasis on workshops and training especially on technological pedagogical approaches to increase the technological and pedagogical knowledge of teachers.

Keywords: TPACK; technological integration; pedagogy; content knowledge.

INTRODUCTION

Learning to teach is complex and a life-long process, so professional learning or development is important. With the paradigm shift in education, the teacher roles and student roles are redefined. It is no longer what a teacher will teach but what a student will be able to demonstrate. This means that education has shifted from instruction paradigm, where the teacher's role is to transfer knowledge, to a learning paradigm, where the teacher's role is that of coach. Obviously, there is a change with how contents are delivered. This becomes a challenge for teachers where background and experience level do not matter since every student learns differently. More so that the trend in education is the integration of technology in content and pedagogy.

With the growing trend in technology in education, its integration into language teaching significantly impacts both the teacher and the students. The technological tools used in language teaching and learning are helpful in terms of repeated use of materials, availability of materials, cost less or low cost of materials, practical learning in a short time, and appeals to different learning styles (Gunuç and Babacan, 2017). It has become a popular tool as an alternative strategy among teachers in teaching language and language learning processes.

However, without enough exposure and mastery over technology, technology integration becomes a more significant challenge for novice or veteran teachers, especially with newer technologies present to teachers. Without proper training, understanding, and preparation, technological integration in class becomes temporary and may not have a sufficient contribution to learning. It only means that technological integration requires a systematic approach. It looks at how technology should be

used in language teaching, not just for the sake of using it.

Since the Philippines is one of the developing countries in Asia, access to the internet and lack of technological devices for e-learning pose a problem for both the teacher and learner, especially in classroom-based instruction, which is also a bigger problem in rural areas. Though the Department of Education (DepEd) encourages its schools to integrate technology in classrooms, teachers only use whatever technology is available.

The lack of Information and Communication Technology (ICT) materials is not only a problem for public schools. Manaligod (2012), in his study of ICT use in Metro Manila public schools, acknowledged that the lack of hardware remains to be the most pressing and persistent problem. Relative to the student population, the computer-to-student ratio is dismally low at 1:63. Access to computers is limited to those taking computer education subjects (Manaligod, 2012). Manila is a big city, how much more in the rural areas like Mountain Province where this study was conducted. Also, an Asian Development Bank Report entitled, ICT in Education and Training in Asia and the Pacific, discussed the present ICT infrastructure of the Philippines. The report indicated that the 'national telecommunications infrastructure is more or less adequate. Marketing and business practices in the sector prevent more optimal utilization of the national network and local exchanges (Ramos, 2010). True enough, data providers in the country offer faster internet only with higher fees. If integrating online ICTs means higher expenses, many teachers cannot afford to do so.

Objectives of the study

To address such problems in the technology integration in language classroom, it is essential to determine first the technological pedagogical and content knowledge (TPACK) of the English teachers in the Philippine context; and to identify the technology-integrated teaching practices employed by these language teachers; hence, this study.

Literature review

In the field of English teaching, English teachers are likely to face many challenges, considering the competitive market of English education not only that, the demanding nature of a teaching career. It is more challenging if these English teachers do not have formal training in teaching methodology. Hence, it is important to look into the knowledge of teachers in the integration of technology to their teaching.

The concept of PCK was introduced by Lee Shulman in 1986. He viewed that the knowledge base of teaching rested at the intersection of content and pedagogy, according to him, this is a specific and unique form of teacher knowledge. He defined PCK as Teacher's interpretations and transformations of subject-matter knowledge in the context of facilitating student learning. To him, he observed that these two knowledge domains were being treated as mutually exclusive domains.

Another definition of PCK is the definition of Mishra and Khoeler which is consistent with Shulman and many other scholars that PCK is the idea of transforming the subject matter for teaching occurs as the mentor comprehends the subject matter, finds different ways to represent it and adapts and modifies the instructional materials to alternative conceptions and students' prior knowledge. Since technology is already part of education, pedagogy and content are not enough for the mastery of teachers.

