

## **Second Language Learner Perceptions on Computer Assisted Language Learning**

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### **Abstract**

*The focus of the current study was to investigate the perceptions of English as a second language learners on using computer assisted language learning (CALL) for improving academic writing skills. The study was conducted for thirteen weeks with 82 second year undergraduates from General Sir John Kotelawala Defence University in Sri Lanka. Switching Replication was used for the research design. The data were analyzed thematically. The findings indicate that the participants preferred the in-class environment more than the CALL environment for academic writing skills. Participants' lack of experience in CALL, poor writing and vocabulary skills and the negative interference from the technical issues were some of the issues that had a negative effect on the participants in the CALL environment. Yet the success of the intervention both in the first and second phases indicates the effectiveness of CALL for developing academic writing skills.*

*Keywords: Academic Writing, Computer Assisted Language Learning, English as a Second Language, ESL Learner Perceptions*

### **1. INTRODUCTION**

The use of computers can motivate second language (L2) learners to improve their academic writing skills in an innovative and effective manner (Zhytska, 2012). Teachers can also use technology in an effective manner to enhance the academic writing experience of L2 learners (Sun & Chang, 2012). As Embogama (2016) states, teachers of academic writing need to provide a better learning experience to their students by guiding them to interact with the resources outside of the classroom using e-learning, because the integration of computers and internet into English for academic purposes (EAP) has already been proved very effective in higher education. At the same time, it is important to note that the computers cannot be a

substitute for teachers, but that it can provide a richer and better learning experience for language learners (Sun & Chang, 2012; Zhytska, 2012).

## **2. LITERATURE REVIEW**

### **2.1 Academic Writing**

With a special focus on academic and research writing, EAP has spread as the world's leading academic and research language. With the maturing of the field of EAP writing, much attention has been shed on graduate and research level students. Competency in academic writing not only supports in mastering technical and formal aspects of the genres but also supports in improving the ability to think in more abstract manner. Moreover, mastering the tacit conventions in academic writing is the prerequisite for membership in the academic discourse (Jou, 2017).

Studies have shown that in academic writing English as a second language (ESL) learners face more difficulties in the language itself compared to the structure of the text and content. They find it difficult to express ideas accurately, smoothly and appropriately. Grammar, style and cohesion are also major areas with which the learners find difficulties (Evans & Greens, 2007). As Lee and Tagino's (2008) study points out undergraduates face difficulties in academic writing due to limited knowledge in that specific area of study. Further, they suggest that most ESL students lack the competency needed in academic writing. As Lee and Tagino (2008), Evans and Green (2007) also show that ESL learners consider language related components in academic writing as being more difficult compared to structure/ content-related components. Chou (2011) also discusses the difficulties ESL learners face in learning academic writing. Among them unclear instructions of the professors, first language (L1) interference, inadequate ideas and poor usage of grammar are some of the mentioned difficulties.

The case study of Giridharan and Robson (2011) investigated the gaps in academic writing, with a study sample of 206 ESL students who were in a foundation studies programme in Malaysia. The study investigated the challenges faced by the learners in academic writing and investigated the grammatical, structural and syntactic errors made in writing tasks. It was concluded that integrating the basics of English language into teaching the language, teaching vocabulary and employing effective teaching strategies by the language lecturers can improve the academic writing skills of ESL learners at tertiary level.

Cai's (2013) study which was conducted at a Chinese university to find out the students' perception of academic writing skills, revealed that reviewing and critiquing are the most difficult areas in academic writing skills while the use of correct academic phrases and styles were also noted as language related difficulties. Further, the findings indicate that the participants needed to work on more authentic research papers and group discussions. Hence, the researcher recommends that the teachers should revise the text books and materials to meet the linguistic needs of the learners. In addition, he recommends genre-based pedagogy in creating the EAP curriculum.

As suggested by Pecorari (2006), it is necessary "to address the full range of students' learning, and not merely the visible tip of the iceberg" (p.27). Hence, as suggested by many

researchers (Chou, 2011; Evans & Green, 2007 & Lee & Tagino, 2008) it is the responsibility of the language lecturers to differentiate academic writing from general writing.

## 2.2 Computer Assisted Language Learning

Computer assisted language learning (CALL) can be defined as a process in which a learner uses a computer for improving his/her language competency or as a tool to support teaching and learning. CALL has become amalgamated with research and general skills such as reading, writing, listening and speaking as well as with autonomy in teaching (Beatty, 2010). CALL is a different field from other fields of study in applied linguistics due to the changes in technological aspects which influence theory, practice and research. As indicated by Figure 1 below, CALL has evolved from the relatively simple text and visual presentation to the highly complex modes such as virtual reality.

