Editor's Corner

Computers:

PLATO, Programmed Logic for Automatic Teaching Operation, is a computer-based teaching system which provides teachers a means for individualizing student instruction. The unique PLATO system has been developed by Prof. Donald L. Bitzer, director of the U. I. Computer-Based Education Research Laboratory, with the first terminal in operation in June, 1960.

With PLATO, teacher, computer, and students interact as a team. The teacher designs the instructional material; the computer presents the material to the students, at the same time monitoring and evaluating their performance; and students interact with the computer, providing information on lesson effectiveness. Each student works at his own pace on material which can provide special information and help when problems arise. The teacher can easily revise instructional material to modernize or improve the instruction. PLATO frees the teacher for special work with students which conventional teaching styles do not usually permit.

The equipment for a current PLATO III terminal consists of: 1) a keyset (related to the typewriter and keypunch), which transmits the user's input (or request) to a central computer, and 2) a video display, which simultaneously shows computer-generated graphic information and computer-selected photographic slides to the user. All PLATO III terminals are controlled by a single Control Data Corp. 1604 computer. The terminals share an electronic slide projector, and each has a television screen which provides the computer-generated graphics. Auxiliary equipment, controllable by the computer, can be added to a PLATO III terminal. Film projectors, audio systems, equipment for research in physics and psychology, and other devices have been used. PLATO III lesson storage is located on magnetic disks allowing rapid random access to large amounts of material for use in either the student or the author modes. During student operation, the lessons are stored in the high-speed computer memory.

PLATO is a versatile teaching system. It can present drill and practice routines, dictations, tutorial material, problems to be solved, information to be retrieved, simulated experiments, and computations. A wide range of classroom subjects have been taught on PLATO, including Biology, Chemistry, Computer Science, Demography, Foreign

Languages (French, Latin, Russian, Spanish, Chinese, Japanese), Mathematics, Nursing, Physics, and Veterinary Medicine, as well as programs for election statistics, psychological experiments, and on-line physics experiments. The above list is not complete, but serves to show the wide range uses for PLATO.

A typical lesson in a foreign language might be as follows: 1) a presentation on the screen of material to be taught; 2) a fully-randomized drill on the material; 3) a review, only of material not correctly answered in first trial; 4) student either goes on to next section or if percentage correct is low (below 75-80% generally), he is given remedial exercises. The computer "grades" the student in a foreign language on the basis of misspellings, wrong words, and words out-of-order. A student is allowed partial credit when he correctly answers a question which he missed on the first trial, thus giving an added incentive for thorough learning.

The PLATO III teaching system presently consists of seventy-five terminals. Thirty-six are located at the U. I. in Urbana-Champaign. Thirty-nine terminals are located at remote sites, including one in Springfield, ninety miles from the central controlling computer in Urbana. With a grant from the National Science Foundation, plus money from state, local, and outside agencies, the PLATO IV system will begin expansion within an approximate 150-mile radius, to include other remote terminals, such as the five projected for Chicago, three in elementary schools and two in community colleges. Present plans include a system of 4,000 consoles hooked by telephone lines to a central computer and would include programs for all levels of instruction. The first sixty, assembled by Magnavox, Inc., are scheduled to be placed on the U. I. campus for the fall of 1972; the P. L. B. basement will house the first units, with a future capability of 250 stations. The other remote units are projected to be in place around 1974.

The new PLATO IV consoles feature two devices developed at the U. I.: a plasma display panel to replace the television screen and a random-access audio device, which can select from over 2,000 messages, including foreign sentences and music. The U. I. has also developed a language called "TUTOR," which permits persons with no computer experience to prepare PLATO lessons.

Estimated costs for the new system are 35¢-50¢ per student per terminal hour. Please direct further inquiries regarding PLATO to: Prof. Donald L. Bitzer, Computerbased Education Research Laboratory, 252 Engineering Research Laboratory, U. of Ill., Urbana, Ill. 61801. (Reprinted from *University of Illinois Foreign Language Newsletter.*)

Dear Editor:

I would like to review with you the reason for my action at our 8th annual business meeting. If the Executive Board proposes constitutional amendments, we are talking about the basic document of our organization. It is not a routine matter. Certainly, therefore, every proposed change to the constitution should be considered separately. There are quite a number of separate and distinct changes proposed here. I object most strenuously to lumping them all together and presenting them to the membership to either take or leave.

My own personal reaction is a very mixed one; I agree with some proposals; I have doubts and questions about others, perhaps because I lack information; and I am definitely opposed to some of the proposals. I think it would serve a very useful purpose if the Executive Board would explain to the membership the reasons for which these changes are sought. Perhaps this could best be accomplished in the next issue of the newsletter. I would certainly like to know what has gone wrong, or what problems you have encountered that makes you request these changes.

As I understand the proposed amendment for Article II, Section Nos. 2, 3, and 4, this takes away from the membership at large the right to present candidates for office from the floor at the annual business meeting. I would certainly like our membership to be aware of the implications of this change before it comes to a vote.

The proposed amendment for Article III, Section 1, relating to the membership of the Executive Board drops the Director of the publication's center from the Executive Board. It is true that at present the Editor of the newsletter and the Director of the publication's center are one and the same person. However, this may not always be the case. Since we are a service organization and the Director of the publication's center is an important position in our organization, I think our membership should be aware of this implication before it is brought to a vote.

In regard to the proposed change for Article III, Section 3, it seems to me that if the constitution requires that the Executive Board meet once a year in conjunction with the annual meeting, this will facilitate members getting approval of their departments to attend rather than making it more difficult. After all, what is the significance of an annual business meeting if the Executive Board does not meet at that time? Just when is it that the membership has an opportunity to talk face to face with our governing body if they are not at the annual business meeting?

These are just a few of the reasons why I made a motion at the 8th annual business meeting to have the ballot rewritten in such a manner that it would allow the membership to vote separately on each different item. The new ballot can be distributed with the next issue of the newsletter.

Sincerely,
T. R. Goldsworthy
Director of Language Laboratories
University of Wisconsin.