コミュニカティブ・カリキュラムにおけるＣＡＬＬ

ヒュー・ニコル，スタンレイ・デイビス

要旨

この論文は、いわゆるＣＡＬＬ(コンピュータ支援による言語学習)と日本の大学におけるその使用の可能性についての基本理念について論じたものである。

CALL IN THE COMMUNICATIVE CURRICULUM

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Introduction

For most people, learning a foreign language is difficult. Language learners and their teachers often feel under tremendous pressure to discover methods, strategies, techniques, attitudes, and even secrets that might somehow lead them out of difficulty and into the promised land of fluency and communicative competence. This may account for the frequency of the "I got religion" phenomenon in the language teaching field. In light of the exaggerations and failures of the past, skepticism in evaluating the promise of new methods and new technology is clearly appropriate. It does seem clear, however, that technology can play a significant role in the creation of stimulating and rewarding learning environments. Audio and video tape have proven themselves indispensible aids to a number of foreign language learners in recent years. The fields of CAI(Computer Assisted Instruction) and CALL(Computer Assisted Language Learning) are among the latest attempts to apply technology to this quest for progress in foreign language learning.

Though some early work on computer assisted instruction was attempted in the late 1940's, the foundations of contemporary CAI and CALL programs were laid at Stanford and at the University of Illinois in the 1960's. After more than thirty years of research and application of computer assisted learning to the classroom, however, it has proved less than a complete success. Many observers, in considering the future of CALL, cite the failure of audio language laboratories to live up to the promises made by their most enthusiastic supporters. One major source of frustration and failure in the application of technology to the language classroom is the exaggerated claims made by enthusiasts for the effectiveness of new technology - the "hype" factor. A second factor is the failure of teachers to integrate the new technology into the curriculum in a meaningful way. In the view of some observers, however, CALL is now on the threshold of realizing its potential. The current emphases on learning strategies in teaching language as communication combined with interactive software and the capabilities of the new multi-media personal computers suggest a way of overcoming these related difficulties.

The key question for supporters and opponents alike is "Are CALL programs effective?" Are they cost effective, and do they produce the desired levels of student achievement? These are valid questions. Unfortunately, empirical proof for the effectiveness of language teaching methods is very hard to come by.

> Current CALL research, like much contemporary second language research, has not yet provided unambiguous and consistent findings that can be used to develop tomorrow's, and to guide the use of today's, instructional materials.
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> - Chapelle & Jamieson, p 53 (Dunkel)

How then can we argue for the benefits of CALL programs if we must admit that no hard evidence can be offered as proof of their effectiveness? As Papert has pointed out, the question of

effectiveness reduced to a simple

"Do computers work?"

is probably not the right question to ask. This form of the question gives the computer the role of the agent of education. Papert, and others have described this view as "technocentric". In the early days, when a technocentric view of computers and their potential was more common than it is now, it was often assumed that the computer would function as a substitute for the teacher. Current research, however, often focuses on using the computer as a tool and supplement to the curriculum, and emphasizes the importance of the people in the so-called electronic environment. It also seeks to debunk the technocentric notion that the LL or the computer could be a substitute for the teacher, any more than a textbook can.

In considering the question of effectiveness, many issues must be addressed. First, the question of validity in the research itself, and second, the areas in which CALL studies can be profitably conducted. Patricia Dunkel offers the following list in descibing the obstacles to a more wide-spread adoption and success of CALL programs:

1) lack of hardware
2) lack of software
3) lack of teacher training
4) failure of administrators to accept the validity of CALL programs

Research questions must include, in addition to the fundamental issue of internal and external validity, investigation of the following points:

1) the effects of computer use on learning
2) consideration of student attitudes toward using CALL programs
3) evaluation of the learning strategies used during CALL activities

Other points to be considered include:

1) the evaluation of software, a description of the variety of programs available and their potential applications
2) the roles of learners in the CALL classroom
3) the role or roles of the teacher

The following examination of these issues in CALL does not presume to be authoritative. As of 1990 over one thousand empirical studies and twenty major reviews had been published. Our goal here is to summarize and explore the major issues with an eye to the potential benefit to the Japanese university.

