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Computers and EFL Classes: A Way to Promote Autonomous Learning

Abstract: This article aims at highlighting the benefits of using computers in EFL/ESL classes. First, there are presented the advantages of high technology in a triangular relationship (computer, student and teacher.) Then two related issues are discussed: The role of the teacher and autonomous learning. Subsequently, a set of guidelines for the use of computers in the teaching and learning of a foreign language is stated. Finally, some pedagogical implications are drawn.

Key words: Computers, autonomous learning, learners, teachers' role, critical thinking, teaching – learning processes.

Resumen: El propósito de este artículo es destacar la importancia del uso de las tecnologías de punta en el aprendizaje de una lengua extranjera. En la primera parte, se presentan las ventajas del uso del computador tanto para los discentes como los docentes. Además, se establecen dos aspectos directamente relacionados con éste como lo son el papel del docente y el aprendizaje autónomo. Posteriormente, se plantean algunas sugerencias para implementar esta tecnología en el proceso de enseñanza-aprendizaje de una lengua extranjera. Finalmente, se dan a conocer las implicaciones pedagógicas al utilizar estas herramientas metodológicas en este proceso.

Palabras clave: Computadores, aprendizaje autónomo; auto aprendizaje, función del profesor; pensamiento crítico, aprendizaje de lenguas asistido por computador, ingles como lengua extranjera; inglís como segunda lengua; proceso de enseñanza-aprendizaje.

Introduction

In recent years the computer has established itself as an important feature in modern life. It is no longer a large, expensive machine used exclusively by specialists in major industrial corporations, government and military. Many of us use computers daily, sometimes without even being aware of that fact. The computer revolution, as it is commonly known, is more than just a technological development. It may well change society as radically as did the industrial revolution.

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Ahmad *et al.,* (1985) affirm that the rapid spread of computers has been spurred by intensive development in the field of computer technology. Computers have decreased in price dramatically over the last two decades and their cost continues to fall. At the same time, they have become more powerful, yet smaller in size, more adaptable, more flexible, and easier to use. As a result, schools and governments have devoted resources to "computer literacy", or knowledge about computers and computing. This effort has benefited mainly the younger generation, while the older people, unless they have had a particular professional reason to become involved with computers, have been much less benefited. This is one of the reasons why computers have been so slow to make a distinct mark on education.

A lot of discussion has recently risen about the use of computers for EFL/ESL teaching and learning. As Galavis (1998) points out, on the one hand, we often hear or read on the pages of EFL/ESL teaching journals statements such as: EFL teachers are not always compatible with computers; teachers and students alike suffer from computer phobia; and questions like: Should we have a computer per classroom or a computer lab? Are computers effective? On the other hand, some authors (Davidson and Tomic, 1994; Reis, 1995; Sivert and Egbert, 1995) have already reported satisfaction of their teaching needs by using computers, computer networks, the Internet, computer software, and multimedia computers or systems.

The objective of this article is to highlight the advantages of using computers to develop language skills in students of English as a foreign language, and to present the computer as an educational aid to the interested teacher in order to promote autonomous learning.

Computer Applications for Language Learning and Teaching: CALL

Most computer applications related to language education have been carried out under the umbrella of computer-assisted language learning: CALL; sometimes also referred to as CAI (computer-assisted instruction) or CALI computer-assisted language instruction). Even though CALL had been a reality since the 1960s, only in the 1980s did it became a realistic enterprise as well as a feasible one (Ahmad *et al.*, 1985)[1]. Earlier efforts were severely constrained by the nonaccessibility of equipment, very high costs, limited instructional capabilities, non-integration with curricula, and unrealistic expectations. It is safe to say that, while many serious problems exist in respect to CALL, many of the earlier problems have either been solved or are currently receiving attention. It is now a huge and rapidly expanding field of computer applications.

Plainly, a new era in CALL has begun. Jones (2001) affirms the early unimpressive phase of "drill and skill" has passed. The fast improvement in technology, the advent of the Cd-ROM, and especially that of the Internet, have enhanced the creative learning opportunities of the medium. The recognition of CALL as a valid resource appeared to have been achieved, and energy is now concentrated on matters of design and quality standards.

