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Perceptions of Junior High school Teachers toward Computer Assisted Language Learning (CALL) Within The Context of Azarbayjan Provinces

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Abstract

In this study, perceptions of junior high school teachers towards Computer Assisted Language Learning (CALL) were investigated. A descriptive research study was conducted with EFL teachers working at different junior high schools of Azarbaijan provinces in Iran. Sixty English teachers participated in this study. Teachers were conducted a questionnaire to reveal their perceptions towards CALL. Descriptive analysis was performed and frequencies and percentages were calculated. The results of this study revealed participant teachers’ perceived computer competence, teachers’ general perceptions towards CALL, their implementation of CALL, perceived advantages, disadvantages and barriers of CALL and lastly their recommendations for effective use of CALL. The findings of this research project can be useful for educational authorities and principals of teachers’ education departments. The Ministry of Education as well can take into consideration the results of this research.

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Keywords: Computer Assisted Language Learning (CALL); descriptive research; computer competence

1. Introduction

Many researchers, in search for the best way to acquire a foreign/second language, now use CALL in language classrooms to find out its effects on language learning. The enrichment of language teaching and learning process through CALL can be achieved through empirical research including teacher’s attitudes and opinions. Therefore, one of the aims of this study is to give language teachers an opportunity to reflect on whether CALL has a helpful role in the learner’s success on the teaching of language. This reflections may provide insights for both language teachers and learners studying English.

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Computer technology is one of the most important components of the electronic technologies. Computer technology has been common in educational contexts over recent years (Rilling, 2000). The use of computer technology in English Language Teaching (ELT) context has also been common since 1960s (Lee, 2000). Different terms have been used to define the integration of computers into ELT context, the most common of which is Computer-Assisted Language Learning (CALL). Levy (1997, p.1) defines CALL as “the search and study of applications of the computer in language teaching and learning” and goes on to state that “it is used as the general term to cover all roles of the computer in language learning” (p. 81). As it is obvious from this definition, CALL is a broad term that includes all aspects of computer implementations into language classes.

2. Literature Review

The historical period of CALL started in the 1950s and 1960s. Warschauer (1996) indicated that the development of CALL can be categorized in three phases. These are Behaviouristic CALL, Communicative CALL and Integrative CALL. The three stages of CALL are summarized in Table 1.

Table 1. The Three Stages of CALL

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<thead>
<tr>
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<tbody>
<tr>
<td>Technology</td>
<td>Mainframe</td>
<td>PCs</td>
<td>Multimedia and Internet</td>
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<tr>
<td>English Teaching</td>
<td>Grammar-Translation &amp; Audio Lingual</td>
<td>Communicative Language Teaching</td>
<td>Content-Based ESP/EAP</td>
</tr>
<tr>
<td>View of Language</td>
<td>Structural (a formal structural system)</td>
<td>Cognitive (a mentally constructed system)</td>
<td>Socio-cognitive (developed in social interaction)</td>
</tr>
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<td>Principal use of Computers</td>
<td>Drill and Practice</td>
<td>Communicative Exercises</td>
<td>Authentic Discourse</td>
</tr>
<tr>
<td>Principal Objective</td>
<td>Accuracy</td>
<td>Fluency</td>
<td>Agency</td>
</tr>
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(Based on Kern & Warschaure, 2000; Warschaure, 1996)
2.1. Behaviouristic CALL

Behaviorism was the dominant theory during 1950s and 1960s and it affected the education at that time. The first example of behaviouristic CALL was "PLATO (Programmed Logic for Automatic Teaching)" Project which was initiated at the University of Illinois in 1960 (Levy, 1997, p.15) and its role was to provide "the more mechanical types of vocabulary grammar drill, thereby freeing class time for more expressive activities" (Hart, 1981 cited in Levy, 1997, p.16). The features of behaviouristic CALL are illustrated as:

- Repeated exposure to the same material is beneficial or even essential to learning.
- A computer can present such material on an individualized basis, allowing students to proceed at their own pace and freeing up class time for other activities.

(Underwood 1984; cited in Warschauer, 1996, p.4)

2.2. Communicative CALL

The second stage of CALL was communicative CALL which was conceived in the 1970s and early 1980s (Warshauer & Healey, 1998). "Communicative CALL corresponded to cognitive theories which stressed that learning was a process of discovery, expression, and development" (Warshauer & Healey, 1998, p.57). The basic features of communicative CALL were listed by Underwood in 1984. Underwood (1984; cited in Warshauer, 1996) indicated that communicative CALL:

- Focuses more on using forms rather than on the forms themselves;
- Teaching grammar implicitly rather than explicitly;
- Uses the target language exclusively and creates an environment in which using the target language feels natural, both on and off the screen; and
- Will never try to do anything that a book can do just as well.