THREE MAJOR ISSUES IN CALL

1. Availability of Hardware

At the end of the 1980s, lack of hardware was still a significant obstacle to a widespead

adoption of CALL in L2 classrooms. At the end of 1993, prices have fallen dramatically, making the hardware purchases a much less daunting problem. There are of course budget constraints in school systems world-wide: cost effectiveness will necessarily remain an important issue for discussion.

2. Availability of Software

Software resources are also increasing dramatically. The key issue regarding software is its effectiveness. At the end of the 1980s, inadequacy of software was considered a significant obstacle to the spread of CALL. The primary goal of educators should be working with programmers in the development of software programs that will prove effective aids to student learning. This cooperative/collaborative process of software development is perhaps just getting off the ground. A number of teachers are, however, working with existing software - learning how to use it in the classroom to increase student motivation and as a stimulus to communicative activities. Dunkel, citing Wyatt, offers a description of the general functions and contents of CALL programs including the following categories:

1) tutorials - which would include the learning of a new alphabet or non-Western system of writing (Russian, Japanese, etc.)
2) drill and practice programs - grammar, vocabulary, usage
3) games
4) holistic practice - defined as higher level, contextualized practice
5) modeling
6) discovery
7) simulations
8) adventure readings
9) annotations
10) idea processors
11) word processors
12) on-line thesauruses
13) spelling checkers

To this list we should add telecommunications software, which is being used by students for e-mail communication, and also opens up the possibility of collaborative study and research projects.

3. Evaluation of Software

Evaluation of software is a vexed issue for a number of reasons. First, there is the issue of validity which bedevils the overall question of effectiveness. Second, the crudity of much of the early software, and the low levels of interactivity found in much of the newer multi-media products on the market. Third, is the distinction to be made between CAI and CALL. For some teachers the distinction between instruction and language learning in these two terms is little more than a question of spelling. However, we believe that the distinction between CAI and CALL is a useful one. The assumption that the computer is viewed as a substitute for the teacher seems quite explicit in the term computer assisted instruction. In the case of computer assisted language learning, the individuality of the learner is respected, and a more humanistic theory of education rooted in the principles of cognitive psychology is expressed. We do not suggest that there is no role for drill and practice activities in the CALL classroom. We seek to stress the importance of the people involved,

the nature and quality of the classroom culture, and the contents of the software itself.

In the early "technocentric" days of CAI, drill and practice software was created by computer programmers working from a behaviorist background. Early research on effectiveness sought to compare and contrast the achievement of students working in a CALL classroom with a control group working with traditional resources. These CALL vs. non-CALL studies have not demonstrated the success of CALL programs, nor have they demonstrated their failure. Because of the lack of hardware and the small number of students working in computer equipped classrooms, data on the effectiveness of these programs is limited. Chapelle and Jamieson(1991) raise other more profound questions as to the validity of such procedures. A major point in their argument, which may be confirmed by anyone with access to computer learning programs, is that in many cases the content of such programs does not significantly differ from that available in textbooks. Lack of familiarity with the equipment, teacher and learner attitudes toward working with the computer, the motivation and skill of the teacher, the motivation and comfort levels of the students - all of these factors influence the effectiveness of CALL programs.

Drill and practice software, including tutorials, are still the most commonly used in computer equipped classrooms. The trend, however, is clearly towards more interactive programs based on mentalistic, cognitive models of language processes, and toward explorations of how to use existing software in "communicative" ways. As Lance Knowles(1992) points out, we still have a long way to go in designing software that is flexible enough, i.e. "interactive" enough to prove a valuable resource for teachers and learners in making real progress in acquiring communicative skills. The challenge is to emphasize ways the computer can be put to use in the second language classroom.

