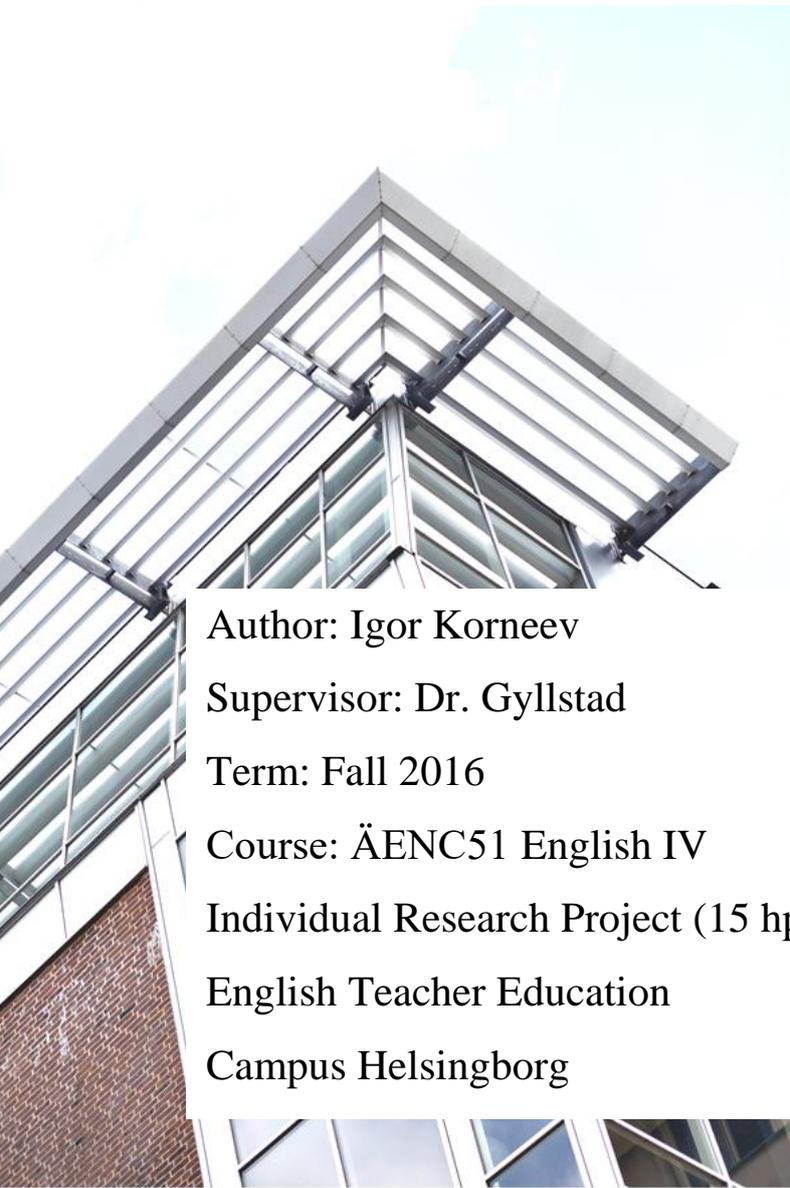


Swedish Upper-Secondary School ESL and EFL Teachers' Perceptions of and Experiences from CALL Software

A Survey-based Investigation



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Abstract

Computer-Assisted Language Learning, more simply abbreviated as "CALL", dates back to the 60s, 70s and 80s. Tested in language laboratories, pioneer CALL software was limited to very simply mechanical exercises on a stationary PC machine. By the year of 2016, product innovation has brought CALL software development into a new dimension. Today, we not only witness the growth of learning management systems, but also mobile learning beyond the traditional boundaries of a classroom. Software for learning has become so powerful that some educational institutions have chosen to move their entire pedagogic activity online, attempting to meet the demands of students who live by the paradigm of life-long learning and who need to keep pace with the knowledge economy. For some educators, such novelties have become a solution in terms of lessening the heavy work burden and optimizing personal time, whereas for others they only brought with new dilemmas and challenges in terms of what role a teacher has vis-à-vis the role of CALL software. Due to the complexity of the issue, there are unfortunately too few global-scale studies on the topic of how English teachers perceive and experience CALL software, as well as on the potential implications of such software in language pedagogy. In truth, most such studies are restricted to a certain country or a geographical region, and the topic is therefore under-represented and under-researched. Most studies are in effect only pieces of a large puzzle. Focusing on the county of Skåne in southern Sweden, the current survey-based study adds one bit to this puzzle, aiming at gaining more insight into how ESL and EFL teachers in southern Sweden perceive and experience CALL software. Perhaps, this study may subsequently also be replicated on a nationwide level in Sweden.

Keywords: CALL software, perceptions, experiences, ESL and EFL teachers

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1. Introduction

The term "CALL" refers to Computer-Assisted Language Learning and is historically an alternative to traditional Teacher-Assisted Language Learning, emphasizing the interaction between a learner and a machine, dating back to pioneer language laboratories and old PCs in the 1960s and 70s (Bangs & Cantos, 2004). Equally important are the first European CALL projects in the 70s, E. Skinner's early behaviorism theories in the United States (Bangs & Cantos 2004) as well as Vygotsky's social constructivism theories (Jarvis & Achilleos, 2013). By the early 1980s, the term "CALL" firmly anchored itself in language education (Jarvis & Achilleos, 2013).

The development of new CALL software and new devices capable of running this software – tablet PCs, e-book readers and smartphones, posed, and presently still poses a challenge, to both CALL research and language pedagogues in terms of how to perceive and use these novelties appropriately. It seems practically impossible, especially in local contexts, within the boundaries of a small geographical region such as Skåne, for language educators alone to keep pace with the unstoppable technological advancement.

With technology stepping forward inexorably, the combined role of language and CALL researchers is to supply teachers of English as a Second Language (ESL) and English as a Foreign Language (EFL) with well-processed and up-to-date information on CALL software novelties, as well as on the implications of CALL software on language teaching. In order to obtain the most recent and accurate information, it is important to review former research, define, delimit, and properly categorize CALL software types, and to explore how the upper-secondary school English teachers in Skåne themselves perceive and experience CALL software.

2. Background

2.1. Understanding CALL Software

Jarvis & Achilleos (2013) argue that the term "CALL" no longer solemnly encompasses, as was traditionally the case, basic software for conducting drills on stationary desktop computers, but has become much broader and now includes apps, blogs, computer-mediate-communication, virtual learning environments and more (p. 2). The invention of new portable devices, in part also drives the development of CALL software designed for these devices. In effect, it is difficult to ignore the product-oriented paradigm and product development invites researchers to react and make judgments.

Innovations, and in addition the development of the Internet (Jarvis & Achilleos 2013), made it even more cumbersome for researchers to categorize CALL. This provoked attempts to invent more precise acronyms than simply "CALL":

- TELL – Technology-Enhanced Language Learning – emphasis on the technology the computer provides and not on the actual computer (Jarvis & Achilleos 2013).
- WELL – Web-Enhanced Language Learning – emphasis on the Internet as a medium of instruction (Jarvis & Achilleos 2013).
- NBLL – Network-Based Language Learning – emphasis on networked computers to facilitate human-to-human communication (Jarvis & Achilleos 2013).
- MALL – Mobile-Assisted Language Learning – emphasis on the possibility of learning outside classroom boundaries via portable devices such as smartphones, eBook readers and tablets (Jarvis & Achilleos 2013).

Since CALL software no longer strictly requires a traditional stationary PC as an interface, I believe that it is prudent to categorize CALL technologies into two overarching categories, namely offline-based CALL software and web-based CALL software. Web-based CALL software, such as WebCT or Blackboard, typically requires access to the Internet and an allocated area on a server (Siekman, 2000). In contrast, offline-based CALL software does not require the machine(s) running it to have access to the Internet.

Web-based CALL platforms are also often defined as online learning environments (Kleinveldt, Schutte & Slitwell, 2016), e-learning platforms (Simon, 2016), Virtual Learning Systems (VLS), Course Management Systems (CMS) and Learning Management Systems (LMS) (Coskun & Arslan, 2014). Tables 1A-4A (see Appendix A) map the main web-based CALL platforms and provide information on their main functions.

The invention of the Internet, the development of portable devices such as mobile phones and tablet PCs as well as the computer increasingly becoming a communicative tool, (Bangs & Cantos 2004), brought CALL development and research into a whole new dimension, beyond what Jarvis & Achilleos (2013) refer to as "basic mechanical drill and kill software" (p. 2). After the invention of the Internet, the rapid development of learning management systems has indeed dwarfed the importance of offline CALL software. Nevertheless, offline-based CALL software deserves attention for the following reasons:

- Offline tools can be used to create learning content.
- Learning content created by file editing tools can be exported online.
- Some offline tools can be integrated with e-learning platforms such as Moodle.
- A combination of offline tools on a single machine could create a whole learning environment offline with capabilities similar to a learning management system online.

Baetson & Daniels (2011) categorize offline CALL technologies into single-PC technologies, file editing tools, quiz authoring software, screen capture tools and self-study CD/DVD (p. 135), most of which are mapped in Table A5.

In the Swedish context, Eriksson, Hultén & Zettergren (2000) stress the importance of the Internet, Ethernet as well as the creation of virtual classrooms with the help of a network and mention e-learning technologies as complementary tools for traditional classroom education. Paper-based learning means such as books could now be complemented with passive learning aid (CDs, audio cassettes and radio), active learning aid (telephony, audio conferencing and low-frequency wave radio), video clips and moving images via TV or PC and various data transfer technologies (Eriksson et al., 2000). Presently, however, the term "e-learning" mostly refers to web-based CALL (Goldberg, 2014).

