

## Normalising CALL : Exploratory Case Study from the Saudi Context

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### Abstract

*This paper reports an exploratory case study of 48 Saudi female freshmen at the College of Languages & Translation in Riyadh, Saudi Arabia. The study seeks to examine the impact of using computers in EFL reading classrooms by looking at how the use of computers contributes to the development of students' reading skills and strategies. It explores the effects of using computer-based reading lessons in EFL classrooms on learners' attitudes, behaviours and motivation. It also investigates the impact of using such lessons on the teacher's role and her understanding of that role. The first stage of the study involved the design and implementation of the computer-based reading lessons. This was followed by a 12-week (a semester-long) reading course where the 48 participants enrolled in a computer-based reading class consisting of three sessions per week at the computer lab and one session in the regular classroom. A variety of data collection methods were incorporated to ensure the richness and depth of data. These include a background questionnaire, classroom observation, teacher and researcher diaries, students' scores, teacher's log and participants' interviews. The analysis was conducted both quantitatively and qualitatively in order to generate categories, patterns, and themes resulting in a final conclusion. Findings showed statistically significant improvement in students' examination scores. The qualitative analysis of the data reveals that integrating computer-based lessons in this particular reading class gradually developed positive attitudinal and behavioural change during the course and increased motivation. It also led to a desire for an increase in autonomous, interactive behaviour not only in the reading class but in other classes as well. Findings showed a positive change in the teacher's behaviour and attitude. That change led to a gradual shift in her role from the manager of the class into more of a facilitator, allowing her students more control over their learning..*

### 1. Introduction

The impact of using technology to promote EFL literacy skills has been investigated by many researchers. These studies support the idea that CALL improves students' reading comprehension, increases their reading fluency, and enhances motivation. In addition in most if not all CALL studies, factors are often examined in isolation from each other or the system in which they interact with each other. According to [4] Michaels (1990, p.17), "the computer is simultaneously influencing and influenced by the social setting. It should not be considered the most important factor in this intervention; it is only a small component within a larger picture." This idea is also echoed in some recent views in the computer-based instruction field. [7] Zhao and Frank (2003, p. 6) argue that:

...in order to appreciate computer uses in schools, we can no longer continue the tradition of studying discrete factors in isolation. Instead we need to become "ecologists" and provide an organic, dynamic, and complex response to this organic, dynamic, and complex phenomenon.

Many CALL researchers ([1] Chapelle, 2003; [2] Egbert, 2005; [3] Kern, 2006) argue that it is essential to explore various aspects and dimensions of this phenomenon, namely learners, teachers, content,

and technology, and try to understand how these dimensions interact within particular social and cultural contexts. According to Kern (2006, p. 201), CALL research should broaden the theoretical and methodological perspectives it draws on, taking into account literacy studies, discourse analysis, socio-cultural theory, socio-linguistics, and anthropology. He suggests that research should become less quantitative and more qualitative (p. 202). In other words, the question "Do computers improve learning?" needs to be re-considered, and researchers should try to explore the various ways in which teaching and learning technology is being used and in what contexts.

## **2. The Study**

Forty-eight first-year female students at the College of Languages & Translation in Riyadh were asked to enrol in a 12-week semester-long course of computer-based (CB) reading classes consisting of three sessions per week at the computer lab and one session in their regular classroom.

For 12 weeks, students attended the computer lab for three sessions a week, where they worked on CB reading lessons. They worked in pairs while their teacher directed the session using a multimedia projector to demonstrate and explain on one computer to the entire class. The teacher monitored and assisted students while they were working on the computerised reading tasks. The fourth reading session took place once a week in the traditional classroom. The researcher attended, observed, and audio-recorded each session. At the end of each week the teacher and some students were interviewed to discuss various aspects of the project.

A number of data collection methods were incorporated to enhance the reliability and validity of the study and to ensure the richness and depth of the data.

## **3. Data Analysis**

The qualitative analysis involved transcribing the data, identifying features of the data that seemed to be interesting, and creating a set of initial codes. Coding at the first stages was data-driven, that is, there was no attempt to fit the data into a pre-existing coding frame, or any analytic preconceptions. Coding was carried out systematically through the entire data set, with an attempt to give full attention to all data elements, especially the elements that might form the basis of recurring patterns.

