

Impact of Using Indigenous Computer Assisted Language Learning Materials on English Language Teaching in Pakistan

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ABSTRACT

Recent advancements in educational technology have brought a significant change in the field of English language teaching. Scarcity of the review of the literature on the usage of indigenous Computer Assisted Language Learning materials in English language teaching in Pakistan shows the inadequacy of technological facilities, traditional methodologies and the scarcity of scholastic work in the field. Keeping these constraints in mind, computer-assisted language learning materials were developed of the selective lessons from Book I & III of Punjab Textbook board, by the researcher following Multifaceted Pedagogical CALL Model: Computer as Mode (Irshad, 2008). Data were collected through the field notes and semi-structured interviews of twenty ESL students and five English language teachers selected through purposive sampling. Findings revealed that students enjoyed using indigenous Computer Assisted Language Learning materials with a change in the understanding of the text, attitude and motivation while the teachers were found reluctant towards the development and usage of indigenous computer-assisted language learning materials. The study suggests that Pakistani English language teachers should be empowered with technology to meet with the divergent needs of the learners.

Keywords: *Computer-assisted language learning, English language teaching, independent learning*

Introduction

The modern wave of technology has revolutionized all the arenas of life, and the paradigm of education is not an exception (Costa, Hammond & Younie, 2019). The teaching of second/foreign language has ever been attractive to educationists and language researchers. Computer-assisted language learning is a methodology which employs computer and its various applications for the learning of a second/foreign language. According to Rodríguez-Castro (2018), computer-assisted language learning should not be considered a method but only an approach to language teaching and learning which has the capability to employ different types of approaches. Mahboob (2017) is of the view that in a developing country like Pakistan, the English language is used as a tool for

linguistic contact. In Pakistan, the English language is learnt only in formal settings at schools and learning of English starts from early primary till graduation. Panezai and Channa (2017) support this view by stating that the Punjab government has declared English as a core subject at the early primary level since 1994. Despite this early exposure, the majority of Pakistani students are unable to use the English language in everyday life. Several types of research (Haidar & Fang, 2019; Yasmin, Sarkar, & Sohail, 2016; Manan, 2018) reveal that, in Pakistan, the English language is associated with power, prestige and success for Pakistani students. Haidar (2017) expands this idea by saying that the English language is considered as a symbol of success which ultimately defines the destination of its inhabitants. According to Akram (2017), a few discouraging factors which hinder

students' learning of English are ineffective teaching methodology, outdated syllabus and flawed examination system. Other factors causing obstacles in effective English language learning and teaching include vague educational policies, lack of provision of modern teaching technology in the public sector institutions and an insufficient number of English teachers especially in the remotest located colleges (Khan, Zahid & AKhtar, 2017). According to Rind and Kadiwal (2016), developments in information technology expanded the usage of computer technology in learning a second/foreign language while in Pakistan still, traditional methodologies are in practice. Khan and Khan (2016) urge English language teachers to be computer literate for their success in the classroom.

According to Babarinde, Babarinde and Obitube (2019), computer-assisted language learning is the use of computer technology in language teaching and learning. Development of computer-assisted language learning materials has stemmed from various language learning theories: behaviourism, constructivism, mentalism and theory of social interaction (Parmaxi & Zaphiris, 2016). The attention of second/foreign language researchers has been directed towards the development and implementation of materials to enhance the learning environment (Weiss & Headlam, 2019; McDermott & Gormley, 2016). The actual problem is to enable ESL teachers for the development of their own indigenous computer-assisted language learning materials (Bippert & Harmon, 2016).

Teachers as materials developers are advantageous for themselves as well as serving institutions (Abadi, Pujiastuti & Assaat, 2017). Advancement in

educational technology has empowered teachers to cater to the individual learning styles of the learners (Bostancioğlu & Handley, 2018). Computer-assisted language learning promotes learner autonomy on the one hand and learner empowerment on the other hand (Lenkaitis, 2019). Balaman and Sert (2017) are of the view that the empowerment of teachers is directly aligned with the development of indigenous materials. According to Rosell-Aguilar (2018), computer-assisted language learning materials to enhance learner efficiency, learner engagement and self-tutoring opportunities.

