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The Effect of the Use of CALL on Pupils’ Motivation and Language Development in English

Användandet av CALL och dess effekt på elevers motivation och språkutveckling i engelska

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Contributions

There were two authors of this synthesis, Cajsa Grenner and Niri Hagelin Jönsson. We have both contributed with an equal share of work throughout the stages of this project.

The stages being:
- Formulating the research question
- The search for research and literature
- Analyzing and selecting the gathered material
- Authoring the synthesis

We hereby state that we together have planned for, conducted and completed every part of this study in agreement.
Abstract

This research synthesis aims to explore how Computer-assisted language learning (CALL) can motivate the learners to develop their language skills. To answer the question 14 articles have been examined against a framework consisting of second language acquisition theory and method and Dörnyei’s motivational theory. The focus areas within this synthesis are the general view of CALL and education, cooperative language learning with communication technology and CALL in teaching.

The review revealed that CALL as a motivational method yielded beneficial results, by providing authentic materials (materials pupils encounter in their daily lives) in a learner-centred environment. In addition, the research shows that the learners’ and teachers’ attitudes towards CALL factors into the result.

*Keywords:* CALL, Communication, ESL/EFL, Language acquisition, Motivation, SLA
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1. Introduction

During our daily lives, computers and digital tools have increasingly become an integral part of our world (Skolverket, 2018b). Over the last two decades, computers and tablets have increasingly been used in Swedish classrooms during lessons. This direction will unequivocally continue. In the revision of *Curriculum for the compulsory school, preschool class and school-age educare 2011* made on the 1st of July this year it was stated that “all pupils should be given an opportunity to develop their ability to use digital technology” (p. 8). Furthermore, the school’s role is to “provide pupils with conditions to develop digital competence and an attitude that promotes entrepreneurship” (p. 8) which ultimately falls to us as teachers.

But is it really that effortless implementing technology in a secondary language acquisition environment, or will this just be another workbook in digital format? While performing vocational training and substituting in schools, we have noticed that some teachers lack confidence in their ability to properly utilise digital tools pedagogically. We have found that the computer frequently becomes a digital text- or workbook instead of an element in its own right, that enhances the education further.

Skolverket (2018a) highlights the importance of an education that aids the pupils in developing their English proficiency with the help of different learning tools. As English teachers we have a range of techniques at our disposal, but the directives of how to use them seems somewhat lacking. In this study we aim to delve into the question of how the use of digital tools may motivate the pupils within the field of second language acquisition, thus encouraging language development.
2. Statement of Purpose

In this independent project the authors aim to do a theoretical literature review of research made on the subject computer-assisted language learning (CALL) and second language acquisition (SLA) in English. Our focal point has been to target language development in general and communication in particular. Our interest lies with pupils ages ten to twelve with equal language proficiency as the pupils in Swedish classes 4-6, but due to the fact that existing research is quite sparse within this age span, we cannot limit us to this age group.

Our research question is subsequently: How can the use of CALL in an EFL-classroom be used to generate motivation and language development, such as communicative skills?
3. Theoretical Literature Review

(Background)

This section will provide relevant theory related to the research question. Firstly, we aim to briefly explain the main theories of second language acquisition, where Krashen’s theory has a considerable impact. Secondly, we will discuss some of the research on motivational theory by Gardner and Lambert, social psychologists who laid the groundwork for modern research. Dörnyei’s theory will also be presented due to the major impact it had on researchers over decades. Finally, we will turn to communication and digitalisation. Here we aim to shortly review the correlation between these fields and the Curriculum for the compulsory school, preschool class and the recreation centre 2011, 2018.

3.1. Krashen’s theory of second language acquisition and second language learning

There are many different theories on second language acquisition, but Krashen is a pioneer within this field. His theory has influenced and been quoted in many consecutive works. Subsequently we have chosen to focus on his theory, since this provides founding thoughts for many of the research articles used in our project. Krashen (1981) maintains that the process of how a learner acquires a second language is comparable with the process a learner undergoes when acquiring their first language. His theory of second language acquisition is comprised of a group of different hypotheses: the acquisition-learning hypothesis and the input hypothesis being two of them. As proposed by Krashen (1981), the acquisition-learning hypothesis defines acquiring and learning a second language as two separate processes. Language acquisition occurs subconsciously and involves partaking in authentic conversations in the target language while language learning occurs through a conscious process and explicit teaching. Furthermore, he states the expertise gained through learning can only be used to adjust the output of already subconsciously acquired knowledge. The input hypothesis provides, according to Krashen (1982), an explanation of how language acquisition and development are dependent upon receiving understandable
language input that is just a bit more advanced than the learner’s present language abilities. Additionally, he believes that attitudinal factors such as high motivation are essential for successful second language acquisition (Krashen, 1982).

