

COMPUTER-ASSISTED LANGUAGE LEARNING IN THE FOREIGN LANGUAGE CLASSROOMS

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Abstract: *There are many on-line applications of CALL that can be used in the English language learning classrooms. These applications have a lot of advantages despite their barriers. Through the use of CALL, English learners are expected to be able to communicate across languages and cultures. It lets learners of a language communicate inexpensively with other learners or native speakers. Using CALL, teachers are not the only source of information any more, but act as facilitators. Moreover, students become active learners and they are encouraged to be explorers and creators of language rather than passive recipients. Therefore, this paper will review and discuss using internet in the classroom, in particular CALL, the benefits of employing CALL, the barriers that CALL presents in our language classroom, and the guidelines of using internet in the classroom.*

Key words: *internet, CALL, and English language learning*

Abstrak: *Banyak terdapat aplikasi online yang dapat digunakan dalam pembelajaran bahasa Inggris di kelas. Penggunaan aplikasi-aplikasi ini memberikan banyak keuntungan meskipun juga memiliki kesulitan dalam penggunaannya. Melalui penggunaan CALL, orang yang belajar bahasa Inggris diharapkan dapat berkomunikasi melintasi bahasa dan budaya. Aplikasi ini memungkinkan siswa yang belajar bahasa berkomunikasi secara murah, dengan siswa lain atau native speaker. Dalam menggunakan CALL, guru tidak hanya merupakan sumber informasi tetapi juga bertindak sebagai fasilitator. Lebih dari itu, siswa menjadi lebih aktif dan didorong untuk menjadi creator, lebih daripada hanya sebagai pengguna yang pasif. Artikel ini akan mereview dan mendiskusikan penggunaan internet dalam kelas, khususnya CALL, keuntungan penggunaan CALL, permasalahan dalam penggunaan CALL di dalam kelas dan menuntun penggunaan internet dalam kelas.*

Key words: *internet, CALL, dan Pembelajaran bahasa Inggris.*

INTRODUCTION

The Internet has reshaped the uses of computers for language learning. The recent shift to global information-based economies means that students will need to learn how to deal with large amounts of information and have to be able to communicate across languages and cultures. At the same time, the role of the teacher has changed. Teachers are not the only source of information any more, but act as facilitators so that students can actively interpret and organize the information they are given, fitting it into prior knowledge.

Students have become active participants in learning and are encouraged to be explorers and creators of language rather than passive recipients of it (Brown, 1991).

The Internet has been such a powerful technological tool that has influenced all business and educational fields in our lives. We have entered a new information age through the Internet. Unavoidably, the internet also influences teaching and learning English. The computer provides a range of informational, communicative, and publishing tools that are potentially available to every

student. This paper will describe and discuss: 1) the Internet, in particular CALL, 2) the benefits of employing CALL 3) the barriers that CALL presents in our language classroom 4) the use of CALL in the foreign language classrooms in Indonesia.

The Internet - CALL

Besides as a means of communication, the Internet can also be used to retrieve and access information. The World Wide Web is a virtual library at one's fingertips; it is a readily available world of information for the language learner (Lee, 2000). The Internet offers numerous benefits to the language learner. Computers have been used for language teaching ever since the 1960's. The program is called CALL – Computer Assisted Language Learning. According to Warschauer & Whittaker (1997), this 40-year period can be divided into three main stages: behaviorist CALL, communicative CALL, and integrative CALL. Each stage corresponds to a certain level of technology and certain pedagogical theories.

Behaviorist CALL

The first form of computer-assisted Language Learning featured repetitive language drills in the 1960's and 1970's. It was based on the behaviorist learning model, that language is learned through repetition. The computer was viewed as little more than a mechanical tutor that never grew tired. Behaviorist CALL was first designed and implemented in the era of the mainframe and the best-known tutorial system, It was mainly used for extensive drills, explicit grammar instruction, and translation tests.