The teacher's knowledge of educational technology to support student learning is also known as technological pedagogical and content knowledge (TPACK) (Mishra & Koehler, 2006). The framework of Mishra and Koehler on the integration of technology to other critical components of teacher's knowledge was built from Shulman's idea of pedagogical content knowledge (PCK) (Shulman, 1987). The framework of these bodies of knowledge shows how technology, pedagogy, and content are equally important and how they are interwoven. As Koehler and Mishra (2009) argue that teaching is a complex and ill-structured domain, the components of teacher knowledge are understanding content, understanding of teaching, and understanding of technology. Teachers should not only be technology-literate but should be able to design teaching-learning activities that effectively integrate these three

components of teacher knowledge so learning would be meaningful. For technology to be effective in classroom teaching, Gunuç and Babacan (2017) explained that technology integration should be carried out consciously and for teachers to carefully plan their lesson. This only shows that there is a change with how teachers deliver their content.

The applications of TPACK are observed in various disciplines. Hence, the use of technology in classrooms is prevalent. In language classes, technology has become popular among language schools and language teachers. However, the availability of technology in schools does not guarantee effectiveness in its utilization. Undeniably, there are many benefits of using digital resources. However, with so many innovations in technology, it requires constant updating. As Ersanli (2016) explains, staying current might be time-consuming for teachers. Ersanli concluded that teachers should have understanding of how technology, pedagogy, and content interact to support learning. With this, teachers need to be constantly updated on the new technology and they need to be trained on teaching approaches where technology is integrated.

With the trend in technology integration in classrooms, Wu (2013) reported that there is still lack of research studies conducted for domain-specific TPACK such as Language, Social Studies, and Geography as compared to Science and Mathematics. This is still true today. Also, most TPACK related studies would focus on pre-service teachers and not on in-service teachers.

Content Knowledge

It refers to knowledge of the specific topic the teacher has about the subject he/she teaches. Knowledge of content is critical to teachers; this domain is a prerequisite knowledge in Pedagogical Content Knowledge (PCK) (Kultsum, 2017). Kultsum also adds that this domain influences the teaching-learning process, substantially affecting learners' achievement. Rfundt and Duit (2000), as cited by Mishra and Koehler (2009), claimed that the cost of not having a comprehensive base of content knowledge could be prohibitive, for students can receive incorrect information and develop misconceptions about the content area. It influences the teaching-learning process, and it has a substantial effect on learners' achievement.

Pedagogical Knowledge

It comes from the teacher's learning and experience. It is the knowledge of how learners learn, how to teach in the way the learners learn optimally, and which forms of assessment are best for learning. According to Mishra and Koehler (2009), pedagogical knowledge requires an understanding of cognitive, social, and developmental theories of learning and how they apply to students in the classroom. Since this is also part of a skill that teachers should have, it is an art in the practice of teaching. They utilize the knowledge and practice transmitting the knowledge in an exciting way for the students to learn. The teacher may know everything but does not know how to teach. Pedagogy is the teacher's deep knowledge about the processes and practices or methods of teaching and learning (Mishra & Koehler, 2009).

Technological Knowledge

Teachers need to know what types of technology will engage and motivate their learners best and how to use those technologies in the classroom. Mishra and Koehler (2009) explicitly emphasized that:

"It goes beyond traditional notions of computer literacy to require that persons understand information technology broadly enough to apply it productively at work and in their everyday lives, recognize when information technology can assist or impede the achievement of a goal, and continually adapt to changes in information technology."

Pedagogical Content Knowledge

It refers to the knowledge of how to teach the content of a specific subject. The idea of transforming the subject matter for teaching occurs as the mentor comprehends the subject matter, finds different ways to represent it and adapts and modifies the instructional materials to alternative conceptions and students' prior knowledge (Mishra and Koehler, 2009).

The key elements of PCK as proposed by Shulman are for teachers to have content knowledge and for them to have a good grasp of the student's conceptions, misconceptions and their difficulties about the subject. This is where

teachers need to profile their students to know which level they are in a particular area. Another element is the general pedagogical knowledge which refers to the teaching strategies. To complete what Shulman suggested about the teacher's knowledge, he added another three elements: Curriculum knowledge, knowledge of educational contexts, knowledge of the purposes of education. On curriculum knowledge, teachers should know how to sequence, structure academic content so to maximize the teaching and learning process. It is not just about following the textbook. This is also important for teacher's knowledge since they are part of curriculum development.