The codes were sorted in order to search for potential themes. This also involved collecting all the related data extracts within the identified themes. Tables helped with sorting codes into themes and with understanding the relationships between the codes, the themes, and how these themes related at various levels. These sets of themes and sub-themes were then revised and refined, taking into account internal homogeneity and external heterogeneity. That is to say, there should be coherence in data within these themes, and themes should be clearly identified and distinguished. At the final stage of data analysis, a clear description of each individual theme was conducted, taking into account the "story" that each theme told and how it fit into the broader overall story in relation to the research questions. Discussion of the results is presented next.

## **4. Results and Discussion**

Improvement in students' examination scores was confirmed in participants' interviews. Students reflected on their reading process, describing some of their common reading problems such as slow reading, poor comprehension, limited vocabulary, poor pronunciation, and difficulty in identifying the text's main idea. Students reported that these difficulties decreased later on. They related their improvement to some aspects of the CB reading lessons. They pointed out the novelty and variety of tasks and the availability of learning resources such as an e-dictionary, encyclopaedia, and links to extra reading material. They described how such aspects helped improve their reading speed,

enhanced their vocabulary and pronunciation, and promoted their use of reading strategies such as skimming for the main idea, using their background knowledge, and scanning for details.

#### **4.1 Learners' Behaviour, Attitudes and Motivation**

Data analysis revealed some changes in students' attitudes, behaviour, and motivation. Despite their enthusiasm and excitement about the new experience, students showed some negative attitudes of discomfort, worries, and anxiety.

Observations revealed students' tendency to act passively and to avoid interaction either with their teachers or with their peers. Further analysis showed that students' negative reactions seemed to be linked to several factors: their unfamiliarity with the new environment, their lack of confidence, their prior experience in L2 learning, and how they perceived the teacher's role. The reasons also included a lack of clear rules and instructions, a lack of group development, and the influence of their teacher.

After several sessions, the teacher and her students started to adjust. Analysis showed a positive transformation in students' attitudes, behaviour, and levels of motivation. A notable change occurred in the atmosphere of the class. With the support of their teacher, students started to feel familiar with the environment, adapting quickly to the new teaching approach and to the new classroom rules. Participants were gradually developing as a group, which allowed them to feel more relaxed and confident. This created an enjoyable and motivating atmosphere.

Classroom interaction also changed positively. Students showed an increase in their interaction with each other during the later sessions. After introducing a variety of tasks and with teacher support, students were observed working collaboratively, planning, asking each other for help, negotiating, and making decisions while working on a particular task. Many students expressed a positive attitude towards pair work, appreciating that the class allowed them to talk to other students about the tasks and ask other students for their advice and/or opinions.

Student-teacher interaction was evidently improving. The later sessions showed an increase in students' participation and involvement. Using elements of the CB lessons such as the real-life reading materials, multimedia, and the variety of game-like tasks seemed to enhance classroom interaction. L1 dominated students' early interaction. However, the quantity and quality of their L2 use increased over time with their increased confidence and their teacher's constant encouragement.

Despite their initial anxiety, observations showed students' increased interest in the CB lessons. They explored and used the different resources available, such as the e-dictionary, encyclopaedia, feedback, and the video links. In their interviews they acknowledged the novelty and variety of these aspects in the CB lessons, pointing out the ways in which they increased their motivation, engagement, and reading ability.

#### **4.2 Teacher's role**

During the study, the use of the computer in this classroom seems to have had some impact on her role. Change was a major theme that emerged while examining the teacher's attitudes and behaviour during the study. The teacher reported some difficulties in adjusting to the new environment at first. She attributed her anxiety and discomfort to the new responsibilities and the lack of familiarity with the technology. Finishing on time, managing the class, and handling technical problems were some of her reported worries.

However, her worries and anxiety decreased over time and after the class started to adjust to the new environment and develop as a group.

The teacher felt a need for change, which led to a clear transformation in her attitudes and behaviours during lab sessions. Although she retained her traditional role as the leader: giving the lecture, providing the information, initiating and directing the discussions, keeping records, and evaluating students, some of her responsibilities as leader were minimised, allowing new roles to develop. She seemed to be moving towards a more construction-centered approach, acting less as the leader and information provider and more as a facilitator. Her facilitative role involved creating a friendly learning environment and encouraging her students to participate in pair work and classroom tasks. She aimed to promote a social climate by reducing the feelings of anxiety and allowing the students to develop as a group. She continued to play that role throughout the lab sessions, promoting a learning environment of respect and trust, always praising students, and never addressing them negatively. She reduced social distance through sharing personal opinions and experiences with her students and interjecting moments of humour. The teacher's role as facilitator gradually developed as lab sessions continued. The role of the teacher lecturing and directing was decreasing, allowing more time for open discussions and tasks. The teacher was trying to be less dominant in classroom discussion, providing students with more opportunities to express their thoughts, feelings, and experiences. She had total control of the initiation and the direction of the discussions. However, the students were given opportunities to freely express their beliefs, ideas, and opinions, which led to the development of their communication skills. They were also allowed to work independently while the teacher walked around providing assistance when needed.