Krashen’s theory of second language acquisition and second language learning is, however, not without criticism. While Krashen believes that exposure to comprehensible input is the only requirement for language acquisition, others point out output as an equally necessary component in the process (Ellis, 2005).

3.2. Motivational theories

Researching motivation is an intricate labour (Lightbown and Spada, 2013) and for a long time there has been few researchers delving into this phenomenon (Dörnyei, 2005). In the later years, there has been a large influx of research on motivation on the language learner (Dörnyei, 2015). Much research is based on the theories of Gardner and Lambert. In *Attitudes and Motivation in Second Language Learning* (1972) they considered motivation to consist of two factors. The first factor, named the instrumental motivation, consists of the subject’s communicative needs. Here, the target language is learned for practical goals, for instance the need of a new language to acquire a new job. The second factor is an integrative motivation and targets the subject’s attitude towards the second language community. If the language learner has a positive attitude towards the speakers of the target language there is a larger probability of using the language (Lightbown and Spada, 2013).

Dörnyei (2015) focuses more on the motivational factors that affects the learner. The Motivational Self System considers nine factors to be important to the motivation of language learning. 1) The learner needs to have a future self-image that is desired by the learner. 2) The future image must differ from the current image and the discrepancy must be large enough to generate a need to make an effort. 3) The future picture must be detailed and expressive. 4) The future must be deemed possible to achieve by the speaker. 4) The future image must correlate with the speaker’s social environment, thus being consistent with the identity of the speaker. 5) The learner must not feel that the goal should be reachable without making an effort. 6) The future self-image must be activated on regular basis during the work-process to still feel relevant. 7) There must exist applicable and efficient strategies to reach the goal. And finally, 8) the positive self-image must be offset
by a vivid negative future self-image that will display the negative consequences of
neglecting the work process. The above-mentioned system has been revised at several
occasions (Dörnyei, 2015) and one might surmise that this might not be the final edition.

3.3. Communicative Language Teaching

The syllabus for English states that “through teaching, pupils should be given the
opportunity to develop all-round communicative skills” (Curriculum for the compulsory
school, preschool class and the recreation centre 2011, 2018, p 23) and through this
statement it is self-evident that communication is one of the main goals for the English
education in Swedish schools. There are many approaches to teaching languages that value
function over form, where form could be described as a focus on grammar. One umbrella
term for this belief is CLT, an abbreviation of Communicative Language Teaching
(Lundahl, 2014). The foundation of this approach to language learning is a focus on the
nature of communication and in what way language takes a role in it (Littlewood, 2011).
There is, however, nothing that exempts the teaching of grammar, albeit more in a
functional way (Lundahl, 2014).

Littlewood (2011) contends that there are two parts of CLT. Firstly, there is an analytical
dimension in which an awareness of the relation between form and meaning is stressed,
thus creating the connections that are necessary to communicate. Secondly, there is an
experiential part where the individual integrates and learns the language subconsciously
and by participating in communication, which not only cements their previous knowledge
but even expands it. Both parts could together be considered two ends of a spectra and all
different types of language teaching under the concept of CLT use them in various degrees
(Littlewood, 2011).

3.4. Digitalisation in the Swedish curriculum

In 2016, a new national strategy was announced by Skolverket concerning digitalisation in
schools over the following six years. The goal was to prepare the pupils for the society
outside school, where digital competence is of great import. One of the goals were that
within three years all pupils in the compulsory school should have their own computer or
digital tool, thus erasing socioeconomic differences and give everybody equal opportunity to learn this way (Skolverket, 2016).

