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HUMANISTINEN TIEDEKUNTA
HUMANISTISKA FAKULTETEN
FACULTY OF ARTS

Finnish EFL Teachers' Attitudes Towards Using Computer-assisted Language Learning Tools

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Master's Thesis
English Philology
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University of Helsinki
March 2019

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Tiedekunta/Osasto – Fakultet/Sektion – Faculty
Faculty of Arts

Tekijä – Författare – Author
NYAIRO, Franklin

Työn nimi – Arbetets titel – Title
Finnish EFL Teachers' Attitudes Towards Using Computer-assisted Language Learning Tools

Oppiaine – Läroämne – Subject
English Philology

Työn laji – Arbetets	**Aika – Datum – Month and year**	**Sivumäärä – Sidoantal – Number of pages**
Master's Thesis	March 2019	62pp + 2 appendices

Tiivistelmä – Referat – Abstract

Computer-assisted language learning (CALL) is an emerging field of research that focusses on how information and communication technologies (ICT) are applied in language teaching and learning. CALL lies at the intersection of several other independent fields of study, i.e. technology, education, and linguistics. The aim of this study is to investigate Finnish EFL teachers' attitudes and perceptions towards using CALL tools in their classrooms. First, the study presents an overview of the CALL tools that the teachers use in their EFL instruction. Then, it explores the teachers' reasons behind choosing the said tools. Lastly, this study presents the teachers' own experiences on the benefits and potential these tools hold in the Finnish comprehensive and upper secondary schools.

This study traces the roots and development of the field of CALL and its implications to the theory and practice of technology-enhanced language learning. Evidently, the benefits of using CALL are not limited to the teachers and students but also extend to the other stakeholders in the learning enterprise. For instance, technologies help motivate learners, and promote novel instructional and assessment practices.

The study was conducted using both quantitative and qualitative methods in the data collection and analysis. The advantage of using dual instruments of survey and interview helped delve deeper into the subject matter to discover answers to the research problem. With an online survey, the study contacted 687 EFL teachers in Finnish comprehensive and upper secondary school and received 91 respondents. In addition, the study purposively selected four teachers for in-depth interviews. The data was analyzed and presented using descriptive statistics and thematic content analysis.

The findings from this study confirm that the use of ICTs in language learning settings continues to grow. In essence, EFL teachers extensively use a variety of CALL tools based on the perceived usefulness and effectiveness in a learning activity. The popular tools are computer applications (word processing) and web resources (audio and video), while mobile applications and social media are rarely used. Secondly, EFL teachers view technologies as complementary tools for instruction, assessment and learning motivation. In most cases, they are confident about integrating the tools in their teaching and learning activities. Furthermore, the teachers hope for more resources and ICT training and support in order to effectively and efficiently use the CALL tools on a wider scale. In conclusion, further research would help establish how teachers have been trained to incorporate technologies in their instructional methodologies and also, there is a need to assess which technologies have a greater impact on attainment of learning objectives.

Avainsanat – Nyckelord – Keywords
computer-assisted language learning, EFL, ICT, teachers' attitudes

Säilytyspaikka – Förvaringställe – Where deposited
Helsinki University Library – Helda / E-thesis (theses)

Muita tietoja – Övriga uppgifter – Additional information

Table of Contents

List of Tables

List of Figures

1 Introduction

The teaching and learning of English as a foreign language (EFL) with the help of Information and communication technology (ICT) has become an integral part of many global education systems and learning environments. Finnish schools are no exception as regards this phenomenon. The introduction of new technologies and tools in the EFL classrooms brings to the table a new mix of possibilities for English language learners and teachers. Certainly, these technologies provide new potential and options on how to manipulate multimodal resources in such a way that helps the attainment of teaching and learning objectives.

Research in EFL continues to show that technology-enhanced learning environments have potential to nurture learners to be intellectually enriched and to attain the desired proficiencies in the English language. At the same time, language teachers and instructors in Finnish schools, with varied levels of enthusiasm and technical know-how, have the challenge and prospect to explore and experiment these new tools for teaching EFL.

Without doubt, English is an important subject in the Finnish education system. The Finnish National Agency for Education (EDUFI) recognizes and upholds the role played by ICT, multimodality and multiliteracy learning in the development of young learners' knowledge and skills. The National Core Curriculum (2016) stipulates the need to promote and exploit the use technologies as "an object and a tool of learning" (2014).

A premise that holds true in many disciplines shows that research is often the point of departure for what happens in practice, and in return, practice forms the basis for ideas

to be researched (Hinkel 2005, Stockwell 2014). The interdisciplinary field of computer-assisted language learning (CALL) is the melting point in this tight relationship between educational technology and language learning. Accordingly, advances realized in educational technology have a potential to affect and shape the way languages are being taught and learnt (and vice versa). It can be concluded (and rationally so) that many contexts of language teaching and learning strive to adjust and match their methodologies so as to keep pace with inventions and developments in technology.

CALL traces its roots to the mid-20th century with the advent of personal computing. Several collaborative projects and research communities in the United States of America (USA) and Britain made concerted efforts to promote language teaching and learning through the development of CALL programs and publications. Thus, the field of CALL is perceived as relatively young. The youthful element, coupled with the interdisciplinary nature, in part explains the lack of an established theory or framework in CALL studies. In order to have understand the rationale of technology use, CALL research and practice finds it befitting to borrow and adapt theories from related and constituent disciplines.

The pertinent decision to implement the EFL teaching with technology lies squarely on the language teacher. The technology acceptance model (TAM) is one theory that attempts to understand, predict and explain the factors that may influence EFL teachers to adopt technology in their language instruction. The TAM model came into prominence in the fields of information technology, marketing and social sciences. In the recent past, the model has been applied and implemented in applied linguistics

fields of second-language acquisition (SLA), technology-enhanced language learning (TELL) and even CALL.

The objective of this study is to investigate the use of ICT tools in the Finnish comprehensive and upper-secondary schools. Such tools in Finnish EFL classrooms are assumed to supplement and complement worthwhile learning experiences. In addition, the study will focus on the teachers by trying to understand their decisions to use (or not use) computer technologies in their EFL classrooms. A detailed narrative of the teachers' attitudes and perceptions of using the CALL tools will help to highlight the rationale of using these tools, and to what extent they feel that the tools contribute to the EFL learning objectives.

The study will use a mixed-method approach of an online survey and face to face interviews in order to answer the following questions:

1. What are the CALL technologies that are used in EFL learning in the Finnish schools?
2. Why do EFL teachers use these technologies for teaching?
3. What are the teachers' perceptions and attitudes towards using the CALL tools?

This thesis is structured as follows: chapter 2 introduces an overview of the theoretical concepts relevant to the topic of CALL, and then presents the definition of CALL, its historical development, its multi-interdisciplinary nature, and related theories of technology acceptance and adoption models. Chapter 3 deals with the data and methods used in this study. Chapter 4 presents the findings of this study, and the analyses of the data from several different perspectives are discussed and summarized. Chapter 5 provides the study summary, recommendations based on the findings and limitations. Finally, chapter 6 presents a conclusion of the research.

2 Theoretical Background

This chapter presents a comprehensive background on the field of CALL, its history, and teachers' perceptions of using technologies in English language teaching and learning in Finland. Section 2.1 introduces the opportunities that have been made possible with the integration of technology in learning environments. Section 2.2 gives the definition of CALL, whereas section 2.3 highlights the history and development of CALL, including CALL-related terminologies and CALL tools. The interdisciplinary nature of CALL research and the theories that have been used in this study are introduced in section 2.4. Section 2.5 covers the benefits of CALL in the EFL teaching and learning, and also the rationale of using CALL tools in Finnish school ecosystems. Lastly, section 2.6 provides the justification and relevance of this study.

2.1 The Theory of Learning with Technology

It is important to appreciate that new technologies have opened the classroom to the outside world. The inclusion and integration of resources such as overhead projectors, interactive whiteboards, laptop computers and wireless internet, has largely overhauled and revolutionized the way learning takes place in our school environments (Golonka, Bowles, Frank, Richardson, & Freynik 2014). According to Kalantzis and Cope (2017), these technologies bring about real and authentic possibilities or *affordances* for the new learning ecologies of the 21st century. It is assumed that if the new e-affordances (see Figure 1 below) are identified and implemented effectively, they can help build a holistic theory for learning with technology. The task of selecting and implementing these technologies lies largely on the classroom teachers, among other stakeholders, such as the school administration, the local municipalities and even the national boards of education (Mumtaz 2000, Jeong & Hmelo-Silver 2016).

Figure 1: The 7 e-affordances of learning with technology Kalantzis and Cope (2017).

The above factors are basically enabled by the emergence of new educational technologies. These affordances have the ability to recreate and transform the traditional learning environments into e-learning ecologies that have the potential of engaging diverse learners in a more effective, resource efficient, and equitable ways (Jeong & Hmelo-Silver 2016, Kalantzis & Cope, 2017).

While many educators have welcomed the use of technology in learning environments, Garrett (2009) points out that “the use of the computer does not constitute a method”, but rather technology is a medium through which a variety of methods, approaches, and pedagogical philosophies have a possibility to be implemented (p. 75). Learning systems continue to exhibit the enthusiasm to explore and exploit novel technologies for language learning. However, the effectiveness of the technologies exists in *how*

they are put to use but not in the tools itself per se (Hubbard & Siskin 2004, Hubbard 2005).

2.2 Definition of CALL

The term computer-assisted language learning (CALL) was agreed upon at the 1983 TESOL convention in a meeting of all interested participants. It took a lot of research and consensus building to arrive at an appropriate and comprehensive definition of CALL as a phenomenon of teaching and learning with computer technologies and tools. CALL embraces a wide range of ICT applications and approaches to teaching and learning foreign languages. Starting with the "traditional" drill-and-practice programs in the 1960s and 1970s to the more recent manifestations of CALL in the Internet age which includes virtual learning environment, Web-based distance learning and even social media. In addition, CALL's enormous scope extends to include the use of corpora and concordances, interactive whiteboards, and Computer-mediated communication (CMC).

Chapelle (2001:3) defined CALL as "the area of technology and second language teaching and learning". This definition is simplistic since it only states the two disciplines on which growing field of CALL is based. Furthermore, it does not take into account the dynamic nature of the characterization of CALL. Beatty (2013) defined CALL as "any process in which a learner uses a computer and, as a result, improves his or her language". Though this definition highlights the notion of 'learner, computer and learning', it is however not clear of this process and inherent relationship between these elements (Davies, Otto & Rüschoff 2012).

The above pair of definitions and (and perhaps several others not discussed herein) lack the interactive element which is abundant in CALL as we know it. In addition,

they may tend to narrowly perceive CALL as simply language teaching and learning with a computer tool or aid. Levy's (1997) definition, "the search for and study of applications of the computer in language teaching and learning", is broad and concise for the theory and practice of field of CALL. This definition carries weight since it takes into consideration issues of materials design, technologies, pedagogical theories and modes of instruction that are part of current studies in CALL. An alternative term, technology-enhanced language learning (TELL), also emerged around the early 1990s by the TELL Consortium project, University of Hull (Bush & Terry 1997).

2.3 History and Development of CALL

The use of computers for language teaching and learning was conceived in the educational movements in the 1960s and 1970s, both in the United States and the United Kingdom. These research ventures were borne of the perceived benefits that would accrue from using the available technologies in the learning process.

Several studies have made attempts to trace and document the history and development of CALL. Earlier approaches in the 1980s and 1990s (Davies & Higgins 1985, Jones & Fortescue 1987, Hardisty & Windeatt 1989) focused on typologies of CALL applications and programs. These studies categorized CALL by outlining the functions of the various computer technologies and tools, as they were used in language learning. Later studies (Warschauer 1996, 2000, Warschauer & Healey 1998, Levy 1997, Bax 2003) diverged from the focus on typologies and pursued a new approach. The studies identified various phases (chronological eras) of CALL and classified them according to their underlying pedagogical and methodological characteristics, over time and space.