## 5. Conclusions

The study results have clear pedagogical implications. They show how the learning process is affected by the educational approach, not only the delivery. In other words, although CALL has the potential for improving students' learning, CALL alone is not the solution. Adapting a teaching approach that combines discussion, collaboration, and motivating tasks which promote interaction, higher level thinking, and autonomy is highly recommended. In addition, when designing CALL material, emphasis should be given not only to the technology used for delivery, but more importantly to the educational approach and context. The qualitative analysis of the data reveals that integrating computer-based lessons into this particular reading class gradually developed positive attitudinal and behavioural changes toward the course and increased motivation. It also led to a desire for an increase in autonomous, interactive behaviour not only in the reading class but in other classes as well.

CALL, and different learning resources, can be integrated into reading classrooms, since they offer great opportunities to enhance the teaching/learning environment. However, we need to understand that CALL is only a tool for instruction and not an end goal in itself. It is as described by [6] Tomei (2008, p. 16) as a "significant catalyst for change," and positive change is what we should aspire to. Despite their reasonable computer literacy, participants in this study had spent most of their school lives in traditional classrooms. CALL was a significant change for most of them. They felt a need for a transitional period to familiarise themselves with this new teaching approach. Thus, when teachers consider introducing new teaching techniques, they should not expect too much too soon. The students should be given enough time and support to adjust to the new learning environment in order to achieve the required positive impact. Orientation sessions should be organised to familiarise the students with the new techniques and help them adjust quickly.

Results of the study also showed how integrating computers into this particular classroom led to a positive change in the teacher's behaviour and attitude. There was a gradual shift in her role and how she understood that role. These findings suggest that teachers might consider integrating different teaching tools into their teaching practice. They can be trained to integrate CALL into their classrooms

to complement the textbook. However, as with any other teaching tool, teachers need to have clear, well-focused teaching objectives and goals for each classroom task.

The findings of this study also revealed the deep influence of the teacher's attitude and behaviour in this particular context. This implies that teacher training should be the first step when considering any educational reform. Teachers should be challenged and confronted to reconstruct their beliefs and perceptions about teaching and learning in order to achieve positive results.

Teacher training should encourage teachers to identify students' needs, interests, and learning styles and strategies. Teachers might be introduced to various techniques that give some control to the student, such as group work or project-based learning. Teachers need to be trained to play a variety of new roles beyond that of information provider; they should become motivators, facilitators, and supporters.

Another important implication of this study involves the interesting link between dependence and interdependence. [5] Ryan (1991, p. 227) introduces the term "autonomous interdependence" to draw attention to the individual and the social dimensions of a learner's autonomy. Little (1996) argues that the development of autonomy implies collaboration and interdependence, rather than learners working in isolation. The findings of this study showed that in order to foster our learners' autonomy, teachers need to encourage students to be interdependent and to work collaboratively. They need to enhance the classroom's social climate and promote opportunities for the students to develop as a group.

## References

- [1] Chapelle, C. (2003). English language learning and technology: Lectures on applied linguistics in the age of information and communication technology. Amsterdam: John Benjamins.
- [2] Egbert, J. (2005). CALL essentials: Principles and practice in CALL classrooms. Alexandria, VA: Teachers of English to Speakers of Other Languages, Inc.
- [3] Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, 40(1), 183–210.
- [4] Michaels, S. (1990). The computer as a dependent variable. *Theory into Practice*, 29(4), 246–255.
- [5] Ryan, R. M. (1991). The nature of the self in autonomy and relatedness. In J. Strauss and G. R. Goethals (Eds.), *The Self: Interdisciplinary Approaches*. NY: Springer-Verlag.
- [6] Tomei, L. A. (2008). *Encyclopedia of information technology curriculum integration*. Hershey, PA: Information Science Reference.
- [7] Zhao, Y., & Frank, K. A. (2003). Factors affecting technology users in schools: An ecological perspective. *American Educational Research Journal*, 40, 807–840.