On the 1st of July 2018 the Curriculum for the compulsory school, preschool class and the recreation centre 2011 was changed to accommodate the vision previously stated by Skolverket. Although no changes have been made in the English Curriculum other changes have been made in the Curriculum for the compulsory school, preschool class and school-age educare 2011 (2018) that affect the way of teaching and learning in Swedish schools. In the preamble it states that the school shall give the pupils an opportunity to develop a responsible way to handle and evaluate digital technology and information, thus developing digital competence. It is also stated that “teachers should organise and carry out the work so that the pupils [...] use digital tools in a way that promotes the development of knowledge” (pp. 12-13). Through this sentence one must surmise that digital tools will affect all teachers in all subject areas and become an even larger part of the current education in the future than it has been in previous years.

3.5. CALL

According to Chapelle and Jamieson (2008) CALL is an “acronym for Computer assisted language learning” (p. 1). Although this definition tells us the general meaning of the acronym, there seems to exist many thoughts on what this entails. Tomlinson (2012) considers CALL materials to be “ELT [English Language Teaching] materials available from websites, computer software, courseware and online courses” (p. 166) not to be confused with Information Communication Technology (ICT), which Tomlinson defines as applications that are utilised for transferring materials and aiding interaction, and other web sources, such as YouTube and social media. Most of the authors of the research articles on which we have based our analysis do not define what they mean with CALL. However, the diversity of the digital tools used in the studies belies Tomlinson’s definition as universally accepted.

Macaro, Handley & Walter (2011) discuss different approaches some governments have taken to incorporate CALL in the nations’ schools. The approaches are different, but they all have one similarity - they all concern digital tools (ibid.). Swedish teachers have many different tools at their disposal, such as smartboards, iPads, different software targeting
grammar, interactive textbooks and workbooks (Billore & Rosén, 2017). As already mentioned, the Swedish government is actively working on digitalisation in school with the goal that the pupils shall develop digital literacy (Skolverket, 2016). With this in mind, one must surmise that even though CALL (which has a stronger focus on computers) and ICT (which includes all information and communication technology) are not exactly the same, frequently the definitions might be both interchangeable and overlapping.
4. Methods

In this chapter we will make a brief account of our methods to find relevant research. This will include databases and terms used. For more detailed information we would refer to the table shown in the appendix. We will also expand on our inclusion and exclusion criteria and the reasons for the choices made.

4.1. Search Engines and Databases

Primarily we have used search engines and databases as our tool to find articles. Our main searches have been in Linguistics and Language Behaviour Abstracts (LLBA), Education Resource Information Center (ERIC), Education Research Complete (ERC), SwePub and Libsearch - and as a subsidiary database Google Scholar. By reading the abstracts we found 49 articles that might have been relevant to our research study. While reading these articles 25 were eliminated due to lack of relevance. The search terms we used were ESF, EFL, CALL, Communication, Computers, Language learning, Second language development, Digital technology, Oral communication, Middle school, Secondary school, Secondary language acquisition and combinations thereof using the terms “and” and “or” for inclusion and exclusion.

Not only have we used digital means, but we have also searched at the University Libraries in Malmö and Lund, finding books by authors referenced in the articles so the use of secondary sources could be avoided.

4.2. Inclusion and Exclusion

Since the subject at hand is rapidly changing it has been of importance to select material that cannot be considered old and obsolete. The material must reflect current technology in present-day schools. Since the research within this area could be considered somewhat limited, the chosen date range has been nine years, from the years 2010 to 2018. Incidentally this almost correlates with the age of the Swedish curriculum. We are aware that the process from conducting the research to publishing the results may take time, thus
referring to even earlier findings than this time span. In some cases, the decision to use earlier sources has been made when backtracking. The use of source material is important to avoid the possible bias of a secondary source.

It was also decided that the publications should be focused on children ages ten to twelve, since our education targets this age group. In two cases this criterion was deviated from, since the level of English of the research participants was comparable to Swedish pupils in class 4-6.