Technological Pedagogical Knowledge

This refers to the knowledge of how to use technology to teach and learn in the classroom. It is also the understanding of how teaching and learning can change when particular technologies are used in particular ways (Mishra and Koehler, 2009). It can utilize various technological tools and digital applications as they are used in different disciplines. TPK is the skill to employ the technology effectively along with pedagogical designs and strategies.

It is worth noting that most popular software, such as PowerPoint Presentations, is not designed for educational purposes. Teachers, therefore, need to develop skills to look beyond the most common uses for technologies, customizing them to be used in teaching-learning purposes. Therefore, Mishra and Koehler (2009) emphasize that TPK requires a forward-looking, creative, and open-minded seeking of technology use, not for the sake of technology itself, but the sake of advancing student learning and understanding.

Technological Content Knowledge

It is the knowledge of how to use the technology to explore the content of the subject. TCK is understanding the influence of technology on the content of a given subject as it is critical in selecting suitable technological tools for the teaching-learning process. Mishra and Koehler (2009) explained that teachers need to master more than the subject matter they teach; they must also understand how specific technologies can change the subject matter.

Technological Pedagogical and Content Knowledge (TPACK)

TPACK is a new knowledge for teachers in all disciplines to equip themselves with these emerging technologies to use technology in their classrooms effectively. According to Koehler and Mishra (2009), TPACK is an understanding that shows equal interactions among content, pedagogy, and technology knowledge. They further explain that it is the basis of effective teaching with technology which requires understanding of the representation of concepts using technologies; pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help amend some of the problems that students face; knowledge of students' prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge to develop new epistemologies or strengthen old ones (Koehler & Mishra, 2009).

To Kurt (2018), the effective implementation of technology in the classroom requires acknowledging the dynamic, transactional relationship among content, pedagogy, and the incoming technology – all within the unique contexts of different schools, classrooms, and cultures. He added that in order for teachers to make effective use of the TPACK framework, they should be open to specific ideas. First, that concepts from the content being taught can be represented using technology. Second, that pedagogical techniques can communicate content in different ways using technology (Kurt, 2018).

Context Knowledge

Knowledge of educational contexts refers to the ability to consider not only the physical conditions of the classroom, technological facilities, access to these technologies, but also the demographics or the profile of the students.

Methodology

This research used quantitative and qualitative methods. The quantitative data were gathered using a survey questionnaire to identify the self-perceived TPACK of the language teachers, and the qualitative data were used to identify the

teaching practices that these language teachers employ in their classroom.

The study was conducted in Public Junior and Senior High Schools in Bontoc, Mountain Province for the School Year 2019-2020. Bontoc has six high schools, and from these six schools, five are Junior high schools and only one senior high school. The study used a total enumeration sampling technique since the study focused on English language teachers in public high school. There were 25 respondents to this study.

The questionnaire used in this study aimed to identify the TPACK of language teachers. The questionnaire is based from the previous TPACK-related instruments and was modified to reflect language learning and teaching as the focus of this study. Originally, it is composed of a "59-item, 9-dimensional, valid and reliable scale." The scale, which initially comprised 66 items (8 items were excluded following the varimax-rotated principal component analysis), had a Cronbach's alpha of 0.97, suggesting the reliability and validity of the tool. Content validation of the questionnaire was also applied. Two language teachers from the Department of Education (DepEd) and three language teachers from Mountain Province State Polytechnic College (MPSPC) validated the questionnaire.

The validated questionnaire consists of two sections. Section A involved 58 items about TPACK framework focusing on the domains or the general competencies of the TPACK, namely: technological knowledge (TK), pedagogical knowledge (PK), content knowledge (CK), technological pedagogical knowledge - offline (TPK), technological pedagogical knowledge – online (TPK), technological content knowledge (TCK), technological pedagogical content knowledge (TPCK), and context knowledge (CK). Each domain has its subsections that covers specific skill. The scales in these domains used four scales without midpoint, namely 1-less competent, 2-fairly competent, 3-competent, and 4-very much competent. Section B of the questionnaire is the qualitative aspect of the study. The section is a face-to-face interview with the participants to gather in-depth information about technology integration use in teaching. Also, document analysis of sample lesson plans of the respondents has been significantly helpful in assessing the data gathered through the questionnaire.