To compete with the modern world, the government of Pakistan also launched a project with the purpose of bringing reforms in the field of English language teaching. Khattak and Abbasi (2010) support this view by saying that the primary function of this project is to bring improvement in the field of English language teaching. According to Irshad and Ghani (2017), technology can play a significant role in improving the existing scenario of English language teaching. For this purpose, the Higher Education Commission (HEC) established a CALL subcommittee for empowering English language teachers with technology. Several types of research (Rogowsky, Terwilliger, Young, & Kribbs, 2017; Iben Maj Christiansen & Rosanne Els, 2019) have proved that the development and the use of this indigenous computer assisted language learning materials have always remained successful among teachers and students. Although a lot of materials are available in the market they are incompatible with the Pakistani scenario due to content and context differences.

Significance of the Study

The current study highlights the efficacy of indigenous computer-assisted language learning materials for English language teaching. The present study also aims to reform traditional methodologies by using modern technologies. This study is significantly contributive in the field, as there is a scarcity of research available on the issue under discussion. The present study also narrates English language learners and teachers' views about the use of indigenous computer-assisted language learning materials. The present study strengthens the doctrine of learner autonomy in English language teaching by using a learner-centered approach and recommends English language teachers to equip themselves with modern technologies.

Objectives of the Study

The objectives of the present research are:

1. to explore the use of indigenous computer-assisted language learning materials
2. to explore the attitude of the students towards these materials
3. to find out any change in the motivation of the students
4. to explore the views and reservations of English language teachers about the use of computer-assisted language learning

Research Questions

1. Can the usage of Indigenous computer-assisted language learning materials for teaching the English language bring any change in the students' understanding of the text?
2. Whether the usage of these materials brings any change in the attitude and motivation of the students?

3. Are there any reservations of English language teachers about the usage of these materials in the classroom?

Methods

Theoretical Underpinnings The present study used the Multifaceted Pedagogical CALL Model: Computer as Mode because it was the best possible model to guide the study under consideration. This model is divided into three phases: development phase, implementation phase, and evaluation phase (see figure 1). This model minutely takes into consideration the cognitive as well as social aspects of language learning in one place. This model also suggests that the materials developers should cater to all the possible ambiguities which a user can face while learning through these materials. In designing materials for the present study, every effort was made to ensure the usability of the materials so that learners may feel independent while learning through materials because the materials not only provide presentation of content along with voice and image but also hyperlinked text to provide synonyms of the difficult words as well as variety of exercises for practice.

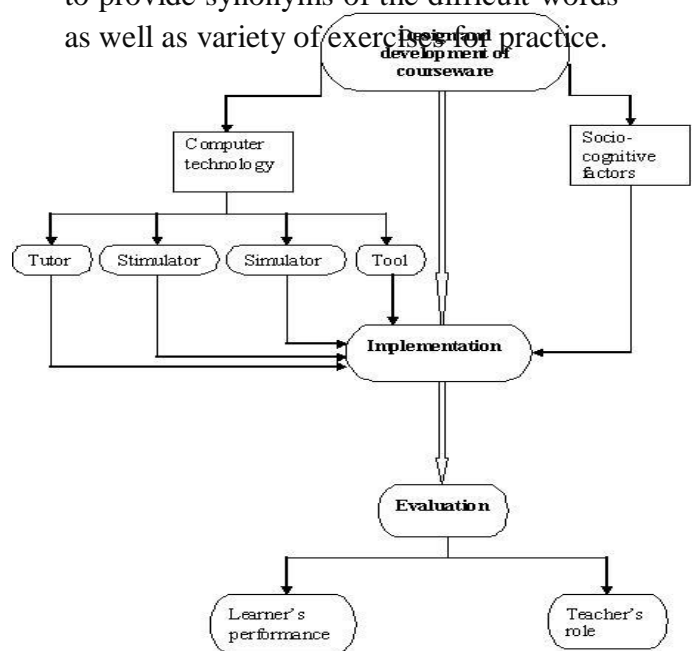


Figure 1 Multifaceted Pedagogical Computer-assisted language learning Model: Computer as Mode (Irshad, 2008)

Materials

Interview protocols were designed to analyse the participants' views about the use of indigenous computer-assisted language learning materials in the teaching of English language in Pakistan. Keeping in mind the nature of the study, semi-structured open-ended interview questions were adapted from the protocols to be used in the present study. The interview questions were not shared or distributed amongst the participants beforehand. The students were asked to respond to the questions with respect to the indigenous computer-assisted language learning materials used in English language teaching. Teachers were asked to share their reservations about the development and usage of computer-assisted language learning materials in the classroom through semi-structured interviews.