2.2. Early CALL Theories and CALL Pedagogy

Before the mid-1980s, empirical CALL research sought to demonstrate the effectiveness of CALL with the help of quasi-experimental research methods aimed at comparing the cognitive and affective outcomes of learners exposed to CALL with similar outcomes of learners in non-CALL classrooms (Chapelle, 1996). Technological novelties were at first regarded as a panacea for language pedagogy, triggering the mass-purchase of CALL equipment by educational institutions and conjuring beliefs that these novelties would revolutionize language pedagogy, helping teachers to optimize their day, and removing the need for teacher supervision (Bangs & Cantos, 2004).

As a research field, CALL for ESL (English as a Second Language), was predominantly influenced by the advancement of educational technology and Chapelle (1996) refers to such research as the "product-oriented paradigm" (p. 142). Before the late 1980s, researchers prioritized computer skills over language didactics, and when this trend gradually reversed in the early 90s attempts were made to integrate better pedagogy into emerging CALL products that now had extended multimedia functions including sound, video, images, text integration, and authoring tools (Bangs & Cantos 2004).

In the 1970s and 80s, the prime purpose of CALL-based pedagogy was mainly to teach certain areas of grammar (Chapelle, 1996). Tasks and exercises were at first inspired by Behaviorist CALL (Warschauer & Healey, 1998) and designed according to the Instructional Model, in which the computer gave short immediate feedback and prompted the learners to re-try whenever they gave an inaccurate response, which effectively removed the teacher from the traditional role as a prompt corrector and feedback provider (Bangs & Cantos 2004).

By the end of the 20th century, the instructional model lost popularity due to maintenance costs and its lack of creativity, and the idea to use the computer for Communicative Language Teaching (CLT), and more as a communication tool rather than basic tutorial aid, gained momentum (Bangs & Cantos 2004). Several solutions were suggested to facilitate Communicative CALL (Warschauer & Healey, 1998), including switching to meaningful rather than mechanical practice, focusing on receptive before productive skills, using the target language maximally, using modeling instead of correction, implicitly building in grammar into activities, refraining from primitive immediate feedback practices, and designing a learner-friendly atmosphere (Bangs & Cantos 2004).

In the 1990s, there was an attempt to develop a more comprehensive CALL-based pedagogical approach with the potential to integrate listening, reading and writing skills with CALL-based activities and this became known as Integrative CALL (Warschauer & Healey, 1998). By the 1990s, a large number of CALL-based pedagogical approaches accumulated, and it is therefore important to understand how web-based and offline-based CALL software relates to each approach.

Clearly, both web-based and offline-based CALL software facilitate machine-learner interaction, as both types require a machine interface such as a PC or a portable device. Web-based CALL, in particular e-learning platforms and complex online learning management systems, provide a more learner-friendly atmosphere, permit to create learning communities, can give more than just immediate feedback, and therefore fall under Communicative CALL, with potential for CLT.

Most offline-based CALL software, in particular stand-alone quiz authoring tools which can provide immediate feedback are best placed under the Instructional Model in terms of pedagogy, and includes elements of Behaviorist CALL. At the same time, since a combination of web-based and offline-based CALL software can facilitate the training of listening, reading and writing skills, both categories can also fall under Integrative CALL.

2.3. Shifting Perceptions of CALL Software

It is worth to recall that the first language laboratories and computers in the 60's and 70's running even simple software were perceived as a comprehensive solution for language pedagogy in terms of removing the need for teacher supervision and time-optimization for educators (Bangs & Cantos, 2004). By the arrival of 2015, this fundamental perception has not change in principle, and has instead magnified due to the growth of e-learning platforms.

Educational institutions have recently began to perceive e-learning platforms in terms of minimizing paperwork and optimizing the educational process, whereas students in terms of optimizing their personal time by attending classes online instead of in-person and keeping pace with the knowledge economy (Benta, Bologna, Dzitac, & Dzitac, 2015). Before the emergence of e-learning, distance education was perceived in terms of giving books or other learning means to a subject and monitoring the learning with the help of a telephone, whereas today e-learning has become a social and interactive activity (Goldberg, 2014).

With innovation, economic growth, increasing demand for post-secondary education, limited technological capacity of classrooms, high facility expansion costs for all kinds of academic institutions, e-learning courses and even virtual higher educational institutions are becoming increasingly popular (Benta et al., 2015), permitting students to efficiently satisfy their needs for lifelong learning and to access knowledge beyond the classroom (Ellis & Vigar-Ellis, 2009).

From a Swedish perspective, Eriksson, Hultén & Zettergren (2000) elicit a Swedish investigation from 1998 on distance-learning methods that stipulates that learning, acquisition of knowledge and personal development should not only occur through traditional formal education and that the future society will be a learning society.

2.4. Review of Former Empirical CALL Research

Many researchers recognize that there is too little research on how language teachers perceive and experience CALL in various situations and environments, as compared to general CALL research and classroom experiences with CALL. Kim (2008), for example, asserts that there is presently too little research on the perceptions and teaching beliefs of ESL and EFL teachers on the role of computers in their classrooms (p.241), while Wiebe and Kabata (2010) claim that very few studies have compared students' attitudes and teachers' perceptions of the use of educational technologies (p.221).

Kim (2008) at Cleveland State University investigated the beliefs and perceptions of 10 ESL/EFL teachers enrolled in a Teaching-English-to-Speakers-of-Other-Languages (TESOL) program and in addition an advanced educational technology program at a university in New York, regarding the role of computers in their classrooms (Kim, 2008). Kim (2008) found that these teachers used computers as instructional tools due to their perceptions and expectations of computers as supplemental and instructional tools only in language classrooms, and that these perceptions were rooted in a teacher-centered teaching paradigm (p.241).

Wiebe and Kabata (2010), using the WebCT tracking system and focus group interviews, examined the effect of educational technologies on the attitudes of 55 language teachers in 12 target languages and 3000 students at the University of Alberta in Canada. Wiebe and Kabata (2010) found disparities between students' awareness of instructors' objectives for the use of technological novelties and the importance the instructors themselves assigned to CALL, between students' reported use of CALL and instructors' perceptions of how the students used CALL as well as between the technologies the instructors deemed beneficial and the technologies the students preferred (p. 221).

Kessler (2010) at the University of Ohio made a recorded observation on how 33 pre-service teachers in the US perceive new CALL technologies and found that pre-service teachers had negative attitudes towards CALL only because they lacked awareness, were not properly informed on the topic, and formerly had some negative experiences (p. 376). This finding prompts for more research in this direction, as not even teachers who are supposedly the front line of CALL technology users together with students, appear to have full awareness.

Sumi (2011) studied the significance of the surrounding environment rather than on immediate perceptions of CALL by interviewing 25 university instructors from different universities in Japan who specialized in foreign language education and had former experiences with CALL. Sumi's (2011) study found that four major factors, including the Human Factor, Technology Factor, Environment Factor and Institution Factor, influenced how teachers use CALL technologies in CALL classrooms (p. 293). These four factors may potentially exist in any classroom beyond the Japanese context.

Alghasab (2014) presented a study on how two 12th grade EFL teachers and 18 Kuwaiti EFL students at a summer camp in Kuwait interacted in online wiki-based collaborative writing activities, revealing that traditional in-classroom teaching practices in many ways stipulated how the teachers interacted in the wiki environment, and in turn influenced how the students collaborated (p. 1).

Speak Apps2 is a European CALL project supported by the Lifelong Learning program with the long-term objective to synchronize efforts in European language teaching (Appel, Mhicil, Jager, & Prizel-Kania, 2014). In 2011, a need-analysis within the framework of the SpeakApps2 project, found that teaching of oral skills was one of the challenges that teachers in foreign language classrooms had to face and that the Internet enhanced access to authentic oral L2 texts (Appel et al., 2014, p.13).

Within the framework of SpeakApps2, another finding was that learners in L2 classrooms were constrained in terms of opportunities for receiving guided production and interaction, in part due to a vast class sizes in traditional and blended classrooms (Appel et al., 2014, p.13). These findings from the need-analysis suggest that even though web-based CALL technologies for accessing the Internet, and the Internet itself, are important for the teaching of oral skills, it is only the teacher who can facilitate guided production and interaction.

Stroud (2014) presented a study on the learning and acquisition of vocabulary by 131 students at a Japanese university learning English via the online Quizlet vocabulary learning system, which found that Quizlet, in comparison to traditional textbooks, had the potential to increase emotional, cognitive, and behavioral engagement in a classroom (p. 343). However, no correlation was found between increased engagement levels and efficient (when the activity leads to better learning and acquisition than other activities) vocabulary learning and acquisition (Stroud, 2014, p. 343), suggesting that teacher input may still be necessary.

2.5. Purposes and Research Questions

The inspiration for my research project comes from two major realities. The first is that software innovation forces researchers to react and investigate these new products, making the product-oriented paradigm impossible to neglect. If not even research can fully keep pace with this rapid pace of development, how can ESL/EFL teachers and language pedagogy? The second reality is that opinions on how to perceive and practically implement these new technologies in language teaching diverge amongst both researchers and among ESL and EFL teachers.

Within the framework of this research project, I am specifically interested in making a survey-based investigation on perceptions and experiences in smaller local contexts and for this reason I intend to investigate Swedish upper-secondary schools in the county of Skåne, using pre-service, assistant, part-time and full-time ESL and EFL English teachers from different age and gender backgrounds as respondents. Using respondents from different age and gender backgrounds contributes to making this research more diversified and bias-free.

Two research questions are proposed:

1. How do the respondents perceive and experience the use of CALL software at their workplace, and by the students in the classroom?
2. Are the respondents' perceptions merely subjective or based on at-work or in-classroom experiences, or are there any other hidden factors (if any) at play?

