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The TESOL Quarterly welcomes evaluative reviews of publications of relevance to TESOL professionals. In addition to textbooks and reference materials, these include computer and video software, testing instruments, and other forms of non-print materials.

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English Lessons on PLATO:

Proponents of computer-assisted instruction (CAI) have claimed for some time that CAI is the wave of the future in education. Yet in many schools and language institutes, where the computer has made only minimal inroads, that future may still seem far away. But there is evidence in TESOL that the future is drawing nearer; each year there is an increase in the number of presentations, workshops, and symposia involving CAI at the Annual Conventions, and there is even talk of a CAI Interest Section within TESOL. Nevertheless, resistance, hostility, ignorance, and apathy toward computers in language instruction persist. Reasons have been explored in the literature, but one of the most frequently cited obstacles to including CAI in current instructional curricula is the lack of quality lessons or, as they are called, courseware (Braun 1980, Jorstad 1980, English 1983).

Why, since CAI has existed for over two decades now, has not a wealth of appropriate courseware in a subject as important as ESL emerged? The answer is complex and involves many issues related to current CAI development. In a sense, large scale development of CAI is like an egg that cannot hatch until it is laid; but for it to be laid, there must first be a chicken that is already hatched. For events to be set in motion, there must be an investment of time and resources in CAI. Investment implies profit, but where wholly commercial ventures have attempted to take advantage of the lack of courseware, especially for rapidly proliferating small computers, the result has often been disappointing, dampening commercial interest in all but the most marketable CAI. This has given rise to concern that commercial
gimmickry will tend to dominate CAI development at the expense of pedagogical rigor, lending credence to the undesirable impression that CAI is in some way associated with the video arcade. Thé, addressing the quality of the products of sixty-three purveyors of educational courseware, concludes that “the most fundamental problem is that most educational software is written by programmers who know nothing about pedagogy” (1982:52).

For quality courseware to appear, professional educators must be integrally involved in its production, and they in turn must be supported through their institutions. But administrators are often wary of committing funds and instructors to CAI development because they have not seen results impressive enough to convince them that CAI would be worth their investment and because a commitment to the development of CAI is indeed a huge undertaking. Even if the hardware (computers and peripheral devices) is already available, it can take up to 150 hours to develop a lesson (Otto 1980), and it will take a practicing teacher at least thirty hours to program and test a simple lesson, using an authoring language which must first be learned (Stevens 1980).

Development costs can be circumvented when courseware is available elsewhere. However, relative to the need, very little courseware has been developed for ESL (although Dodge [1980], referring to institutional work in computer-assisted language instruction, notes that “possibly a majority” of such work is in ESL). What has been developed is usually system-specific; so, unless two institutes have the same type of computer, what is developed at one may not be usable at another. Even where system compatibility is not a problem, an institute in the market for courseware will find the selection limited.

These problems can, to some extent, be circumvented through hook-up with time shared computing systems such as CCC (Saracho 1982), Brigham Young University’s TICCIT (Hammond 1972b), and Control Data Corporation’s PLATO (Smith and Sherwood 1976, Hart 1981), which users can access via phone lines from leased terminals located at their respective institutions. In such systems, access to large mainframes provides educators with versatile and powerful tools for lesson creation and CAI curriculum development and management. With PLATO, for example, teachers can select from several thousand hours of CAI programming on a variety of topics, route students through curricula tailored to individual or class needs, keep track of student progress in assigned lessons, and, if so inclined, develop customized lessons using PLATO’s TUTOR authoring language, which incorporates sophisticated graphics, animation, and answer-judging capabilities.

There exists a large body of ESL lessons on PLATO, plus many more lessons for native English speakers which can be used by advanced students of ESL. Specifically for learners of ESL, there is a
battery of 124 lessons developed at the University of Illinois for use with heterogeneous classes of ESL students in the Intensive English Institute (IEI) there. These lessons were written for “low” and “high” level IEI students and are based on Krohn (1976) and Praninskas (1975), respectively. The two streams include lessons in reading, spelling, dictation, culture, and grammar.

This review seeks to evaluate the grammar components of these lessons, which include 23 remedial grammar lessons (those following Krohn) and 16 advanced grammar lessons (following Praninskas). These lessons are “so arranged that they are supplementary to the classroom work in which the students are engaged” (Dixon 1981:100); hence, material in these lessons follows closely that in the two texts. It is important to keep in mind the circumstances behind the creation of these lessons. As Dixon points out, “The PLATO system has been used by DESL [at the University of Illinois] for more than ten years as a medium of supplemental instruction . . . It has not been a major thrust of materials development, but the lessons have consistently been created, expanded, and edited throughout that time” (102). As such, they are slightly dated products of texts, teaching methods, and technology of the last decade, and they “have consequently made little use of the capabilities of the system which are now available” (106). Yet, at a time when viable courseware remains at a premium, this collection of lessons represents a major contribution to CAI in ESL.