Participants

Students' Interviews

In the present study, a purposive sample of 20 low achievers, as supported by their English language teachers as well as their academic background, college students of Intermediate grade XI of faculty of Arts (FA) of three different sections were selected from a private college in Lahore because purposive sampling enables the researcher to choose participants who have characteristics required to meet the objectives of the research (Rivera, 2018). These 20 students (average age = 16 yrs.) were taught the English language by using Indigenous computer-assisted language learning materials developed by the researcher himself to know whether these materials can bring these low achievers

back to studies. The time duration of this treatment was three weeks.

Teachers' Interviews

A purposive sample of five English language teachers (average teaching experience= 5 years) from the same institute was interviewed individually for the current study. Three teachers were teaching the sections from where the participants were selected while the other two English language teachers were teaching sections of faculty of Science.

Nature of the Data

Data collected for the present study is qualitative in its nature because it consists of the field notes and the excerpts of the semi-structured interviews conducted for students and teachers.

Ethical Consideration

Due to the involvement of human respondents in the process of data collection, ethical considerations were ensured about the consent and privacy of the participants. The participants were informed that their interviews would be recorded. It was also assured that the study would incur no psychological and physical harm to the participants. The consent of the students and teachers was sought by assuring them that the present study was being conducted solely for the academic purpose, and the obtained data would not be misused. The anonymity of the identity of the participants was also ensured in the research.

Procedure

Indigenous computer-assisted language learning materials were designed following the model mentioned earlier. According to the model, computer-assisted language learning materials also underwent three stages: development, implementation and evaluation.

In the development phase, five sample lessons of English book I and III of intermediate published by Punjab textbook were developed through Video studio 11 Plus. Here, students could watch the videos of the lessons bearing the text and voice as well. Text of these lessons was also converted into word form through OCR technology where the hyperlinked text was created to make students learn meanings and synonyms of difficult words.

In the implementation stage, students were taught the sample lessons through these materials and these materials were also converted in mp4 format so that students could watch these videos and learn the English language as and when required which ultimately promoted learner autonomy. In the evaluation phase, students had to appear for multiple types of assessments as offered by Hot Potatoes software.

Data were collected through field notes and semi-structured interviews of the interviews. Teachers were also given a brief presentation about the development, implementation and evaluation of these materials. Afterwards, semi-structured interviews were also administered for English language teachers. According to Uzunboylu and Altay (2019), qualitative content analysis is the most often applied method to verbal data such as interview transcripts because it involves the inductive approach which includes open coding and creating categories. Bengtsson (2016) further supports this view by saying that its purpose is to organize and draw meaning from the collected data and to deduce conclusions from it.

Students' and teachers' interviews were audio-taped and transcribed. Content analysis was used as a method to analyse

students' and teachers' responses because it is a viable method to assess the important trends and topics. It is also an effective method to interpret the content of text and interviews through systematically classifying process of coding and identifying themes (Hamlen & Imbesi, 2019). The data collected through the interviews were manually coded and categorized and themes were developed on the basis of recurring ideas.

Data Analysis

During the process of data collection, field notes and the responses of the interview transcripts were rechecked in the light of the research questions which led to the process of generating codes. Intercoder reliability was ensured by sharing the data and codes protocol with the senior 232 colleague to check for any disparities.

Usage of Indigenous computer-assisted language learning materials and the Change in the Understanding of the Text

The analysis of the data reveals that by using indigenous computer-assisted language learning materials in English language teaching, students were better able to understand the text effectively which is very much evident there in the field notes.

“Learner 5 enjoyed watching a video of the lesson, Button Button, and then enjoyed reading the hyperlinked text”. [Day 2].

“Learner 3 enjoyed taking JMatch test which provides the facility of making the matching exercises tests”. [Day 3].

“Teacher asked the students to watch videos and helped Learner 7 who

was struggling to open the video file”. [Day 2].

The field notes were further supported by the findings of the interviews in which one of the participants said, “the understanding of the text was not clear to me earlier but after watching the video and reading text from the screen made me clearer in comprehending the essence of the text”. In-depth analysis of the responses of the students shows that although they had a computer with them at their home, yet they were unable to use it for learning the English language. One of the respondents said “I never used the computer for learning the English language. I use it for music and games only” which shows the lack of exposure among the students towards learning the English language through the computer.