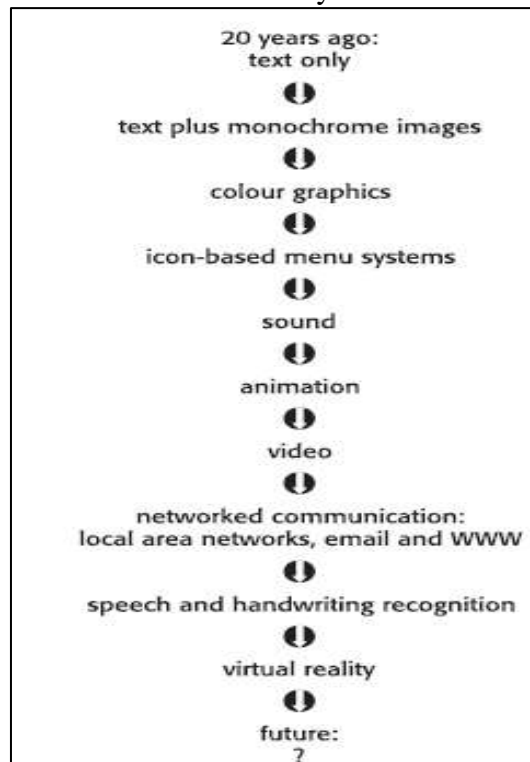


Figure 1: Progression in computer presentation technology (Beatty, 2010, p.188)

Computers are used both in higher and secondary education for teaching and learning of modern foreign languages and English for speakers of other languages. Computers in teaching and learning may be used for different applications and these applications can be placed in two categories “(a) those that involve the use of generic software tools such as word processors, presentation software, e-mail packages, and Web browsers, and (b) those designed specifically to promote language learning” (Davies, 2006, p. 460). As Martinez-Lage and Herren (1998 cited in Chen, 2011) point out, the use of technology supports learners to work on more or additional materials after class. This learner-centered environment would

undoubtedly make learners work at their own pace. The ultimate goal in language learning is that learners are able to use what they have learnt, in authentic situations (Chen, 2011).

Computer mediated communication also paves the way for easy interaction with other learners and teachers, which is very helpful for a learner in language learning (Chapelle, 2001). In second language acquisition theories, it is an important aspect that opportunities are provided for language learning through interaction (Benson, 2011) and such interactive learning supports learners and reduces the interventions from the language teacher. Dynamic display of the content also provides learners to get exposed to materials to be learnt in a way which is not available in traditional language learning classrooms. Easy access of materials in CALL with different levels of support (for example with or without a glossary) is also an added advantage for language learners. Feedback can also be provided in many different ways such as auditory, visual and textual means (Reinders & Hubbard, 2013).

Both Okonkwo (2011) and Shafaei (2012) argue that CALL is not a method but a tool. Further, Okonkwo (2011) points out that the focus of CALL should be learning, not teaching. In Warschauer's (1996) study, he concluded that computers supported the participants learn effectively and independently. Further, ".....using computers, they feel they can learn faster, become more creative, and write better essays. They feel they have more control of their learning and more opportunities to practice English" (p. 37).

CALL is both exciting and frustrating because of its dynamic, complex and quickly changing nature (Hubbard, 2009). In developing new CALL programmes, cost of technology, lack of funds, availability of the expertise in the field and authoring of programmes can be some of the obstacles which prevent implementing new technology effectively in the field of language learning. CALL has also encountered with issues when designing materials, technologies, theories in pedagogy and different styles of teaching (Beatty, 2010).

Research should be conducted on *how* and for *what purpose* CALL should be used and to increase involvement of teachers as researchers in CALL research. However, creating a better connection between pedagogy and technology is an ongoing challenge in the field of CALL. Moreover, CALL should be perceived from different point of views to be better aware of the problems, solutions and implications for learning language through technology (Beatty, 2010).

### 3. METHODOLOGY

The current research article was based only on the qualitative segment of a larger study.

#### 3.1 Participants and Context

The participants of the study were chosen from the General Sir John Kotelawala Defence University (KDU) in Sri Lanka which is a state university that is governed by the Ministry of Defence. Out of the seven Faculties at KDU, the Faculty of Allied Health Science (AHS) was chosen for the current research, mainly because in other faculties there are foreign students whose L1 is English. AHS is the only faculty which has only local day scholars who speak English either as a second or third language. If there had been foreign students whose L1 is English in the sample, the researcher would not have been able to achieve her main research objective which is gauging to what extent the ESL learners prefer CALL for academic writing

skills. Before conducting the study, the consent of the university was granted and permission was given to utilize the undergraduates selected as the sample of this particular study.

