One way for teachers to integrate information technology (IT) into their classrooms is through the use of computer assisted language learning (CALL) software programs. Much has been written about how teachers should select and evaluate such software programs; this paper attempts to consolidate some of the issues discussed in the literature and to offer some suggestions for the selection and integration of CALL software into the English-as-a-foreign-language (EFL) classroom. First, selection criteria pertinent to an EFL teacher are highlighted. Second, through examination of these selection criteria, the close relationship between selection and integration is discussed, suggesting that the teacher should always look at integration when selecting software programs. Third, the paper concludes by summarizing the criteria discussed in the form of a checklist that can be used by teachers selecting EFL software programs. The checklist highlights some of the basic concerns mentioned in most literature on the selection of software programs and offers additional suggestions for the EFL teaching and learning environment. (Contains 24 references.)
Selecting and integrating CALL software programs into the EFL classroom

K.C. Lee

Introduction

The first development of computer assisted language learning (CALL) software programs can be traced back to the early 1960s (Ahmad et. al, 1985), namely the Program Logic for Automated Teaching Operations (PLATO) project. Developed at the University of Illinois, it was among the first computerised foreign language teaching systems. PLATO was mainly used for grammar and vocabulary drills, and translations. Since then, the impact of information technology (IT) on language teaching/learning has increased rapidly to include the present day's wide range of software programs, language learning websites and authorware.

It is important to look at how best both teachers and learners can use the strengths of IT to enhance the language learning experience. By now, we should have progressed beyond initial scepticism and fear that computers may take the place of a language teacher. After all, as Ahmad et al (1985:2) pointed out, "the computer is a tool, of itself incapable of action". Instead of the teacher being replaced, what happens is a change in the role of the language teacher, from the traditional know-it-all authoritarian to a facilitator or a guide in the language learning process. Nevertheless, Clifford's caution, that while "computers will not replace teachers, ...teachers who use computers will replace teachers who do not", should be kept in mind (Clifford, 1998: 5).

One way language teachers can begin to incorporate IT into their classroom is through the use of CALL software programs. With a wide range of commercial software programs available to language teachers, selecting those that best suit the needs of the students has become a challenging task. A number of authors (Cunningham, 1995; Gildenston, 1994; Healey, 1994; Healey & Johnson, 1997; Higgins, 1995; Hubbarb, 1987; Hubarb, 1988; Murray & Barnes, 1998; Odell, 1986; Poulsen, 1990; Strei, 1983; Voogt, 1990) have discussed the selection and evaluation of software programs. This paper hopes to consolidate some of the issues discussed in the literature and to offer some new suggestions for the selection and integration of CALL software programs in an EFL classroom. First, it highlights a few selection criteria pertinent to an EFL teacher. Second, through the discussion of these selection criteria, it demonstrates that the close relationship between selection and integration means that the teacher should always look at integration when selecting software programs. Third, it concludes by summarizing the criteria discussed in this article in the form of a checklist that can be used by teachers selecting EFL software programs.
Selection criteria for the EFL context

This section discusses six criteria for the selection of CALL software programs in an EFL context.

Purpose of purchasing a CALL software program
Before deciding whether or not to purchase any software program, language teachers must be clear not only why but also how they plan to use it. ‘Why do we need this software program?’; ‘Does this software program fill a gap in the teaching/learning experience?’; ‘Would this software program be used as a supplementary tool, a complementary tool, or a main teaching/learning tool?’; and ‘How would it fit into my existing language curriculum?’ are some basic questions that teachers must ask themselves.

Why buy?
Warschauer & Healey (1998) wrote:

“One of the reasons that administrators buy software is with the thought of providing an integrated teaching solution, something that will:
1) provide realistic, native-speaker models of the language in a variety of media;
2) offer a language learning curriculum;
3) do a needs assessment;
4) determine the best next step for the learner and provide practice with that skill area;
5) record what the student has done, along with an evaluation;
6) be available to laboratories at any hour and require no additional pay or benefits.”
(Warschauer & Healey, 1998: 3)

Sharma cautions teachers not to use any CALL software program “simply because it is there” (Sharma, 1998: 23). He further emphasizes that software programs should be intrinsically motivating for students to want to use them. In other words, teachers should consider whether a software program arouses the students’ interest in learning. Sharma also contends that software programs must allow students to work on a needed area at their own pace while catering to different levels of language proficiency at the same time.

In addition to the above reasons, there are two more that EFL teachers should take note of before acquiring software programs. First, they must be able to provide samples of meaningful, authentic and realistic communication. Unlike students in an ESL environment, EFL students have little contact with the target language except in the
classroom. They also may have very limited contact with native speakers of English as most of their teachers may be locals. More sophisticated software programs with video clips allow students to watch and listen to native speakers using English in different contexts. One such program is the ELLISTM series.