To summarise – our inclusion criteria were source material targeting groups with an English language level comparable to Swedish pupils ages 10-12, because this is our target group for teaching. Our exclusion criterion was age of the research, because we find this to be a rapidly evolving field. In the end 14 articles were deemed to fit our criteria.
5. Results and Analysis

In this section we have chosen to consider certain aspects of CALL that can engage language development in a learning situation, such as communication via telecollaboration. We have also focused on teachers’ and pupils' attitudes towards the use of CALL in the EFL classroom, since attitude and motivation are strongly linked. Finally, we have also chosen to consider how CALL is used by teachers in the classroom, since this is an important factor in motivating pupils, thus generating language development.

The research articles used in this work all have things in common and things that differentiate. The conclusive evidence shows beneficial effects of using technology in the classroom while teaching a second language. The research is quite often made in smaller groups or classes, where the attitude towards computers seems to be positive. However, the usage and definitions of CALL and ICT varies wildly between the articles, which sometimes makes a comparison problematic in some areas.

5.1. The general view of CALL and education

The articles that were read in preparation, and used in this work, shows a positive outlook on the usage of CALL. The same can be said of the *Curriculum for the compulsory school, preschool class and the recreation centre 2011* (2018) with changes made focusing on digital literacy and the means to help the pupils reach this goal.

This optimism is indicative of much research done within this field. Burtson and Arispe’s (2017) examination of research articles pertaining CALL and education between 1983 and 2015 shows that even though much research claims learning gains, only 50% of the articles researched can validate their claims. The lack of appropriate difficulty of the tasks given out to the test groups and lack of objective generalised assessment, for instance the sole use of self-assessment in questionnaires are of concern (Burtson and Arispe, 2017). With this in mind we have decided to primarily focus on results we deemed to be in accordance with our research question and judiciously gathered by the researchers.
5.1.1. The view of the teacher

Using CALL in the classroom might benefit both the teacher and the pupils in changing out-dated education to more current practices, which includes a strong emphasis on communication skills. The education will be more centred on the pupil than the teacher, where the teacher would take more of a supporting and monitoring role. The possibility of a closer communication between the teacher and pupil will also increase (Vahdat, S., & Eidipour, M., 2016), thus giving the teacher ample opportunity to motivate the learner.

Many Swedish teachers are positive to using digital tools in the classroom. Allen’s (2015) research shows that experienced teachers find it very advantageous to use internet, finding authentic listening materials for the students, while also exposing them to many varieties of the English language. Other assets listed are variation, a gain of productivity, and students being able to record themselves, thus gaining better understanding (Billore & Rosén, 2017).

There is however a general agreement that the usage of CALL is not entirely flawless. Teachers point to hardware problems, such as connection to networks, the battery life on devices and overload of said technology. Frequently the software also lacks the possibility for the teacher to observe the students, give formative and summative feedback, and individualize learning (Billore & Rosén, 2017). The use of authentic material could also put a strain on the teacher. Henry, Korp, Sundqvist & Thorsen (2018) questions if teachers have the necessary time and skill to utilize such materials in the education of their students. Allen (2015) corroborates this view while adding the opinion that the written course book might be a good supplement aiding the inexperienced teacher to choose the correct level of proficiency in their classroom as well as giving the older pupils a more nuanced text form than the messages on social media the pupils encounter in an extramural context.

5.1.2. The pupils’ viewpoint

The use of digital technology has become an integrated part of education in many schools and is often described as having beneficial effects on second language development and motivation. Yet, it should also be mentioned that the success rate of using digital technology in language learning is dependent on the pupil’s acceptance of it. Three of the
research articles we read specifically captures this by focusing on pupil’s perceptions and attitudes towards using computers as a helping tool in their language development process.

As proposed by Billore and Rosén (2018), pupils’ stance on the use of digital technology in second language learning may differ depending on the country in which they go to school as we as individual factors such as personal experiences and feelings. Thus, when exploring sixth grade pupils’ attitudes towards digital tools, the researchers found there was a significant difference between the perspective of German pupils and that of Swedish pupils. For example, when answering Billore’s and Rosén’s questionnaire most of the German respondents indicated that they only spent approximately 1-3 hours per week using a computer in their lessons, never using it for second language learning. However, a small percent of the German pupils reported that they did use computers during second language learning in the form of writing texts in English. Furthermore, when asked for input on a language learning game, a large portion of them communicated that they did not think of it as helpful in learning the English language due to difficulty in associate themselves with a tool that does not contain any translation to German. Conversely, the Swedish pupils accounted for using computers around 15 hours per week in school, with slightly less than half of the students stating they used them to read and write in their second language. When asked for their opinion on the English learning game, a majority stated they felt computer usage was valuable to their language development.