In addition to addressing the main purpose of the research, I am also interested in presenting a discussion on what implications my research has on EFL/ESL teaching in Sweden, taking into account former empirical studies, and the survey findings. I also plan to propose suggestions for further research.

3. Methodology

3.1. The Design of the Project

This research project consists of a theoretical component and a practical empirical component. The sources used in the theoretical bit provide a general background on the topic, define and delimit CALL, and elicit some major debates and discourses on the issue.

Defining, categorizing and subsequently mapping recent and relevant CALL software permits to build an accurate and up-to-date survey that takes into account recent novelties in CALL software and existing CALL categories.

The practical empirical component starts with collecting and analyzing the survey data. The empirical findings from the survey are then discussed in conjunction with former empirical studies, which helps to answer the research questions in a more objective manner, taking into account not only the obtained empirical results, but also the results of other similar empirical studies.

3.2. Evaluation Procedures

The survey results obtained from various upper-secondary schools in the county of Skåne are quantifiable and quantitative. Since the current investigation, and its results, depends on a well-constructed survey aimed at gathering quantitative data, the current research project falls under the category of quantitative research (Nunan, 2008). The current investigation is not a formal experiment for the major reason that it does not take place in ideal laboratory conditions (Nunan, 2008). However, it is tangible in that the data is collected from a real environment and quantifiable in that the data can be quantified (Nunan, 2008).

The survey questionnaire permits to systematize any quantitative elements of English teachers' perceptions of and experiences with CALL software into quantitative data (Nunan, 2008) and this considerably simplifies data interpretation (Nunan, 2008). Finally, a more overarching qualitative discussion is made in order to understand how the surveyed ESL/EFL teachers really perceive and experience CALL.

3.3. Survey Design

The schematic design of the survey is presented in Appendix B. The survey contains two major sections with 17 question items in total. The first section is comprised of items 1-5, and the second of items 6-17. To make the questions more appealing to respondents who are non-native speakers of English, all items are also replicated in Swedish. The first section is aimed at obtaining background information from the respondents on their age, gender, level (grade 8-9 elementary school, upper-secondary school), professional rank (assistant, pre-service, part-time, full-time), and the familiarity with common web-based and offline-based CALL software.

In question items 1-4 the answer alternatives are pre-defined in the form of a checklist (Dörnyei & Taguchi, 2003) in which the respondents can specify their age, gender, teaching level and professional rank. Item 5 is a multiple-choice item (Dörnyei & Taguchi, 2003) allowing the respondents to choose the description which best characterizes their familiarity with a list of web-based and offline-based CALL software.

Apart from upper-secondary school ESL/EFL teachers, this survey-investigation also includes year 8-9 elementary school ESL/EFL teachers as respondents for the reason that year 8-9 is the transition stage to upper-secondary school in Sweden and some teachers at upper-secondary school could in parallel also teach at year 8-9 elementary schools. Prior to

responding to the survey, some of the respondents from a contact network anonymously provided the information that they taught at both year 8-9 elementary school level and at upper-secondary school level.

The second section (items 6-17) which aims at gathering data on the perceptions of and experiences with CALL among the respondents, is constructed according to the principles of a Likert scale, asking the respondents to rate certain statements on a pre-defined scale (Dörnyei & Taguchi, 2003). Each item in the second section contains in itself an even number of response options (six options per item) in order to prevent respondents from unprecedentedly "ticking" any response in the middle. (Dörnyei & Taguchi, 2003).

Although ambiguous response options such as "Hesitant" are in theory not desirable (Dörnyei & Taguchi, 2003), the "Hesitant" option was nonetheless included in order to find out if the surveyed ESL/EFL teachers lack awareness on the topic each item presents. The extreme response options are "Totally disagree" and "Totally agree", and in-interim answer options such as "Partially agree" were placed in between these two extremes.

Weights ranging from 1-6 are assigned to each response option, with the option "Totally disagree" having a weight of 1, and the option "Totally agree" a weight of 6 respectively. The Survey Monkey tool uses these weights to arrive at a rating average for each item. The median (middle value) for the rating average is always 3 and the calculated rating average is always compared to this value.

3.4. Dissemination Procedures

In order to disseminate the survey to the respondents, the web-based Survey Monkey ("Survey Monkey,"2016) software was used. The items presented in Appendix B were imported into Survey Monkey and an open link was generated in order to forward the survey to any potential respondent via-email.

The request to complete the survey was sent to approximately one hundred e-mail addresses in the county of Skåne, targeting ESL and EFL teachers, including pre-service English teachers, year 8-9 elementary upper-secondary school English teachers, upper-secondary school English teachers and assistant English teachers. The respondents were either directly, or through the e-mail circular, informed that the survey is anonymous. For this reason, the identities of the respondents may not be disclosed.

The e-mail addresses were obtained from websites of Swedish upper-secondary schools in Skåne that offered ESL and/or EFL teaching, and from a contact network of anonymous ESL and EFL teachers. To secure a maximum number of responses, all respondents were also encouraged to forward the survey to their ESL/EFL colleagues or assistants, and therefore one hundred e-mail addresses is only an approximate estimate.

4. Evaluation of Survey Findings

4.1. Response Rate

The Survey Monkey tool permits to export gathered data into a Microsoft Excel table and the exported results for all items (1-17) are presented in Appendix C. In total, 37 responses were gathered out of which 37 respondents answered items 1-5 and 29 respondents items 6-17, while 8 respondents chose not to answer items 6-17 entailing an out-of-the-ordinary response (Dörnyei & Taguchi, 2003).

The choice not to answer items 6-17 is a response in itself and may be rooted in private reasons, complete unawareness on the issue of CALL software, or to the fear of responding even though the respondents were aware that the survey is anonymous. Based on the assumption that approximately one hundred e-mails with a request to complete the survey were disseminated, the response rate can be estimated to 37/100 (37%).

4.2. Responses to Items 1-5

The responses gathered from this section provide important findings in terms of the surveyed ESL/EFL teachers' backgrounds and background knowledge about offline and web-based CALL software. Responses to Item 1 revealed that the first majority (40.5%) of the respondents were between the age of 20-30, the second majority (29.7 %) between the age of 40-50 and the minority of the respondents were either between the age of 50-60, comprising 5.4%, or above the age of 60 comprising 8.1%. This finding suggests that most of the surveyed ESL/EFL teachers in Skåne are in the age of 20-50.

Item 2 revealed that most of the respondents were female (59.5%), whereas male respondents made up for 40.5% respectively. Item 3 revealed that pre-service ESL/EFL teachers (37.8%) and full-time ESL/EFL teachers (37.8%) combined made up a majority (75.6%). The third largest category percentage wise was part-time ESL/EFL teachers, comprising 16.2%. Assistant teachers or colleagues of ESL/EFL teachers were in a clear minority, comprising only 8.1%. The conclusion from the findings of Item 2 and Item 3 combined is that the majority of the surveyed teachers in Skåne are either pre-service or full-time female ESL/EFL teachers.

Item 4 revealed that a great majority (73%), of the respondents taught at upper-secondary school whereas only 27% taught at year 8-9 elementary school. This finding not only suggests that most of the surveyed ESL/EFL teachers in Skåne teach at upper-secondary school level, but also makes this investigation reliable, in that it is primarily aimed at investigating the perceptions of and experiences from CALL software by ESL/EFL teachers at upper-secondary schools in the county of Skåne.

Item 5 revealed that 32.4% of the respondents were familiar with at least one e-learning and one offline tool and equally many (32.4%) respondents were familiar with at least one offline tool. Less respondents were familiar with e-learning platforms than with offline tools, indicated by only 21.6% of the respondents answering that they were familiar with at least one e-learning platform (compared to a 32.4% familiarity percentage with offline tools). Some 2.7% percent of the respondents were familiar with another e-learning platform or another offline tool than specified in Item 5 and 10.8% had no familiarity with any e-learning platform or offline tool whatsoever.

The percentage distribution for Item 5 suggests that the majority of the respondents were acquainted with a least some type of CALL software (89.1%) and that only a minority 10.8% had no familiarity, which further suggests that the succeeding investigation of the perceptions and experiences in items 6-17 is relevant and valid. An investigation in which the respondents have no background knowledge of CALL software would not be meaningful or valid as it is impossible to ask respondents for perceptions or experiences for certain types of CALL software if they have never encountered or heard about such software.

4.3. Responses to Items 6-17

The responses gathered from items 6-17 must be evaluated more qualitatively, as they reflect both how the surveyed ESL/EFL teachers of various age groups, gender groups, various levels, academic ranks, perceive and experience CALL software at their work. Items 6-10 ask for background information on how the respondents perceive their working environment. Items 11-17 seek to investigate how the respondents experience the use of CALL software in their classrooms.

Item 6 revealed that the respondents perceived their workplace as well equipped with software for learning, as 9/29 (31%) answered "Partially Agree", 7/29 (24.1%) "Agree", and 4/29 (13.8%) "Totally agree", yielding a total agreement rate of 20/29 (68.9%). Some 5/29 (17.2%) were "Hesitant", 3/29 (10.3%) replied "Disagree" and 1/29 (3.5%) "Totally disagree", yielding a disagreement rate of 4/29 (13.7%) and a hesitation rate of 10.3%. Based on assigned weights, the rating average comes to 4.03 (above the middle value of 3) which signifies a tendency towards agreement with the statement of Item 6. Figure 1 displays the responses for Item 6.