The second reason concerns the culture of the native speakers. Most software programs geared toward the EFL setting are produced in America and the United Kingdom. Because many scenes are created based on contextualized situations, there are cultural nuances, verbal and non-verbal, embedded in them. For example, a scene in the ELLISTM Middle Mastery program depicts a group of university students of mixed races discussing subjects to add or drop in the semester. Since ELLISTM is developed in America, terms such as "credit transfer" etc. are based on the culture of the American college. Indirectly, this may help students by giving them some insight into some aspects of the target language culture.

How to implement

The implementation of a program depends to a large extent on the philosophy of the institution and the course. If the main focus of the institution is on promoting and using technology in teaching and learning, there is a greater possibility that it will support the use of a multimedia language laboratory with adequate advanced computer hardware and equipment for its student population. On the other hand, if the management allows for only less than 10 units of computers for a sizeable class of say 20 students, it will shape and, to a certain extent, restrict the variety of activities that can be undertaken.

The type of course taught can also determine to what extent and how software programs are integrated. Using the analogy of choosing printed course materials: as language teachers browse through the printed materials, at the back of their mind, they would be thinking about how they could use the materials in the classrooms. They may decide to adopt a course book or may make use of only some components. Alternatively, the course book may be assigned or recommended as materials that students can work with on their own, outside of the classroom. Similarly, language teachers may adopt a software program and use it as the main teaching/learning tool, replacing printed course materials. On the other hand, they may refer students to particular sections in the software program and assign them as homework. The software program may also function as an independent learning tool which students can access whenever they feel the need to do so.

No matter how teachers plan to integrate a software program into their language curriculum, this should correspond with the direction the institution takes and fit into the existing course curriculum.
Teacher readiness

Another major consideration in the process of going the CALL-way is whether the language teachers are ready for it. Teacher readiness has a great impact on the entire CALL experience. Teachers who are unprepared, both technically and mentally, may leave students with an averse impression of CALL. Successful integration of software programs hence requires that the language teachers have: 1) a certain level of competency in the use of computers; 2) an understanding of the dynamics of a CALL classroom; and 3) a commitment to the continuous use of CALL in the language classroom.

Competency in the use of computers

Competency in the use of computers refers to a basic knowledge of how to operate a computer and of what the computer can do, familiarity with some computer terminology, and some knowledge of dealing with commonly encountered problems. To have the confidence in taking a class into the multimedia language laboratory, one needs to “feel in control of the tools one uses as well as the subject matter” (Curtin & Shinall, 1987: 266).

Language teachers who plan to use CALL in the classroom should already be using the computer as a tool in their everyday working lives for word processing, e-mail, surfing the internet for information, etc.. If a language department decides to use software programs, teachers, who are not familiar and at ease with the use of computers, need to be trained before they step into the multimedia language laboratory with their students.

Knowledge of basic computer terminology and what basic terms refer to is an advantage when language teachers select and evaluate software programs. Understanding such information will give teachers an idea of whether the hardware available in their schools or institutions can support the software programs they intend to purchase. In addition, such terminology is commonly used in literature reviewing CALL software products.

Many times, language teachers will encounter situations where a click of the mouse, a touch of a function key or an adjustment made to the equipment will solve the problem. For example, a student might complain that the volume was too low or too high, the screen too bright or too dim, the size of the frame too large or too small. Ways to resolve such problems can be picked up easily and they can assuage teachers’ anxiety of losing control whenever such situations occur.
In many EFL contexts, the school will also require teachers to be able to monitor the multimedia language laboratory. Thus, having sufficient knowledge and confidence in managing a CALL class is definitely an asset.

Dynamics of a CALL classroom

Two factors which impact on the dynamics of a CALL classroom will be discussed here i.e. teacher role and learner control. Will the use of software program prompt a change in the role of the teacher? Does the software program control the learning of the students or do the students have the choice of controlling their learning?

In many EFL contexts, the language teacher is the main agent in providing communication practice and opportunities, and is the main resource person for students to seek information on and about the target language. The language teacher also controls the input and pace of learning. However, with the introduction of software programs into the classroom, students now not only have access to a wider variety of resources and opportunities to practice their English, but also have more autonomy in selecting what, how much and how fast they want to learn. Clearly, teachers will have to adjust to this change.

CALL has also been associated with the advocacy of a learner-centred learning environment. Nunan in describing the basic principle underlying the learner-centred curriculum contends that:

“It is impossible to teach learners everything they need to know in class. What little class time there is must therefore be used as effectively as possible to teach those aspects of the language which the learners themselves deem to be most urgently required, thus increasing surrender value and consequent student motivation.”

(Nunan, 1988: 3)

CALL allows students greater control over their learning and provides more opportunities for individualized learning of targeted language items.