In evaluating these lessons, it must be further understood what criteria constitute adequate CAI. Of prime concern is that courseware emphasize the inherent advantages of the computer over other instructional media. For example, computers can correct without criticizing and can provide immediate feedback, much of which should be “concept-related visual feedback” (Alesandrini 1982). The Remedial Grammar Review incorporates such feedback in making use of PLATO’s sophisticated graphics; for instance, in a lesson on wh-questions (Stock and Simkin, whquestion), subjects and objects turn into wh-words and literally move across the screen, trailing fronting auxiliaries. Other transformations and other concepts are occasionally illustrated in similar fashion throughout these lessons.

Thé discusses several criteria for evaluation of CAI, echoing the point that it “should exploit the unique capabilities of the computer . . . There is no reason to buy software that isn’t superior to a book” (1982:114). Bork (1981) faults lessons that make computer screens resemble pages of a book for being “imitative of other media.” Following as they do on their respective texts, these IEI lessons have a bookish air about them. However, they are not “page turners,” lessons which present students with screens full of textual explanation. The

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1 In citing lessons on PLATO, we have first given the name(s) of the author(s)/programmer(s) of the lesson, followed by the filename by which the user may call up that lesson.
lessons in the Remediaal Grammar Review are formatted deductively, with brief explanations preceding the exercises, but the exercises themselves dominate the lessons. The Advanced Grammar Review is nothing but exercises. In both cases, the emphasis is on interaction. There are ample opportunities for students to type out long sentences, on which they receive immediate feedback, or to make simpler discriminations, occasionally by touching correct answers on the screen. The screen itself is sometimes sectioned off in attractive, yet functional, ways, as in the lesson on plural nouns (Pech and Faye, plural), in which various objects are flashed onto the screen to elicit different plural endings from the learners. Even when the lessons deal with purely linguistic matter, much as an exercise book would, these make excellent use of the fast-interaction capabilities of the computer, so that the integrity of the medium is maintained.

Another of Thé’s criteria is that feedback should help the student “not only catch mistakes but analyze them for patterns, which helps the [student] understand how he made the mistake, and not just that he made it” (110). PLATO has a means of analyzing strings of student input, which sometimes works well, but at other times is misleading. When this system is not activated, blanket responses are programmed for unanticipated answers, and these can be ludicrous (for example, telling a student who has failed to include a period in an answer, “That is not the complete relative clause.”). A lesson program should also accept a wide range of correct answers so as to avoid telling students they are wrong when they are not. There are many instances in these series where even a native speaker will be told the answers are wrong because a complete range of correct answers has not been keyed in. This occurs particularly where prepositions or modals are involved. Also, in the exercise on the simple perfect (Stock, esl6) in the Advanced Grammar Review, students must avoid the commonly used progressive in sentences like He’s worked on his thesis since January, or their answers will be judged wrong.

Yet another consideration in evaluating CAI is to what degree the programming breaks with the tendency toward linear progression that is characteristic of traditional modes of instruction, but not necessarily desirable in CAI (DeBloois 1979, Scollon and Scollon 1982). Properly utilized, the logic, symmetry, and recursiveness inherent in computing can enable students to take control of their own learning and to follow their instincts within loose parameters. But this truly unique quality of CAI has proven to be a mercurial characteristic to try to exploit for focused learning (LOGO being the most widely known embodiment of this quality in less-focused, Piagetian learning, as Papert [1980] has noted).

The wider question is one of choice and control in CAI. Is it best to harness the computer as part of a carefully managed programmed
learning scheme, or do greatest benefits result from allowing students the freedom to explore (or not to explore) the medium as they like? The former idea dominated the first major efforts at CAI in language instruction (e.g., Hammond 1972a). As recently as 1980, Jamieson and Chapelle noted that “it is in the use of mechanical drills to facilitate habit formation that CAI justifies its implementation as an instructional device” (3). On the other hand, misgivings about drill and practice are noted in Howe and DuBoulay (1979) and in Papert (1980). Barger, in an article countering arguments that computers are anti-humanistic, notes several elements of humanism that are enhanced by computers, among which are autonomy (individuals have control over their own potential for development) and individuality (students can pace themselves and ideally exercise “a number of optional approaches to the same material” [1982:95]).

Whereas the guiding principle behind the IEI lessons is obviously an attempt to enlist the computer as what Marty (1981) calls an “ally” to its students, these lessons and the curriculum in which they were meant to be implemented tend to withhold a crucial element of choice. One way, for example, in which to allow choice in courseware is to make it menu driven (that is, users should be able to go directly to lesson segments from a table of contents, or menu). This is not the case with the IEI lessons. Furthermore, as Dixon (1981) points out, a router governs IEI student access to the lessons themselves and “to an extent” prevents students from going beyond those lessons already covered in class, this being consistent with the school of thought that CAI is supplementary to and always follows classwork. Furthermore, the router is deemed necessary because the lessons are so closely related to the course material that students tend to flounder when they push ahead in their curriculum. In evaluating these lessons, this rationale for control must be considered, but one must also be aware that others, for whom control is anathema in CAI, hold a contrary opinion.