(Underwood 1984; cited in Warshauer, 1996, p.4)

2.3. Integrative CALL

The third stage, integrative CALL, emerged with the development of multimedia computers and the Internet (Warshauer, 1996). In this phase, socio-cognitive view took the place of cognitive view and teachers started to support this view that emphasizes "real language use in a meaningful, authentic context" (Lee, 2000, p.2). Four language learning skills (listening, speaking, writing, and reading) and also technology were integrated into language teaching with the help of integrative CALL (Warshauer & Healey, 1998). This period also included the development of hardware and the development of computer software programs (Chartrand, 2004). As Warshauer and Healey (1998) stated, integrative approaches such as task-based, project-based, and content-based started to be actively used in language teaching environments. Furthermore, the use of these approaches provided authentic learning environments in this period of CALL (Tick, 2006).

2.4. Computer Competence of EFL Teachers

The term computer competency was defined by Lee (2001, p.4) as "basic knowledge of how to operate a computer and what the computer can do, familiarity with some computer terminology and some knowledge of dealing with commonly encountered problems." Albirini (2004, p.44) further indicates that the term computer competence is not only related to teachers' computer knowledge but also "the skills and experience necessary for putting them into use."

Hertz (1987, p.183; as cited in Levy, 1997, p.106) defines four levels of computer competence for language teachers. As follows:
Level 1: the computer using teacher;
Level 2: the non-programming author of courseware content
Level 3: the user of authoring systems;
Level 4: the teacher programmer.

3. Method

3.1. Participants

Sixty EFL junior high school teachers working in different cities of Azarbayjan and using computers in their lessons were selected as the participants of this study. Schools were selected from Urmia, Tabriz, Khoy, Makoo, Poldasht and Naghadeh.

3.2. Instrumentation

In this study a questionnaire included Likert-scale and closed-ended questions was used to collect necessary information.

3.3. Design

Since this study aimed to determine perceptions of EFL junior high school teachers towards CALL, the descriptive research design was selected as the most appropriate design. Ruane (2005) suggests that "descriptive research offers a detailed picture of some social phenomenon, setting, experience, group, etc" (p.12). In this study quantitative method was used in order to collect data. To determine perceptions of participants towards CALL, a questionnaire was used and the results of this questionnaire were analyzed quantitatively.

3.4. Procedure

Brace (2004) mentions that piloting the questionnaire is recommended before conducting the main study. While explaining the questionnaire design process in his book, Brace (2004, p.163) further states that "whether it is a new questionnaire… that have been used before and adapted or arranged for a new study, testing it out before committing to a large-scale study is an essential precaution."

In this study, the questionnaire was piloted to test its validity, to determine the average time needed for filling it out and also to reveal, if there were any unclear parts such as ambiguous words and grammatical mistakes. In addition to these, it was also aimed to check the understandability, clarity of the questions and appropriateness of the questions to the research questions.

<table>
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<th>Table 2. Cronbach's Alpha value for the questionnaire</th>
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<tr>
<td><strong>Reliability Statistics</strong></td>
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<tr>
<td>Cronbach's Alpha</td>
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<td>.909</td>
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3.5. Data Analysis

In the analysis part of the data, gathered through the questionnaires quantitative analysis techniques were used. The quantitative data were analyzed by using SPSS program. Likert type scales were entered to the program easily because they were designed with numeric items. Closed-ended question items were also given some numerics, and then, these data were entered into SPSS. Descriptive analysis of SPSS was used to present the frequencies and percentages of each item of the questionnaire.

4. Discussion

Teachers were asked how they perceive their computer competence. Questionnaire results were analyzed quantitatively. Results are given below.

Participants of the study were asked 11 – item Likert type questions about their computer competence. They expressed their computer competence for each item as no competent, little competent, moderate competent or much competent. Frequencies and percentages of each item were calculated and a general idea of participant EFL junior high school teachers’ perceptions about their computer competence was revealed.

According to the overall mean score of the participants' responses based on the 11-item Likert type computer competence scale, it can be concluded that participant teachers' computer competence varies between little and moderate competence with the total mean score 2.33.

These results were similar to the findings of Albirini’s (2004) study which was about computer competence of Syrian EFL teachers. His study revealed that most of the participant EFL teachers in Syria had little or no competence in handling most of the computer functions. While, the results were different from Abu Samak’s (2006) findings in Jordan. According to him Jordanian EFL teachers had "Moderate "to " Much" computer competence.