Advantages Of CALL In Language Learning

It is helpful to divide the advantages of the computer into three types: Those, which are part of its inherent nature, those that benefit the learner and those, which benefit the teacher. Ahmad (1985) establishes, that in relation to *its inherent nature*, the computer can handle a much wider range of activities, and much more powerfully than other technological aids. It can also offer interactive learning. It means that it can conduct a two-way learning session with the student. It is much more

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1 As this article is not aimed at a complete history of CALL, we did not include so much information on this issue. However, if readers are interested, they can consult other important authors who have done a complete state of the art about CALL: Hardisty (1989), Brierly and Kemble (1991) and Garret (1991) among others.

than a mere programmed textbook, whose powers of interaction are virtually limited to an ability to reveal the correct answer: the computer can assess the student's response, display messages, take the learner to subsequent attempts at a question, and even take the student to a different section of the package, depending on the nature of the response. The computer can do all this very quickly.

If the computer is impersonal and literal-minded, it is also unfailingly accurate and precise. It does not tire, and its attention does not falter. It can repeat an activity with none of the errors that easily arise from the repetition by humans, and it is as impartial and unbiased as the linguistic material that is typed into it. It can handle a large volume of interaction and can deliver to the student feedback of some subtlety, at more frequent intervals than it would be possible for a human teacher in all but individual tuition sessions.

The computer is flexible in a number of ways: It often happens that students can not attend a class because of illness, timetable clashes, and other problems. This presents no difficulty for the computer. Provided a computer is available, the learner can come any time, and spend as long as it is needed to gain full benefit from the material. It can accommodate different speed of learning, or alternately, limits can be imposed on the time available for answering questions that are valuable when it is used for testing purposes.

The computer also offers many advantages for *the learners*. First among these is access. The computer flexibility of time allows the student the choice of when to study particular topics and how long to spend on them. This factor makes many educational courses accessible to students who would otherwise have no chance to take them. Whatever the factors of time and distance, the computer retains its potential for personalised instruction. The branching capacity that we have already mentioned means that the computer can be made sensitive to the learner's pace, pattern of responses, and so on,

and can adjust the linguistic material to the needs of the individuals.

On the other side, the teacher, using the feedback and report from the learner's performance, can tailor linguistic data and programs specifically to the needs of the individual students with special learning problems. The learning session can also be more concentrated than normal class sessions. The student has the exclusive attention of the computer and he can work at the speed best suited to him. Each student response receives a reply from the computer, virtually instantaneously, with appropriate feedback in the form of comments, assessments and guidance.

Even the best teacher needs at least a day to mark and return students' work. The computer does the whole process at once. The learner is corrected the first time a mistake is made. Experience has also shown that learning with a computer is rated highly by students. There is the novelty of working with the computer together with its diversity and sophistication; in that way, learning a foreign language becomes an exciting and enjoyable force for productive study.

From the point of view of *the teacher*, the computer presents several aspects of particular promise. First is its versatility in handling different kinds of material. The simplest is the one-way presentation of information, in the form of texts, graphics, audio and video. The computer can handle question and answer routines, simulated dialogues, hypothesis testing, and many other types of exercises. It can choose questions in sequence at random from the list of questions supplied by the teacher. It can branch to different parts of the package, depending on many different factors, and can do so at any point. When the student has completed the session, the computer can record results, errors, success rates, the time spent and much more information for the teacher to view at a later time. As a result, the teacher is able to revise and refine the materials at any stage. This entire process does not even require the teacher to be in direct contact with the

students-although we have found that CALL works better when integrated with normal classroom teaching patterns.

The computer gives the student the opportunity to take advantage of the material carefully designed or selected by the teacher without his or her actual presence. All these factors above mentioned have the effect of freeing the teacher from some constraints imposed by heavy teaching schedules. This is particularly the case if the computer is handling drill and revision sessions, to which it is well suited. This will make more time available for creative and imaginative teaching in those parts of the course where teacher-student contact is more necessary.

