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Utilizing Emerging New Instructional Materials and Mechanical Devices Implications for the Library*

by

Dorothy B. Jamerson

"Teaching Machines and programmed learning are the greatest educational innovations of our time."¹ Theodore Waller (President, Teaching Materials, Inc.)

"Programed instruction, limited or not, is here to stay, certainly not as a substitute for the teacher but as an indispensable and powerful ally in the classroom."² Benjamin Fine (Educator and Author)

"The impetus of the movement will not soon die out."³ Leslie J. Briggs (American Institute for Research—Instructional Materials Division)

These options were echoed with little variation in thirty-three of the thirty-five sources consulted in the preparation of this paper. The two differing opinions labeled programed instruction as a fad or as a threat to humanism (Chambers⁴; Mumford⁵;). The majority opinion based its conclusions on:

- (1) application of the psychology of learning which underlies every program inside every machine;
- (2) favorable results of trial projects in schools and colleges;
- (3) success achieved through its use by industry, the military, and government;
- (4) increase in the number of programs available;
- (5) improvements being made in the performance of new machines;
- (6) research in the area being carried out by educators as well as industry; and
- (7) the tremendous sums which have been poured into the production of machines and the development of programs.

So, whatever our feelings may be concerning programed instruction, we are faced with the reality of its existence. How do we stand up to its challenge? The extent to which you as individuals or as departmental units decide to incorporate programed instruction into the classroom will affect, in direct proportion, one phase of the library's program. This phase of the library's program consists of

*Presented at the Savannah State College Faculty Fall Institute September 14, 1965.

the purchasing of materials requested by faculty, administration and students; processing these items; and administering their use by library patrons. Should programmed instruction come to be used extensively at Savannah State College then we can expect to add to the library collections all types of materials in this field, including teaching machines. Should programmed instruction be ignored, then our library collections will be poor in this area.

The implications for that portion of the library's program directly affected by faculty decision indicate a period of waiting. On the other hand, the objectives of the library demand that we take immediate action. Theodore C. Hines says, "The goals of libraries frequently have been summed up as the provision of information, education and recreation."⁶ This is a concise presentation of some of the objectives of the Savannah State College Library. The nature of our college's commitment to teacher education also requires that the library provide information about programmed instruction.

At this point let us examine what the experts on programmed instruction in relation to libraries have to say. Theodore C. Hines, Professor at the Graduate School for Library Service, Rutgers, states that:

1. "The size, scope and nature of the programmed instruction movement show that it is a major social and educational phenomenon. Librarians need to inform themselves about it and to provide informative materials for their users.
2. "The wide spread availability of machines and printed materials specifically intended for home use means that libraries should be prepared to assist their users to evaluate them. To do this libraries need to have criteria for purchase as well as samples of Encyclopedia Britanica TEMAX materials, TMI—Grolier texts, and World Book's Cyclo Teacher for examination by users.
3. "Libraries ought to provide for themselves and their users, the basic lists of programs.
4. "Libraries should provide printed programs (requiring no machine) whenever they meet the needs of the library clientele and if program format makes this feasible.
5. "Many teachers and industries are doing their own programing. Libraries should consider providing material on how to program, either for use by programers, or simply because manuals on programing constitute good explanations of the programing method of instruction even for readers who do not intend to try the technique.
6. "Libraries should consider the use of programmed instruction as a method of teaching people to use libraries. At least three commerical programs are being written.
7. "Libraries should experiment with programmed instruction, then evaluate the results of experiments and when necessary adopt

library procedures to user needs and conveniences, in this field as in all others.”⁷

Stanley J. Slote says:

1. “We should be prepared to answer reference questions in this area.
2. “We should train our staffs, librarians and non-librarians, through this technique.
3. “Storage and use patterns should be developed.
4. “Areas and equipment for in library use of programmed instruction should be designed and experimented with.”⁸

These and other writers would have libraries become totally involved in all aspects of programmed learning. We might well ask what are libraries really doing? To shed some light on this query, a questionnaire was sent to the libraries of the twenty units of the University System of Georgia. We received fourteen replies. A summary of the three questions directly concerning libraries reveals:

1. Eleven libraries contain classified materials on programmed instruction; two do not, and one respondent failed to answer the question. The classified material referred to consists of general and background works, selection and use of programmed materials, how to construct a program, guides to programmed instructional materials, and bibliographies. Four libraries reported the number of items in their collection. These libraries include Abraham Baldwin Agricultural College 5; Augusta College 8; Savannah State College 21; and University of Georgia 68.
2. In reply to the question, “Are programmed texts included in your library collections?” four answered yes, ten answered no. It was indicated that in the near future 7 libraries plan to add programmed texts to their collection while 7 do not plan to do so.
3. The questionnaire revealed that there is one teaching machine located in the library of a Unit of the University System—Savannah State College Library has a Cyclo-Teacher in the Curriculum Materials Center.
4. One library, that of Georgia State College, reported the use of programmed instruction material on cards for teaching use of the library and library materials.

These findings indicate that eleven of the fourteen responding libraries do contain classified materials about programmed teaching. In the near future, half of the fourteen libraries will include on their shelves programmed textbooks. The one library containing a teaching machine plans to add others to its holdings.

We have examined the implications for libraries as outlined by experts in the field. We have briefly inquired into the activities in this area on the part of libraries in some of the Units of the University System. We find that correlation between the two is low. However,

on one implication, that of providing information about programmed learning, most of the libraries that were examined have already become involved. From this beginning it is but a series of small steps to the point of total involvement. Whether or not this road is followed depends upon decisions made by faculty, administration and librarians in the individual units.

At Savannah State College, one professor has purchased an Honor Teaching Machine from his own funds. It was used in the classroom with his students in English. A report of the results of this experiment entitled "A Preliminary Report on Teaching Methods Used in a Remedial English Class," is published in *The Quarterly Review of Higher Education among Negroes*, January, 1965. James A. Eaton is the researcher and author.

As has been said, Savannah State College Library holdings rank second on classified materials about programmed learning when compared with schools in the University of Georgia System. It is our intent to continue to acquire this type of resource material.

Another implication, that of using programmed teaching in the area of instruction in the use of the library and library materials, appears to merit consideration as a possible solution to alleviating some of the inadequacies of our students. It is hoped that cooperation between faculty and library staff will produce an effective program.

The extent to which the Savannah State College Library will become involved in the utilization of emerging new instructional materials depends upon the attitudes and efforts of each individual instructor in the classroom. Each instructor should ask himself "How am I meeting this challenge?"

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¹Fine, Benjamin. *Teaching Machines*. New York: Sterling Publishing Company, 1962. p. 19.

²*Ibid.*, p. 25.

³Briggs, Leslie J., "Instructional Aids" in his column, TRENDS AND TANGENTS. *Journal of Higher Education*, v. 36, March 1965, p. 165.

⁴Chambers, Barbara, "An Evaluation of Programed Instruction," *Education*, v. 85, November 19, p. 173.

⁵Mumford, Lewis, "The Automation of Knowledge," *AV Communication Review*, v. 12, Fall 1964, p. 270.

⁶Hines, Theodore C., "Programed Materials, Shall we let Them in the Library?" *Library Journal*, v. 88, May 15, 1963, p. 2055.

⁷*Ibid.*, p. 2058, 2065.

⁸Slote, Stanley J., "Pigeons in the Library," *School Libraries*, v. 13, March 1964, p. 18.

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