In this study, perceptions of the teachers towards the role of computers in a CALL class were also revealed. Results showed that most of the teachers perceived computers as a means of visual and audio materials provider, a complementer to classroom instruction or a useful provider of mechanical language practice. Participants of this study also expressed how they rated their interest in CALL. In parallel with this, most of the teachers perceived themselves as interested or very interested in CALL. Thirteen pint three percent of the participants considered themselves as little or not interested at all.

In addition to these, responses of the teachers to the 17-item Likert scale focusing on the general perceptions towards CALL showed that teachers generally had positive perceptions towards CALL. Regarding the results of this Likert scale, it can be concluded that a large number of participants agreed or strongly agreed to the statements related to the advantages of CALL. All of the participants of this study agreed or strongly agreed that they like using computers in teaching English. A large number of the participants also agreed or strongly agreed that using computers is enjoyable for them; using computer technology would make the subject matter more interesting; computers can help learners improve education of English language; computers can enhance students' learning English; computers save time and effort in EFL lessons; teaching with computers offer real advantages over traditional methods of instruction; computers would motivate students to do more study; It is also obvious from the findings that computer use suits their students' learning preferences and their level of computer use.

More than half of the participants also strongly agreed that class time is too limited for computer use and each student should be given a separate computer to implement CALL successfully. In addition, the findings indicated that most of the participants disagreed or strongly disagreed to the negative statements of this scale, such as computer's not being useful for language learning and computer's not being able to improve the quality of students' learning. Results also revealed that a large percentage of the participants believe the need of a computer in their classes and most of the teachers noted that their schools did not have enough computers for them to implement CALL.
5. Conclusions

The following conclusions can be drawn from the study:

A large number of the participants perceived themselves as no competent in dealing with some basic computer functions. In order to develop their computer skills they needed in-service teacher training courses. Nearly half of the teachers who participated in this study had no acquaintance with the term CALL and most of the teachers defined CALL as students’ learning a language using computers in the presence of teacher. Most of the participant teachers had positive perceptions towards CALL and they were interested in CALL programs. They used computers as a mean of visual and audio materials provider, and a complementer to classroom instruction. However, they noted that their schools did not have enough computers for them to implement CALL.

Another important conclusion in terms of teachers’ perceptions of CALL lies in the teachers’ views regarding the appropriate aspects of language. In this respect, most of the teachers underlined that pronunciation, speaking, and listening should be viewed as the most appropriate aspects of language essential for CALL.

Pedagogical Implications

This study aimed to explore the perceptions of EFL junior high school teachers towards CALL. The results of the study have several implications for educational authorities and for the teachers.

At first, the ME can take into consideration positive perceptions of teachers and their recommendations for effective implementations of CALL. These teachers are more eager to use CALL in their lessons and authorities can provide the appropriate teaching situation for these teachers. The ME should supply adequate hardware, software and CALL materials to the school. Language labs or CALL labs can be established in schools.

In addition, pre-service training such as special CALL lessons can be offered to ELT students in ELT departments of the universities. Teacher trainees can be educated on CALL implementation before they enter their professional life.

Finally, it can be stated that the ME should provide in-service teacher training focusing mainly on the implementation of CALL in English language classes. Related with this, professional development of teachers related to CALL can be promoted. With competent teachers and technologically well equipped classes, CALL can be implemented in Iranian junior high schools more successfully.

Taking into account the conclusions obtained from the study, especially from the last part of the questionnaire, some suggestions were made in the following part. The following suggestions can be made for the effective implementation and development of CALL at schools, taking the teachers’ perceptions of CALL into consideration.

1. Firstly, the schools should be equipped computers and computer laboratories.

2. The related authorities should provide a chance for the teachers to make them familiar with the computer literacy and computer use in their language classes by conducting in-service courses.

3. School text books should be changed to create the effective possibility of using computers in the classroom atmosphere.

4. Teachers education curricula and programs can be reorganized.

5. The related authorities of the schools, such as the principals, should provide the newest soft wares for English
teachers.

6. Ministry of Education (ME) authorities should take necessary steps into the implication of CALL at schools. Financial supports of teachers’ offices to develop CALL programs can be an effective factor to use CALL programs at schools.

7. CALL specialists should be trained.

8. Apart from the teachers, the students should also be trained in terms of computer literacy. In language classes they can be grouped and a computer can be specified for each group.