Warschauer (1996) provides a holistic view of the historical development of CALL

research in which he depicts CALL chronological sequence, as seen below:

1. Structural CALL: 1970s to 1980s.
2. Communicative CALL: 1980s to 1990s.
3. Integrative CALL: 2000 onwards.

Bax (2003) pointed out several criticisms of Warschauer & Haley (1998) and Warschauer (2000) model. He found it problematic and ambiguous on a number of instances. In addition, he thought that it contained unclear criteria, especially on the historical validity of the phases, questioning ‘how is it that all three coexist together today’? In addition, he pointed out ‘conceptual confusion’ on whether the categories were ‘paradigms’ or ‘perspectives’. Despite the fact Bax (2003) appreciated the usefulness of the conceptualization of the development of CALL in Warschauer (2000) model, he saw the need to propose a new analysis to address the above inconsistencies. Consequently, he proposed the following historical development of CALL framework:

1. Restricted CALL – mainly behaviouristic: 1960s to 1980s.
2. Open CALL – i.e. open in terms of feedback given to students, software types and the role of the teacher, and including simulations and games: 1980s to 2003
3. Integrated CALL – still to be achieved. Bax argued that at the time of writing language teachers were still in the Open CALL phase, as true integration could only be said to have been achieved when CALL had reached a state of "normalisation" – e.g. when using CALL was as normal as using a pen (Bax 2011).

The historical development of CALL has been collectively summarized in the Table 1 below (Walker & White 2013), and it takes accounts the contributions made by both Warschauer & Haley (1998) and Bax (2003, 2011). A point of note is that these phases or their constituent elements overlap, therefore it is difficult to fix times to them.

Approach	Structural Restricted CALL	Communicative/ Open CALL	Integrative CALL	TELL
Technology	From mainframe to mobile	PCs	Multimedia, Internet	Mobile devices, tablets, multiplayer games, virtual worlds
Teaching Paradigm	Grammar-translation and audio-lingual	Communicative language teaching	Content-based ESP/EAP	Communication, interaction
View of Language	Structural (a form of structural system)	Cognitive (a mentally constructed system)	Socio-cognitive (developed in social interaction)	Structural, Cognitive, Socio-cognitive, adaptable
Principal Use of Technology	Drill and practice	Communicative Exercises	Authentic discourse	Normalized
Principal Objective	Accuracy	Fluency	Agency	Autonomy with community
View of Learning	Behaviorism	Constructivism	Social Constructivism Situated learning	Connectivism
Role of Technology	Tutor	Tutee	Mediation tool	Environment, resource

Table 1: From CALL to TELL adapted from Walker & White (2013)

2.3.1 CALL Related Terminologies

Schools of thought within the field of CALL have put forward several variants of what constitutes language teaching and learning with technology. These terms represent the different orientations, perspectives, philosophies and emphasis held by their proponents. The motivation for this multiple nomenclature also stems from the growing attempts to distance the field from the earlier iterations of CALL. In many cases, these terms overlap and sometimes are indistinguishable from each other. This is partly because many aspects of CALL exist in some sort of continuum and therefore work, in varied degrees, to achieve effective language teaching and learning (Beatty 2013).

The field of CALL uses many acronyms, as seen in the Table 2 below.

CALL	Computer Assisted Language Learning
CMC	Computer-Mediated Communication
CAI	Computer Assisted Instruction
ICALL	Intelligent Computer Assisted Language Learning
CELL	Computer Enhanced Language Learning
TELL	Technology Enhanced Language Learning
WELL	Web Enhanced Language Learning
MALL	Mobile Assisted Language Learning

Table 2: List of CALL-related acronyms

The main difference between the acronyms is the focus given to the computer as part of the language learning process. In this study, I will refer to the language teaching and learning with the help of a computer or computer application and technology as CALL (unless otherwise stated). The reason for this choice lies in the fact that this is the term that is closest in form and content to the use of computer technologies for language learning and also it is the official term agreed upon by the earlier proponents of the learning language with technology. The acronym CMC is computer-discussion in emails, forums, text or chat, and may not necessarily involve learning or learning environments. CAI refers to the use of the computer for instruction, regardless of what is being taught. ICALL refers to the integration of techniques from the fields of Artificial Intelligence and Computational Linguistics to enhance CALL applications. CELL effectively means the same thing as CALL. TELL is an acronym that is mainly used in North America that covers the same domain as CALL. WELL refers specifically to the use of the web (or Internet) in the language learning process. MALL is simply learning with mobile devices like mobile phones, tablets, and mp3 player (sometimes also used for Multimedia Assisted Language Learning) (Davies, Otto & Rüschoff 2012).

From the foregoing existing definitions, it could be problematic to describe CALL as a single idea since language learning with technology involves a broad range of

activities, and covers many issues such as materials design, technologies, pedagogical theories, and modes of instruction. Instead, it could be beneficial and befitting for emerging definition to shift the focus from technology to language learning itself and include the notion of ‘enhancing’ and/or ‘assisting’ to highlight the fact that technology mostly facilitates the language learning process (Egbert, Paulus, Nakamichi 2002, Egbert 2005).

2.3.2 Tools for CALL

The role of computers and computer technologies in language learning can be depicted by these four metaphors: tutor, tool, environment and resource (Taylor 1980, 2003, Stevenson 2008). As a tutor, it assumes the role held by a teacher in a traditional classroom. It is often designed with an independent learner in mind (Levy 1997). As a tool, the learner uses the computer or computer program to accomplish a task in a language learning situation. Thirdly, as a learning environment, computer applications or network of computers can provide a real or virtual space in which learners can interact with each other or with programmable items or tasks. Lastly, digital technologies can be a learning environment whereby they act as sources of information or multiple ways for teachers to present information to learners.

CALL as a tool is designed to assist learning, therefore it is part of a wider learning process. Normally, a tool is under the direct control of the user and does not have a methodology of its own. Examples of CALL tools include email, electronic dictionaries, Computer Mediated Communication (CMC) and the word processor. Generally, there is no feedback to the user. More teacher input, both in the planning and usage stages, is required with a tool (Beatty 2003, Blake 2013).

As mentioned earlier, there are many different ICT tools (software applications) that are being employed for CALL. These applications fall into two categories: generic applications and CALL specific applications. Generic software applications, as the name suggests, are multi-purpose programs and applications that have not been specifically designed for language teaching and learning, but still have gained prominent use in CALL. They include: word-processors, spreadsheets, presentation software, email, and web browsers. On the other hand, CALL software applications are programs that have been designed specifically to promote language learning. They usually include interactivity language learning. Examples include language lab software, Web-based interactive exercises/quizzes, just to name but a few (Golonka et al. 2014, Chun 2006).

The history of CALL suggests that the computer can serve a variety of uses for language teaching. It can be a tutor which offers language drills or skill practice; a stimulus for discussion and interaction; or a tool for writing and research. With the advent of the Internet, it can also be a medium of global communication and a source of limitless authentic materials (Levy 2006, Blake 2013).

Through its relatively short history, the field of CALL has developed in tandem with the available information communication technology. It has taken advantage of the affordances and potential of ICT. CALL is a relatively new field that draws on research from other fields. Therefore, it is sometimes easier to apply the findings of one field of research directly to the CALL field, instead of having to carry out the research from scratch. This idea of employing an established theory from another field of study has few advantages: it saves time and effort and it provides positive transfer.

2.4 CALL as a Multi-disciplinary Field for EFL Learning

Stickler & Hampel (2015) suggested the notion of CALL being a multi-interdisciplinary field of study since its constituent fields are themselves interdisciplinary. They reiterate their position because the main concepts of CALL have drawn on other domains of Psychology, SLA, Instructional Technology, Human Computer Interface, Artificial Intelligence, Computational Linguistics and Applied Linguistics (Chun 2011, Stickler & Hampel 2015).

The unique location and content of CALL makes it both a challenging and productive field to study. Many of these domains of study are developing fast and hence they generate abundant explorable data. By so doing, CALL offers a multi-faceted perspective and approach. Nevertheless, this positioning of CALL at the intersection of different (and at times competing) disciplines and research traditions makes it a very complicated field to study (see Figure 2 below).

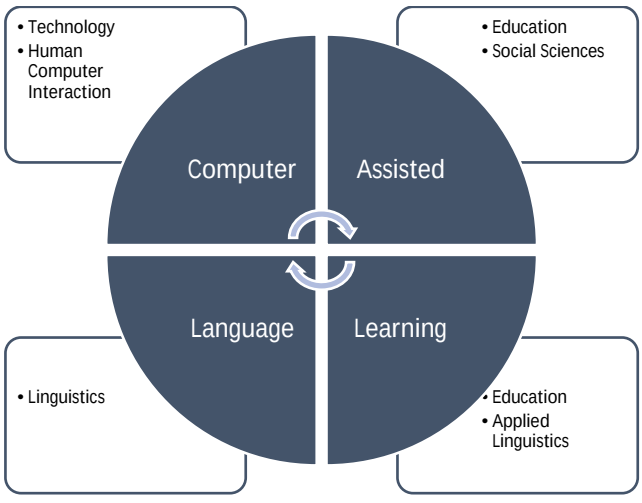


Figure 2: CALL at the intersection of disciplines adapted from Stickler & Hampel (2015)

2.4.1 Technology Acceptance Model (TAM)

With the introduction of new technology, users make the ultimate decision to use (or not to use) these innovations. Furthermore, it is natural that practitioners and researchers in the field of education attempt to understand why teachers and learners use the new technologies. The resultant acceptance/adoption models and theories have the potential to discern and predict users' behavior.

Technology acceptance model was an offshoot of the Theory of Reasoned Action (TRA) that proposes that "people form intentions to adopt a behavior or technology based on their beliefs about the consequences of adoption" (Davis 1989, Davis, Bagozzi & Warshaw 1989). TRA has been extensively used to understand and explain the adoption of behaviors, technologies, or advice. It can be seen that some theories are extended from other theories and models. In addition, this traditional framework (Figure 3 below) has been used by many studies to conduct their researches, either as individual models, a combination of models, or extended constructs of these models (Venkatesh, Morris, Davis & Davis 2003).

The Technology Acceptance Model (TAM) (Davis et al. 1989) is adapted from information systems theory and it owes its origins to acceptance and adoption models laid out in the Figure 3 below. TAM endeavors to elucidate and clarify why individuals choose to adopt or not adopt a particular technology when performing a task.

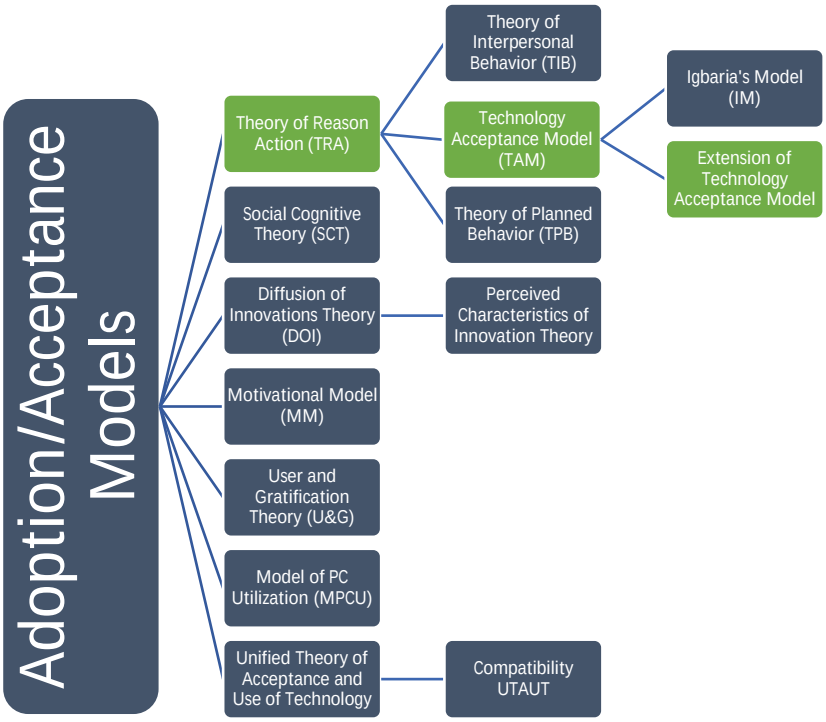


Figure 3: An overview of Adoption and Acceptance Models adapted from Taherdoost (2018)

The theory presents three factors that explain the motivation of users to use certain technological tools; perceived usefulness, perceived ease of use, and attitude toward use (Figure 4 below). (Davis 1989) defines perceived usefulness (PU) as "the degree to which a person believes that using a particular system would enhance his or her job performance", and the perceived ease-of-use (PEOU) as "the degree to which a person believes that using a particular system would be free from effort" (Davis 1989, Venkatesh et al. 2003).