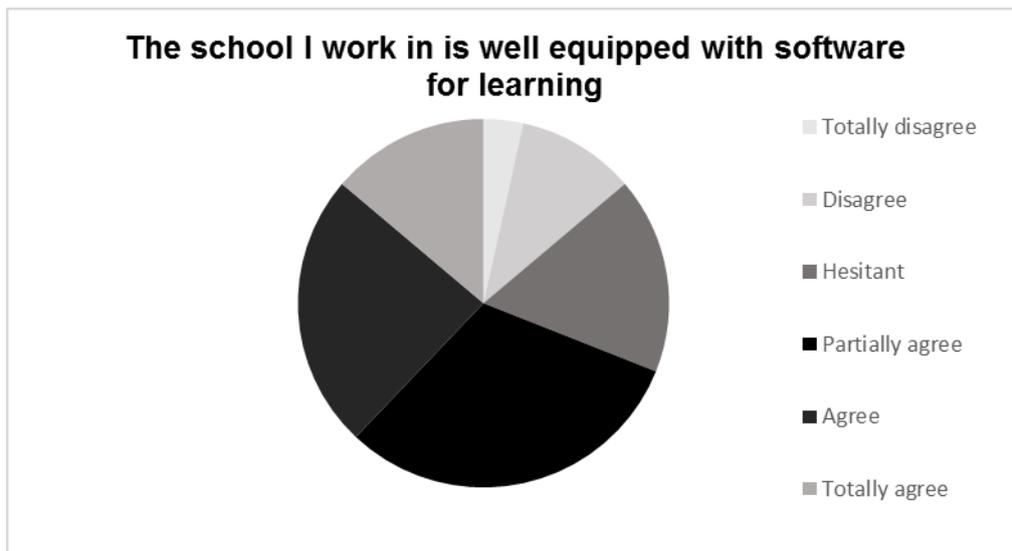


Figure 1. The school I work in is well equipped with software for learning. This figure illustrates the responses for Item 6 as proportions.

Item 7 revealed that the respondents felt constrained in terms of being able to choose the appropriate software for their students, as 7/29 (24.1%) respondents replied "Hesitant ", 8/29 (27.6%) replied "Totally disagree" and 4/29 (13.8) % "Disagree ", compared to 8/29 (27.6%) replying "Partially agree" and 2/29 replying "Totally agree" (6.9%). In total, 12/29 (41.4%) of the respondents were either completely unable or constrained to choose the software they deem necessary, 27.6% only partially able and 24.1% were hesitant. The hesitation rate too suggests that the respondents felt constrained, or were uninformed on the matter. The rating average of 2.79 (below 3), signifies an inclination toward disagreement with the statement of Item 7, which confirms that the teachers felt constrained in terms of software choice. The responses for Item 7 are illustrated in Figure 2.

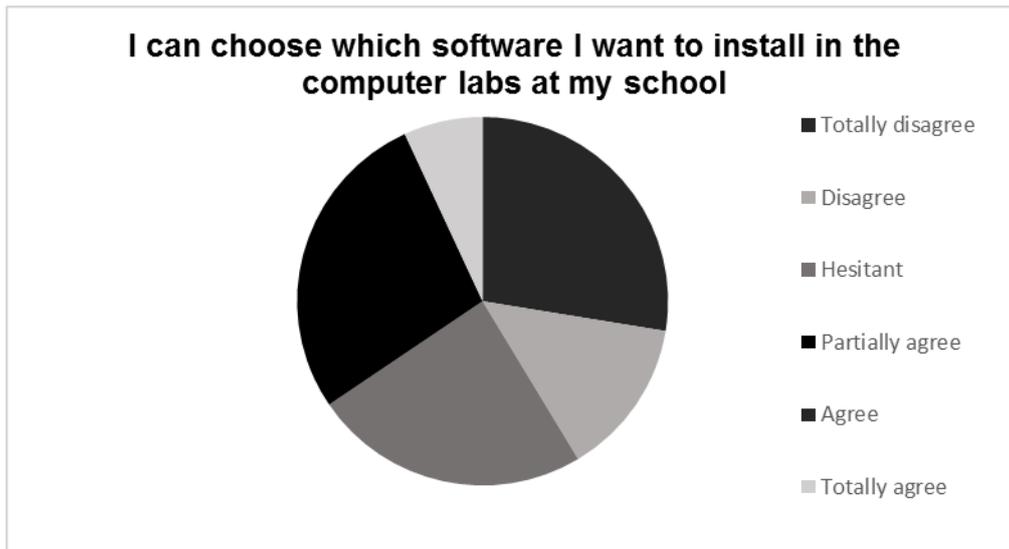


Figure 2. I can choose which software I want to install in the computer labs at my school. This figure illustrates the responses for Item 7 as proportions.

Item 8 revealed that the respondents demonstrated a high degree of awareness on exactly what kind of learning software their students need, as 8/29 (27.6%) replied "Partially agree", 6/29 (20.7%) "Agree" and 3/29 (10.3%) "Totally agree", compared to 7/29 (24.1%) replying "Hesitant", 3/29 (10.3%) "Disagree", and 2/29 (6.9%) "Totally disagree". In summa, 17/29 (58.6 %) respondents demonstrated partial, general or full awareness on what kind of software their students needed, and 12/29 (41%) respondents demonstrated hesitation or no awareness. The rating average of 3.76 (above 3), signifies a tendency to agree with the statement of Item 8. Figure 3 displays the responses for Item 8.

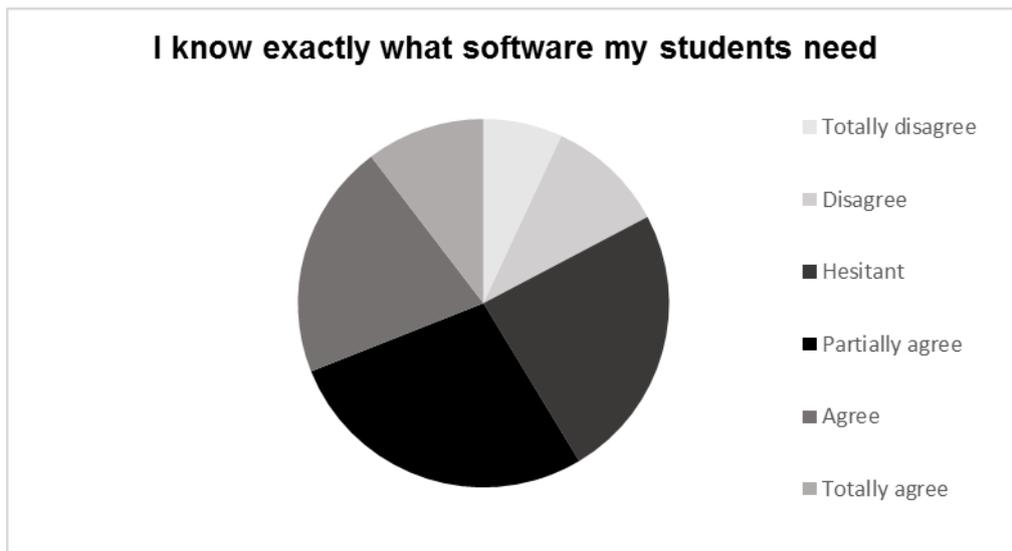


Figure 3. I know exactly what software my students need. This figure illustrates the responses for Item 8 as proportions.

Items 9-10 are supplementary to Item 7 and are designed to provide more detailed information on students' accessibility to software. Due to the straightforwardness of the statements of Item 9 and Item 10, no in-depth evaluation is required except of the average ratings. For Item 9, the average rating is 4.41(above3) and for item 10 it is 4.72(above 3) which in both cases signifies an inclination towards agreement with the statement. Most respondents perceived their students to have access to at least one e-learning platform and one offline productivity tool. As the supplementary items 9-10 are not designed to present the bigger picture Item 7 presents, pie charts for items 9-10 are not essential.

Item 11 revealed that a majority of the respondents either "Partially agree"(6/29) (20.7%), "Agree" (14/29) (48.3%) or "Totally agree" (3/29) (10.3%), that the software they use helped their students to learn more English, compared to 2/29 (2.9%) replying "Hesitant" and 4/29 (13.8%) "Disagree". In summa, 23/29 (79.3%) of the respondents had positive experiences from using CALL in the classroom, and only 6/29 (20%) were hesitant to provide information or likely had some negative experiences.

The rating average is 4.34 (above 3), signifying an inclination towards positive experiences. The responses for Item 11 are hereunder displayed in Figure 4.

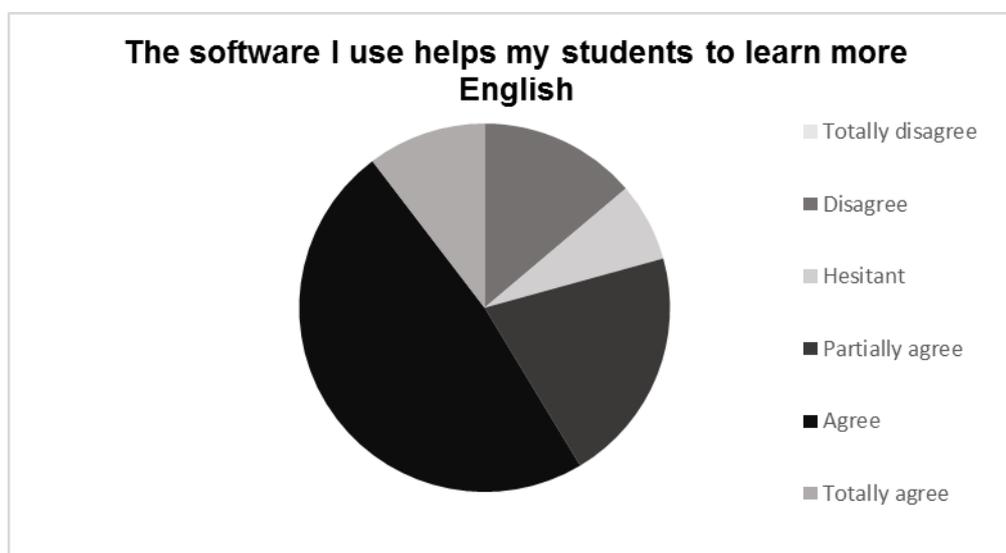


Figure 4. The software I use helps my students to learn more English. This figure illustrates the responses for Item 11 as proportions.