Descriptive statistics was used to treat the data from the questionnaire. The weighted mean and its corresponding standard deviation were computed for each indicator. The questionnaire used a Likert-type scale to identify the level of competence of language teachers of their TPACK.

Scale	Range	Descriptive Rating	Descriptor
4	3.25 – 4.0	Very Much Competent	I have full knowledge, experience, and full confidence and can provide guidance, instruction, and advice to others
3	2.50 – 3.24	Competent	I have knowledge, experience, and confidence, but still needs advice from others to carry-out tasks confidently and consistently
2	1.75 – 2.49	Fairly Competent	I have knowledge and experience and slight confidence and needs some assistance
1	1 – 1.74	Less Competent	I have limited knowledge of its terminology and concepts but requires some experience and much assistance

Thematic coding was employed to analyze the data gathered from the interview, and document analysis was also employed in analyzing the DLL of the respondents.

Results and Discussion

The technological pedagogical and content knowledge of English teachers

Table 1 *Overall result of the competencies of English language teachers in the nine (9) domains of TPACK*

General Competencies	**ENGLISH**	
	Mean	Description
Technological Knowledge (TK)	2.71	Competent
Pedagogical Knowledge (PK)	3.33	Very Much Competent
Content Knowledge (CK)	3.60	Very Much Competent
Technological Pedagogical Knowledge (TPK) - Offline	2.88	Competent
Technological Pedagogical Knowledge (TPK) - Online	2.21	Fairly Competent
Technological Content Knowledge (TCK)	3.08	Competent
Pedagogical Content Knowledge (PCK)	3.39	Very Much Competent
Technological Pedagogical Content Knowledge (TPCK)	2.70	Competent
Context Knowledge	3.31	Very Much Competent

The survey result shows that English language teachers are very much competent in four domains, namely PK, CK, PCK, and Content Knowledge. The mean scores of the domains show that these teachers have full knowledge, experience, and full confidence which means they could provide guidance, instruction, and advice to others. It also shows that they have full confidence in these areas without the integration of technology. However, there are also four domains that these English language teachers feel competent about, namely: TK, TPK-offline, TCK, and TPCK. With the integration of technology in their classes, the results reflect that there are certain skills in each domain that teachers acknowledge what they lack. They may have knowledge, experience, and confidence, but they still need advice from others to carry-out relevant tasks confidently and consistently. Also, TPCK-online indicates that these teachers are fairly competent. This suggests that they have knowledge and experience, but they have slight confidence in this area which requires some assistance. One participant explained that do not really employ online class since access to the internet in their school and at home is a problem for both teachers and students.

Technical Knowledge (TK) of English Teachers

This domain has six (6) competencies at which English language teachers are competent, as shown by the grand mean of 2.71. On the specific skills in this domain, the English teachers are competent in choosing appropriate technologies to use. They are also competent in their ability to overcome technical problems independently and to use new developing technologies. When it came to their ability to solve hardware issues of technological devices and their ability to install necessary software into their technological devices, the language teachers are fairly competent. However, their ability to help their students with problems on computers is also somewhat limited.

The results further reveal that there are inconsistencies in the Technological Knowledge of English teachers. Not all of them have the same level of competency in the area of technological knowledge. Ersanli (2016) explained this by citing that many teachers are still reluctant to integrate technology to reinforce their classes because they do not know how to do it. Being tech-savvy is not that simple. It takes time and experience to get there. The lack of proficiency to effectively use technology in class, coupled with the presumption that their students are "digitally native", naturally affects the teachers' competency level.