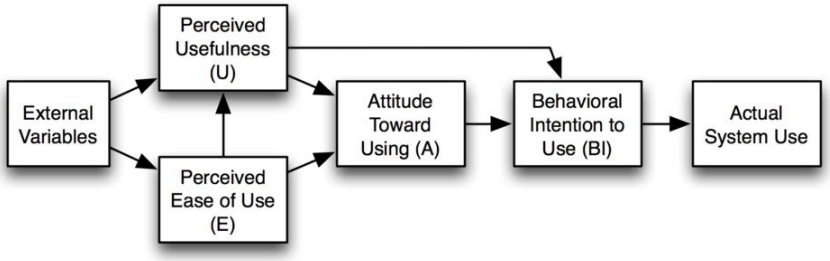


Figure 4: The Technology Acceptance Model (Davis 1989)

In this model, human behavior (including decisions to use technology for language learning) is predicted and explained through three main cognitive components including attitudes, social norms and influences, and unique personal intentions (Davis et al. 1989, Taherdoost 2018, Wallace & Sheetz 2014). For instance, teachers' deliberate decisions, to use particular tools for language learning, are determined by their feelings or behaviors towards the said tools, social influence from the school administration, or their individual decisions.

2.5 Benefits of CALL in EFL Teaching and Learning

The use of computers in English language learning is based on the promises the technological tools holds for the instructors, learners, policy makers and even the content developers. Collis (1997) considered the idea that all the stakeholders in the adoption of technology in EFL instruction should keep in mind three things: ease, efficiency and enjoyment. At no time that technology is geared to make teachers redundant, but act as one of the tools to help teachers be more effective and efficient in their roles. This said, technology has the potential to enable the teachers shift their roles from being mere information deliverers, to that of guides in the learning process (Kenning 2007, Schulte 2001, Kreijns et al. 2013)

In the use of technology in language learning, the field of CALL brings to the forefront the aspects of individuality and interactivity as the core and interconnected elements of educational technology (Simpson & Walker 2014). Kenning (2007) sees as computer technologies as natural agents of change that are inherently interactive. However, she adds that for this potential to be realized, technologies require the correct human input in order to run and produce the desired results. Over time, this interactivity is growing in its complexity. The interactivity in school environment is

always a two-way street, in that students have a say in what they want to learn, and this makes the teaching using CALL tools a dynamic and robust affair (Egbert 2005, Kenning 2007). The tools that are used in CALL environments are not one-size-fits-all artefacts, but a set of technologies that provide options for the technology-savvy language instructors to cater and serve the variety of individual learner differences within the learning environment. In addition, different learning styles and learning schedules can be taken into account (Robertson et al. 1996, Liu, Moore, Graham & Lee 2002).

Apart from using CALL tools to teaching EFL, the language instructors also have at their disposal different ways to reinforce and assess their learners. The mere presence of technology in the classroom has the power to generate the learners' interest and motivation to engage in the learning activities. Technologies provide a great variety of interactive activities such as games, stories, and songs that make the language learning fun for the learners. This reinforcement of the learning process with technological tools goes a long way to produce more vivid lessons and bring concepts alive with multimodal (audio and visual) aids.

Research in CALL has shown that technologies enhance EFL learning by augmenting the traditional instruction methods and provide additional innovative ways to the teaching and learning. This effectively increases the learners' interest and preference for computer technology over more traditional methods and materials in EFL learning (Golonka et al. 2014; Scott &Beadle 2014). This preference is brought about by the advantages associated with these new technologies, such as increased student motivation, achievement and access to authentic study material for independent studies (Lee, 2000; Kongrith & Maddux, 2005).

The use of CALL technologies in EFL can make the learning experience more enjoyable, and therefore motivating to both the teachers and the students alike. In addition, teachers can improve and influence their instructional methodology by adapting their learning material to the student needs. CALL technologies and tools offer a wide range of multimedia resources by enabling text, images, audio and visuals to be combined in an interesting and stimulating ways. By so doing, it makes learning more memorable and lifelong.

Teachers who use computer technologies have the advantage and access to a rich resource of authentic materials both on the internet and in digital formats (Egbert, Paulus & Nakamichi 2002, Hong 2010, Chun 2011). No doubt, this has the ability to make their teaching experience robust, comprehensive and worthwhile to the learners. Computer and computer technologies provide the required tools to decentralize learning and provide tools for interactive, collaborative learning, critical thinking and independent studies. Learners have now the ability to learn outside the normal class hours and take into account their special learning needs, if any (Nagata 1996, Bancheri 2006, Levy 2007, Scott & Beadle 2014).

From the above, the use of CALL has been argued as an effective tool to improve students' involvement and students' performance in the learning tasks. However, several studies (Liu et al. 2002, Sagarra & Zapata 2008) have unearthed some controversies and brought into question the effectiveness of the use of technology in language learning.

2.5.1 The Finnish Educational Ecosystem

As mentioned earlier, technology has become an integral part of the Finnish educational ecosystem. The Finnish National Core Curriculum for Basic Education

lays strong emphasis in the need for learners to develop adequate ICT skills for multiliteracy. It expressly identifies ICT skills as a key part in versatile learning and points out how it should be an object and a tool to support and promote learning (EDUFI 2016). Moreover, it is important to note that equity is the value basis of the national curricula at all levels of the educational system. Lifelong learning is another important component that has received major focus in the Finnish educational arena. The underlying principle entails that everyone needs sufficient learning skills and opportunities to educate and develop themselves in different learning environments throughout their lifespan.

The Finnish education system has been characterized by high learning outcomes and an outstanding performance in the PISA scores (OECD 2010, Ilomäki 2008, Lakkala & Ilomäki 2015, Niemi 2014) It has been considered as being an equitable, decentralized system that promotes high quality teacher education. This is in addition to ICT skills for lifelong learning (Niemi 2014, Vahtivuori-Hänninen et al. 2014,).

The research indicates further that an open school culture allows staff to take risks when applying new technology, creates learning environments, and empowers learners (Lakkala, Lallimo & Hakkarainen 2005, Niemi et al., 2013).

2.6 Justification of the study

In many parts of the world, there has been ongoing research focusing the attitude of both learners and teachers towards the use of computer-assisted language learning tools, especially to EFL learning. Finland is one the many developed countries that strive to keep abreast with the developments in information and communication technologies, especially in the education sector. Despite this, there is sparse and sporadic research that is investigating EFL teachers' use of technology as a tool for

instruction. Therefore, it will be very interesting to see how the EFL teachers perceive these ICT tools, why they choose to implement them in their language learning environments in Finland.

The use of questionnaires as a major research instrument has received priority most of the previous studies, and with fewer studies utilizing interviews. In this present study, both questionnaires and case study interviews have been used to provide the opportunity for a deeper and comprehensive understanding of the way EFL teachers use CALL tools in their classrooms.

3 Materials and Methods

This chapter will present the core materials and methods used to conduct this study. The constituent sections will describe in detail the data collection procedures and methods for data analysis, including the research design and instruments, study locations, target population, research sample and other pertinent activities that helped realize the research aims.

3.1 Research Design

The research design and the choice of instruments was necessitated by the nature of the study, the research questions and objectives. In order to present a deep field picture of the usage of CALL in Finnish comprehensive schools, the research design was descriptive in nature. The first research question aimed at developing a general overview of CALL tools used and with a supplementary question on the explanation behind their usage. The study started with the hypothesis that EFL teachers in comprehensive schools in Finland use CALL tools. The second question was focused on the attitudes and perceptions that the EFL teachers harbored towards the CALL tools. The constituent items in these themes were in form of semi-structured open-ended questions (Appendix 2). These were critical in providing personal narratives of using CALL in EFL teaching.

The study employed mixed-method approach using both quantitative and qualitative methods in the data collection and later analysis. The material for this study came from two main sources: an online questionnaire (quantitative/qualitative) and semi-structured interview (qualitative). The research instruments were administered one after the other. The initial perusal of the survey findings could provide ideas for deeper

discussion and follow-up questions in the interview. Using a pair of instruments also provided me with versatility, efficiency in time and space, the perceived cost-benefit and cost effectiveness in data collection and analysis (Dörnyei & Taguchi 2009, Bilbatua & Herrero de Haro 2014). By so doing, my data collections tools have the potential to maximize the quality and amount of material that I could gather within the brevity of time and space.

3.2 Participants

The study population was English subject teachers in comprehensive and general upper secondary schools from the whole of Finland. The choice for this group was based on the idea that it would produce a general understanding on the use of CALL technologies in language teaching and learning. With the introduction of the new national school curriculum and Finland's continued high performance of in PISA tests, Finnish schools have strived to integrate various technological innovations in the field of education. Consequently, most teachers are keen to employ current educational methods and technologies in their classrooms. Therefore, these respondents do have a good understanding and first-hand experience on the use of CALL tools in the teaching and learning of English in Finnish school system.

The participants of this study are qualified teachers of English as a foreign language. That means, they have a fulfilled the duly required certification of a master's degree that includes a pedagogical studies component in English as a major subject from universities, both locally and internationally.

The age of the respondents ranged between 20 to over 50 years and their teaching experiences was from newly employed teachers to those with more than 20 years of experience.

3.3 Instruments

In order to draw a deep field picture of the usage of CALL in Finnish comprehensive schools, the study employed mixed-method approach using both quantitative and qualitative methods in the data collection and later analysis. The material for this study came from two main sources: an online questionnaire (quantitative/qualitative) and semi-structured interview (qualitative). The idea of using these two instruments simultaneously was guided by the nature of my research questions and study objectives. The research questions guided the composition of the items in both the survey and the structured interview. They both started with general demographic information of the teachers, such as the educational background, their teaching experience in years, their class sizes and the CALL tools they employ in their teaching.

3.3.1 Survey

One of the primary instruments for this study was an online survey, in form of a questionnaire. It was administered during a four-week period between 15th February to 15th March 2018. The questionnaire comprised of fourteen multiple choice and Likert scale items. At the onset, the questionnaire collected basic information about the teachers (age range, experience range, and educational qualifications). The other survey items were organized in groups of school type, class size, CALL usage and attitudes towards CALL usage. The main purpose of asking these questions was generate an overview of the CALL tools that the teachers used in their EFL instruction and also make an in-depth determination of the frequency, purpose of usage and attitude towards using them. Included in the questionnaire was an opportunity for the respondents to provide additional free comments or statements regarding CALL usage in teaching EFL.

This survey was hosted on the University of Helsinki e-form service at https://elomake.helsinki.fi/. The link to the survey was sent out via email to the teachers' email official email addresses that had been collected the schools' webpages. A total of 687 teachers were contacted. In addition, the same link was posted on the social media (Facebook) pages of the Association of Teachers of English (Suomen englanninopettajat ry) and the Federation of Foreign Language Teachers in Finland (Suomen kieltenopettajien liitto ry). The survey garnered a total of 91 respondents.

As seen in Figure 5 below, more than half of the teachers (53 respondents) were teachers in upper secondary schools, while 27 respondents were from comprehensive schools. In addition, 8 respondents teach both levels.