Furthermore, Henry, Korp, Sundqvist & Thorsen (2018) reveals that one way to motivate pupils when they are learning a second language is to use videos, including personalities the pupils think highly of, from various websites. This result is also corroborated by a study made by Bunting and Lindström (2013) where research was made in two classes of Swedish 11-year olds. In this study, most pupils consider tv and film being the primary source for language learning, followed by teaching materials, being abroad and digital games.

Macaro, Handley & Walter (2011) have in their review found evidence that a range of technologies may better classroom behaviours and strategies. Their work also shows that learners have exhibited positive attitudes towards CALL. However, when asked, the pupils in Bunting and Lindström’s (2013) research were not unequivocally positive towards gaming in a school environment. The games used in school are primarily considered being
an educational tool in the guise of a game, which does not engage in the same way a game chosen by the individual would. In contrast, the games the pupils might have picked to play in an extramural and recreational context they do not themselves consider being appropriate in a learning environment (ibid.).

5.2. Cooperative language learning with communication technologies

Our reviewed research studies show that the use of digital technology in teaching can prove to be a significant benefit to second language learning. Moreover, the adaption of computer-supported communication technologies in the learning process, such as chat programs or website forums, promotes development of the target language.

Zeng’s (2017) research study conducted in China, that includes thirty-two ELF learners corroborates this. He examined the potential effects of pupils partaking in collaborative conversations either face-to face (F2F) or through synchronous computer-mediated communication (SCMC). During this, Zeng (2017) discovered the learners who interacted through chat messages in the SCMC group tended to pay more attention to the overall correctness of their own language as well as language produced by others. However, the F2F group produced more language overall.

Likewise, Anderson and Sundh’s (2013) research study points out the positive effects of using digital technology in learning English as a second language. Exploring the use of ICT in international communication between learners in Sweden and Russia, Andersson and Sundh (2013) had the 12-year-old participants communicate with each other through the use of blogs and podcasts on various websites. From their research findings, Andersson and Sundh (2013) concluded the EFL learners who participated in the experiment developed their language abilities beyond of what they previously showed. Andersson and Sundh (2013) state a possible explanation for this is a communicative need among the learners serving as a driving force for language acquisition. Furthermore, gathered data also showed evidence that the learners preferred using different forms of written communication over spoken language in their interactions.
5.3. CALL in teaching

The use of CALL in teaching has been shown to help pupils in their language learning process. Computer-guided teaching could be used to reach results regarding oral language proficiency, listening skills and vocabulary – all important parts of developing communication skills. However, in order to reach successful results implementing this method, how the technologies are framed and applied are of great importance.

For instance, Alvarez-Marinelli’s et al. (2016) research study conducted in Costa Rica, that includes 816 pupils in grade three, corroborates this. When investigating the use of different types of curriculums in language teaching, the researchers had the pupils divided into two different CALL-based learning groups (A and B) and one non-CALL-based control group. The pupils in group A received a technology-reinforced treatment which activated the “auditory, phonological, and visual” (Alvarez-Marinelli’s et al., 2016, p. 108) parts of the brain. This treatment was paired with constructive feedback. In contrast the pupils in group B, who also received a CALL treatment, did not partake in activities that activated parts of the brain simultaneously. At the conclusion of the study, they found there was a significant difference in language acquisition growth between the three different groups. In discussion of their research findings, Alvarez-Marinelli’s et al. (2016) mention that the pupils in group A outperformed the other two groups in regard to oral language acquisition. This was the case although the pupils in the control group had shown a higher oral language proficiency at the beginning.

Similarly, Vahdat and Eidipour’s (2016) research study, conducted in Iran, highlights listening skills as a base for speaking skills, as well as different learning outcomes depending on the form of teaching. Examining the effects of using either CALL or a traditional mode of teaching listening comprehension proficiency, the researchers discovered that the pupils partaking in CALL-based teaching had improved their skills more than pupils in the other group. Vahdat and Eidipour (2016) propose this may be the result of a student-centred versus a teacher-centred approach to teaching.