Pedagogical Knowledge (PK) of English Teachers

Of the eleven (11) competencies in this domain, the English language teachers are very much competent in seven, exhibiting effective classroom management during class. The English teachers deemed themselves as very much competent in their ability to keep up-to-date with instructional strategies, methods, and techniques; to detect misconceptions students might experience; to exhibit effective classroom management during classes; to prepare practical measurement tools for examinations; to prepare practical measurement tools for examinations; to decide how to assess in-class student performance; and to make classes attractive to stimulate student learning. The other areas in which English language teachers manifest competence are: their ability to use the best instructional strategy and method for teaching a particular concept; their ability to get rid of misconceptions that students might experience; their ability to use those instructional techniques that are based on student performance; their ability to take into account any potential individual differences in the instructional process; and their ability to take measures against potential problems that might be experienced in the classroom.

The English teachers' perception of themselves shows that they are well-equipped for their pedagogical knowledge. In the interview, one participant explained that they are confident enough to rate themselves as very much competent in this domain since their schools also accept practice teachers whom they mentor. However, the respondents also admit that they still need training on specific strategies for teaching English since new trends have emerged in language schools or centers.

Content Knowledge (CK) of English Teachers

The result of the self-survey discloses that English language teachers are very much competent in their content knowledge. The English language teachers are competent in all nine (9) areas of this domain.

The results show that they are very much competent in using existing knowledge about English subjects. They are also very much competent in their ability to decide on the order and scope of English subjects to be covered; and to explain objectives of English subjects by level.

However, they admit that they still have to work to improve their content knowledge on their ability to solve potential daily problems with linguistic concepts and ideas; on their ability to use various ways and strategies for solving linguistic problem; on their ability to associate English subjects with similar courses; and on their ability to provide examples and activities of how language can be used for effective communication, specifically in a professional setting.

Technological Pedagogical Knowledge (TPK) of English Teachers

TPK of English language teachers are divided into offline and online with three competencies. The TPK offline mean score of English language teachers is 2.88, which is indicative of their being competent in their ability to plan on how to use technology for instructional purposes, ability to evaluate students about a class in which technology is effectively used, and the ability to predict how technology can affect the learning-instructional process. Their TPK-online mean score of 2.21 suggests that these teachers are fairly competent, as indicated by their scores in the three areas of competencies, which are: 1) the ability to provide students with online environments that contribute to their knowledge and skills; 2) ability to use various methods and approaches during online instruction; and 3) ability to promote online learning among students.

The participants are aware of what they lack in this area. Based on the interview with them, most of them agreed that they tend to use digital technology without fundamental change. For example, some teachers use TV to teach, but they still deliver content to students in much the same way as they did with an old chalkboard. While it is true that they can animate texts and slides, this is not essentially different from what was done in the past using overhead projector transparencies or photocopies. This demonstrates that, in terms of pedagogy, teachers who have been in the service have integrated technology only to their usual teaching practices without necessarily changing their methods (Howard & Mozejko, 2015).

This is similar with the study of Ersanli (2016). Though his participants were pre-service

English language teachers, he found out that they thought they are aware of the learning styles of the students, they do not know how to integrate technology, content knowledge, and appropriate pedagogy. This could explain why even the in-service teachers do not know the appropriate approaches in integrating technology in their teaching because it could also be interpreted that there is a need for teaching programs in higher education institutions (HEIs) to give emphasis on technology integration in their curricula.

Technological Content Knowledge of English Teachers

The TCK of English language teachers is competent as indicated by the grand mean of 3.08. Among the five competencies in this domain, the English language teachers showed that they are very competent in explaining the advantages of using technology in teaching English. The teachers show that they are competent on their ability to use pre-installed software like MS Office, voice recorder, media players, sticky notes, mail, paint, team viewer, among others. The language teachers are competent in the four other areas of competency, such as the ability to use flash animations and graphical drawings, the ability to make multimedia or presentations, and the ability to search the web for subjects and concepts related to English.

This supports the findings of Alqurashi and Samarin (2015) which revealed that teachers' knowledge in technology was not as strong as their knowledge in pedagogy and content. It might likewise reflect an assumption that teachers become confident in their stock knowledge and the information they tend to familiarize themselves with after many years of teaching.