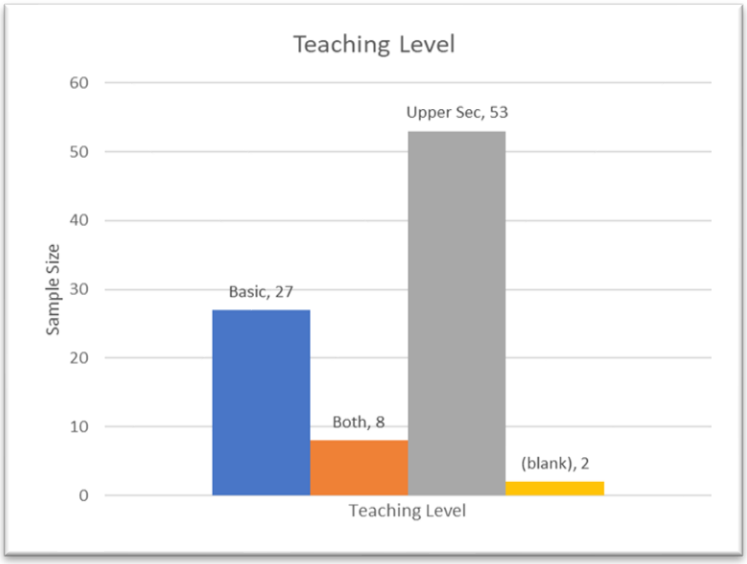


Figure 5: The teaching level of the respondents

3.3.2 The Interview

The structured interview was the second data collection instrument used in this research. The researcher pilot-tested the interview questions beforehand face-to-face with to a colleague who had experience in teaching EFL in both comprehensive and tertiary

institutions of learning. The test pilot responses did not form part of the final data analysis. The main purpose of piloting the interview items was to identify and eliminate repetitive questions. In addition, the removal of unclear questions will help to avoid misunderstanding in the actual interview

The respondents were selected through a purposive convenience sampling and requested to participate in the interview. A total of four interviews were conducted at various dates in March and April 2018. Each interview session lasted for approximately one hour and was performed in a friendly and informal manner. The location of the interviews was as per agreement with the interviewees. Two of the interview sessions took place in the respective teachers' school environment. The third interview was conducted over Skype video call while the last one took place at the at the Helsinki University library.

The interviews were audio recorded and later transcribed. In order to guarantee the anonymity of the respondents, their actual names and specific background information were duly omitted from the study, and replaced by numbers Teacher 1, 2, 3, and 4 (as seen in Table 3 below).

Teacher ID	**Teaching Subjects**	**Experience (years)**	**Teaching Level**
Teacher 1	English	17	CLIL 1-3, EFL 4-6
Teacher 2	English	15	Upper Secondary
Teacher 3	English	14	Comprehensive
Teacher 4	English and French	10	Comprehensive

Table 3: Background of participants for interview

3.4 Data Analysis Methods

The data analysis of this research was guided by the key research questions or objectives. Consequently, the objectives of this study and nature of data collected, the

analysis used both quantitative and qualitative approaches. The first tool had an opportunity to build a general overview of the CALL tools usage in EFL instruction (Question 1) while the interview enabled the study to explore in depth the ideas and issues that had been unearthed in the survey. This mixed-method approach put the researcher in a good position to arrive at meaningful results out of the analysis.

For the survey data, the responses were extracted in Excel format. The data was later sorted, and unnecessary entries like timestamp eliminated. It was important to reorganize and group the data into their various thematic groups to enable easier visualization. Using the Excel sheets, the graphic visualizations were generated from each individual theme, in such a way that they answered the research questions and objectives.

For the interviews, the researcher listened to the recording several times then transcribed them using SoundScriber (GPL freeware). For the purposes for content analysis, only the relevant parts of the transcription were selected. In addition, conversational markers (e.g. filler phrases, hesitation, pauses) were left out as they were not necessary and relevant for this study. The transcriptions were once again counter-checked with the recording to ensure all critical points have been captured on text. From the transcribed texts, the research had to pick out worthwhile and integrated conclusions for the research themes. This way, the relevant data for this study was highlighted and separated from full body of transcription. These data sets then grouped into the themes that had earlier guided the theoretical framework and that were best-placed to answer the research questions and objectives. Then, the researcher used thematic content analysis by considering the main items and making objective decisions and conclusion.

The critical part of combining data from both instruments was made possible since both instruments followed the same thematic structure. The following themes emerged from the data analysis:

1. Prevalence of CALL tools for EFL learning in Finnish schools
    a. The teachers' skills and confidence to use CALL tools
    b. Purposes for using CALL tools
2. Benefits of CALL tools in EFL learning
    a. Usefulness of Specific Tools
    b. Perceived effectiveness on EFL teaching and learning
3. Changing role of the teacher.
4. Attitudes towards CALL in EFL
5. Ways to improve use CALL in EFL

3.5 Ethical Considerations

This study ensured that all necessary and standard research ethics were adhered to, without exception. The main purpose of the study and other relevant/pertinent issues (results reporting, publishing and wider dissemination) were clearly communicated (highlighted) in both the online survey and face-to-face interviews. Firstly, informed consent was obtained from all the study participants. This was clearly stated in both written (for the questionnaire instrument) and verbally stated (in the audio interviews). Secondly, the study participants were assured of their anonymity and confidentiality of having participated in this study.

4 Results and Discussion

This chapter presents the research findings and discussion using the emerging themes from the data collected. The first section highlights the findings on the prevalence of CALL tools in Finnish comprehensive and upper secondary schools, including the teachers' preparedness and purpose of integrating the tools in the English language instruction. Section 2 covers the perceived usefulness and effectiveness of various CALL tools in EFL teaching and learning in the aforementioned schools. Also embedded in this section are the attitudes and perceptions of EFL subject teachers towards CALL tools at their disposal. Section 3, 4 and 5 highlights the benefits of the various technologies as tools for learning, assessment and motivation, and the teachers' attitudes towards these tools. The last section describes various proposals and recommendations to enhance the use of CALL tools in EFL teaching and learning in Finland.

4.1 Prevalence of CALL tools for EFL learning in Finnish schools

This study was based on the idea that technology acceptance model (TAM) (Davis 1989) two core factors of 'ease of use' and 'usefulness' determine how EFL teachers decide to adopt and integrate technologies for instruction. It is assumed that, once a teacher has identified a tool as easy to use and has proved it to be having benefits, it is almost predictable that the tool be adopted for use (Davis et al. 1989, Venkatesh et al. 2003). These two factors are determined by other external variables, one of them being the teachers' confidence to handle ICTs. Other factors such as lack of teaching experience with ICT, lack of support for ICT use and inadequate ICT and financial resources may inhibit the teachers' use of ICT (Mumtaz 2000).

The survey findings show that most respondents use a variety of CALL tools, in one way or another, in the course of their EFL instruction in Finnish comprehensive schools. The Figure 6 below presents the frequency of the tools used by surveyed teachers. It shows that more than half of the respondents use several tools on regular basis: word processing and audio recording tools are the most often tools, while other tools such as websites, computer applications, videos and other online options are also very popular as a means of aiding instruction.

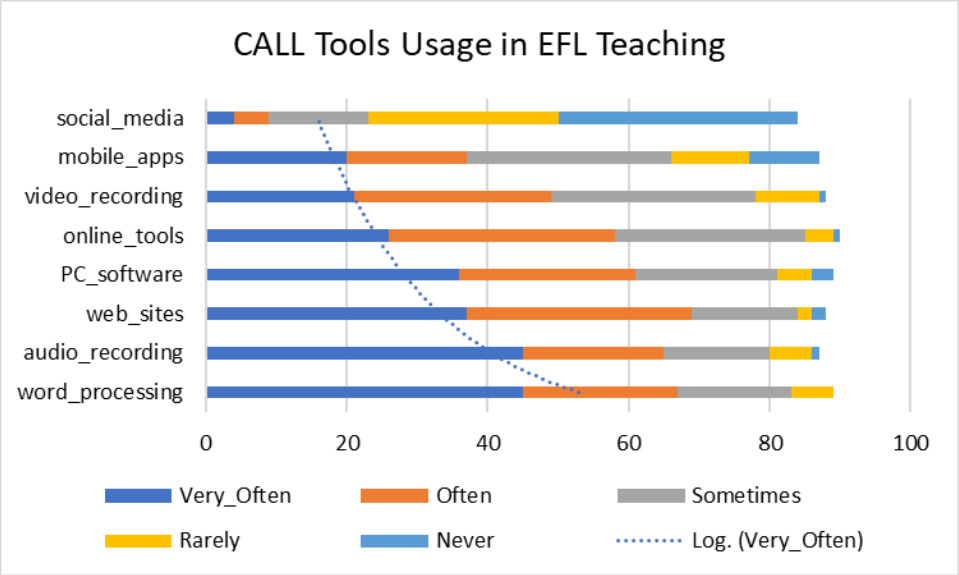


Figure 6: Frequency of CALL Tools Usage in EFL Teaching

It can be inferred from these survey that most teachers are comfortable and more often use the older technologies, such as word processing and websites, whereas newer tools such as mobile apps and social media are not yet prevalent with the teachers.

When asked how they would describe their level of ICT skills for everyday use, majority of the same teachers reported a high level of confidence (84%) in using ICT tools (see Figure 7 below). From the data, we can see that most of the surveyed teachers are aware or informed on the need to be technologically competent and be able to use these tools in EFL instruction, if need be.

The reasons why EFL teachers use CALL tools for instruction is closely tied to their attitudes and perceptions the teachers have to the same tools. Additionally, there are a number of factors that encourage teachers to use CALL tools in their EFL instruction. Abdullah & Ward (2016) suggested a number of factors that determine how teachers come to identify CALL tools as easy and useful in technology-enhanced learning environments. Some of these factors include, earlier experience in using ICT, proficiency and confidence in ICTs, personal habits are one major factor that can encourage teachers to use CALL tools, support and supply of ICT resources and training, among others (Abdullah & Ward 2016, Mumtaz 2000, Lam 2000, Liu, Lin & Zhang, 2017).

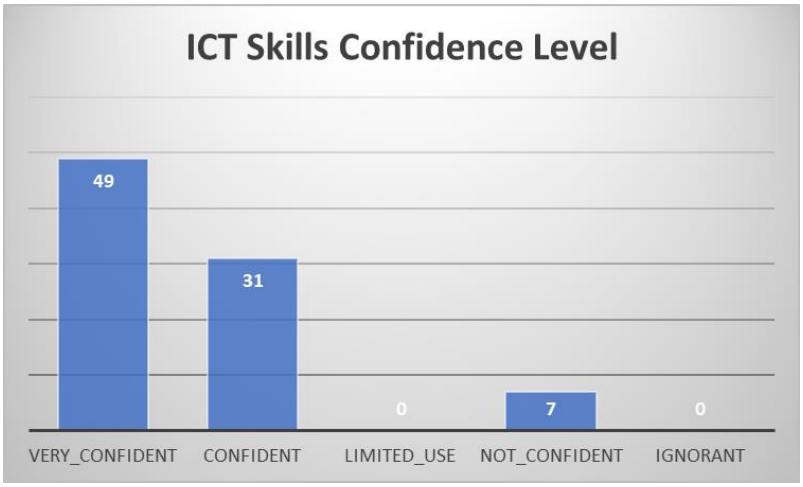


Figure 7: Confidence on their ICT skills for everyday use

The finding from the interview reported similar phenomenon that all the teachers were well conversant with computers especially MS Office and were able to utilize the tools in the school setup. They also reported that depending on their computer skills and access to resources, they use different tools for different activities for EFL instruction.

T1 is a regular user of ICT tools, both at home and school, possesses average computing skills and is confident using the computer in everyday life. Teacher 1's ICT

usage includes iPads and Chrome books. She uses the Google Classroom learning environment where she can set up different tasks for children or links for different programs for the learners to use. The class tasks include short one-off tasks for the lower classes and also longer projects for the upper grades 5 and 6.

T2 is an avid user of technology and has extensive experience using tools, applications, and learning environments. T2 has expertise using tools such as MS Office programs, audiovisual editing tools, Google Classroom, Moodle and Mindmaps. T2 uses most of these tools and environments in the classroom on a regular basis.

Teacher 3 has 16 years of experience teaching English between grades 3 and 6 in Finnish comprehensive schools. In her current station, she is the only English subject teacher. She undertook Media studies trainings (organized by Jyväskylän AMK and paid by the city of Espoo). In addition, T3 has acquired most of her ICT skills while working. The local city has been organizing several courses and seminars on teaching with technology.