Talking about their exposure to computer-assisted language learning materials, all the students responded that they had never heard of it because they were never exposed to it. One of the respondents said that “my cousins, from abroad, told me that they were taught through computers”. Majority of the students found reading the text from computer-assisted language learning materials on the screen easier because of the several hypermedia options available for learning. Three of the students were of the view that reading from book was an easy task because they could add annotations in Urdu language (L1) for the sake of understanding the text written in the English language.

Majority of the respondents were in favour of the use of computer-assisted language learning materials in promoting learner autonomy. One of the respondents was of the view that “availability of all the

learning materials in my mobile made me independent learner”. Most of the students responded positively that they found a significant change in their understanding level after learning the English language through indigenous computer-assisted language learning materials. One of the respondents said, “Now, I am in a better position to understand the text effectively”.

Usage of Indigenous Computer-assisted language learning materials and the Change in attitude and Motivation

Students’ punctuality and active participation became the root cause of the change in their attitude and motivation towards learning the English language as recorded in field notes.

“Learners took keen interest throughout the study which shows an increase in the attitude towards learning the English language through the developed materials”. [Day 12].

“Learners were very motivated to learn through materials because they were always on time in the class”. [Day 13].

“Teacher was also motivated to use computer-assisted language learning materials for the teaching of English language through multiple modes of learning”. [Day 4].

These findings were further supported by the findings of the interviews. Talking about attendance and discipline issues, seventeen respondents were of the view that these issues can be

easily overcome because all the participants are keen towards learning through videos. One of the participants said “I wait for this lecture because I have a lot to learn here.... it provides me with a kind of entertainment”. The multiplicity of the learning options resulted in a significant change in the attitude and motivation of the students. Most of the students acknowledged the materials as agents of change in learning the English language. Majority of the participants were in favour of videos while the rest of the participants liked hyperlinked- text and online assessments. These materials can not only bring a significant change in the marks of the students but also solve disciplinary and attendance issues. The study was also successful in promoting learner autonomy and building confidence in the students. Computer-assisted language learning materials were highly appreciated due to their multiple modes of learning. One of the participants said, “I was highly demotivated in learning the English language but now, I am motivated to learn English”. Learner-centred approach of this study was highly appreciable among learners.

The students urged that this type of methodology should be used not only in the English language but also in other subjects. They also urged the inception of this methodology from the early teaching and learning experience. Furthermore, the students felt the need for teacher training accompanied by computer-assisted language learning methodology because if the teachers are motivated towards the use of technology, only then some significant change can occur.

Reservations of English Language Teachers for the Development and Use

of Indigenous Computer-assisted language learning materials

Talking about the use of English language teaching methodology, all the teachers favoured “Lecture Method” which shows their orthodox style of teaching. One of the teachers said, “I am never exposed to any other teaching methodology except GTM. That’s why we know only this methodology”.

As far as classroom facilities are concerned, all Pakistani colleges except a few are still embellished with just Black/White-board which clearly describes the existing scenario. One of the teachers said, “Classroom is still devoid of any kind of IT equipment”. This response gave information about the facilities provided in English language classrooms. All the respondents agreed that teaching the English language through technology can be more efficient. This shows that although Pakistani English language teachers do not have any kind of IT facility in the classroom. They are well aware of the fact that modern technology can bring fruitful results in the teaching of the English language. One of the teachers said, “I think computers can easily bring a significant change in English language teaching as is clear in the West”.

When asked about the familiarity of the teachers with the term computer-assisted language learning, only a few respondents stated their familiarity. Response to this question shows their poor knowledge of modern English language methodologies. All the respondents were of the view that computer-assisted language learning materials can certainly motivate the students because of the multiplicity of the learning options on the one hand and independent learning on the other hand. One of the respondents was of

the view that “motivation is sure when there is something new in methodology”. All the respondents agreed on the availability of computers in the college and they can easily access computers for the teaching of the English language. Three of them were of the view that “Although we have access to computers in our college, we don’t know how to use the computers for the teaching of English language”. All the teachers are of the view that the government should conduct more and more training for the teachers of the English language to empower them to use technology to enhance the English language learning experience of the learners. All the respondents agreed that they have several reservations regarding computer-assisted language learning methodology which include financial constraints, time constraints and technical constraints. One of the teachers is of the view that “We lack skills in tackling computers for English language teaching because of limited time”. This presents the real-time picture of English language teachers where they are to cover a large amount of syllabus in a considerably very short time. The development of indigenous computer-assisted language learning materials seems quite impossible for them. One of the respondents said that “With the induction of technology in the educational arena, we face threat to our jobs” which shows a general feeling among all the teachers.