Pedagogical Content Knowledge of English Language Teachers

The English language teachers are very much competent in their pedagogical content knowledge gathering from mean score of 3.39. From the five areas of competency of PCK, the result indicates that they are very much competent in explaining the contents of English subjects in the curriculum; likewise, in teaching English classes following the theoretical foundations of the curriculum. They also see themselves as very much competent when it comes to their ability to determine instructional strategies, methods, and techniques suitable for English subjects and the ability to overcome any misconceptions that students might have about a particular English.

However, when it comes to identifying the learning difficulties of students in a particular English subject and teaching research language subjects, they only perceive themselves as competent. This also supports the statement of the participants that they sometimes neglect the individual needs of the students because of the population of one class which could be sometimes more than 50. When it comes to teaching research language subjects, they admit that this is something new in the K-12 curriculum. One participant explained that not all teachers are researchers. This is because it is only now that DepEd is encouraging its teachers to conduct action research studies.

These results are promising and reassuring as it implies that English language teachers are highly knowledgeable about their curriculum, subject matter, the learners, and pedagogy. The teacher's knowledge on the purposes of education is also key in PCK. Knowing the goals of the curriculum, the contents to be taught, and the goal of the students would help teachers design lessons that would help in attaining the program's goals and also that of the student. Faisal (2015) concluded that a teacher's pedagogical content knowledge primarily affects the practice of teaching. In order to be competent in this domain, teachers are required to be sufficiently informed of the curriculum as this allows them to know what objectives learners should attain. They are also required to possess expertise in their subject matter and be familiar with the learner's characteristics, potentials, and limitations. Finally, they must be pedagogically conversant to convey the lesson through meaningful learning activities effectively.

Technological Pedagogical Content Knowledge (TPCK) of English Language Teachers

The grand mean score of 2.70 illustrates that English language teachers are competent in this domain. Among the nine (9) areas of competencies in this domain, the English language teachers are very much competent in one area which is their ability to consider English language contents, learning-teaching

strategies, and relevant new technologies during lesson planning. This also agrees with the result in their content and pedagogical knowledge as mentioned earlier.

There are also five areas of competencies in this domain where they feel that they are competent enough which are their ability to use technology-assisted evaluation tools while assessing the learning-teaching process; use technological devices in order to measure students' preliminary knowledge about English subjects; use technology to reinforce students' skills in, comprehension of, and predictions about a particular English subject; use technology to provide practical examples in parallel with the English textbook; integrate technology with English effectively and adequately in order to make them more manageable and more comprehensible. The respondents admit that they sometimes ask help or advice from others who are more knowledgeable in specific tasks especially when technology is involved.

While looking at the other areas of competencies in this domain, there are three areas where the teachers feel that they are fairly competent about. These are their ability to use technological devices in order to identify students' misconceptions about English subjects; satisfy student requirements during online English instruction; and help others at school for coordinated use of language, technological and instructional strategies. This is also reflected in their technological pedagogical knowledge, especially in online classes. As admitted by the respondents during the interview, and as reflected in their daily lesson logs (DLL), they do not practice online classes.

Context Knowledge of English Language Teachers

In this domain, the English language teachers are very much competent. This has five areas of competency. They are very much confident in their ability to consider certain physical conditions of the classroom where English instruction occurs and to take into account technological facilities of the classroom where English instruction takes place

Meanwhile, to consider specific demographics of students for whom English instruction is provided, such as parental educational status and income level; to consider the structure of the society in which the school where English instruction will take place exists; and to consider how sound students at the school where English instruction will take place can access technology, the respondents only feel that they are competent enough in these areas.

To sum it up, this study has shown that the English language teachers have different levels in their technological and pedagogical content knowledge. Though the English language teachers are more confident in most areas that do not involve technology in teaching, the ICT integration in their lessons is not utilized correctly, raising concerns in K-12 classrooms.

Technology-integrated teaching and learning activities employed by language teachers

The respondents were asked about the technology they use in teaching and the technology-integrated student activities they give their students to enhance learning.