Liu, Lan, & Jenkins’ (2014) research study also confirms this by showing differences in pupils’ language development depending on which method that has been used in their learning process. Exploring the use of CALL in language teaching, the researchers had the
sixth-grade pupils learn English as a second language by either utilising a technology-enhanced strategy use (TESU) system or through using a notebook without the system’s help. The TESU system allows pupils to take advantage of multiple learning methods, such as auditory and visual strategies, as well as computer related tools in order to reinforce language learning in and out of the system. Liu et al. (2014) found that the ELF learners who had participated in the CALL-based learning sessions improved their vocabulary more than the pupils attending the non-CALL-based lessons. As a possible explanation, they propose the TESU system made learning and language input more interesting, due to easily accessed data and incorporation of tools such as YouTube, hence motivating pupils to practise for longer periods of time. Moreover, the CALL system was constructed in such a way that it made the pupils more mindful of different strategies for learning.

5.3.1. CALL and assessment

Although Krashen (1982) feels that assessment and feedback might be detrimental for language acquisition due to it potentially putting the pupil on the defensive, assessment and feedback is a part of the learning environment in school. According to Skolverket (2018a) one of the duties of the teacher is to show to which degree the individual pupil has reached the knowledge requirement within various subjects. Furthermore the “teachers should on the basis of the requirements laid down in the syllabuses assess each pupil’s learning, and orally and in writing report this to pupils and the home, and also inform the headteacher.” (Curriculum for the compulsory school, preschool class and school-age educare 2011, Revised 2018, p.16.), thus making assessment an explicit demand on the teacher.

Wheeler’s (2001) prognosis for the future regarding the assessment opportunities within ICT was positive. A range of information would be provided to the teacher on basis of the pupils score and response time on computer administered tests, thus making it possible to automatically individualise a plan for the teaching of the pupil (ibid.). The reality today in Sweden seems to be a bit different. Billore and Rosén’s (2017) interviews with Swedish teachers indicates that many of the digital tools used in the classrooms do not support possibilities to keep track, provide feedback and individualise learning, which would be considered valuable by the teachers. Their conclusion is that there needs to be a better connection between the users and the software developers in the future.
Albeit the software might be considered lacking there might be other uses for CALL within assessment. Studies shows that a CALL-based education free up time, thus enabling teachers and pupils to do more during the lessons. The research made by Zeng (2017) showed that pupils using Computer-mediated communication felt that this way of learning granted them more time to detect self-made errors which would be ignored in conversation face to face. Vahdat and Eidipour’s (2016) research supports previous claim, showing that a CALL-based teaching would not only give the teacher more time to observe the pupils, but also give new opportunities to communicate one-to-one, giving the teacher possibilities to guide and assess in real time.
6. Discussion

In this section we will discuss the research question against the referenced framework in correlation with the analysis. In order to seek explanations, we started our search for relevant material by focusing our attention on research targeting second language development.

Even though different modes of communication are used in the studies, all articles exhibit a positive outlook on technologies among the participants. The question is if a positive outlook on a tool or strategy is enough to generate motivation. Gardner and Lambert (1972) argues that the attitude held by the learner towards the target language and the probability of using it are essential for the acquisition of said language. Dörnyei (2015) focuses on the end goal where the outcome is desirable. To keep the motivation the learner needs appropriate and competent support. With this criterion in mind it stands to reason that a positive attitude towards the means of learning is good, but not enough.

The context of learning is very important to motivating the learner and gaining language development. A computer game might not be favourable, even if it has beneficial outcomes in an extramural context. Should the same game be deemed inappropriate in a classroom by the learner (Bunting and Lindström, 2013) it would lose its benign effect. Bunting’s (2013) research among eleven-year-olds in Swedish schools also shows that the pupils are not fooled by pedagogical games where the developer has used a form that is popular outside the school environment. The pupils know that this game is a tool for learning. This gives the game the same status as any other educational material, generating the same motivation and language development as other tools. In conclusion the change of venue gives the games a different role and might make them a chore instead of recreational indulgence.