Item 12 revealed that a majority of the respondents either "Partially agree"(8/29) (27.6%), "Agree" (12/29) (41.4%) or "Totally agree" (2/29) (6.9%) with the statement that the software at their school makes them more productive as teachers, compared to 3/29 (10.3%) replying "Hesitant", 3/29 (10.3%) "Disagree" and 1/29 (3.5%) "Totally disagree". In summa, 22/29 (75.9%) of the respondents either partially, generally, or completely agreed with the statement, and only 7/29 (24.1%) generally or completely disagreed or were hesitant, while the rating 4.14 (above 3) signifies an inclination towards agreement. These findings suggest that the respondents' experience from using the CALL software at their school is that it makes them more productive. Figure 5 displays the responses for Item 12.

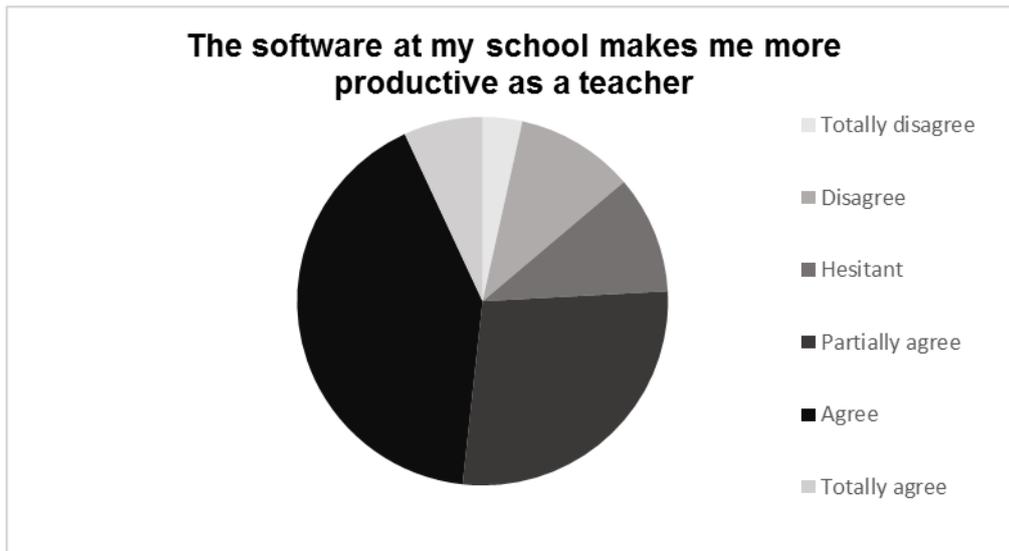


Figure 5. The software at my school makes me more productive as a teacher. This figure illustrates the responses for Item 12 as proportions.

Item 13 investigates if respondents perceive the CALL software at their school as a threat to their traditional teacher role. Some 13/29 (44.8%) of the respondents replied "Disagree", 8/29 (27.6%) "Totally disagree", and 3/29 (10.3%) remained "Hesitant", compared to 4/29 (13.8%) choosing "Partially agree" and (1/29) (3.5%) "Agree". Some 21/29 (72.4%) respondents generally or wholly disagreed that the software at their school diminishes their role as teacher, whereas 5/29 (17.2 %) partially or generally agreed while 3/29 (10.3%) respondents who replied "Hesitant" could not tell. The rating average of 2.21(below 3), signifies that the respondents are generally inclined to think that the software at their school does not threaten their role as a teacher. Figure 6 displays the responses for Item 13.

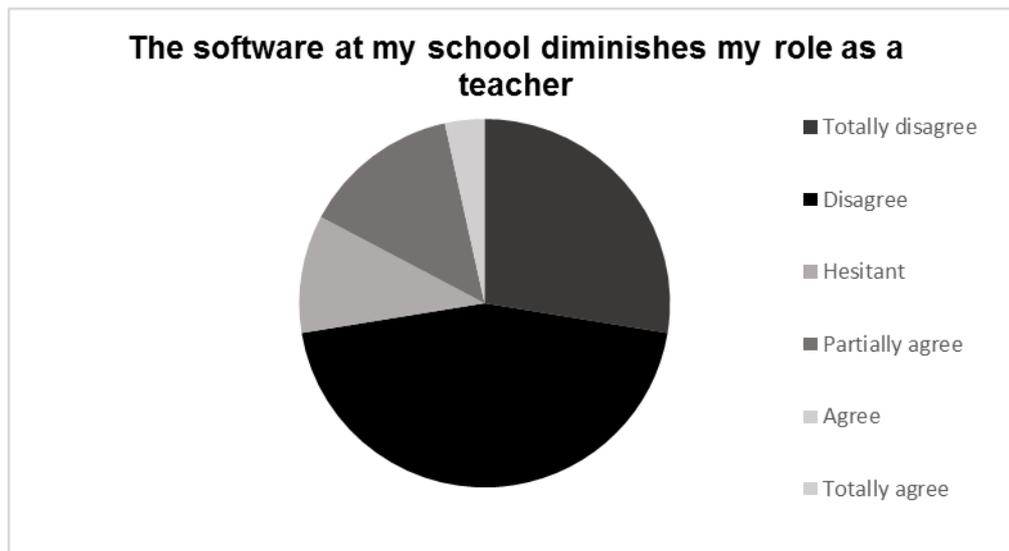


Figure 6. The software at my school diminishes my role as a teacher. This figure illustrates the responses for Item 13 as proportions.

Item 14 is an extension of Item 13 seeking to investigate if the respondents experience mobile CALL technologies in the classroom as discomforting. The majority of the respondents, either "Partially agree"(7/29) (24.1%), "Agree" (11/29) (37.9%), or "Totally agree" (8/29) (27.6%) that they feel comfortable whenever the students use such devices, compared to 1/29 (3.5%) "Totally disagree" and 2/29 (6.9%) "Hesitant". In effect, 26/29 (89.6%) of the respondents were comfortable with their students using portable devices, which is also reflected by a rating average of 4.76 (above 3), signifying that the respondents had no negative experiences from the students using portable devices. Since Item 14 is only supplementary to Item 13 a pie chart for Item 14 is not essential.

Item 15 asks the respondents if they feel that they are not able to manage in terms of teaching without the software at their school. The respondents replied "Totally disagree"(7/29) (24.1%), "Disagree"(5/29) (17.2%) or Hesitant" (7/29) (24.1%), compared to "Partially agree"(5/29) (17.2%), "Agree"(3/29) (10.3%), and "Totally agree"(2/29) (6.9%). The rating of 2.93 (around 3) signifies that there is an inclination to think in both directions,

with only a negligible tendency to think that they are nonetheless able to manage without CALL software, entailing no unified opinion on the matter. The responses for Item 15 are displayed in Figure 7.

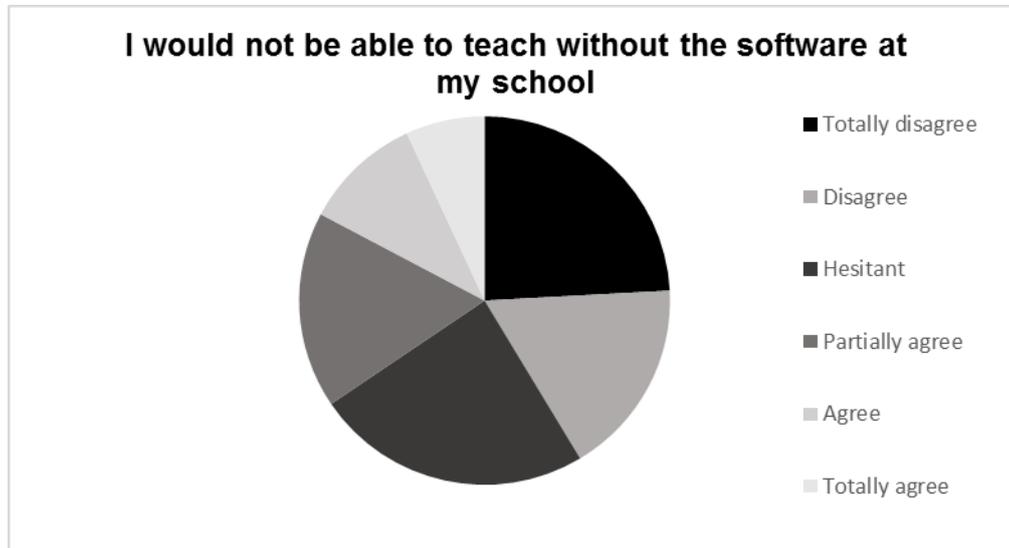


Figure 7. I would not be able to teach without the software at my school. This figure illustrates the responses for Item 15 as proportions.

Items 16 and 17 serve as an extension of Item 15 and explore if the respondents believe that their students can or cannot manage without in-school CALL software and mobile CALL software. Item 16 asks the respondents if they feel that their students cannot manage without the software at their school, while Item 17 goes further by asking the respondents if they feel that their students cannot without laptops, tablets and smartphones in the classroom. For both items 16 and 17, the average rating hovers around the average value of 3 (2.76 for Item 16 and 3.21 for Item 17), which signifies that there is no unified opinion among EFL/ESL teachers on the subject if students can or cannot manage without CALL software or mobile CALL software in school. Due the supplementary-only purpose of items 16-17, a pie chart is not essential.