This has two main implications for teachers intending to use or who are already using software programs. Firstly, when selecting software programs, they should look for those that give flexibility to students to choose what they want to learn while at the same time matching this with their level of proficiency. An illustration of this concept is programs that pitch students at different levels depending on the responses they make. In such programs, two students who choose to work on tenses, for example, are challenged with different sets of questions, according to their proficiency level. Secondly, teachers should strike a balance between teacher time and computer time, teacher role and computer
role. They ought to determine how they want software programs to support their teaching, particularly in cases where the language course necessitates the students to spend a specific number of hours in the multimedia language laboratory. For example, a teacher who decides to focus on fluency in oral communication in the classroom could assign students to work on specific pronunciation exercises in the laboratory. There is no ready formula to apply to the question of the optimum ratio between contact time with the teacher and with the computer. However, Sharma suggests that “one guideline is to keep the balance clearly tipped in favour of teacher contact time, while allowing the technology to enhance the course and help optimise learning, whenever appropriate.” [Sharma, 1998: 17]

Commitment to the continuous use of CALL

Because of the large amount of money invested in hardware and software, the commitment to venture into CALL should be a departmental instead of an individual one. This commitment will ensure that the multimedia language laboratory and any necessary peripherals do not go to waste. Similarly, for the successful integration of software programs, teachers in the language department should have the opportunity to sample or test software programs before they are purchased, and teachers should also be committed to try to make use of them thereafter.

Financial concerns

Budget is a major contention in the acquisition of software programs. Before the management of an institution gives its approval to the purchase of a software program, it will usually require a justification of the values, educational and economical, of its investment.

Financial concerns are not confined to the cost of hardware and software, they also entail administrative considerations that relate to how CALL will be implemented and which will probably include the following.

1) What is the initial financial commitment, i.e. cost, shelf life, and any additional equipment needed to support the software program?
2) What are the logistics involved, i.e. network versus stand-alone basis, a language learning dedicated laboratory versus a multi-purpose multimedia laboratory?
3) What are the administrative implications, i.e. timetabling, teacher contact hours with each class, hiring of a CALL specialist or laboratory assistants?

In short, teachers will have to know what their constraints are financially and administratively, and will need to suggest an option that operates within these constraints. It is not necessary to aim for glamorous, high-end products. What is crucial
is that the program satisfies the objectives of the curriculum and fulfills the needs of the students.

**Content and methodology**

How content is presented speaks of the pedagogical approach underlying a software program. Software programs are usually designed based on theories of language learning and teaching (Hubbard, 1987; Chapelle, 1997; Chapelle, 1998). Warschauer (1996) further distinguishes the development of CALL software programs into three different phases, corresponding with the teaching/learning approach and technology sophistication. These phases range from behavioristic CALL in the 1960s and 1970s, communicative CALL in the late 1970s and 1980s, to integrative CALL in the 1990s. This differentiation does not imply that all software programs developed today are integrative CALL. There are still some recently produced software programs that adhere to a behavioristic or communicative approach. Regardless of the pedagogical approach used for the design of the software program, teachers should ascertain that it is sound and it matches their needs.

Every software program has a focus i.e. general proficiency, report writing, business communication, pronunciation, grammar, vocabulary enrichment, etc.. Software programs geared for general proficiency are usually available in different levels of difficulties, covering all four language skills, grammar and vocabulary. In fact, some software programs are able to address the issue of differences in the level of proficiency within a mixed ability class. Using the same software program, teachers can assign tasks of different levels of difficulty to students. The Language Library™ series, for instance, has this feature. Depending on the students’ respective proficiency level in each skill area such as grammar, reading, listening etc., it allows the teacher to choose and assign suitable exercises for the students to practice. Upon completing exercises within a particular level, students can choose to take a test and/or proceed to more challenging exercises in the next level. Such a program provides a goal and motivates students to work towards it.

Other considerations concerning content and methodology are its suitability for the intended students, its ability in motivating students, quality issues such as accuracy, the availability of other supplementary materials in the form of printed workbooks and instructor’s manual, and the preference a particular institution has for American or British English.

**Design**

“Design” here refers to the user friendliness and flexibility, layout, feedback and record-keeping features of the software program. These features may either appeal to or repel
teachers and students from using a program. They can even be differentiating factors between an excellent and a good program.

In the case of user friendliness and flexibility, the software program should be easy to install and should come with clear and detailed installation instructions. It should also give clear instructions to students and make it easy for them to obtain help. In addition, students should be given the flexibility to exit or return to a certain section without trouble. The help feature is especially important because students should be able to gain access to it immediately whenever they need assistance. The software program should also have a branching system of choices to provide students with the flexibility of choosing those items they want to work on.