Notwithstanding, in order to understand what computers can do for our EFL/ESL contexts and take advantage of the benefits they may bring, we have to actually use them and view them from an insightful, creative and innovative angle. First, we have to ask ourselves a series of questions that will help us visualise our "technological enhanced" work environment and procedures. Some of the questions we should ask ourselves are the following:

- What and how will we design, implement and teach in a course using multimedia systems?

- When will we use the system?

- Where will we have such a system? In a lab? In a special place different from a lab? What will this place be like?

- Who will attend the classes or sessions with this system? Will they be young learners, adult learners, autonomous learners assisted by an instructor, beginners, intermediate or advanced students?

- What learning context will the system be used for? An EFL context? ESL context? ESP? EAP?[2]

Taken from Galavis (1998:28).

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2 English as a Foreign Language, English as a Second Language, English for Specific Purposes and English for Academic Purposes.

The answer to these questions may help us decide whether or not the use of computers for our needs or resources is practical and feasible. Answers to the questions may be the basis for deciding the adequate or appropriate use of the system for our program. The answers may even lead to a novel idea of how to use this kind of resources to effectively enhance the teaching-learning process and environment we have been working with for a long time.

Once we have done so, we realise that when a motivating resource such as a multimedia system is used, the benefit of autonomous work may be magnified. The role of the teacher will be different from that of a simple holder and provider of knowledge; the teacher will become the student's guide. In other words, one of the greatest improvements teachers can reach is that they can produce autonomous learners who are able to control –at least– part of their learning process. Jonassen (1996) states that all this is due to the fact that in the last two decades, learning systems have become increasingly cognitively oriented, investing more intellectual responsibility and intentionally in learners. Designers of learning environments and instructional systems are engaging learners in more meaningful mental processing. The next logical step in this revolution is to invest additional responsibility in the learners for constructing knowledge. If this occurs, learners should become more self-reliant thinkers, better able to relate new information to existing knowledge and to apply that new knowledge in novel situations.

Rather than designing learning systems that supplant the thinking of the learner, effective cognitive tools support meaningful thinking by performing lower –level operations that enable learners to generate and test hypotheses in meaningful problem– solving situations. Learning systems and environments that employ cognitive tools that perform in these ways represent a further step in the constructivistic direction of learner empowerment.

CALL And The Teachers' Role

Remarkably, however, the attitude of the teachers –those who should guide and sustain the students in their computer use– seems to be more complex. Most language teachers are not comfortable with high technology, since unlike so many of their students, they have not grown up with computers. Some may fear that computers replace them (Evans, 1998); others may recent the administrators' decision to spend large sums of money on high technology rather than on, for instance, books, classroom furniture and people. In any institution certain proportion of teachers will remain hostile to or simply uninterested in CALL. Nonetheless, there is little doubt that, as the innovation has grown less complex, and its benefits clearer, acceptance and interest among teachers have become more widespread (Dodigevic, 1998).

The key question is what proportion of teachers in a given language Center or languages department would be interested enough to drive the CALL process as fast as its expert proponents would wish. Will those teachers be able to fulfil their own enthusiasm? Research on this issue has demonstrated that what really prevent the teachers from following an interest in CALL is a lack of time, since they tend to be sufficiently burdened by their conventional administrative and classroom duties.

Moreover, as Burnston (1996) says, even if they were provided with training both technical and pedagogical, they still might not find enough time to put into practice what they have learnt. CALL might be reduced to the "better than nothing" solution where teachers only manage to recommend to their students CD-ROM or Internet sites which are relevant to the syllabus, not having enough time to properly integrate CALL into their regular teaching, or help learners individually by providing activities in self-access mode.

There is an important implication to be drawn from the state of affairs described above. If we are expected to exploit the rich potential of CALL, then certain issues must be taken into account:

- Respond to the fact that modern language learners are likely to be interested in and experienced with computers, and ready to learn through CALL.

- Revise the curriculum so that CALL plays a key part in it. Both in classroom or laboratory and self-access modes.

- Give committed teachers adequate training.

- Give teachers time to develop pathways for their learners.

- Recognise that students can only learn from computers with the instruction and supervision of the teachers: CALL will not be effective without this essential interaction of teachers and students.