Technology-integrated teaching

The technology is used as lesson support. The third knowledge domains that are least specified or described in DLL are technological knowledge (TK) and technological pedagogical knowledge (TPK). Teachers' TK and their use of technology is only suggested under "Materials" in their DLL. If it is not specified in the "Material" section of the DLL, it is briefly mentioned in the "Procedure." However, there are no brief or elaborate descriptions in DLL on how the technology will be pedagogically used in lessons. Standard technologies listed as materials needed for use are projectors that suggest using presentations, radio speakers, smartphones, and laptops. Other materials would also suggest video clips and digital storytelling. Online and offline applications are never specified in the DLL. Teachers do not use online games since they do not have internet connection. However, interviews with teachers suggest it as visual aids and for continuous communication and instruction with students outside class hours.

The most common offline ICT-related mode of instruction is the use of PowerPoint presentations. However, the presentations are not more of pedagogical use but only used to disseminate the content of subjects. In their study, Badilla and Sabilla (2015) observed that

slide presentation applications do not have a clear didactic purpose, and technology use is dominant in this category. The majority of their respondents "exemplarily implemented the use of Prezi" regarding the curriculum objectives as teaching strategies (Badilla & Sabillon, 2015). PowerPoint is an excellent aid to presentations provided that each presentation is considered first from a pedagogical viewpoint, said Jones (2003) but, if not used carefully, may instead disengage students and hinder learning (Smith, n.d).

Other teachers talk about the comfort of downloading PowerPoint presentations from the net, which further implies that it is basically for exploring and presenting content. As explained by one respondent that downloading presentation from the net saves them time, considering the load of work they are given. Ramos (2020) also supported this, who stated that the preparation of teaching resources like PowerPoint presentations is burdensome as they have no time to prepare them.

Technological-integrated student activities

During the interview, the teachers were asked what type of activities they give to students to improve the language skills of the students. They mentioned that they give picture prompts, and essay, and some activities available online or printed.

For online ICT-related instruction mode, some teachers reveal asking students to write blogs and post outputs such as articles and videos in social media like Facebook and Youtube. These types of activities are results of their discussion on writing which covers the types of writing. One teacher explained that:

“After my discussion on the process of writing and types of writing, I ask my students to write something about they are interested in. For instance, on narrative writing, I ask them to write their experience on travelling. After they are done writing, I ask them to post them in their social media accounts.”

When asked about why they ask students to post their outputs, she said that they are encouraged to integrate technology in their teaching. She added that:

“It’s not only me who does this. Other teachers also in other subjects. Sometimes, they ask them to count the number of likes, if it is posted on Facebook, and how many commented.”

Another teacher said that when assignments are asked to be posted online, more students are becoming more creative with their outputs since many might see it. Also, some learners are already becoming inspired to write blogs and articles after experiencing posting assignments on the internet, the teacher added.

However, concerning the design of a blog, results of a study by Badillon and Sabillion (2015) show that most teachers are not aligned with the curriculum objectives of the selected technology (the blog). According to the TPACK model, teachers must have pedagogical discipline knowledge enabling them to adapt or create new tasks that are suited to the learning needs of their students (Badilla & Sabillon, 2015). Nevertheless, the experience of teachers who utilized blogs and social media to display learners' output disagree with this.

This is the common misconception of having the pedagogical content knowledge.

With so many activities available online or printed, it is just easy for English teachers to pick activities and use it in the classroom because they think that students enjoy them. However, the concept of PCK is not busy and fun. This is also reflected during the interview that one teacher explained that they share materials or activities with other teachers. This is observed when other teachers asked for fun activities in the classroom. This is also a common mistake for a one-size-fits all activities.

When asked about the cause of minimal use of technology in the classroom, the respondents’ most common answers are summarized into three. First is the lack of ICT materials in the schools. Second, there is no internet connection provided by the schools, making it impossible to use in the classroom. The internet connection is a personal expense of the teacher; hence, it is for personal use only. And third, lack of knowledge or training about ICT and ICT pedagogical integration. Though DepEd trains teachers in ICT integration in the classroom, the teachers still admit that they are not that confident to use it in their class.

Regarding the lack of knowledge on the advanced use of technology as part of the teaching pedagogy, it seems like a common

problem. According to Manaligod (2012), almost half of the teachers never attended ICT-related training. Training usually attended by teachers were generally on computer literacy like basic operations, word processing, and spreadsheet. Critical applications using educational games, CAI, and simulations registered some lower usage. Most of the teachers do not use ICT in the classroom. His study also revealed that ICT is used few times a year, and the type of use is concentrated on lesson preparation and class management. Most teachers accept that students know more about computers and the internet, and data analysis confirmed this view (Manaligod, 2012).