Communicative CALL

Communicative CALL emerged in the 1970's and 1980's as a reaction to the behaviorist approach to language learning. Proponents of communicative CALL rejected behaviorist approaches at both the theoretical and pedagogical level. They stressed that CALL should focus more on using forms

rather than on the forms themselves. Grammar should be taught implicitly. This form of computer-based instruction corresponded to cognitive theories which recognized that learning was a creative process of discovery, expression, and development. At this period, the mainframe was replaced by personal computers that allowed greater possibilities for individual work. Popular CALL software in this era included text reconstruction programmers and simulations.

Integrative CALL

The last stage of computer-assisted Language Learning is integrative CALL. Teachers have moved away from a cognitive view of communicative language teaching to a socio-cognitive view that emphasizes real language use in a meaningful, authentic context. Integrative CALL seeks both to integrate the various skills of language learning (listening, speaking, writing, and reading) and to integrate technology more fully into language teaching (Warschauer & Healey, 1998 in Lee, 2000).

Benefits of Employing CALL

Besides for communication, the Internet can be used to retrieve and access information. The World Wide Web is a virtual library at one's fingertips; it is a readily available world of information for the language learner. Perhaps one of the most essential pedagogical principles of language teaching is one that emphasizes the study of language in a cultural context. The Internet is a valuable resource to both language teachers and learners. As discussed previously, e-mail on the Internet allows language learners to communicate with native speakers. In this manner, the Internet facilitates the use of the specific language in an authentic setting. By sending E-mail and joining newsgroups, EFL students can communicate with people they have never met. They can also interact with their own classmates. Furthermore, some Internet activities give students positive and negative

feedback by automatically correcting their on-line exercises.

A foreign language is studied in a cultural context. In a world where the use of the Internet becomes more and more widespread, an English Language teacher's duty is to facilitate students' access to the web and make them feel citizens of a global classroom, practicing communication on a global level.

Computers are most popular among students either because they are associated with fun and games or because they are considered to be fashionable. Student motivation is therefore increased, especially whenever a variety of activities are offered, which make them feel more independent. Network-based instruction can help students strengthen their linguistic skills by positively affecting their learning attitude and by helping them build self-instruction strategies and promote their self-confidence.

Then, the Internet can also be used to acquire information from language resources for a variety of purposes. For example, students can access current information from countries around the world. They can obtain geographical, historical, social/cultural, economic, and political information from the countries in which the target language is spoken. Students can read web versions of daily newspapers and same-day news reports from different kinds of sources. Such experiences can allow learners to participate in the culture of the target language, which in turn can enable them to further learn how cultural background influences one's view of the world.

Also, the Internet serves as a medium for experiencing and presenting creative works. Students can use the information on the Internet for their own work such as essays, poetry, or stories. Numerous public schools, for example, are making use of the World Wide Web for publishing student work which can be accessed by other web users. Students,

therefore, become not only consumers of content, but in fact generate the content.

The use of the Internet has also been shown to promote higher order thinking skills. A language teacher, for example, may instruct learners to search for specific information. Searching the Web requires logic skills. Once information has been obtained, the results must be reviewed which requires scanning, discarding, and evaluative judgment on part of the learner. The information must be put together to make a complete and coherent whole which entails the synthesis process. Such activity permits students to practice reading skills and strategies.

The World Wide Web makes it possible for students to work on a huge amount of information. In such a way, they can learn by doing things themselves. They become the creators not just the receivers of knowledge. As the way information presented is not linear, users develop thinking skills and choose what to explore.

The Internet promotes literacy for authentic purposes, as stated previously. In addition to being a supplement to reading materials, especially current information, when students are exploring the Net, they are essentially exploring the real world. Such browsing or exploration can also lead to incidental learning as they encounter a variety of information in this way.

All students can use various resources of authentic reading materials either at school or from their home. Those materials can be accessed 24 hours a day at a relatively low cost. Communication with native speakers improves the language learners' literacy development for authentic purposes. It also enables language learners to compare student perspectives on an issue, and allows them to practice specific skills such as negotiating, persuading, clarifying meaning, requesting information, and engaging in true-life, authentic discussion. This activity also promotes literacy within a social context. The

interaction that results from the above situations can lead to the development of social skills because of the communication that occurs.

Finally, the use of the Internet can provide additional language activities which can provide students with additional practice in specific areas of language learning. These include reading tests and comprehension questions, grammar exercises, pronunciation exercises possible through the available multimedia capabilities, cloze tests, vocabulary exercises, and so forth. Students can search the Web for such sites, or teachers may recommend specific sites on the Web.