Taken from Jones (2001:366).

Guidelines For Using Computers In Efl Contexts

Finally, in the light of the triangular relationship that has been stated in this article

–computer, learner and teacher,– it is essential to establish the guidelines for the use of computers in EFL/ESL contexts in order to help you in the process of getting used to computer enhanced classes in case you decide to use them for your EFL/ESL needs:

- Remember that computers and other equipment are just tools, and you have to make them work for you not against you.

- Create materials to work with the computer that are also related to the teacher-led sessions.

- Direct students to the objectives you want them to achieve (these may not be necessarily the objectives of the software program.)

- Use Internet accessibility and create writing and speaking tasks for your students using this computer resource.

- The World Wide Web contains millions of pages you can use to produce a variety of communicative tasks. Use them to encourage your students to learn about topics related to culture matters.

- You may also design reading tasks using any CD-ROM encyclopedia or program that contains hypertexts.

- Encourage your students to use their intellectual potential by assigning them computer tasks such as looking for information in databases that will make them think and use English.

- In order to give a sense of purpose to what your students are going to write, have them write and send real e-mails: This will provide them with a real sense of communication. As Kamhi-Stein (2000) says, research on the use of e-mail in foreign language classrooms has produced a number of positive findings in respect to learner involvement and learning since it improves the participation of shy students (Fotos & Iwabuchi, 1998). Moreover, implementing e-mail projects in class reduces gender-related differences in classroom participation (Kamhi-Stein & Browne-del Mar, 1997) and promotes student-student, as opposed to teacher- student interaction (Ady, 1999; Kern, 1996). E-mail projects also allow students to improve their cultural awareness (Ady, 1999). Finally, e-mail dialogue journals create opportunities for self-paced learning (González- Bueno, 1998).

- Make use of the web pages or CD interactive programs to generate discussions. Topics can be as varied as your and your students' imagination can get, and as interesting as your searches through the Internet are.

- Motivate students by using computer games for which you have prepared classwork materials.

- Think of a combination of teacher-led classes and computer sessions that best suit your needs.

Galavis (1998) points out that good as all this sounds, accessibility may be a major problem with the use of this kind of system. Unless we have a complete lab with several computers, only a small group of students can work with a computer at the same time. This is more often than not less than ideal. If we have large groups of students and the budget is limited what can we do? Design courses that are flexible enough to accommodate students' schedules to a part-time autonomous learner framework. Without eliminating or reducing teachers' classes drastically, students can be scheduled to attend individual work sessions with the multimedia system throughout the week.

This may require designing tasks that can be carried out by students without much assistance from the teacher and will allow them to work individually and monitor themselves. Would it mean that computers will take over the teacher's role? In fact, once teachers stop seeing the computer as a threat, they will be able to use their creativity to produce new material, and will also be able to redirect their efforts to weak areas. Teachers will continue to develop the real life communication that computers can not provide. If teachers get to understand computers and really become computer literate, they will gain instead of losing and they will become more efficient and productive teachers.

Conclusion

One of the objectives of this article was to show some of the benefits from using computers in EFL/ESL classes. These benefits are better perceived when we actually use computers than when we read about them. The list of benefits, the guidelines, and the experience reported here are meant to encourage you to take advantage of computers in your EFL/ESL classes or programs. *The media have assisted self- access learning to grow faster than our traditional classroom methods, but self-access alone fails to achieve all the goals* (Galavis, 1998).

One of the most obvious and accessible benefits of CALL is its capacity to provide personalised and self-paced learning. This allows students of varying ability enough flexibility to find their own level, which is a boon to slow and fast learners who need remedial and extension exercises respectively. Such personalised learning has become fashionable over the last decade, signalling a movement towards a more flexible organisation of learning in which much more emphasis is placed on the different learning styles and abilities of individuals.

By incorporating technology in your programs, you will see many more benefits than the few mentioned in this article. The disadvantages you might find when working with computers will never outweigh the improvement you will notice in your English programs. One of the greatest improvements is that you can produce autonomous learners. You will also find more time with new resources to create new ideas, procedures, and material for your classes.

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