Teacher 4 has 10 years' experience as a language teacher. She mainly teaches English and French in grades 3 to 6. She possesses sufficient computer skills and is well conversant with office applications, web browsing, blogging and emailing. She has been in the current school for the last seven years.

From Table 4 below, we can see that the assortment of tools used to assist EFL learning is quite large and all over the map.

Teacher	**ICT Skills**	**Tools for EFL**	
		Hardware	**Software**
T1	Average Confident user	Tablets, PC, chrome books	Google Classroom, Youtube, Bingel, Prodigy (for English and Maths), Spelling city (Vocabulary), Starfall Websites (Education.com)

T2	Advanced Skills Enthusiastic user	PC, Tablet, Laptop, Mobile phones	Office, Google classroom, Moodle, Mindmapping, Padlet, Kahoot, TodaysMeet, audio/visual editing, YouTube,
T3	Average, Confident user	Laptops, PC iPads, phones	Office 365 and Google Classroom Smart Notebooks, Book Creator, Puppet Pals, PicCollage, Morfo Kahoot and Spelling City, Pages, Keynote, QR Codes
T4	Average, Confident user	Chrome books, phones	Google Suite for education iPad apps, AnswerGarden, Padlet, Morfo, iMovie, Blabberize, Shadow Puppet Edu, Top Motions, YouTube Microsoft learning environment

Table 4: Interviewed teachers' ICT confidence and CALL tools

In addition to MS Office and Google Classroom, T2 uses audiovisual editing tools, Moodle and Mindmaps on a daily basis, including Padlet (mini-twitter), TodaysMeet and Kahoot. T3 stated that she used several other tools other than Office 365: Class Notebook, Book Creator (ebooks), Pages, (documents), Puppet Pals (cartoon creator), PicCollage (photo editor), Morfo booth (photo animations), Keynote (presentation), Kahoot, QR Codes (Crafter) and Spellingcity.

Teacher 4, on the other hand, said that Google and especially YouTube were her greatest teaching resource, using various applications in it. She uses AnswerGarden, Padlet, and Drives for collaboration; iPads Applications- Morfo, iMovie, Shadow Puppet Edu, Top Motions, Blabberize.

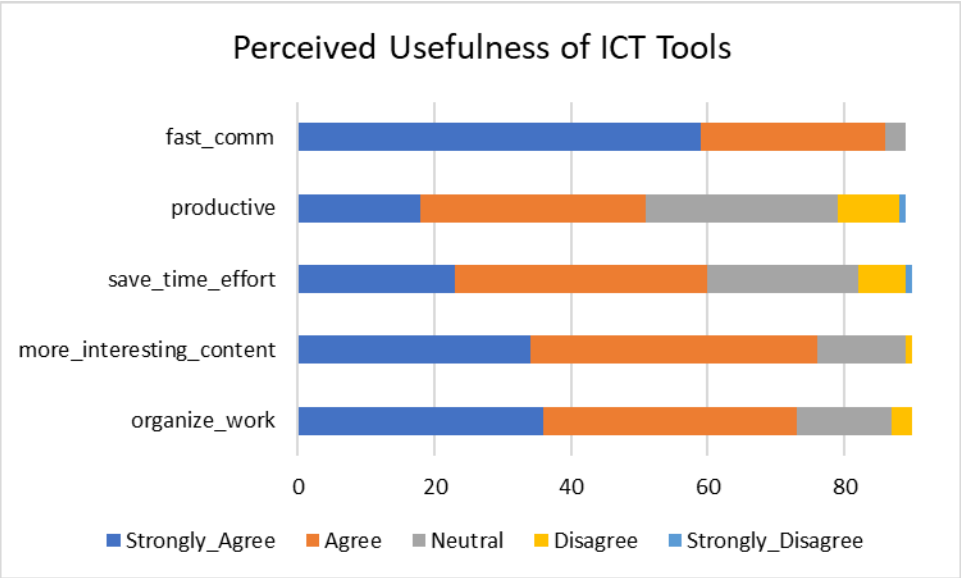
From the summary Table 4 above, we can see that the teachers use the classroom learning environments, either Google Classroom (Google suite for education) or Microsoft version. T4 uses both version in her classes. In terms of applications in use, it can be correctly inferred that all the teachers use a wide variety of tools when compared to teach EFL in their classes. The popular and common applications or technologies for all the teachers include YouTube, Spelling city, and Kahoot. Because there is no clear guidelines, every teacher uses whichever application that he or she

comes across. It also depends on the operating system, whether it is Windows, Android, or iOS.

4.2 Perceived Usefulness of ICT Tools

Davis (1989) model of technology acceptance (TAM) first presents the as the extent in which a person believes that using a tool or system would be effortless or easy to use. Equally in this research, teachers reported how their ‘ease of use’ perception helped make a decision on whether they will use a particular tool that has been provided by the school or they have explored for tools themselves.

In the research survey, the teachers were asked to choose how they agreed with the perceived usefulness of the technologies that they used in their EFL classrooms. From the figure 8 below, it can be seen that most teachers have a most favorable perception of ICTs as tools that enhance communication and access to information. In addition, most teachers strongly agreed that technologies in EFL teaching will help them find interesting teaching content and also help them organize their work. This is very critical for the efficiency and effectiveness as a teacher.



Key:
fast_comm: Enables faster communication and access to information
Productive: Makes me more productive
Saves_time_effort: Helps to save time and effort
More_interesting_content: Helps to make the learning content interesting
Organize_work: Helps me organize my teaching work

Figure 8: Perceived Usefulness of ICT Tools

When the interviewed teachers were asked about their views of technology as a learning tool, all the four teachers stated that CALL tools had made learning more enjoyable for students. T1 stated that when using Google classrooms, she could set up different tasks or links for different programs that she wanted the learners to use. All the interviewed teachers seemed to agree that these tools encouraged collaborative work and participation among learners. They also stated that they use the assessment tools as illustrated in following examples 1, 2, 3, and 4[1].

(1) When the ipads came, it made so easy, you know, they just open it and they can actually work on it … That also motivates the students and they have so much fun, and they want to do it. (T3)

(2) […] Websites and applications: Pages, Book creator, you can use it for almost everything, they can add text and pictures, and they record it. And it is easy to evaluate, the spelling, the pronunciation, and everything. (T3)

[1] All the text data are presented verbatim, as transcribed from the actual interviews.

When asked about their views of technology as a learning tool, the teachers stated that tools had made learning more enjoyable for students. T1 stated that when using Google classrooms, she could set up different tasks or links for different programs that she wanted the learners to use. All the interviewed teachers seemed to agree that these tools encouraged collaborative work and participation among learners. They also stated that they use the assessment tools as illustrated in following examples 1, 2, 3, and 4.

(3) I think easy to use, quick to use and offer more variation, versatile; Assignment evaluation, they enable independent work: easy to sync these applications/platforms and assignments that would be evaluated separately… to keep the discussion going. (T2)

The Figure 9 below shows the perceived usefulness of specific ICT technologies that are available and used by the EFL teachers in Finnish schools. Apart from social media tools, the survey found out that teachers perceived all other tools to be very useful for their EFL instruction. This confirms that most ICT technologies are favorably seen as important and useful tools for learning and language learning in this context (Golonka et al. 2014; Scott &Beadle 2014).

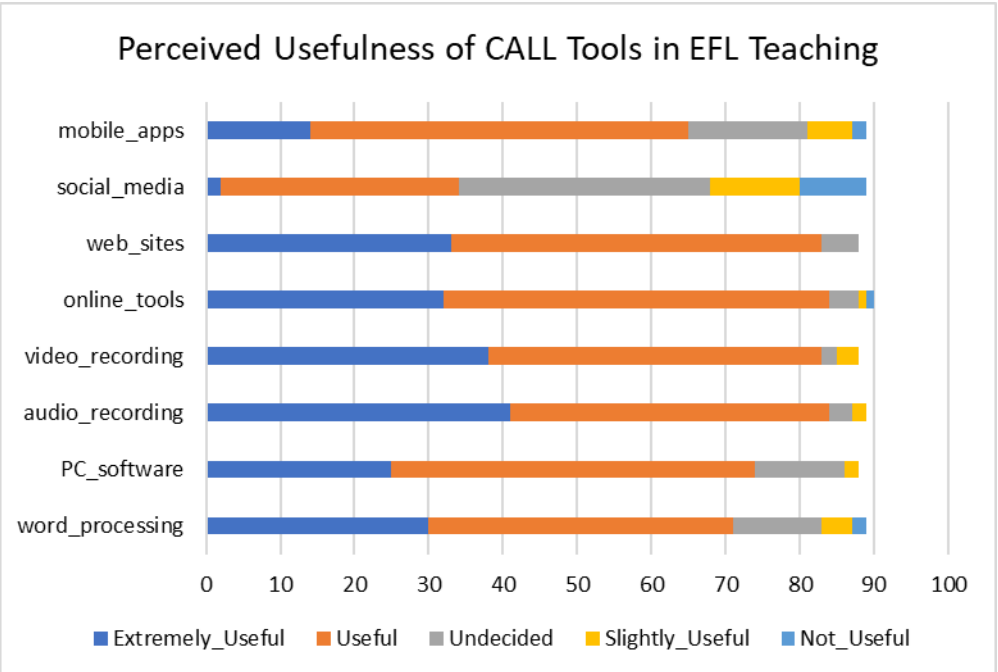
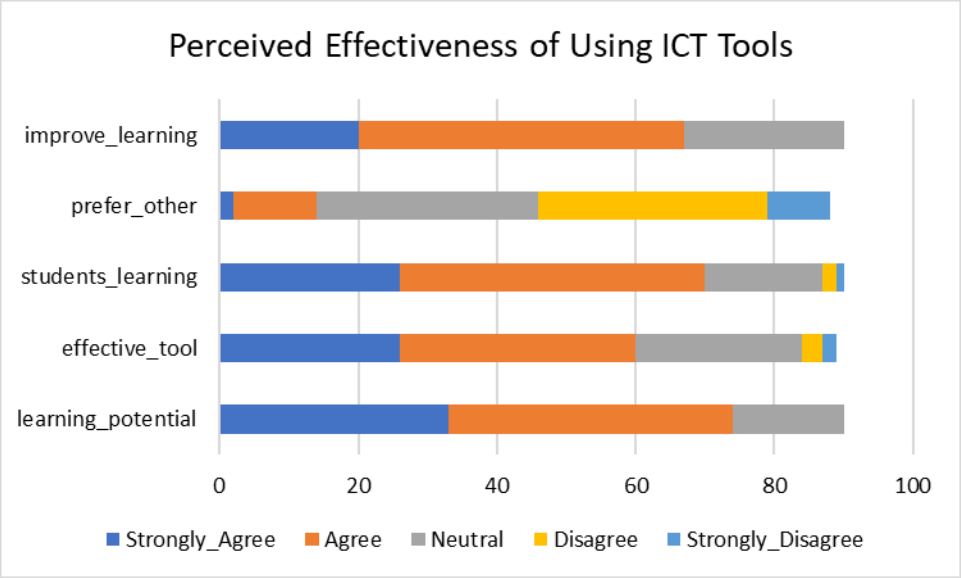


Figure 9: Perceived Usefulness of CALL Tools in EFL teaching

4.3 Perceived Effectiveness of Using ICT Tools

The perceived effectiveness or usefulness of using ICT tools was the degree to which EFL teachers viewed the CALL tools as potential to enhance teaching and learning activities and hence attainment of learning objectives (Davis 1989, Davis, Bagozzi & Warshaw, 1989). The data from the surveyed teachers show that at least two thirds of the teachers view the CALL tools as effective learning tools that have potential to improve learning and even motivate the students to learn better and efficiently (see Figure 10 below). These views concurred with all the teachers who were interviewed.