5. Discussion of Survey Findings in Light of Former Research

Item 5 revealed that the surveyed ESL/EFL teachers at year 8-9 primary schools and upper-secondary schools in Skåne, of various age, gender, levels, professional ranks, were well-informed on the topic of CALL software, with slightly better knowledge of offline-based CALL technologies than e-learning platforms. In Sweden, in the 80s and 90s, it was not uncommon, due to the scarcity of all-inclusive e-learning software, to combine all kinds of early offline and web-based CALL technologies (Eriksson et al., 2000) to achieve the desired learning effect.

Item 6 revealed that the surveyed ESL/EFL teachers at upper-secondary schools in Skåne perceived their workplaces as well equipped with CALL software and Item 9 and Item 10 provided the supplementary information that the students had at least one e-learning platform and one offline tool at their disposal. Combined, the findings of items 5, 6, 9 and 10 suggest that ESL/EFL teachers in Skåne, as they did in the 80s and 90s, still combine both offline and web-based CALL technologies.

Item 7 revealed that the surveyed ESL/EFL teachers in Skåne felt constrained in terms of being able to choose what CALL software to install. The finding of Sumi (2011) on four hidden factors that influence how teachers use CALL technologies in CALL classrooms in part provide an explanation. Sumi (2011) defines the Institution Factor as the lack of support and funding (p. 294). The ESL/EFL teachers in Skåne may feel constrained simply because their school lacks the funding for a rich software choice or because the principals of these schools do not support or approve certain types of software.

Item 8 revealed a majority awareness (58.6%) among the surveyed ESL/EFL teachers in Skåne as concerns knowing exactly what software the student needed. In relation to Item 7, this suggests that even though the teachers knew what software is best for the students, they were nonetheless constrained in terms of choice and therefore it is reasonable to believe that this constraint is rooted in the Institution Factor, rather than in lack of awareness.

Kessler (2010) found that pre-service teachers had negative attitudes towards CALL only due to lack of awareness, information and negative experiences with CALL technologies (p. 376). Item 11 revealed that a majority (79.3%) of the surveyed ESL/EFL teachers in Skåne had positive experiences with CALL software and felt that the software they used helped their students to learn more English. Moreover, as Item 12 revealed, the majority (75.9%) of these teachers also felt that the software at their school increased their productivity as teachers.

While Kessler's (2010) study showed that a lack of awareness and negative experiences form positive attitudes, the current investigation mirrors his finding, showing that the possession of proper information (Item 5), a high degree of awareness (Item 8) and positive experiences (Item 11 and Item 12) conversely form positive attitudes among ESL/EFL teachers.

Alghasab's (2014) finding that traditional in-classroom teaching practices by teachers interacting in wiki environments affected how the students collaborated, Stroud's (2014) finding that vocabulary learning systems increased classroom engagement but did not necessarily contribute to efficient vocabulary learning and acquisition, and the revelation by Appel et. (2014) that learners in L2 classrooms were constrained in terms of opportunities for guided production and interaction in part due to classroom settings, portray the reality that teacher supervision and guidance is required in CALL classrooms for effective language

learning and acquisition to occur. This points to the strong prevalence of the Environment Factor, defined by Sumi (2011) as the difficulty of interaction and classroom settings (p. 294).

Item 13 revealed that a majority (72.4%) of the surveyed ESL/EFL teachers in Skåne did not perceive CALL software as an immediate threat to their traditional role as a pedagogue, and have thus far not experienced that CALL software completely crowds out their work. This perception seems to be rooted in the reality portrayed by the findings presented by Alghasab (2014), Stroud (2014) and Appel et al. (2014), namely that the English teachers in their traditional roles still have influence on the quality of language learning.

Kim's (2008) finding that teachers' perceptions and expectations of computers as supplemental and instructional tools in language classrooms were rooted in a teacher-centered teaching paradigm is important in the context of the current investigation. A plausible reason for the surveyed ESL/EFL teachers in Skåne not perceiving CALL software as a threat (Item 13), may well be that these teachers follow a teacher-centered teaching paradigm, perceiving the CALL software on computers in their classroom merely as supplemental and instructional tools.

The finding of the supplementary Item 14, that (89.6%) of the surveyed teachers were comfortable with their students using portable devices for learning purposes, only supports the argument that these teachers in all likelihood adhere to a teacher-centered teaching paradigm and do not allow computers and mobile devices to gain a dominant role.

Using Sumi's (2011) factors, it seems that the Human Factor, defined by Sumi (2011) as the tutors' teaching styles and lesson plans (p. 294) very much affects how the ESL/EFL teachers in Skåne use the CALL software in their schools. Bearing in mind that the teachers do not perceive CALL software, laptops, tablets and smartphones as threatening or discomfoting (Item 12 and Item 13), it is well possible that they independently choose teaching styles and lesson plans that safeguard them from any threatening implications of

CALL software, ensuring that computers, laptops, tablets and smartphones are used as supplementary means only.

The findings of Item 15 entailed that there was no unified opinion among the surveyed EFL/ESL teachers in Skåne on if they would not be able to teach without the software at their schools. Wiebe and Kabata's (2010) findings on disparities between students' and instructors' objectives, awareness as well as preferences towards CALL technologies may in part provide an explanation to this, as there may be a disparity between the ESL/EFL teachers' and students' perceptions on the appropriateness of certain CALL software.

In extension of Item 15, Item 16 and 17 also revealed that there was no unified opinion among the surveyed EFL/ESL teachers in Skåne on the subject if students can or cannot manage without CALL software in school or without mobile CALL technologies (laptops, tablets and smartphones). In relation to Wiebe and Kabata's (2010) study, this further suggests that even though these ESL/EFL teachers know exactly what kind of software their students really need (Item 8), they may still not know what perceptions and preferences the students themselves may have and can therefore not provide any firm opinion.

6. Conclusions and Implications

The surveyed ESL/EFL teachers in Skåne were well-informed on types of CALL software, combined both offline-based and web-based CALL technologies to improve English learning, seemed to know exactly what software their students needed, but felt constrained in terms of being able to choose which software they want. This constraint is rooted in the Institutional Factor, including the lack of funding and/or a lack of support. The implication of this finding is that allowing ESL/EFL teachers in upper-secondary and year 8-9 primary schools in Skåne to independently choose the software they deem appropriate, may help to supply students with more relevant CALL software.

The surveyed ESL/EFL teachers in Skåne had positive experiences with CALL software, feeling that the software at their school helped their students to learn more English and made them more productive as teachers. Positive perceptions on the use of CALL software, are in part based on real in-classroom experiences, in part on subjective beliefs, and in part on the interplay of hidden factors of which the Human Factor and Environmental Factor dominate. The Technology Factor, defined by Sumi (2011) as interface problems and system settings (p. 294), seems to be of negligible significance as the survey demonstrated that the teachers were well acquainted with CALL software. The main implication is that ESL/EFL teachers may better understand what hidden factors affect their daily work and their use of CALL software.

The surveyed ESL/EFL English teachers in Skåne did not perceive CALL software as an immediate threat to their traditional roles and even felt comfortable whenever their students used mobile CALL technologies in the classroom. The recent development of educational institutions increasingly offering their courses through e-learning platforms and students pursuing life-long learning beyond the classroom, presently poses no threat to the traditional teacher role of ESL/EFL teachers in Skåne, as these teachers seem to be opposing the idea of CALL software gaining a dominant role and appear to have their pedagogy under control.

Today, the use of CALL software in Sweden seems to move in the direction of a learning society, rather than a society in which the role of the teacher is crowded out by various software solutions. The main reason for this is that the surveyed ESL/EFL teachers in Skåne seem to restrict computers and portable devices to the role of supplementary tools only. This does not however mean that these teachers do not use CALL software for CLT and the implication here is that more research is required in order to understand how and in which scenarios ESL/EFL teachers tend to use computers and portable devices as communicative tools.

The survey also revealed that the surveyed ESL/EFL teachers are not yet certain of whether or not they themselves and their students can fully manage without CALL software. This suggests, that even though these teachers presently have the situation under control, they do not have full awareness on all the implications that CALL software might have on ESL/EFL teaching. The implication of this finding is that ESL/EFL teachers in Skåne must constantly test and evaluate new CALL software coming to their schools in terms of potential benefits and pedagogical risks.

7. Limitations and Suggestions for Further Research

7.1. Limitations

Former studies on CALL presented by Kim (2008), Kessler (2010), Sumi (2011), Wiebe and Kabata (2010), Alghasab (2014), Appel et al. (2014) and Stroud (2014) are typically restricted to a certain geographical region such as a country or a city, giving these studies a local-only significance. Likewise, my research is a contribution to ESL/EFL language teaching research in a Swedish-only context, with the county of Skåne as a starting point. Another limitation of this investigation is that data from more recent former empirical studies is ideally desirable. However, not all recent data available is relevant to the current research questions and the data for this study was carefully selected to adhere to the research questions.

7.2. Further Research

The findings of the current investigation prompt for further research in four directions. Firstly, more research is required on the wider implications of CALL software on ESL/EFL language teaching in Sweden in the context of the increasing popularity of e-learning platforms and the need for life-long learning. Secondly, more research, and on a greater scale, is needed on new types of web-based and offline-CALL software. Thirdly, with the emergence of Integrative CALL, more research is necessary in terms of new pedagogical approaches that can integrate traditional language pedagogy with the possibilities that new CALL software products offer. Fourthly, more research is desirable on how ESL/EFL teachers in Sweden use CALL software for CLT and in what scenarios they do so. I also hope that the current investigation will be replicated on a nationwide level in Sweden.