There is also no indication at any point in the Remedial Grammar Review, and very little in the Advanced Grammar Review, of how much time remains in a lesson that a student is working on, increasing the probability that someone with prior commitments will have to leave in the middle. This is no problem if one is using a student sign-on (which will return users to their point of departure next time they sign on), but this cannot be taken for granted for users outside the IEI.

These problems are compounded when students in other institutions attempt to use the lessons with no knowledge of the IEI curriculum. There is confusion both with the material itself and with its organization. For example, there is no apparent reason why say and tell, two-word verbs, modals, and indirect quotations should all appear in the same lesson (Stock, esl8) in the Advanced Grammar Review, other than the fact that they are so juxtaposed in the Praninskas text. Fewer
problems would stem from this if the lessons were set up so that students could move freely in and out. Then, a student interested in modals could go directly to that section. As it is, students have to work through *say* and *tell* and two units on two-word verbs to get to the lesson they want. Marty (1981) warns that courseware should never be prepared to favor a particular text, and the disadvantages just noted seem to bear out this contention. At present, these problems are a factor only for users outside the IEI, but that institute will find similar difficulties when and if it decides to change texts.

One reason why working through irrelevant sections might be unpalatable to students is that many of the drills in these lessons require a lot of typing. International students often have deficient typing skills, and PLATO is not a word processor. It allows some buffered editing, but having to type ten-word sentences in answer to questions on PLATO, as must be done frequently in these lessons, is still unwieldy. For example, in the lesson on *wh*-questions, there is a drill in which students are required to type *all* possible *wh*-questions from sentences with multiple objects. In such cases, when a mistake is made, the student must retype the sentence until it is correct. Then the question is returned to the stack so that the student encounters it again before leaving the drill. Since the difficulty of the typing task may have contributed to the error in the first place, lessons programmed to handle errors in this way seem unnecessarily stringent.

A final problem with the lessons is that in some drills communicative aspects of the language are ignored in favor of linguistic form. The lessons on the present progressive (Stock and Simkin, progressiv) and the *going to* future (Stock and Simkin, begoing) in the *Remedial Grammar Review* have several instances of this; for example, students must write *going to go* repeatedly in the latter lesson in situations where the simpler *going to* seems more natural. On the other hand, some lessons are very well contextualized. The lesson on the use of *one* (Stock and Frye, one) utilizes dialogs in shops in which conversants use *one* quite naturally, and *too* and *enough* (Pech and Simkin, verytoo) are practiced in a situation where a radio starts out not being loud enough, but becomes too loud for the conversants to understand each other.

Dixon acknowledges this last problem, saying that the present drills "constrain the students rather than open to them the communicative aspects of language development" (1981:106). Plans are under way for new lessons which will "couch the target grammar point in meaningful and creative exercises" (106). Also on the drawing boards are plans to complete the *Remedial* set of lessons to cover all of the Krohn text beyond the seventeenth lesson, which is as far as the present lessons extend. The possibility of allowing students to circumvent some of the lessons depending on pretest scores is also being considered.
In conclusion, this is an impressive set of lessons and a good example of the accumulation of CAI material that can take place when professional teachers are attracted to a teaching tool as versatile as the computer. As we have seen, this battery of lessons is not without its drawbacks. Among the liabilities are its close association with textbooks, the amount of typing required in student input, occasionally inappropriate feedback, some inattention to function as opposed to form, a high degree of control over student progress, and lack of exploitation of potential options for students. However, despite whatever problems there may be in these lessons (and not everyone would agree that the “liabilities” mentioned above are all disadvantages), users of PLATO are fortunate to have access to this set of highly interactive and professionally executed lessons. It is hoped that recognition of the relative success of this educational-commercial partnership can stimulate other efforts along similar lines and contribute to the wider and more productive involvement of teachers of ESL in CAI.

REFERENCES

Howe, J. A. M., and B. Du Boulay. 1979. Microprocessor-assisted learning:
turning the clock back? Programmed Learning and Educational Technology 16 (3): 240-246.

Jamieson, Joan, and Carol Chapelle. 1980. ESL computer-assisted instruction on PLATO. Manuscript, University of Illinois, Division of ESL.


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Principles and Practice in Second Language Acquisition

For some years now the work of Stephen Krashen has been the most influential in the field of second language acquisition research. Krashen has formulated or helped to formulate a number of related hypotheses about the second language acquisition process (referred to in the book