Key:

Improve_learning*: make me more productive*
Prefer_other*: Preference for other traditional teaching methods*
Students_learning: *Enhance students' learning*
Effective_tool*: effective learning tools for EFL*
Learning_potential: *improve EFL teaching and learning*

Figure 10: Perceived Effectiveness of Using ICT Tools

For instance, T2 views CALL tools as resources that the teacher and the students use to enable learning, make things easier and motivate learning.

(4) A tool that enables certain things easier, writing skills, get better feedback, makes process writing possible, makes it easier to assess students' speaking /oral skills, when you can have recording, individual meetings (…) Makes certain things more efficient for the teacher, and has to be for the students, to learn better and has to be used, if the teachers see fit. (T2)

4.4 Benefits of CALL Tools for EFL Teaching and Learning

The TAM model (Davis, 1989, Davis et al. 1989) helps show the direct relation between the above perceived ease of use and perceived effectiveness (usefulness) as the two key aspects that determine how EFL teachers decided to use the various ICT technologies. Therefore, the teachers had to weigh and make decisions based on these two factors. First, do I find it easy to use this tool? Or am I conversant how this tool works? Or is it easy to learn how to use this tool? If the answer is yes, then they will ask themselves, what is the function of this tool? Will this tool be beneficial for my teaching EFL to my class? Will it help my students learn better?

4.4.1 Tools for Learning

The interviewed teachers gave provided detailed narratives on how the use of CALL tools for EFL teaching and learning provide diverse potential for both the teacher and the learners (Kongrith & Maddux, 2005& Garrett 2009). The use of various technologies, shared among the learners, and guided by the teachers offer the possibility for multimodal learning, collaborative learning, differentiated learning and self-regulated learning (Golonka et al. 2014; Scott &Beadle 2014, Kalantzis & Cope 2017). It makes work easier for the teacher to prepare, implement and assess the learning tasks.

Different teachers have different reasons why they came to use CALL tools for EFL instruction. T1 explained that she largely uses audio devices in her teaching through the internet via YouTube, mainly to help learn various English communication skills

(5) They get authentic English, (as opposed to Finnish English) it is important they get the pronunciation. They learn to hear different kinds of English because English is not spoken the same way around the world. (T1)

(6) Use of songs gives the rhythm of the language and vocabulary, and it helps them to remember things when songs are played. (T1)

(7) […] Websites and applications: Pages, Book creator, you can use it for almost everything, they can add text and pictures, and they record it. And it is easy to evaluate, the spelling, the pronunciation, and everything. (T3)

T1 says that main reason for using CALL tools and resources is for the EFL learners to get the right original pronunciation and an opportunity to develop their speaking skills. She believes that CALL tools have the capability to improve learning and make the learning experience more worthwhile. She provided evidence as follows:

(8) Half of the kids didn't have English skills, but by the second year, they have learnt much, have improved and learnt faster… it has been easier to use specific material for their level. (T1)

(9) Once they learn to use the keyboard, or basic computer skills, chrome books are much better. Because you can do more writing and are to produce materials and interactive… it requires cognitive skills. (T1)

T3 espouses that technology in language learning helps to unlock individual creativity and group collaboration. Definitely, they are precursor to effective teaching, differentiated learning and provision of more possibilities in many directions. T3 sees the challenge of teaching with technology as two-fold. One has to teach the learners on how to use the tools and make sure they have mastered the relevant features in the application before introducing the actual learning activity. This is the efficient way of incorporating the tools into teaching and learning tasks. T3 finds this method of teaching slower.

(10) There are sometimes delays to learn using the tool, but later they know, need a lot of guiding (T3)

(11) Even when I give the topic, the topic is so large, they can do anything they want inside that topic, so, it is theirs, the ownership is theirs, not mine anymore…() but they choose, it is more like theirs than mine… like I am guiding them, and giving them information, helping them how to find words.…

Teacher 4 stated that technology had empowered her to do things in different ways and given her some kind of magic or luster. Teacher 4 agreed to state she doesn't understand why other teachers are opposed to the technology as for him, it has enhanced his teaching skills and created a world of whole new possibilities. She further said that despite being accustomed to the traditional use of textbooks, she is grateful for the introduction of technology into the curriculum. For example:

(12) I used to teach, the traditional way, just with the textbook. We only studied with the textbook. I have always been open to the use of technologies. The new curriculum made it possible to use technology. You don't have to teach based on the book anymore. It was based on grades and their content. The new curriculum gives topics. The new curriculum gave me the possibilities to organize my teaching, in a better way, with more freedom to explore and to be more creative and effective in my teaching. (T4)

4.4.2 Tools for Assessment

When T2 started using computer tools in his teaching (around 2002), there were very scarce, ‘virtually nonexistent’. According to him, one must have a starting point, a toolkit of sorts, which is developed and improved over time. However, he is satisfied that resources for teaching with technology have dramatically become more ubiquitous. He added that this prevalence of CALL teaching has given content publishers the ‘the impetus to develop material’.

They include the following:

(13) To make certain things easier, if student is shy, you get more interaction… to measure the student have done their homework… (T2)

(14) Assignment evaluation, they enable independent work… (T2)

(15) Easy to sync these applications/platforms… (T2)

(16) Assignments that would be evaluated separately… to keep the discussion going… (T2)

4.4.3 Tool for Motivation

The surveyed teachers reported that their learners were very receptive to the use of technology in learning and they enjoy it a lot. Previous research has shown how the use of CALL tools helps to motivate and make the learning experience enjoyable to both learner and instructors alike (Bilbatua & Herero, 2014, Bush 1997, Conole 2008, Cuban 1993). The learners were said to apply their lessons better with the use of technology. This is clear evidence on how learners can be independent and creative in using technologies in language learning (Bancheri 2006, Kalantzis & Cope 2017). For instance, when T1 prepares for the classes, and her learners are always very excited to use the technology.

(17) There are more options and activities available. Different pupils are served and helped. Technology has widened the world of teaching. (T1)

T1 says that teaching with technology has ‘a big impact and opens the world’ by ‘providing more tools for teaching’. In her own words, ‘technology has made my work easier’. In addition, T3 sees that the use of technology in teaching English triggers a lot of motivation and makes the learning experience fun-filled.

(18) It is more fun to do so, the students can make more things themselves, (…) They can creatively put into practice what they have learnt, and learning is more integrated. The students have many tools to apply what they have learnt. (T4)

(19) The device motivates them (…) They enjoy it, and they say, that it is more creative to work, to put their ideas. But if they did use it in every lesson, they would be bored and frustrated. (T3)

(20) When the ipads came, it made so easy, you know, they just open it and they can actually work on it. And they had so many lovely options, (…) you can use it for so many purposes, (…) That also motivates the students and they have so much fun, and they want to do it. (T3)

Teacher 3 further applauded the technologies due to their user-friendliness, versatility, flexibility, use of communicative language, learn the language in different situations.

These benefits are in concur with known benefits of using technologies in language learning (Nagata 1996, Walker & White 2013, Scott & Beadle 2014). She also stated that CALL tools enabled her to learn a lot within the lesson. The tools motivated students and made learning more fun. Examples 18 and 19 show other teachers' comments:

(21) When you use it regularly, you teach it while giving feedback, self-evaluation, peer evaluation as well as teacher evaluation. We have achieved much more using technology than we could have achieved without it. (…) They learn from each other, share and collaborate. For example, using Keynote, we did like a project where students evaluate each other using the evaluation criteria […] and that helped a lot. (T3)

(22) Technology has helped students to be more creative with language, to learn technical skills and integrate language in their daily living. Study modules have also aided students to learn at their own pace. (T4)

T2 reports that he mainly uses 'all-purpose tools'. This approach provides T2 with more opportunities to customize and adapt the content to meet specific needs. In the end, this makes him more versatile in his work and provides him with more choice. Since T2 is a technological enthusiast, it was easy to try to integrate these tools into his lessons. He gets to know of new tools from colleagues when they meet at training sessions, and through collaboration with other regional peers. He added a quick rejoinder that students sometimes prefer paper books to e-books, because e-book licenses are available for a shorter period of time.

(23) I think easy to use, quick to use and offer more variation, versatile; Assignment evaluation, they enable independent work: easy to sync these applications/platforms and assignments that would be evaluated separately… to keep the discussion going. (T2)

T2 also thinks that CALL tools help interaction and communication among learners.

(24) I use them to make certain things easier, if a student is shy, you get more interaction… to measure the student have done their homework. (T2)

4.5 Attitudes towards ICT Tools

The teachers attitude towards ICT tools arises from the first two components of the TAM model (Davis, Bagozzi & Warshaw, 1989) that are, the perceived ease of use and the perceived usefulness of the CALL tools. It is also important to remember that these two states are pre-determined by other external variables such as previous experience and competences in using ICTs and other personal preferences and habits.

The Figure 11 below shows the attitudes that the surveyed teachers had towards using ICTs in their EFL classrooms. More than two thirds of the teachers enjoy using CALL tools in their instruction. They are also not afraid to talk about technologies, and they are confident in handling and manipulating the tools in the classroom or outside the school premises. Despite this, majority of the teachers feel that they still need training in information technologies, so as to be more effective in their instructional methods.

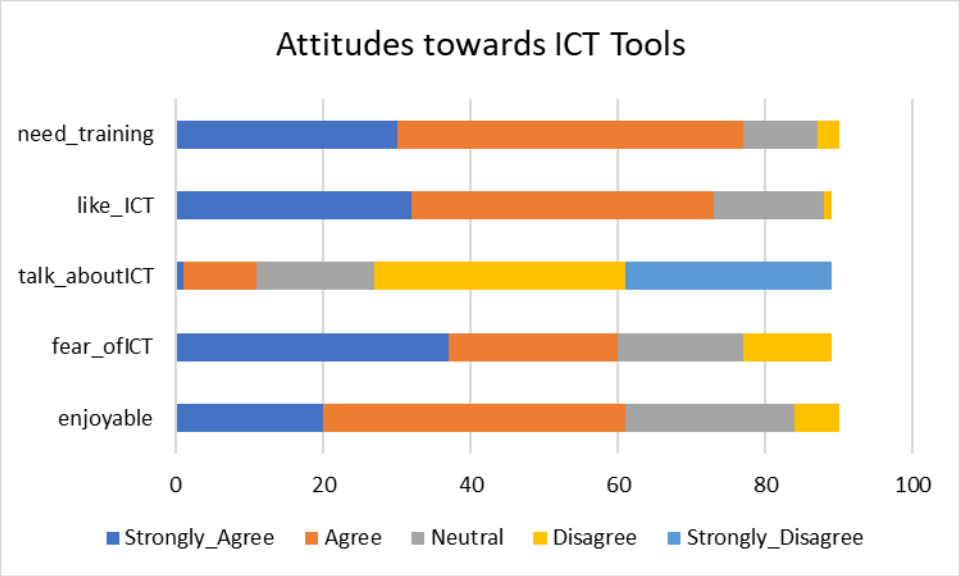


Figure 11: Attitudes towards ICT Tools

The results from the survey also showed similar trends. T2 is very motivated to develop his personal skills and creates time to explore new possibilities. This is mainly because the school administration and the local board of education are very supportive and helpful through organizing in-service training and offering additional

encouragement to use technology in teaching. According to T2, the school administration ensures that teachers have access to Google classroom environment and creates opportunities for peer tutoring programs within the institution.

4.6 How the Role of EFL Teachers Has Changed

The interviewees were asked to give their personal opinions and experiences about how the use of CALL tools has changed the role of the teacher considering the fact that the use of technology in EFL teaching has brought a new dimension that impacts on their instructional methodologies. The interviewed respondents reported that the role of the teacher had considerably changed by the integration of CALL tools in the teaching and learning processes.

T1 and T3 believes that her role has changed a lot.