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Appendix A

Web-based and offline-based CALL software

Table A1	
<i>Edmodo</i>	
Developed by:	Edmodo Inc. ^a
Full description:	Web-based e-learning platform with social networking capabilities. ^b
Background:	A learning platform built to resemble Facebook in order to give students a more familiar social networking learning environment. ^c
Available at:	https://www.edmodo.com
Installation:	Web-based (requires access to the internet) and also available via app for iOS Android and Windows Phone. ^d
Price and availability :	Open-source software with no limitations for core features while subscription fees for additional third-party apps may apply. ^e
Core features:	<ul style="list-style-type: none"> - Separate profiles for teachers, students, and parents. ^f - Possibility to upload, share and publish content between teachers, students and parents. ^g - Possibility to upload and manage classwork. ^h - Possibility to deliver and collect assignment and quizzes at scheduled time intervals. ⁱ - Quiz creation tool, including matching, short answer, multiple choice, true or false, and fill in the blanks quizzes. ^j - Students can get instant feedback on quizzes. ^k

Table A1 Continued

<p>Core features:</p>	<ul style="list-style-type: none"> - Score and pie chart feedback for teachers on student performance. ^l - Possibility to create and manage learning communities. ^m - Parents can supervise course progress. ⁿ - Possibility to invite other colleagues. ^o - The "Edmondo Planner" calendar. ^p - Possibility to link Edmondo account to an MS Office 365 account and to link MS. Office online with classes. ^q - Possibility to set up folder libraries. ^r - Students and teachers can link their libraries with a Google Drive or MS OneNote account. ^s - Newsfeed, microblogs, wikis. ^t
<p>Limitations:</p>	<ul style="list-style-type: none"> - No possibility to conduct video lessons. ^u - No possibility to stream lessons. ^v

^{a-v} Simon (2016).

Table A2	
<i>Moodle</i>	
Developed by:	Moodle Pty Ltd. ^a
Full description:	-Modular Object-Oriented Dynamic Learning-Environment. ^b -Web-based e-learning platform.
Background:	Designed for educators who want to create online platforms as well as dynamic interactive environments. ^c
Available at:	https://moodle.com
Installation:	Web-based and also available as mobile app for Android, iOS, and Windows Phone. ^d
Price and availability:	- Moodle for Free: Includes the core features and is free for personal trial and single classes. ^e - Moodle for School: Designed for multiple classes, contains extra plugins, and comes in different versions at various annual fees. ^f
Core features:	- Possibility for educators to create and share content with students online. ^g - Possibility to develop interactive activities, forums, wikis, quizzes, surveys, assignments, lessons, databases and glossaries. ^h - Possibility to archive teaching/learning materials. ⁱ - Possibility to follow-up on student activity. ^j

Table A2 continued	
Core features:	<ul style="list-style-type: none"> - Possibility to install extra modules: synchronic chat, forums for online discussions, glossary activity, creating surveys for student feedback on the course. ^k - Possibility to construct tests with immediate feedback. ^l - Blogs, discussion forums, wikis. ^m - Video conference plugin. ⁿ - Office 365 integration. ^o - Other modules under development. ^p
Limitations:	Version for multiple classes comes at a fee.

^a "Moodle hosting," (2016).

^{b-c} Coskun & Arslan (2014).

^d "Moodle Mobile for Windows 8.1," (2014).

^{e-f} "Moodle hosting," (2016).

^{g-o} Coskun & Arslan (2014).

^p "Moodle plugins,"(2016).

Table A3	
<i>WebCT</i>	
Developed by:	Murray Goldberg at the University of British Columbia. ^a
Full description:	<ul style="list-style-type: none"> -The World-Wide-Web Course Tool. ^b -Web-based e-learning platform. -Software infrastructure for the facilitation and management of learning and assessment. ^c
Background:	Designed for the creation of web-based courses. ^d
Available at:	www.webct.com and www.blackboard.com
Installation:	Web-based (requires access to the internet). ^e
Price and availability:	<ul style="list-style-type: none"> - Free to try, but requires purchase after the registration of student accounts, while the price will vary depending on the number of students the software is to be used for. ^f - Acquired by Blackboard as of 2006. ^g
Core features:	<ul style="list-style-type: none"> - Web CT e-mailing. ^h - Bulletin boards. ⁱ - Online chat rooms. ^j - Shared file spaces. ^k - Learning communities. ^l - Course menu components including web links to library resources. ^m - Tools for student learning outcomes assessment. ⁿ

Table A3 Continued

<p>Core features:</p>	<ul style="list-style-type: none"> - Discussion forums, syllabus, assignments, media library, calendar.^o - Whiteboards permits to upload annotations, images, MS PowerPoint slides as well as web page slide shows.^p - Possibility for students to access the contents of a learning module online and to save it on the computer.^q - Possibility for students to print out the content of a learning module.^r - Self-tests, multiple choice, fill in the blanks, quizzes, matching, anonymous surveys, and other exercises.^s - Student homepages and student presentations.^t - Possibility for teachers to track student's progress and for students to track personal progress.^u
<p>Limitations:</p>	<ul style="list-style-type: none"> - Can be costly if purchased for many students. - Video and audio content must be created separately of WebCT.^v - No support for video conferencing in the original WebCT version - more features may be under development by Blackboard. - No official apps for tablets and smartphones.

^a "Murray Goldberg develops," (1995).

^b Chan, Charles C.; Tsui, Ming-sum.; Chan, Mandy Y. C.; & Hong, Joe H. (2008).

^{c-d} Goldberg (2014).

^{e-f} Siekmann (2000).

^g "Murray Goldberg develops," (1995).

^{h-j} Chan et al. (2008).

^{k-r} Florea (2008).

^{s-v} Siekmann (2000).

Table A4	
<i>Blackboard</i>	
Product name:	Blackboard
Developed by:	Blackboard Inc. ^a
Detailed description:	- A Learning Management System (LMS). ^b - Web-based e-learning platform.
Background:	Designed to promote and improve online teaching, learning, sharing and teacher-learner collaboration. ^c
Available at:	www.blackboard.com
Installation:	- Web-based (requires access to the internet). ^d - Various mobile-apps with specialized Blackboard apps are available for smartphones and tablet computers.
Price and availability:	Free evaluation courses, while full-version products are priced according to the amount of servers, the level – course or portal manager, and according to the level of support required. ^e

Table A4 Continued

Core features:	Blackboard products for education:
	<ul style="list-style-type: none"> - Blackboard Analytics – an all-round solution for educators allowing to organize school data into reports, dashboards and other important information, improve student retention, target and analyze enrollments, and to increase learner engagement. ^f - Blackboard Collaborate – runs in the browser and provides synchronous collaborative learning online, with the help of online conference rooms. ^g - Blackboard Learn – a virtual learning environment allowing to post materials online, share lectures, syllabi, assessments and feedback, communicate via blogs, web conferences, and to communicate with Blackboard peers globally. ^h - Blackboard Mass Notifications – allows to publish messages across multiple notification channels and to broaden the reach of messages. ⁱ - MyEdu – provides the possibility to create student-oriented academic roadmaps for academic as well as career goals, and for institutions and students to connect with potential employers. ^j - Blackboard Open Content – designed to give teachers direct access to Open Educational Resources(OER), and to allow teachers to collaborate with colleagues globally. ^k

Table A4 Continued

Table A4 Continued	
Core features:	Blackboard products for education:
	<ul style="list-style-type: none"> - Moodlerooms – A free-to-try Moodle-based platform operating in accordance with a partner agreement between Blackboard and Moodle.^l - X-Ray Learning Analytics – An analytical tool that allows using Moodlerooms to analyze the behavior and performance of students online.^m
	Mobile Blackboard products:
	<ul style="list-style-type: none"> - Bb Grader – enables educators to remotely monitor and grade assignments and to provide feedback.ⁿ - Bb Student – enables students to access assignments, see their marks and view class content.^o - Blackboard Planner – comprehensive degree planning and career tool.^p
	General Blackboard features:
	<ul style="list-style-type: none"> - Discussion boards, e-mails.^q - Virtual Classroom with text and image integration.^r - Digital Dropbox for file exchange.^s - Quizzes, multiple choice, short answer, fill in the blanks, matching, paragraph correction and questions.^t - Student homepages and presentations.^u - Online grade book and the "check grade" student grade report.^v

Table A4 Continued

Limitations:	- Many different products for various purposes – difficult to evaluate which product is truly needed. - Cost issues.
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^a "About us," (2016).

^b "Transforming education through innovative," (2016).

^c Kleinveldt et al. (2016).

^{d-e} Siekmann (2000).

^{f-j} "Online education platforms," (2016).

^k "Manage open educational content," (2016).

^l "Moodlerooms for a better," (2016).

^m "Online education platforms," (2016).

^{n-p} "Engage students with a mobile," (2016).

^{q-v} Siekmann (2000).