In short, the Internet or in particular CALL has a great deal of potential in language learning and teaching. The use of CALL will benefit shy or inhibited students by individualized, student-centered collaborative learning, and fast learners can also get benefits by utilizing their full potential without preventing their peers from working at their own pace. The students are given the chance to discover thousands of information sources. Teachers should be aware that students now generally have a positive attitude toward technology in the classroom.

CALL Applications

A wide range of on-line applications are available for use in the foreign language class. Dictionaries and encyclopedias, pronunciation tutors, grammar and vocabulary quizzes, games and puzzles, literary extracts are some of the applications. The World Wide Web (WWW) is a virtual library of information that can be accessed by any user. If someone wants to read or listen to the news, for example, there are a number of sources offering the latest news either printed or recorded. The most important newspapers and magazines in the world are available on-line.

Another example is communicating with electronic pen friends, something that most students would enjoy. Teachers should explain

how it all works and help students find their keypals. Two EFL classes from different countries can arrange to send E-mail regularly to one another. This can be done quite easily. The web sites provide lists of students looking for communication. It is also possible for two or more students to join a chat-room and talk on-line through E-mail.

Another network-based EFL activity could be project writing. By working for a project a pupil can construct knowledge rather than only receive it. Students can work on their own, in groups of two or in larger teams, in order to write an assignment, the size of which may vary according to the objectives set by the instructor. A variety of sources can be used besides the Internet such as school libraries, encyclopedias, reference books etc. The Internet itself can provide a lot of food for thought. The final outcome of their research can be typed using a word processor. A word processor can be used in writing compositions, in preparing a class newsletter or in producing a school home page. In such a Web page students can publish their project work so that it can reach a wider audience. That makes them feel more responsible for the final product and consequently makes them work more laboriously.

The Internet and the rise of computer-mediated communication in particular have reshaped the uses of computers for language learning. The recent shift to global information-based economies means that students will need to learn how to deal with large amounts of information and have to be able to communicate across languages and cultures. At the same time, the role of the teacher has changed as well. Teachers are not the only source of information any more, but act as facilitators so that students can actively interpret and organize the information they are given, fitting it into prior knowledge (Dole, et al., 1991). Students have become active participants in learning and are encouraged to be explorers and creators of language rather

than passive recipients of it (Brown, 1991). Integrative CALL stresses these issues and additionally lets learners of a language communicate inexpensively with other learners or native speakers. As such, it combines information processing, communication, use of authentic language, and learner autonomy, all of which are of major importance in current language learning theories.

Barriers to the Use of CALL

The application of CALL in the classroom in Indonesia is not similar in every school. There are some factors that probably become the reasons why CALL is not commonly used in teaching languages at schools in Indonesia. The barriers inhibiting the practice of Computer-assisted Language Learning can be classified in the following common categories (a) financial barriers, (b) availability of computer hardware and software, (c) technical and theoretical knowledge, and (d) acceptance of the technology.

Financial Barriers

Financial barriers include the cost of hardware, software, maintenance (particular of the most advanced equipment), and extend to some staff development. Concerning these barriers, schools should consider that Computer-Assisted Language Learning costs the same as conventional instruction but ends up with producing higher achievement in the same amount of instructional time. It results in students achieving the same level but in less time. The new technologies probably will not replace the teachers, but will supplement their efforts. Effective usage will decrease the cost barrier, if computers, interactive instruction TV, and other devices are used effectively every day. Either the number of learners or the amount of time learners apply the technology must be increased substantially to approach the concept of cost-effectiveness.

Availability of Computer Hardware and Software

Availability of high quality software is the most pressing challenge in applying the new technologies in education. Underlying this problem is a lack of knowledge of what elements in software will promote different kinds of learning. There are few educators skilled in designing it because software development is costly and time-consuming. McClelland (1996 in Lee, 2000)) indicated having sufficient hardware in locations where learners have access to it problematic and is, of course, partly a financial problem. Computer hardware and software compatibility goes on to be a significant problem. Choosing hardware is difficult because of the many choices of systems to be used in delivering education, the delivery of equipment, and the rapid changes in technology.