(25) At first, I was unsure, I thought I had to know everything about computers, before I can work with kids. But now, I just throw the tablets, and the kids teach me more than I teaches them on how to use the computer. When we started with PC, we were afraid to touch a keyboard… (T1)

(26) Yes, of course, it has changed. When I studied at the university, first I studied in my home country then I studied here, so it was like, frontal teaching, you teach and they learn. Now we are doing it somehow together. (T3)

(27) I think, some people, even in this school, think if you use ipad or computer, you do not teach anymore. That somehow that computer are enemy of traditional teaching. (T3)

The research also showed that the CALL tools require the teacher to adapt to a learner-centered approach to teaching. The teacher's role is critical but requires re-training. For example, T3 explained that:

(28) They always need the teacher, they cannot do it just with the device. The device can help them to like for example, one of them can't talk or give the answer, but if you give a task like that, everybody works at the same moment, in pairs or individual. (…)You have to think about how to organise in order for the device to help you. (T3)

Therefore, it shows that T3 recognizes the need and presence of the teacher to provide instructions on how to handle task and also with the classroom organization, and oversee the implementation of the tasks given.

(29) I have to give tools and instructions, of varying difficulties. The technology helps. (T3)

On his part, T2 thinks that the teacher is a very indispensable part of the learning process and therefore his role cannot be written off or diminished. In addition, he maintains that the basic ideas (of teaching) has not changed (Thomas, Reinders & Warschauer 2013:9). He therefore views CALL in EFL teaching as the same process (teaching) but with different set of tools (resources) that one needs to adapt to. He points out that the curriculum is continually being updated to include peer feedback. He thinks that such changes are quite easy to implement with use of computer technology.

(30) As a teacher, I basically do the same things: motivate, teach language and enable the students to learn the language better, the core/basic idea of the language teaching has remained the same… only that technology has made certain things easier and more efficient to fulfill the role and requirements of the teacher… (T2)

(31) there will always be some guiding force (teacher), you become in certain ways a tutor or mentor, to guide the students along, as opposed to a lecture standing before the classroom. There will always be a teacher, who knows what to do, how to do, to motivate the students, help them out, and makes sure that interaction and communication always proceeds. (T2)

4.7 Ways of Improving Use of CALL for EFL

The last item of the questionnaire gave the respondents an opportunity to share their views on the current state of teaching EFL with CALL technologies and ways in which it could be improved. There were 41 respondents (45.5%) who gave various personal

opinions on the use technology. The study used content analysis and identified main themes and ideas and classified in the Table 5 below.

Theme	Occurences
Need Resources (Hardware, Software and Network, Time, Money)	27
Training and Support	16
Perceived Usefulness (Benefits, or lack thereof)	4
Attitude Towards Use	3
Ease of Use (Learner-friendliness, or lack thereof)	2
Licensing	1

Table 5: Ways of Improving Usage of CALL in EFL learning

4.7.1 Availability of Resources

Among the factors that determine the use of technology by teachers, as highlighted by Mumtaz (2000), availability of resources is the most prevalent one. In this particular study, 27 respondents reported the need for more resources as one of the ways to improve and encourage teachers to use CALL tools in EFL instruction. The resources include: computer hardware, software and network, time and money. 16 of the occurrences stated that there was need to provide training and support for the technology to take off while 4 occurrences did not see the usefulness of the use of technology and preferred the traditional teaching styles. 3 of the occurrences stated that there was a bad attitude towards the use and adoption of technology by some of the teachers while 2 stated that technology adoption was easy to learn as it was easily adaptable. In one of the occurrences, that some of the tools were seen to be limited by the licencing of eBooks which the licences are available for a short period of time thus limiting the usefulness of this tool.

T1 hopes for more financial resources, and for more applications to be made available in order to expand the teaching EFL with technology. This would ensure that there are enough Chromebook for all the learners.

On the future of CALL resources, T2 mentions that open sourcing would solve the current constraints of licensing. This way, it will be easier for everyone, both content creators (publishers) and content users (teachers and students).

(32) The ebooks have developed well, ealier they were PDFs, nowadays, there is improvement, more open, free to edit, user interface (…) Some aspects or elements would be open source, rigid and clumsy… difficult for the publishing companies to choose which elements will be open. (T2)

(33) Ebooks, e material, something you need to adapt for your purposes… the more you are able to adapt and customize for your own classroom needs, without certain constraints or limits like license fees, license times/durations. (T2)

T2 noted that the current government has made cuts in vocational school and is afraid this has potential to negatively impact on the availability and accessibility to CALL tools in EFL teaching and learning.

4.7.2 ICT Training and Support

In order to develop the teaching materials and accumulate the teaching tools, most teachers work with information technology experts. A number of teachers get the expertise during training sessions, and seminars, in addition to via word of mouth, partaking in collaborative work with regional peers. There are efforts by the board of education to improve the ICT competence through in-service teaching (Vahtivuori-Hänninen et al. 2014).

(34) We shared material on Google classroom, team drive: sync documents, instructions, materials, pictures or video link. (T2)

Teacher 2 started using the ICT tools after being recommended by colleagues and through own personal initiative. Other teachers stated that they also hadn't received

much training on using the ICT tools until they were either introduced in their schools or received training in their cities as explained in examples 32 and 33.

(35) I was not prepared to teach with technology. I don't remember any lecture handling this topic... I don't remember any topic about computer or technology-based education. I have learned by herself, and heard or collaboration with other teachers, and had training sessions organized by the city. Already when in the profession. (T1)

(36) And it was a huge, so much work the kids had not use the Google classroom before. And I was the first teacher to introduce them Google world and I myself had to learn everything at the same time because I didn't know anything. So, it was a huge work, but it was worth it, the Google suite is so much better than Microsoft. So, it was a good thing after all. (T4)

When I enquired if she was trained in teaching with technology, she was very categorical that she did not receive that kind of ICT training in her university education.

(37) I don’t remember any lecture handling this topic. Of course, students, at university use technology, but I don’t remember any topic about computer or technology-based education. (T1)

T1 went further to explain that she had accumulated her ICT knowledge through self-teaching, sharing ideas and collaboration with other teachers. During her teaching career, she has attended a number of training sessions organized by the city.

Teacher 3 added that the tools were also said to be difficult and lacking in customization for children with diverse learning needs depending on skills and age: Example 36.

(38) One size fits all? I tried, nowadays, they are somehow made for average and better students… I would like them to have more variation within the tasks for children who might have learning difficulties and those who are advanced language skills. It seems they serve the kids are who are in the middle, average kids. The ones who might need more challenge, get bored quickly, therefore she gives them something to do. (T3)

However, the teachers also said the technology had some flaws which made it not work as efficiently. As for CALL tools, T3 shared that they require instructions on how to handle task hence students always need the teacher as they cannot do it just with the

device. Therefore, as a teacher, you have to think through how to plan in order for the device to help you carry out a lesson. Teacher 4 also shared a similar sentiment, stating that CALL tools were not working well in Finland as teachers were not conversant with the applications hence could not know how to use them in their classrooms. Having taken 80 hours of training during his free time, he said that teachers needed to take up tactical and technological learning in languages as a personal initiative. With the changing technology, he deemed it fit that it be made mandatory for teachers to take such courses to enhance their teaching skills, collaborate and share new ideas in service learning. (Example 39)

(39) […] If you don't understand something, then you can't see the possibilities or have the ability to integrate the technologies into the teaching...They don't know the basic applications (iMovie, Morfo), and the possibilities of the resources that are available online. First, they should learn how to use the applications. But they don't want to use their free time to learn new technologies. They are in some sort of denial and afraid of technology, then they come up with some pedagogical reasons (excuses), like: the kids' handwriting could get worse, their eyesight will get worse by looking the screens all the time, or their social skills will deteriorate. (T4)

With the dynamism of the curriculum, the policymakers ought to consult them prior to coming up with critical changes in the education curriculum: Example 38.

(40) These applications we are using, they are changing for the better, and they take into account, the users and teachers and those who work in the field of educational pedagogy say…. A bigger problem is that like here, inside the city,(policymakers) when they're making the changes, they are making somehow so fast, and nobody can really understand somehow what he or she is up to and those who are making the changes, they do not actually work at school, so they do not know how it works… (For example the ipads, they would like to own it…) They want them controlled by the city, that means they will take away the applications we had and they are putting the application the city thinks are good for us. Now, the school were able to decide what is good for us, what is good for our students, (not all the schools are the same, not all the students are the same) but now the city will decide what is good for everyone. (T3)

4.7.3 Attitude Change

At the upper secondary school level where T2 teaches, technology has become commonplace, and is therefore used more frequently and consistently. One can say

that ‘know the drill’. Nevertheless, there still could be variation between schools and cities, and in the students’ ICT skills and competence levels.

(41) It could be a shock at first, some students don’t have technology experience or skills outside the social media applications (Snapchat, Whatsapp, Facebook) therefore they require a bit of practice, but they quickly learn and get a grip of how and why you do somethings. (T2)

The use of CALL tools can be a distraction to the learners. T2 suggests that there need to be clear clarification of the learning tasks and proper classroom management, it is possible to achieve effective teaching and learning with technology.

(42) … show them around, for instance audio and video editing. Giving proper instructions for the task at hand, monitoring how the student is progressing, checking if they need any help. Therefore, clear goals, clear instructions, oversee the team work (make up) for effective learning. (T2)

(43) The younger students need motivation and infuse entertainment and gaming to the learning (…) Good entertaining graphical interface, motivation via entertainment. (T2)

On the bright side, T2 appreciates the technology infrastructure in Finland, and he feels that Finland is unique because of the teachers are dedicated and focused. Moreover, the school administration and government possess a very supportive mindset on the use of technology in learning. Teachers are the driving force for an effective and successful CALL environment, coupled with support from school administration, local board of education and the government. Nevertheless, T2 cautions on the scenario whereby the ‘the government could have wrong focus on non-critical issues that do not add value to the teaching objectives’. He believes that teachers want to develop their professions naturally without any coercion or manipulation from the local board of education and the government. Such an independent teacher will work best in relaxed working environment and bring about effective EFL teaching.

5 Summary, Recommendations and Limitations

5.1 Summary

Word processing, audio recording, websites, PC software and online tools were the most popular CALL tools used in EFL teaching, whereas social media and mobile tools being the least popular. Most of the respondents were confident on the use of technology in teaching. However, there were few respondents who reported that they lacked confidence using the CALL technologies in teaching. This would likely lead to little usage of CALL tools and subsequently unfavourable perception or attitude. Most teachers found that CALL tools have many benefits and advantages to the EFL teaching and learning. For instance, CALL tools came in handy for fast communication and organization of work as well as creating the most interesting content. CALL tools were important tools for learning, motivation and assessment. The interviewed teachers provided a detailed picture on how they use the various CALL tools for various teaching and learning activities. Their learners were very pleased and enthusiastic to use these tools. Video and audio recording, online tools and websites were reported to be the most useful CALL tools in EFL teaching. Moreover, using ICT tools was seen as creating possibilities for learning and improving the learning experience. Since most teachers regularly use CALL tools, it also meant that they have a positive and favourable attitude to the CALL tools and they had suggestions on how the usage can be improved. For those teachers who reported unfavourable attitude towards CALL tools was mainly due to lack of required ICT skills and lack of training on the use of technology for EFL teaching and learning.

5.2 Recommendations

The relationship between the theory and practice vis-à-vis methodology and tools is tightly intertwined. In order for CALL tools to flourish and effectively bring about worthwhile learning outcomes, school systems would need to establish digitally-enriched learning environments. This could be realized by the training of current and future EFL teachers on methodologies of integrating new technologies in the English language instruction. This critical aspect of bridging the theory and practice of language learning has been supported by Bancheri (2006) who highlights the importance of incorporating CALL methods in the teacher training. By so doing, current and future EFL teachers will be adequately prepared to work in teachers for the digitally-enriched learning environments.

Sometimes new teachers face the challenge of entering the profession without the realization of the implications of ICTs in the language pedagogy. Many respondents in this study reported that they were not actively prepared or trained on using technology to teach EFL. This begs the question: are they aware of the technological tools that could benefit their instructional experience? Do these teachers possess the capability and creativity to manipulate the affordances of the information age so as maximize achievement and language competence? Therefore, the training on technology for EFL teachers, both pre-service and in-service, will go a long way to encourage and embolden teachers to explore various technologies and receive peer support and feedback.

It is probable that current instructional methods in EFL continue to be characterized by older (and traditional) teaching methodologies. This can explain why some respondents of this study do rarely explore new CALL tools in the classrooms.