The layout of the software program concerns the general look, colour, sound, richness of background, location of important icons on the screen, attractiveness of the graphic images, screen size, etc. All these aspects will add to the attractiveness and appeal of the software program thus maintaining the interest and motivation of the students. Of particular significance is the richness of background. This refers to the background sceneries of video clippings or animation. It is of relevance, for example, when the subject revolves around winter that the background depicts scenes of snow, skiing and ice skating etc.

The kind of feedback provided reflects the level of interactivity between the student and the computer. Does the program allow for a second chance? Is there any explanation as to why the student's response is correct or incorrect? Is the feedback encouraging? Is the feedback immediate? Will the student get to see how well he has performed at the end of an exercise? Will the student be able to track his own progress over a period of time?

The record-keeping feature is an important tool to enable teachers to keep track of the performance of the students. Sophisticated software programs allow teachers to know how much time individual student has spent working on a particular section, his performance and progress in each section, and where the student stands compared to his peers.

After-sales service

"After-sales service" refers to technical support, teacher training, warranty period and software upgrades. All these aspects reflect how established and committed software developers are.

Although many software developers appoint distributors or agents throughout the world, customers are often requested to refer to the respective developers should there be any enquiries regarding technical aspects of the program. EFL teachers thus have to
communicate with the technical support team via long-distance communication. Since technical support is often required during installation and initial running of software programs, it is vital that a technical support team is able to assist the teachers promptly and effectively on any technical issues.

Some software developers, especially those of complex programs, provide a certain number of hours of teacher training either for a fee or for free. There are also software developers that organize seminars for teachers who use their products to share their experiences. Software developers that provide such services are normally more established and they would already have a solid customer base for their products.

Teachers should also check the warranty clause while selecting a software program. Some software developers allow for a free exchange, with little fuss, of the program disks if they have been damaged. In most cases, there is a time period before the warranty lapses. In terms of software upgrades, they are provided either free or for a nominal fee. Software developers will usually inform customers of any upgrades and how they can be obtained.

**Conclusion**

The checklist below summarizes the six criteria discussed in this paper. It is by not means conclusive, but it should be comprehensive enough to serve as a preliminary checklist for teachers in an EFL context. Essentially, these six criteria highlight some basic concerns mentioned in most literature on the selection of software programs and offer additional suggestions peculiar to the EFL teaching/learning environment. Different authors may approach the selection of software programs through various perspectives. Nonetheless, they concur on the fundamental considerations such as purpose, motivation, content, instructional design, assessment/feedback, interaction, maximization of technology, and implementation strategies. The bottom line is whether CALL intervention contributes to an improvement in students' learning.
Checklist
Selection of CALL software programs for the EFL context

1.0 Purpose of CALL software program purchase
   1.1 Why do I need this software program?
   1.2 Does this software program fill a gap in the teaching/learning environment?
   1.3 How will this software program be used, i.e. as a main, supplementary or complementary tool?
   1.4 How will this software program fit into my existing curriculum?
   1.5 Are there any printed materials that can effectively serve the same purpose as this software program?
   1.6 Does the software program interest and motivate the students to learn?

2.0 Teacher readiness
   2.1 Do teachers in my department use the computer in their everyday work?
   2.2 Do teachers have experience in conducting a CALL lesson?
   2.3 Are there teachers who need training on how to use the computer?
   2.4 What is the general opinion of teachers toward CALL?
   2.5 Is special training required before this software program is implemented?

3.0 Financial concerns
   3.1 What is the initial financial commitment, i.e. cost, shelf life, and any additional equipment needed to support the software program?
   3.2 What are the logistics involved, i.e. network versus stand-alone basis, a language learning dedicated laboratory versus a multi-purpose multimedia laboratory?
   3.3 What are the administrative implications, i.e. timetabling, teacher contact hours with each class, hiring of a CALL specialist or laboratory assistants?

4.0 Content and methodology
   4.1 Is the context authentic and realistic?
   4.2 Will the content be suitable for my students?
   4.3 Is the language meaningful?
   4.4 Are there any/many language mistakes in the software program?
   4.5 Can the software program cater to students of different levels of proficient simultaneously?
   4.6 Is the software program based on sound pedagogical principles?
   4.7 Is the institution/department concerned about whether the software program uses British or American English?

5.0 Design
   5.1 Is the software program user-friendly?
   5.2 Do students have the flexibility to choose which language items to learn?
   5.3 Is the help feature always available?
   5.4 Will the layout appeal to the students?
   5.5 Does the software program provide immediate feedback to the students?
   5.6 What kind of feedback does the software program provide?
   5.7 Is there a record-keeping feature that keeps track of the progress and performance of individual students?

6.0 After-sales service
   6.1 Is there technical support?
   6.2 Is teacher training provided?
   6.3 How long is the warranty period?
   6.4 Will upgrades be provided free?
7.0 Others

7.1 Has there been any review conducted on this software program?
7.2 Is there any documented research on the effectiveness of this software program?

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