Table A5

Major Offline-based CALL Tools

Single-PC technologies:	File editing tools:	Stand-alone Quiz authoring tools:	Screen capture tools:	Self-study CD/DVD:
Document creation tools. ^a	Word processors. ^d	Hot Potatoes – quiz-authoring tool allowing administration of exercises via the Internet and Moodle. ^m	Some tools allow inserting voice, text as well as video clips. ^o	Interactive software on CDs or DVDs. ^q
Multimedia editing and interactive activity software. ^b	Spelling and grammar checkers. ^e	Quedoc – specialized quiz creation tool with the possibility to port results to Moodle via the QuizPort module. ⁿ	Captive– includes question-and-answer pages. ^p	

Table A5 Continued

Table A5 Continued				
Single-PC technologies:	File editing tools:	Stand-alone Quiz authoring tools:	Screen capture tools:	Self-study CD/DVD:
Connectable peripheral PC devices. ^c	HTML editor programs. ^f			
	Gimp – image manipulation tool. ^g			
	Audacity – sound editor tool. ^h			
	MovieMaker – video creation and editing tool. ⁱ			
	Fireworks – image manipulation tool. ^j			

Table A5 Continued				
Single-PC technologies:	File editing tools:	Stand-alone Quiz authoring tools:	Screen capture tools:	Self-study CD/DVD:
	SoundForge – sound editor tool. ^k			
	Vegas – video creation and editing tool. ^l			

^{a-f} Baetson & Daniels (2011).

^{m-q} Baetson & Daniels (2011).

Appendix B

Schematic survey design

CAN SOFTWARE FOR LANGUAGE LEARNING HELP YOU AS AN ENGLISH TEACHER?

KAN PROGRAMVARA FÖR SPRÅKINLÄRNING HJÄLPA DIG SOM ENGELSKA LÄRARE?

Please provide some background information: Vänligen berätta om din bakgrund:

1. Your age: Din ålder:

- 20-30 30-40 40-50 50-70 Prefer not to say: Ville ej uppge

2. Your Gender: Kön:

- Man: Man Woman: Kvinna Prefer not to say: Vill ej uppge

3. I teach or plan to teach English at: Jag lär ut eller planerar att lära ut Engelska på:

- Elementary School year 8-9: Grundskolan årskurs 8-9
- Upper-Secondary School: Gymnasieskolan

4. I am a: Jag är en:

- Pre-service English teacher: Lärarelev i Engelska
- Assistant or colleague of an English teacher: Assistant eller kollega till en Engelska lärare
- Part-time English teacher: Lärare I Engelska på deltid
- Full-time English teacher:: Lärare i Engelska på heltid

5. Are you familiar with at least one of the following programs?: Har du kännedom om någon av de följande programvarorna?:

E-learning platforms: Plattformer för e-lärande:	Offline productivity tools: Offline produktivitetsverktyg:
Moodle	Microsoft Office, Libre Office, Open Office, Ms. Works
WebCT	Hot Potatoes quiz maker, Quedoc quiz maker,
Blackboard	Gimp, Audacity, Windows MovieMaker, Fireworks, SoundForge
Edmodo	Microsoft Paint, Photoshop

- Yes, at least one e-learning platform: Ja, minst en plattform för e-lärande
- Yes, at least one offline tool: Ja, minst ett offline verktyg
- Yes, at least one e-learning platform and one offline tool: Ja minst en plattform för e-lärande samt ett offline verktyg
- Another e-learning platform or offline tool: En annan plattform för e-lärande eller ett annat offline verktyg
- None of the above: Inget av det ovannämnda

Please value the following statements: Vänligen värdera följande påståenden:

6. The school I work in is well equipped with software for learning: Skolan som jag arbetar på är väl utrustad med programvara för lärande:					
Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam. <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
7. I can choose which software I want to install in the computer labs at my school: Jag kan välja vilken programvara jag vill installera i datorsalarna på min skola:					
Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam. <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
8. I know exactly what software my students need: Jag vet precis vilken programvara mina elever behöver:					
Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam. <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>

9. My students have access to at least one e-learning platform:**Mina elever har tillgång till minst en plattform för e-lärande:**

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam. <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
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10. My students have access to at least one offline productivity tool:**Mina elever har tillgång till minst ett offline produktivitetsverktyg:**

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
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11. The software I use helps my students to learn more English:**Programvaran som jag använder hjälper mina elever att lära sig mer Engelska:**

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med: <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
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12. The software at my school makes me more productive as a teacher:**Programvaran på min skola ökar min produktivitet som lärare:**

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam. <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
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13. The software at my school diminishes my role as a teacher:**Programvaran på min skola gör mig mindre viktig som lärare**

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
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14. I feel comfortable if my students use laptops, tablets and smartphones in the classroom: Jag känner mig bekvämt om mina elever använder bärbara datorer, surfplattor och mobiler i klassrummet

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
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15. I would not be able to teach without the software at my school:**Jag hade inte kunnat lära ut utan programvaran på min skola**

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam. <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
--	---	---	--	---	--

16. My students cannot manage without the software at my school:**Mina elever klarar sig inte utan programvaran på min skola**

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam. <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
--	---	---	--	---	--

17. My students cannot manage without laptops, tablets and smartphones in the classroom: Mina elever klarar sig inte utan bärbara datorer, surfplattor och mobiler i klassrummet.

Totally disagree: Håller inte alls med. <input type="checkbox"/>	Disagree: Håller ej med. <input type="checkbox"/>	Hesitant: Tveksam <input type="checkbox"/>	Partially agree: Håller med delvis. <input type="checkbox"/>	Agree: Håller med. <input type="checkbox"/>	Totally agree: Håller med fullständigt. <input type="checkbox"/>
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Thank you for your contribution! Tack för din insats!

Appendix C

Responses to survey items

Item 1

Your age/Din ålder		
Answer Options	Response Percent	Response Count
20-30	40.5%	15
30-40	16.2%	6
40-50	29.7%	11
50-60	5.4%	2
Above 60/Över 60	8.1%	3
Prefer not to say/Vill ej uppge	0.0%	0
<i>answered question</i>		37
<i>skipped question</i>		0

Item 2

Your gender/Kön		
Answer Options	Response Percent	Response Count
Male/Man	40.5%	15
Female/Kvinna	59.5%	22
Prefer not to say/Vill ej uppge	0.0%	0
<i>answered question</i>		37
<i>skipped question</i>		0

Item 3

I am a/Jag är en		
Answer Options	Response Percent	Response Count
Pre-service English teacher/Lärarelev i Engelska	37.8%	14
Assistant or colleague of an English teacher/Assistant eller kollega till en Engelska lärare	8.1%	3
Part-time English teacher/Lärare i Engelska på deltid	16.2%	6
Full-time English teacher/Lärare i Engelska på heltid	37.8%	14
<i>answered question</i>		37
<i>skipped question</i>		0

Item 4

I teach English at/Jag lär ut Engelska på		
Answer Options	Response Percent	Response Count
Elementary School year 8-9/ Grundskolan årskurs 8-9	27%	10
Upper-Secondary School/Gymnasieskolan	73%	27
<i>answered question</i>		37
<i>skipped question</i>		0

Item 5

Are you familiar with at least one of the following programs?/ Har du kännedom om åtminstone en av de följande programvarorna?:		
Answer Options	Response Percent	Response Count
Yes, at least one e-learning platform/Ja, minst en plattform för e-lärande	21.6%	8
Yes, at least one offline tool/Ja, minst ett offline verktyg	32.4%	12
Yes, at least one e-learning platform and one offline tool/Ja minst en plattform för e-lärande samt ett offline verktyg	32.4%	12
Another e-learning platform or offline tool/En annan plattform för e-lärande eller ett annat offline verktyg	2.7%	1
None of the above/ Inget av det ovannämnda	10.8%	4
<i>answered question</i>		37
<i>skipped question</i>		0

Item 6

The school I work in is well equipped with software for learning/ Skolan som jag arbetar på är väl utrustad med programvara för lärande								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	1	3	5	9	7	4	4,03	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 7

I can choose which software I want to install in the computer labs at my school/ Jag kan välja vilken programvara jag vill installera i datorsalarna på min skola								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	8	4	7	8	0	2	2,79	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 8

I know exactly what software my students need/ Jag vet precis vilken programvara mina elever behöver								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	2	3	7	8	6	3	3,76	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 9

My students have access to at least one e-learning platform/ Mina elever har tillgång till minst en plattform för e-lärande								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	1	1	6	4	11	6	4,41	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 10

My students have access to at least one offline productivity tool/ Mina elever har tillgång till minst ett offline produktivitetsverktyg								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständig	Rating Average	Response Count
	1	0	1	10	9	8	4,72	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 11

The software I use helps my students to learn more English/ Programvaran som jag använder hjälper mina elever att lära sig mer Engelska								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständig	Rating Average	Response Count
	0	4	2	6	14	3	4,34	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 12

The software at my school makes me more productive as a teacher/ Programvaran på min skola ökar min produktivitet som lärare								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	1	3	3	8	12	2	4,14	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 13

The software at my school diminishes my role as a teacher/ Programvaran på min skola gör mig mindre viktig som lärare								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	8	13	3	4	1	0	2,21	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 14

I feel comfortable if my students use laptops, tablets and smartphones in the classroom/ Jag känner mig bekvämt om mina elever använder bärbara datorer, surfplattor och mobiler i klassrummet								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	1	0	2	7	11	8	4,76	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 15

I would not be able to teach without the software at my school/ Jag hade inte kunnat lära ut utan programvaran på min skola								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	7	5	7	5	3	2	2,93	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 16

My students cannot manage without the software at my school/ Mina elever klarar sig inte utan programvaran på min skola								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	7	7	5	6	4	0	2,76	29
<i>answered question</i>								29
<i>skipped question</i>								8

Item 17

My students cannot manage without laptops, tablets and smartphones in the classroom/ Mina elever klarar sig inte utan bärbara datorer, surfplattor och mobiler i klassrummet								
Answer Options	Totally disagree Håller inte alls med	Disagree Håller ej med	Hesitant Tveksam	Partially agree Håller med delvis	Agree Håller med	Totally agree Håller med fullständigt	Rating Average	Response Count
	7	4	4	6	6	2	3,21	29
<i>answered question</i>								29
<i>skipped question</i>								8