Currently, more than before, the teachers' role is changing; teachers are not only perceived the traditional sense of imparting knowledge, they also act as technology guides on the right tools and help learners identify of these new digital learning resources. Nonetheless, language teachers have to strike a balance between new and old resources and methodologies. This calls for continual measures to encourage and motivate teachers to embrace and appreciate technology as the key ingredient to a successful teaching career.

From this study, the support for CALL tools was identified as one of the ways teachers can maintain a positive attitude and appreciation of using CALL tools for instruction. It is through the support that the policy makers and other stakeholders communicate the importance and benefits of using CALL instructional technologies. In other words, the school administration, the municipal government, the board of education and even the content publishers have a responsibility to create awareness on the benefits and potential that using CALL tools has for attainment of learning objectives.

As it might be the case, the technology creators are not always language instructors themselves, Hendricks (1998) highlights the important need for a collaboration between tool creators (programmers, graphic artists) and the tool users (EFL instructors, learners). A successful teamwork on this front would ensure pedagogically sound and effective tools for language education. In addition, such creative ventures will help bring ease of use and perceived effectiveness in the EFL classroom environment. In the era of big data and analytics, there is potential for further research to highlight in detail the interaction between the technology and the users, and try to unravel how specific tools impact on the learning outcomes. A study like that will be crucial by providing predictive guidance on effective EFL instructional tools and

methodology. Along with that, analytics would help to inform the appropriate intervention when using technologies in learning.

Lastly, supplementary research in the CALL tools and technology acceptance model would help identify specific variables that influence the EFL teachers' perception. There is need to isolate and explore how different external variables influence the perception of teachers towards the said tools as being easy to use or useful in classroom instruction. Such findings would provide crucial insight on how other stakeholders in the education enterprise can work to enhance instruction design in EFL. This could also bring to the table the discussion how various individual differences, experiences determine the choice and use of CALL tools in EFL instruction.

5.3 Limitations

The researcher would like be fair in stating that the participants of this present study cannot be representative of or generalized for the entire population. This is mainly because the study has aimed at generating an overview of the phenomenon and investigated it from a teacher's perspective. That means, students or other stakeholders in the similar or global learning environments might hold differing narratives. More so, a larger sample size has the potential to zoom in and identify variations within the population.

On the other hand, it is almost impossible to find the absolute truth when conducting qualitative research. Therefore, it is prudent to take into consideration that the investigator's interaction with the events or surrounding may affect the end results. In the same line of thought, the researcher may have had unique perceptions toward the use of CALL tools in EFL learning. This could have emanated from his different educational experience in teaching EFL and exposure to various technologies in

general. It is natural that such personal knowledge, experience and attitudes has the potential to affect the methodology, data analysis and reporting of the findings. While taking that into consideration, the researcher strived to diminish any personal opinions, attitudes and predispositions towards CALL tools or EFL instruction from impacting on the validity and otherwise reliability of the study as a whole.

6 Conclusion

The purpose of this study was to generate an overview of the usage of computer-assisted language learning (CALL) tools in the English as a foreign language (EFL) learning in the Finnish comprehensive and upper secondary schools. Secondly, the study was geared at establishing the attitudes and perceptions of EFL teachers towards CALL tools in EFL instruction. In a way, this study was assenting the presence (or absence of the said technologies) and provide mitigating accounts for the state of the affairs as far as usage of CALL tools is concerned. Lastly, this study hopes to bring to the surface the discussion on the prevalence (or absence) of technologies in language learning and instruction, and act as a platform of augmenting the theory and practice EFL learning.

In order to endeavor to arrive at the research objectives, the study employed a robust and a comprehensive two-pronged methodological approach characterized by an online survey and purposively selected case-study interviews. These instruments yielded enough data that was rigorously analyzed by using both quantitative and qualitative analysis methods. The online questionnaire used a cross-sectional approach and a Likert scale rating to understand the prevalence ICT usage and the users (teachers) perceptions towards the usage. The data was analyzed and interpreted from the generated graphics using MS Excel. On the other hand, the qualitative data from the interviews was supplementary to the survey data since it provided an opportunity to investigate further on the thematic issues arising from the survey.

The study findings exhibit a widespread use CALL tools by the EFL instructors in Finnish schools. Considering that Finland is one of the highly technologically economies in the western world, has a high equitable school system and has been

among the top-performing countries in the PISA reports, then this ubiquitous use of technologies in language learning did not come as a surprise. The introduction of CALL tools in EFL learning is a continuous process which needs to be evaluated regularly. This will ensure that the right and effective tools are in use in the EFL classrooms.

For a successful CALL experience, EFL instructors will need to find a good balance between their approaches, tools and other teaching resources in order to meet all differentiated learners needs. This study helped pinpoint how the EFL instructors use specific tools in their classrooms and what they think of these tools. This aspect would be very crucial and critical to the theory and practice of learning with technology and help support the EFL teaching methodologies. Lastly, it would also shed the light on how EFL instructors engage in worthwhile learning activities by using the provisions and affordances of the national curriculum to explore and experiment with an array of available technologies. By so doing, the EFL instructors have an opportunity to provide first-hand feedback on the needs and potentials of technologies EFL in various contextual learning environments within the wider Finnish learning ecosystem.

The study, and the findings thereof, supports that the idea that various technologies are important tools that support EFL learning and their usage and success largely depends on the willingness, intuitiveness and creativity of the language instructor. The study has also shown that these technologies provide great benefits and potential, not only in orchestrating the learning process on the part of the teacher but also, to motivating, supporting individualized learning and providing opportunities for learner-centered learning. That said, CALL tools are just tools like any other tools require to be adapted, tailored and constantly monitored over time period in order for them to be set in sync

and tandem with the rest of the learning pedagogies in that particular context. By so doing, CALL tools remain to play an important and indispensable role in the current teaching and learning of EFL in our schools.

With the advent of big data and learning analytics, the stage is set for the scaling of research to reveal novel ways in which specific tools can be improved, tweaked or combined to provide sensational language learning environments. Also, there is an opportunity to study how both pre-service and in-service EFL teachers are trained and supported to use CALL tools in their classrooms.

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Appendices

Appendix 1: Online Questionnaire

https://elomake.helsinki.fi/lomakkeet/86980/lomake.html

The study is aimed at assessing the perception of English language teachers' use of computer-assisted language learning (CALL) technologies in Finnish comprehensive schools. I greatly value your contribution since it will go a long way in supplementing English language learning.

Your survey responses will be strictly confidential.
This survey will take you approximately 5 minutes to complete.

Research Questions

1. What are the common CALL tools that are used in EFL learning in the Finnish comprehensive schools?
2. What are the teachers' attitudes to using CALL tools in EFL classrooms?
    a. Why do they use the tools in EFL teaching?
    b. To what extent do teachers feel CALL tools contribute to EFL student motivation (and therefore learning)?
    c. Are there any differences between regular school and international school teachers in using technology for teaching English?

Section 1: BASIC INFORMATION

1. **Age**
    a) 20-24
    b) 25-29
    c) 30-34
    d) 35-39
    e) 40-45
    f) 50+
2. **Teaching experience (in years)**
    a) Less than 1
    b) 1-10
    c) 11-20
    d) More than 20
3. **Are you a qualified English subject teacher?**
    a) Yes
    b) No
4. **What degrees, undergraduate and/or graduate, have you earned? (e.g. Bachelor's, Master's, doctoral)**

Section 2: SCHOOL TYPE AND CLASS SIZE

5. **In what kind of school do you teach?**
    a) Comprehensive school
    b) International school
    c) Private School
6. **In which grades do you teach English?**
    a) Grades 1-2
    b) Grades 3-6
    c) Grades 7-9
    d) Upper Secondary
7. **What is your average class size?**
    a) Less than 10
    b) 11-20
    c) 21-30
    d) Over 30

TRAINING FOR CALL

8. **During your teacher training, did you receive any computer technology courses that prepared you for teaching English with technology?**
    a) Yes
    b) No
9. **Have you participated in or received any supplementary training in computer technologies that was organized by one or more of the following?**
    a) School
    b) City
    c) Municipality
    d) Ministry of Education
    e) My own private enrollment
    f) None of the above
10. **How would you describe your level of computer skills for everyday use?**
    a) I am very confident in most aspects of computer use
    b) I am confident only in everyday computer use
    c) I use computers often but I am not confident
    d) I use computers but my abilities are rather limited
    e) I am not confident at all in my use of computers

Section 2: TECHNOLOGY USAGE

11. **Which of the following computer-assisted language learning (CALL) technologies are available in your English language class?**
    a) Word Processing, e.g. MS Word)
    b) Computer software for learning English (Kahoot, Bingel)
    c) Audio Recordings (CD, DVD, flash memory)
    d) Video Recordings (CD, DVD, flash memory)
    e) Online Audio and Video Tools (i.e. Podcasts, YouTube)
    f) Web Sites (i.e. Spelling City)
    g) Social Networking Sites (i.e. Facebook, Twitter)
    h) Tablet PC or Smartphone Apps

i) E-books, audio books, online versions of textbooks
j) Pronunciation software (e.g. Ekapeli)
k) Other technologies (please specify)

12. Do you use any of the above CALL technologies when you are teaching English?

a) Yes
b) No

13. If YES, what are your reasons for using technology when teaching English? (you may choose more than one)

a) It makes me perform my classroom tasks faster and my work easier
b) The students' have requested me to do so
c) It is the best resource or tool to teach English
d) The school administration requires me to do so
e) The national curriculum guides me to do so
f) I enjoy using it and it provides me with extra options and a potential for enhanced creativity
g) It is modern and prestigious

14. If NO, what are your reasons for not using technology when teaching English? (you may choose more than one)

a) I have not been trained to use technologies when teaching English.
b) There are no specific computer technologies available for English teaching.
c) I am not comfortable or confident using computer technologies in teaching English.
d) I think technologies are overrated and do not add value to my teaching of English language.
e) Teaching English with technologies requires too much time.
f) I prefer the traditional teaching method without technology.
g) Nobody has required me to use technology when teaching English.
h) I am unable to cope with too frequent technology change, therefore I stick with traditional teaching methods.

15. How often do you use each of the following technologies for teaching English?

	Always	Often	Sometimes	Rarely	Never
Word Processing					
Computer software for learning English					
Audio Recordings					
Video Recordings					
Online Audio and Video Tools					
Web Sites					
Social Networking Sites					
Tablet PC or Smartphone Apps					

16. To what extent do you think the following technologies are useful when teaching communication skills in English?

	Extremely Useful	Useful	Not sure/ Undecided	Slightly Useful	Not Useful at all
Word Processing					
Computer software for learning English					
Audio Recordings					
Video Recordings					
Online Audio and Video Tools (YouTube, podcasts)					
Web Sites					
Social Networking Sites					
Tablet PC or Smartphone Apps					

Section 3: Teachers Attitudes towards CALL

17. What is your opinion to the following statements in terms of teaching English as a foreign language?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Computer technologies would help me organize my work					
Using computer would make subject matter more interesting					
Computers save time and effort					
Using computers is enjoyable					
Computers make me much more productive					
Teaching English with computers offers real advantages					
Computers have proved to be effective learning tools					
Computers can enhance students' learning					
I would rather do things by hand than with a computer					
Computers will improve EFL teaching and learning					
Computer do not scare me at all					
I do not like talking with others about computers					
I like to use computers in teaching English					
Computers are a fast means of getting information					

I would like to learn more about computers					

18. In your opinion, is there something more that could be done to improve the use of CALL technologies in English language learning?

19. If you would like to provide more information in an interview, please indicate your email address.

Appendix 2: Interview Themes and Questions

1. Basic Information, teaching experience
2. Personal ICT competences
3. Which CALL tools they use in EFL teaching
4. The teacher's preparedness to use the CALL tools
5. Why they use CALL tools in EFL teaching
    a. The motivation to use the CALL tools
    b. Who determines the use of CALL tools
6. Perception and attitude in using these tools, vis-à-vis role of teacher
7. External support on the use the CALL tools