Discussion and Conclusion

Students enjoyed a lot in learning the English language through computer-assisted language learning materials because the understanding of the text was clearer to the students after watching the videos and reading text from the screen as well as taking online tests. Estapa and

Amador (2016) also support these findings by stating that video development should be promoted among teachers so that students can become successful learners. They were of the view that watching videos of the lessons was the main source of inspiration for their learning. Although, students had a computer with them at their home, yet they were unable to use it for learning the English language. Rosa-Jimenez, Marquez-Ballesteros, and Nebot (2018) conducted a similar study and the findings revealed that the use of hypermedia promotes learner autonomy.

Majority of the students had never heard of computer-assisted language learning materials because they were never exposed to it. Students also found reading the text from computer-assisted language learning materials on the screen easier. A few students were of the view that reading from book was an easy task because they could add annotations in Urdu language (L1) for the sake of understanding the text written in the English language. Tham, Chau and Thang (2019) conducted a study and the findings revealed that students usually support the idea of using L1 in the learning of the second language. Tsai (2019) also supports these findings by stating that technology promotes individualized learning. Learner autonomy is strengthened by the use of computer technology (Ding, & Shen, 2019). Students wanted this methodology to be inducted in normal classroom teaching at a very early stage because it can produce computer-assisted results. These findings support Hung, Sun, and Liu (2018)’s a study which states that lazy bluffers can easily be brought into class by using computer technology.

Computer-assisted language learning can generate wonderful results. It

has the potential of reducing the number of failures and can also bring many less motivated students back to studies. Students' attitude and motivation were found positive towards computer-assisted language learning materials. Irshad and Ghani (2017) found in their study that teachers and students were positive towards computer-assisted language learning. Traditional teaching methodologies are still in practice which is also revealed by the findings of Haidar and Fang (2019). It was also revealed that Pakistani public sector classrooms are still devoid of any latest audio-visual aids. It was found that students wanted to adopt this methodology in the near future and requested the government to start different campaigns related to the awareness of computer-assisted language learning among teachers and students.

Teachers are reluctant to do anything on their own. This is the reason for the rapidly falling standard of English language teaching. If the English language teachers want to bring change, they should be up to date with the latest methodologies. Every year, a significant number of students results in underachieving English language exam. There are several factors behind this failure, and inappropriate English language teaching methods have been found as a major contributory factor. Although the government has conducted training and workshops for this purpose, they are very few. The government should launch more and more research seminars, training, workshops and conferences on the development and use of indigenous computer-assisted language learning materials. Noor and Shahbaz (2015) also support the same findings by stating that the government should arrange sustained

teachers' training programs. It was found that teachers were reluctant towards the use of technology due to many factors and some feel it a threat to their jobs. These findings have also been supported by a study conducted by Soomro, Memon and Memon (2016) that Pakistani English language teachers face threats to their jobs when technology integration is there. English language teachers should not be the buyers of already developed out of context computer-assisted language learning materials rather they should develop their own materials to meet the best needs of their respective students.

The present study is successful in revealing that students enjoyed learning the English language through indigenous computer-assisted language learning materials. Most of the students find computer-assisted language learning interesting in boosting up their interest, and motivation towards learning the English language, as these are the core after-effects of this methodology. The present study remained successful in making the learners self-confident and autonomous. Students enjoyed learning English due to their different flexible learning modes. The findings also revealed that Pakistani English language teachers are ignorant of the modern technological advancements in academia. They are reluctant to use technology for the teaching of the English language because they feel it a threat to their jobs.

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collection. Dr Ahsan Bashir did synthesis and analysis of data. Both authors did findings and conclusion together. Asif Ikram prepared the first draft of the paper whereas Dr Ahsan Bashir prepared the final draft. Conclusions were drawn and penned down by both authors jointly.

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