### **3.2 Research Design and Procedure**

In the main study, the overall research design adopted was Switching Replications (SR) (Trochim & Donnelly, 2015). SR is a hybrid experimental design which is considered to be one of the strongest in experimental designs. Unlike in the simple experimental design, in the SR both groups receive the intervention, which makes it possible to successfully address one of the major issues in experimental designs which is denying the benefits of the treatment to some participants due to random assignment (Bartch, 2013; Trochim & Donnelly, 2015).

In the current study, following the design of SR, the sample was randomly assigned to treatment group (group A) and control group (group B). The experiment was carried out in two phases breaking the syllabus into two parts. In the first phase, the Group A was the treatment group and Group B was the control group. Accordingly, Group A was given the intervention first to follow the lessons in the first half of the syllabus and do academic writing exercises in the CALL environment while Group B worked in-class on the same academic writing lessons and exercises. In the second phase, the two groups switched their roles and studied the second half of the syllabus. Then the intervention in the CALL environment was given to Group B and the Group A worked in-class. As it is mentioned in the SR, the replication allowed all the participants to experience the intervention which prevented creating hostility towards the participants in the original treatment group which also supported in mitigating the social threats to internal validity.

### **3.3 Data Collection Instruments**

#### **3.3.1 Learner Analysis**

There was a learner analysis questionnaire to collect demographic information, information on first year language learning experience and computer experience of the participants. The data were collected through open and close - ended questions.

#### **3.3.2 Post Questionnaire**

The post questionnaire survey was prepared to find out the participants' level of satisfaction towards the learning approach and the environment. Moreover, it was also used to find out the participants' desired learning strategy/s when learning academic writing skills and whether they would like to continue CALL or in-class for academic writing. Both advantages and disadvantages of learning in CALL and in-class were also focused in this tool.

#### **3.3.3 Interviews**

Interview guide approach was used for interviewing the selected participants. Under interview guide approach, structured and semi-structured interviews were conducted to gather data on the experience, preference and satisfaction of the participants in the CALL and in-class learning for academic writing skills. The interviews were conversational and situational having greater flexibility and freedom (Cohen, Manion & Morrison, 2007).

### **3.4 Data Analysis**

For the analysis of the qualitative data, thematic approach was used. The main purpose of using thematic analysis here was to identify and to analyze the patterns in qualitative data. It also supported in analyzing the preference of the research participants for working in CALL/in-class for academic writing skills.

#### 4. FINDINGS

The reasons for preference of CALL for developing academic writing skills were explained under five main themes: Modern technology, Interest, Language development, Self-confidence and Convenience. The negative features of CALL for academic writing skills were discussed under the themes of technical issues, waste of time, boredom and issues in communication. Verbatim quotes were presented as evidence for various themes.

##### 4.1 Preference of CALL for Academic Writing Skills

The qualitative data indicated a range of benefits that could be gained by students by working in the CALL environment. The participants were happy to get the exposed to virtual learning environment for academic writing skills, in which the mode of learning is very different from their traditional-teacher-centered learning.

“Experience online learning is a good opportunity because we can then improve our language with modern tools in technology”

“I like to learn in Moodle which is more advanced than learning in classrooms”

Further, the easy access to materials rather than relying on printed materials and access to audios and videos have also been experienced as benefits of modern technology which supported learners in enhancing language competency.

“You can watch videos and read lessons in Moodle instead of using printed materials”.

Further, the comments of the students informed that they enjoyed studying in the CALL platform.

“It is very interesting method using new technology”

“I enjoy doing activities with my friends online, than learning in the classroom every day”

CALL also supported them in language development by improving their writing skills and vocabulary. Unlike in-class, in CALL all the group members had to contribute to the building up of the answers because the availability of the chat records supports the lecturer in monitoring the participants’ discussions. Thus, the students had to give their individual contributions to produce answers. This practice had helped the students to develop their academic writing skill as well as their self-confidence.

“We can improve self-confidence because in CALL we work without any other members in front of us to support. It also helped to improve writing and vocabulary”

“ We get more confident and improve writing skills through technology”.

Moreover, convenience is also noted as an advantage of CALL which supported the students in improving academic writing skills. As the participants of our study reported, rather than staying after lectures which was tiring sometimes, it is possible to work off campus, which is more relaxing.

“We can do it in a relaxed mind, so it is more effective”

“...does not require to be in close proximity for successfully complete the activities and discussions”

#### **4.2 Issues in CALL for Academic Writing Skills**

The qualitative data also revealed some limitations of the CALL as perceived by the participants. Technical issues such as logging difficulties and slowness of the system hindered the successful academic writing skills in CALL. As pointed out by the participants;

“Sometimes it is difficult to log at the given time as of internet problems, and in-class all members can get together easily as there no internet issues”,

“Sometimes data connection is slow, therefore cannot connect with others on time”

They were not happy with the discussions to be conducted in CALL because when group members are not present face to face as in-class, it is difficult to discuss the things and

“We are unable to discuss everything in detail as we do in the class discussions because of problems in typing.”