Technical and Theoretical Knowledge

A lack of technical and theoretical knowledge is another barrier to the use of Computer-assisted Language Learning technology. Not only is there a shortage of knowledge about developing software to promote learning, as shown above, but many instructors do not understand how to use the new technologies.

Acceptance of Technologies

Engaging in Computer-assisted Language Learning is a continuing challenge that requires time and commitment. As we approach the 21st century, we realize that technology as such is not the answer to all our problems. What really matters is how we use technology. Computers can/will never substitute teachers but they offer new opportunities for better language practice. They may actually make the process of language learning significantly richer and play a key role in the reform of a country's educational system. The next generation of students will feel a lot more confident with information technology than we do. As a result, they will also be able to use the Internet

to communicate more effectively, practice language skills more thoroughly and solve language learning problems more easily.

Besides using the online applications, we can also use the three categories of CALL mentioned above, such as behaviorist CALL, Communicative CALL and Interactive CALL. These three are possible to use for teaching English. For example, Behaviorist CALL software can be used for giving extensive drillings or teaching explicit grammar, especially for beginners; Communicative CALL software can be applied in teaching English communicatively, that is, by providing opportunities to students to use forms in communicating, while Interactive CALL software emphasizes real language use in a meaningful, authentic context.

TEACHERS' GUIDELINES FOR USING INTERNET IN THEIR CLASSROOMS

Since technology is developing rapidly, it can often be difficult to work with it. Therefore, teachers need to prepare the use of internet in their classroom carefully. In order to make effective use of the internet, the following guidelines can assist teachers in planning and implementing network-based activities (Warschauer, 1995a; 1995b; 1996c; 1996d). The following guidelines are designed to help teachers implement computer network-based activities into the second language classroom.

Determine your Goals

There are several possible reasons for using the Internet in language teaching. First, it is believed that the linguistic nature of online communication is desirable for promoting language learning. Second, it creates optimal conditions for learning to write, since it provides an authentic audience for written communication. Third, it can increase students' motivation (Warschauer, 1996). The fourth possible reason is the belief that learning computer skills is essential to students' future success. This reason suggests

that it is not only a matter of using the Internet to learn English but also of learning English to be able to function well on the Internet.

However, since there are so many ways to integrate the Internet into classroom instruction, it is important for the teacher to clarify his or her goals. If, for example, one of the teacher's goals is to teach students new computer skills, the teacher may want to choose Internet applications which will be most useful to them outside of the classroom, with activities structured so that students steadily gain mastery of more skills. If the immediate goal is to create a certain kind of linguistic environment for students, once again, the teacher should consider what types of language experiences would be beneficial and organize computer activities accordingly. If the goal is to teach writing, internet activities should be structured so that they steadily increase in the types of writing processes and relationships essential to becoming a better writer. In short, clarifying course goals is, thus, an important first step toward successful use of the Internet.

Think Integration

Most teachers who have used the internet have started out with some kind of simple key pal (computer pen pal) exchanges. These exchanges seem that they have been felt something lacking from simply creating a pen pal connection than there is from simply bringing two students into a room and asking them to talk. Greater involvement on the teacher's part in creating learning activities creates sufficient linguistic and cognitive demands on the students as they need to get maximum benefit from Internet exchanges. It seems that teacher intervention will be most successful when it brings about activities and projects that are well-integrated into the course curriculum as a whole.

Of course there are many ways that internet activities can be integrated into the overall design and goals of a course. For example, the teacher can work with students to

create research questions which are then investigated in collaboration with foreign partners. Students and long-distant partners can work collaboratively on publications. Or students can use exchange partners as experts to supply information on vocabulary, grammar, or cultural points which emerge in the class. The choice should be made by the classroom teacher, preferably in ongoing consultation with the students.

Don't Underestimate the Complexity

Most English teachers have several relative advantages when learning to use the internet. They are skilled at English, experienced at typing or keyboarding, and have some basic computer literacy (i.e., they probably have at least used a computer for word processing). ESL students, on the other hand, at least in some cases, may lack these basic prerequisites.