Knowles argues that in considering courseware design, it is important to maintain a distinction between education and entertainment. Learning is hard work, says Knowles, urging that challenging courseware should provide learners with a carefully sequenced set of barriers to be overcome. It is in the successful completion of a task, and the experience of triumph over adversity, that motivation for learning and continued hard work develops.

Current evidence suggests that the combination of sight and sound for providing complex information about behavior and culture is unparalleled. The learner, however, should not be asked to do things with the computer which could be more effectively accomplished with other media. In some cases simpler graphic presentations of information will prove more effective than full-motion video in a highly interactive computer environment. In a further warning about the dangers of hype, Knowles reminds us that courseware must be worked with over many hours to be properly evaluated. The glow from a glitzy, high-tech presentation may hardly have faded when the usefulness of inadequately designed courseware is also gone.

In the conclusion of his essay, Knowles raises eight questions that he says all teachers should ask in evaluating computer software. We have summarized those questions below.

Is the courseware adequate and sufficient?

Does the courseware provide benefits that couldn't be achieved by other means - often, at great savings, with less harm?

Does the program provide a useful record of student work?

CALL IN JAPAN

Interest in CALL in Japan has clearly grown significantly in the last year. A national special interest group of the Japanese Association of Language Teachers has been formed, and held its first national conference in Nagoya in September, 1993. A number of teachers working here in Japan are very enthusiastic about the potential of CALL programs to be of special value to our students.

A key question for us is: Can computers in the L2 classroom improve students' motivation and their abilities to learn? Japanese university students come to the English classroom after a six year program of preparation for the university entrance exams which generally leaves them exhausted and unable to use the vocabulary and grammar rules they have memorized. The continuing problem for the university instructor is how to motivate the students to study and how to guide them toward communicative competence. The Japanese university student has learned how to learn in specific ways, which, it is safe to say, only very rarely exhibit the characteristics of the good language learner as described by Rubin in 1975. The following list of these strategies, as adapted by Naiman, et al., is taken from Willing (1989):

1 the good language learner is a willing and accurate guesser;
2 the good language learner has a strong drive to communicate, or to learn from communication. He is willing to do many things to get his message across;
3 the good language learner is often not inhibited. He is willing to appear foolish if reasonable communication results. He is willing to live with a certain amount of vagueness;
4 in addition to focusing on communication, the good language learner is prepared to attend to 'form ' . The good language learner is constantly looking for patterns in the language;
5 the good language learner practises;
6 the good language learner monitors his own speech and the speech of others. That is, he is constantly attending to how well his speech is being received and whether his performance meets the standards he has learned;
7 the good language learner attends to meaning. He knows that in order to understand the message, it is not sufficient to pay attention to the grammar of the language or to the surface form of speech.

Japanese university students are shy, hesitant to speak up in class, afraid of making mistakes, and inexperienced at expressing opinions or exploring learning strategies and options for themselves. They are also extemely busy with part-time jobs, club activities, and heavy class schedules, especially during their first and second years. CALL programs, integrated into the English curriculum could help our students in the following ways:

1) additional time to practice - the key to improvement of skills;

2) through the use of games and simulations they provide the opportunity for collaborative work and problem solving;

3) they provide an experience of language much richer in cultural content than texts usually can;

4) telecommunications programs provide the opportunity for real use of English with e-mail pen-pals, and also could provide the opportunity for cooperative research and study projects with students at other universities, here in Japan or in other countries;

5) word-processing for collaborative composition and writing projects generally

Clearly, all the evidence available confirms the fact that effectiveness is difficult to measure, and a technological solution to language learning is not failsafe. The key is in the design of intelligent, truly interactive courseware for the computer, and the integration of computer learning with the rest of the syllabus. Because students can work individually, at their own pace, and collaboratively in small groups with a multimedia personal computer, there is great potential for a significant change in classroom dynamics with widespread implementation of computer assisted learning systems. Many educators also hope that the teacher freed from drilling will become more effective - a counseler and participant in the students' learning experience.

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