Discounting game-playing in the classroom, CALL provides a large selection of original content, giving the teacher opportunities to expose the pupils to many variations of the usage of English. This is important for communication proficiency and language development. The use of authentic materials also correlates with the syllabus in English in the Curriculum for the compulsory school, preschool class and the recreation centre 2011 and has been proven a favourable choice by experienced educators (Allen, 2015). In addition, while combining CALL with the field of cooperative learning there are ample
opportunities for authentic learning experiences. Andersson and Sundh (2013) shows the beneficial effects of genuine interaction between pupils with English as a second language, here using telecollaboration between Sweden and Russia. The need to be understood is a strong motivator, thus inspiring the 12-year olds to strive to avoid communicative breakdowns and stretching their language abilities (Krashen, 1982). Furthermore, the research made by Henry, Korp, Sundqvist & Thorsen (2018) indicates that not only authentic materials, but also authentic projects with authentic results, such as recorded films and aforementioned telecollaboration, yields great motivation within the class. The conclusion is that the use of authentic CALL materials in EFL learning is of great import for language development.

Dörnyei (2015) argues that there must be an adequate gap between the set goal and the current level of competence to garner motivation to do what is required. In Sweden the proficiency level among pupils is quite diversified. According to Skolverket “teaching should be adapted to each pupil’s circumstances and needs. It should promote the pupils’ further learning and acquisition of knowledge based on pupils’ backgrounds, earlier experience, language and knowledge” (Curriculum for the compulsory school, preschool class and school-age educare 2011, 2018, p. 6) which entails challenges for the teacher. CALL can provide a student-centred approach to teaching, granting the teacher more time to support each pupil (Vahdat and Eidipour, 2016). However, the study quoted was made in Iran where a more traditional mode of teaching is the norm. Since Swedish teaching methods are more learner-centred the time gain might not be as noticeable, but the opportunities of individualisation within CALL must be considered broader than with regular text books, thus motivating different proficiency levels.

Although Swedish teaching methods might be more learner-centred than in some countries, the teacher must still control and plan the lessons performed in the classroom. Effective learning includes teaching the pupils different language strategies to efficiently communicate with others (Skolverket, 2018). During the planning phase the teacher gets ample opportunity to give the pupils means to try relevant strategies to reach a pre-set goal. This correlates with Dörnyei’s (2015) theory concerning generating motivation where applicable and efficient strategies to reach the goal are one of the key elements.
7. Conclusion

During our research for this synthesis we drew the conclusion that there does not exist a definite answer to our research question "How can the use of CALL in an EFL-classroom be used to generate motivation and language development, such as communicative skills?". There is no doubt that CALL could be great motivator for second language development when used with deliberate planning. Within some areas, such as computer-mediated communication (telecollaboration) and authentic experiences, CALL is an unparalleled motivator.

The general positivism toward this mode of language learning might overshadow critical thinking and generate indiscriminate usage. CALL is an ever evolving and expanding field. The digital tools available to us today will surely not be the same we use in a few years. This puts high demands on both teachers and pupils. A constant evaluation of learning and teaching methods is of paramount importance, as is the further education of teachers.

To be able to motivate the pupils to further develop their language proficiency, the teachers must know how and when and what to use. It is not enough to use a digital tool and expect a beneficial outcome. The teacher must carefully consider their options and act accordingly. As in any educational context there needs to be a plan. By using CALL, the teachers can individualise the education in accordance to the needs of the pupils, make the lessons authentic and, in combination with collaborative learning, give the class a range of situations where communication is needed and developing the learners' language skills further. In other words, if CALL is used correctly and with explicit strategies the teacher can give the pupils an enhanced learning experience that will motivate them in their second language acquisition.

While the interest in CALL is growing and developing, new teaching methods surely will emerge. However, assessment within this area seems to have been overlooked. Feedback is not only fundamental to promote motivation and development, but also prescribed within teaching. We concur with the teachers in the research made by Billore & Rosén and hope for further research and development within this field.

Finally, even though we have felt the need to critically review the utilization of CALL we are positive to using this method of teaching, since digital tools are not only an integral
part of our world but also our future. As teachers we need to move with the times, or as John Dewey (1944) has said “if we teach today’s students as we taught yesterday’s, then we rob them of tomorrow” (p.167).
8. References


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## 9. Appendix

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