Though we have had students who are quite experienced with computers, we have also had students who had seldom used a computer; lacked basic knowledge such as how to operate a mouse or open a folder; and lacked the vocabulary, reading, and listening skills to follow instructions for using the computer.

Beyond the issues of learner preparation, there are a number of other complexities in introducing Internet-based activities in the ESL classroom. Activities in a single class may be dependent on scheduling the computer lab, and on students finding computers outside the class time to continue their activities. Hardware and software can malfunction and computer systems can be down. Students' schedules might not permit them to return to the computer lab at a time when computers are available to complete their assignments.

Exchanges between classes are even more complex. The partner class might have absent students, or might not meet in a particular week due to holidays or other activities in that location. The partner teacher might not have the same understanding of the nature of the exchange, and working through differences can

cause further delays. The students might have differences in background, language, and experience which can cause further complications.

But, it does not mean that internet-based activities should not be used. Trying to integrate online teaching, it is best not to be overly ambitious in the beginning. A situation which overwhelms both students and teacher in technical difficulties is not likely to bring about the desired results. It is better to start small and to create the kinds of activities which have a direct purpose and are well-integrated into classroom goals. If these activities are successful, you can build from there and attempt a more ambitious plan for the next activities.

Provide Necessary Support

Having the complexities which can arise in Internet usage, teachers need to provide support sufficient to prevent students from being overwhelmed by difficulties. This kind of support can take numerous forms: creating detailed handouts that students can refer to when class is finished and the teacher's personal help is not accessible; building technology training sessions into the class schedule, not only in the beginning but on an ongoing basis; working with the computer center to set up log-on systems and other procedures which are as simple and intuitive as possible; assigning students to work in pairs or groups, both in and out of the lab, so that they can provide assistance to each other; providing details to the students about how and when they can get assistance from technology specialists or others on campus outside of class; and being available to help students at times when they are most likely to need it.

Involve Students in Decisions

The concept of a learner-centered curriculum has broader significance than the internet-enhanced classroom. However, this concept seems particularly important when considering network-based teaching. First of all, network-based teaching involves a number

of special complexities. It will be difficult for a teacher to be fully aware of the impact of these complexities without regular consultation with students. This might involve anonymous surveys, class discussions, or similar means of involving students in expressing their opinions about the process of implementing technologies.

The nature of computer-mediated communication creates opportunities for more decentered interaction. To fully exploit these opportunities, the teacher must learn to become a “guide on the side”. A situation which is based on communication between students but in which the students have little say over the topics or outcomes of that communication is not likely to lead to the kind of atmosphere optimal for language learning.

Involving students in determining the class direction does not imply a passive role for teachers. Teachers’ contributions in a learner-centered, network-enhanced classroom include coordinating group planning, focusing students’ attention on linguistic aspects of computer mediated texts, helping students gain meta-linguistic awareness of genres and discourses, and assisting students in developing appropriate learning strategies.

CONCLUSION

There are many on-line applications of CALL advantages despite their barriers that can be used in the English language learning classrooms. These applications stresses how language learners deal with large amounts of information, and through the use of CALL, the learners are expected to be able to communicate across languages and cultures. The use of CALL lets learners of a language communicate inexpensively with other learners or native speakers. Moreover, teachers are not the only source of information any more, but act as facilitators. Students become active participants in learning and are encouraged to be explorers and creators of language rather

than passive recipients of it through the application of CALL. (Brown, 1991).

However, CALL approaches should not be adopted until measurable benefits can be seen, not only for students but also for teachers. Before using the applications, teachers have to remember that CALL applications cannot replace the jobs/positions of teachers in the classrooms. When they are used, they are only parts of the instructions. Teachers need to study them carefully about how they will benefit to their English students and they should also consider whether the use of an application is not going to discourage their students in studying English, probably because of their limited knowledge in using the technologies.

Working with internet, students should be involved in determining the class direction, but it does not imply a passive role for teachers. Teachers’ contributions in a learner-centered, network-enhanced classroom include coordinating, planning, focusing students’ attention on linguistic aspects of computer mediated texts, helping students gain meta-linguistic awareness of genres and discourses, and assisting students in developing appropriate learning strategies in using the applications .

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