Suggestions for Further Research

As this study is limited to a particular setting and particular participants, further study is needed. The implications presented below will provide useful insights into the further study:

1. This research only covered the perceptions of the teachers’ who taught at certain schools of Azarbajjan Provinces. A similar study can be conducted at other districts of Iran.

2. This study was conducted with 60 EFL junior high school teachers. In future studies, a larger number of participants can be used to verify the results of this study.

3. In this study, age, gender of the participants or type of schools were not taken into consideration. Some participants had very good conditions of CALL implementation at free schools while others had only very limited facilities. In further studies, these different features can be taken into consideration; participants can be selected having common characteristics in terms of the working condition or having the same age or gender, and the effect of these variables on the perceptions of teachers can be investigated.

4. To collect data in this study a questionnaire was used. It is recommended that further studies can add other data collection techniques such as interview, observation and diary into the data collection procedure of their studies in order to get more detailed information.

References


APPENDIX

QUESTIONNAIRE (ENGLISH VERSION)

A. PERSONAL INFORMATION
1. Gender:
   Male                                   Female
2. Age:
   20-29                 30-39                    40-49                 50-59                60 and over
3. I have been teaching English for…………. Years.
   1-5                     6-10                 11-15                 16-20                over 20
4. Academic degree:
   Upper Diploma                    BA                                       MA                         Other
   center                     other institutes
6. Currently, I have been teaching English at ………………
   Grade one                     Grade two                      Grade three
7. Have you ever attended any training course, workshop, or seminar on using computer?
   Yes                                No
8. Computer at home:
   Yes                               No
9. Internet Access of your computer:
   Yes                               No
10. If you had an experience with CALL, please choose the choice that best describe(s) your experience.
   a) I have joined at least one computer course.
   b) I have joined at least one CALL course.
   c) I have joined at least one CALL seminar or conference.
   d) I have read about it.

B. COMPETENCE OF TEACHERS
Please indicate your current computer competence level (both your knowledge of and skill in using computers)
regarding each of the following statement.
   No Competence           Little competence          Moderate competence       Much competence
1. Install new software on A computer.
2. Use a printer
3. Use a computer keyboard
4. Operate a word processing Program. (e.g.Word)
5. Operate a presentation Program. (e.g.Powerpoint)
6. Use the Internet for Communication. (e.g.e-mail,Chatroom)
7. Use the World Wide Web To Access different types of Information
8. Solve simple problems in Operating computers
9. Select and evaluate Educational software
10. Teaching your students With readily available CALL materials

C. PERCEPTIONS TOWARDS CALL
Please select the most suitable item for you.
1. How do you rate your interest in CALL?
   Not interested at all                                         A little interested
   Interested                                                          Very interested
2. Please select your agreement to these sentences.
   Strongly disagree       Disagree       Neutral       Agree       Strongly Agree
   1                             2                      3                    4                         5
   a) Using computers is enjoyable
   b) I like using computers in teaching English
   c) Computers save time and effort in EFL lessons
d) Computers would motivate students to the more study

f) I do not think I would ever need a computer in my classroom

g) Computers can enhance students' learning

h) Computers can improve education of English language

i) Teaching with computers offer real advantages over traditional methods of instruction

j) Computer technology can not improve the quality of students' learning

3. This is the first time I encounter the concept of Computer-Assisted Language Learning.

   Yes                              No

4. What does the term "CALL" mean to you? Here are 7 teaching/learning situations. Please decide for each one whether you (personally) would describe it as "CALL" or not. If it is an example of "CALL", check it. (you can check more than one box)

   a) Students learning a language using computers in the presence of a teacher.

   b) Students learning a language using only computers without the presence of a human teacher.

   c) A language lesson when a teacher uses an LCD projector a teaching aid for part of the time.

   d) Students learning a how to write in English by using word processors (for example Microsoft Word).

5. Choose the term(s) that best describe(s) the role(s) you see the computer taking in language learning. You may select more than one:

   a) A tool (e.g. word processor)

   b) A surrogate teacher

   c) A useful provider of mechanical language practice

   d) A manager of tasks

   h) An aid to communication (e.g. e-mail)

6. Going from a classroom to a computer laboratory with my students is time consuming.

   Yes                              No

7. In your opinion, which aspects of language are appropriate for CALL.

   Grammar           Comprehension  Speaking          Listening
   Reading            Pronunciation  Writing           Vocabulary teaching
   Presentation skills Teaching with Games Other

8. How do you use CALL materials in your EFL lessons?

   a) To reinforce classroom lessons

   b) For independent study

   c) For developing particular language skills

   d) Other