Due to some notable issues, learning in CALL was considered as a waste of time by some of the participants in the study.

“We have to wait till others log into Moodle and then they type the answers in Moodle which is a waste of time”

“Sometimes of the connectivity problems it takes long time to connect to Moodle”

Learning in CALL, sometimes reduced their enthusiasm to learn academic writing skills because

“Some students do not have enthusiasm to do this at home, it then effects to the other group members as well”

“Sometimes it is bored to work online when there are no friends as in the physical classroom”.

### **5. DISCUSSION**

The results of the study indicate that there are positive and negative aspects in relation to working in both in-class and CALL. Among the main issues the participants experienced in CALL was lack of experience in the use of Moodle for language learning. Participants took time to adapt and to be familiar with the learning mode. Technical issues such as problems in loading the web pages, logging into Moodle and connection failures of some participants also had a negative impact on social interaction and on completing the assigned tasks. The participants’ inability to use L1 in CALL and limited writing abilities may also account for participants’ preference for the in-class learning for developing academic writing skills. The lack of opportunities for face-to-face discussions in CALL also affected some of the participants’ enthusiasm in learning in CALL.

In contrast, the use of computer supported some of them to learn faster as well as to be more creative and to produce better essays. Being able to access online resources and improving writing and vocabulary skills made the learning of academic writing skills unique in CALL for some of the participants and therefore led them to prefer CALL over in-class learning for developing academic writing skills. At the same time, they accepted that computers gave them more opportunities to learn and take control of their learning. The use

of visual media made learners engage more actively in CALL than in face-to-face learning. This agrees with Collins (1991) who highlights that the use of visual media makes learners engage in learning with interest without limiting themselves to printed materials. Even in Warschauer's (1996) study, he shows how his learners perceive the use of computers supported them to learn better and more independently.

This new learning mode also made some learners interested in both the learning mode and the environment. Szendeffy (2008) also points out that the use of computers makes students engage and work cooperatively with interest which ultimately leads to better language production. Moreover, the close monitoring of students' participation in CALL by the lecturer which is not possible in the physical learning environment can be considered a positive feature of the virtual learning environment. The monitoring of interactions ensured that all participants contributed to the production of answers which, many participants identified as a factor that enhanced their self-confidence and was felt to be a positive feature of CALL. As Reinders and Hubbard (2013) highlight, the dynamic display of the content also provides learners to get exposed to materials to be learnt in a way which is not available in traditional language learning classrooms. Easy access of materials in CALL with different levels of support is also an added advantage for language learners. Convenience was also noted as a benefit of CALL which supported in improving academic writing skills. Rather than staying after lectures which was tiring sometimes for the participants, it was possible to work off campus, which is more relaxing.

As Beatty (2010) points out, learners can be given opportunities at computers for second language acquisition when they are promoted to work collaboratively. The participants in the current study also stated that when they worked collaboratively online, it supported them to engage in scaffolding. Moreover, it made them to be more responsible with their own learning than working in groups in in-class learning environment. Moallem (2003), Okonkwo (2011) and Sarita and Sonia (2014) also agree that when learning online, learners are more responsible for their own learning while communicating and interacting with peers and getting the fullest advantage from new technologies.

## 6. CONCLUSION

The results of the study indicate that CALL is both exciting and frustrating because of its dynamic, complex and quickly changing nature. It can also be concluded that *CALL supports in creating innovative methods both in teaching and learning of languages*. Further, the participants accept that the effectiveness of CALL for improving academic writing skills would provide more opportunities for ESL undergraduates to work on extra writing materials off-campus thus improving their writing competency.

It is believed that the knowledge obtained in this study can contribute to the field of CALL and applied linguistics. Hence, the findings can be used for instructor/ teacher training as well as to design pedagogical interventions and materials aiming to support learners of ESL. For future directions, it is suggested that to conduct research to find out the ESL learner preference for CALL for other sub-skills such as reading, speaking, listening. How their preferences get changed according to the gender should also be another research avenue for future directions.



## **7. LIMITATIONS**

As for the limitations in the current study, the researcher acted both as the lecturer and the main researcher. So due to the relationship built up between the lecturer and students during the study, the possibility cannot be excluded that the participants may have struggled to respond more honestly when answering the questionnaires to prevent themselves giving negative comments and to avoid displeasing their lecturer. Furthermore, the participants of the study were not a statistical representation of all the state and private university undergraduates in Sri Lanka. As a result, this has limited the generalizability of the findings. In addition, the duration which had been allocated for academic writing should be extended to make the participants get more exposure to and experience in CALL.

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