Conclusion

The English teachers have confidence in their self-perception of their content knowledge, pedagogical knowledge, and pedagogical content knowledge. However, there might be a misconception of what they think of what PCK is really like. On the integration of technology in teaching, they have a long way to improve their pedagogical practices that enhance engaging teaching-learning encounters with learners in the digital age. Though the integration of technology is not spelled out in the daily lesson logs of the teachers, they are not far behind in integrating ICTs in their teaching strategies. With the limited facilities up to the unsatisfactory internet services, they try to utilize available ICTs, although it focuses more on exploring contents than pedagogical.

Reference

[1] Alqurashi, E. & Samarin, S. (2015, October). In-service English language teachers' knowledge of technology integration into the classroom. Paper presented at the 2015 International Business and Education Conference, Las Vegas, NV.

[2] Badilla, M. G., & Sabillón, D. (2015). The TPACK model to prepare and evaluate lesson plans. An experience with pre-service teachers using social networks and digital resources. Journal of Mobile Multimedia, 1(1 & 2), 134–146.

[3] Conlon, T., & Simpson, M. (2003). Silicon Valley versus Silicon Glen: The impact of computers upon teaching and learning: A comparative study. British Journal of Education Technology. http://dx.doi.org/10.1111/1467-8535.00316.

[4] Cuban, L. (2001). Oversold and underused - computers in the classroom. Cambridge: Harvard University Press.

[5] Ersanli, C. (2016). Improving technological pedagogical content knowledge (TPACK) of pre-service English language teachers. International Education Studies.9(5). Canadian Center of Science and Education.

[6] Gunuç, S., & Babacan, N. (2017). Technology integration in English language teaching and learning. The Journal of Teaching English for Specific and Academic Purposes, 5, 349–358. https://doi.org/10.22190/JTESAP1702349G

[7] Jones, A. M. (2015). The use and abuse of PowerPoint in Teaching and Learning in the Life Sciences: A Personal Overview. BioScience Education, 2(1), 1–13. https://doi.org/10.3108/beej.2003.02000004

[8] Koehler, M. & Mishra, P. (2009). What is technological pedagogical content knowledge? Contemporary Issues in Technology and Teacher Education. (9) 1. 60-70.

[9] Kultsum, U. (2017b, August). The Concept of Pedagogical Content Knowledge (PCK): Recognizing the English Teachers' Competences in Indonesia. 2nd International Conference on Innovative Research Across Disciplines (ICIRAD 2017). Advances in Social Science, Education and Humanities Research. https://doi.org/10.2991/icirad-17.2017.11

[10] Manaligod, H. J. (2012, September). Integration of Information & Communication Technology in Public Secondary Schools in Metro-Manila, Philippines. (Dissertation). Universidade de Santiago de Compostela. https://minerva.usc.es/xmlui/bitstream/handle/10347/6112/rep_250.pdf?sequence=1&isAllowed=y

[11] Mishra, P. & Koehler, M. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teacher knowledge. Teachers College Record 108 (6), 1017-1054.

[12] Nazari, N., Nafissi, Z., Estaji, M., & Marandi, S. S. (2019). Evaluating novice and experienced EFL teachers' perceived TPACK for their professional development. Cogent Education, 6(1). https://doi.org/10.1080/2331186X.2019.1632010

[13] Onal, N. (2016). Development, validity and reliability of TPACK scale with pre-service Mathematic teachers. International Online Journal of Educational Sciences. 8 (2), 93-107.

[14] Shulman, L. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher.

[15] Watson. D. (2001). Pedagogy before Technology: Re-thinking the relationship between ICT and teaching. Education and Information Technologies, 6(4), 251-266.

[16] Ramos, D. D. (2010). ICT-Integration-in Education as a Social Practice in a Post-Conflict Setting: An Analysis of an ICT-Integration in Education Program in ARMM. Dalumat EJournal., 1, 40–54.