and tested for use at the post-secondary level. This is probably why the Mohan and Hull book makes no reference to PSI; however, I can see how PSI can be used in schools.

PSI or the Keller Plan (named after Prof. Keller who with a colleague, Prof. Sherman, developed this. method of instruction just over ten years ago) is characterized by selfpacing — the student moving at his own pace through small sequential units of study, mastery learning or "unit perfection requirement for advance," and the use of proctors (usually students who have completed the course) to provide immediate feedback on tests as well as tutor individuals experiencing difficulties. Proctoring provides the "personalized" feature of PSI. Lectures and demonstrations are an added bonus for those who have completed a specified number of units; however, attendance is optional. Some of these features are in common with a number of recent innovations in instruction; but the authors make no claim for originality, although the use of proctors and the basis in Skinnerean positive reinforcement learning theory may be the special features of PSI.

The Keller Plan Handbook provides useful detail for those considering implementing PSI. Difficulties are anticipated and dealt with, not glossed over. The ideal is pointed to for guidance, but constraints are recognized. For instance, self-paced learning should not be undermined by end-of-semester deadlines. The grade "Incomplete" may remove the difficulty but it also encourages procrastination, one of the most frequentlyreported problems with PSI. Ways of dealing with the problem are discussed. It soon becomes apparent that PSI's superiority over conventional teaching is in those areas of the curriculum calling for mastery over limited content or developing a particular skill.

The effect of PSI: 41 Germinal Papers (about half of the forty-one have not appeared in print before) is to confirm that PSI has been subjected to numerous tests and compa-

risons with conventional teaching approaches and has been foound superior in that students in PSI performed at a significantly higher level in common final examinations, retained much more of what they learned over a longer period of time, enjoyed the process, worked harder and learned more efficiently.

The collection is well-balanced. The writers represent a variety of disciplines, the majority being in the areas of psychology and physics. Seven of the forty-one articles deal with problems, including one tongue-in-cheek "Fifteen Reasons Not to Use the Keller Plan." As is to be expected. there is much repetition of all toofamiliar details about the approach and the almost predictable successful results. A number of articles provide research data on various aspects of PSI. A section by Keller and Sherman on the history and theory of PSI concludes this collection.

The reader contemplating a PSI course should find the handbook and the collection of papers indispensable. Dyed-in-chalk-dust lecture enthusiasts may be challenged by these books at least to defend their practice.

Patrick Dias McGill University

David W. Champagne and Richard M. Goldman. HANDBOOK FOR MANAGING INDIVIDUALIZED LEARNING IN THE CLASSROOM. Englewood Cliffs, New Jersey: Educational Technology Publications, 1975. 200 pp. \$9.95.

This is an unconventional book. The reader may have to peruse it several times before seeing its significance. It is unlike those textbooks intended for study from cover to cover. No two teachers will work through the same units in this book in the same order and to the same degree of intensity. Moreover, it can-

not be read passively; the learner must do something. The book requires considerable input on the part of the reader: exposing of values; thinking; making choices, decisions, and commitments; criticizing; and planning for action. This is a text the reader helps write and personalize. Yet it is not a workbook nor is it a programmed textbook. It is something else.

The book centers on planning, implementing, and managing a cusindividualized learning system. Although it contains a few key ideas for individualizing instruction (through student tutors, individualized seat work, textbooks, and contracts), it is not a book of techniques or curricula. The reader is led to these via Unit 10: "'Stealing' Ideas for Your Students." This unit might well be supplemented by selections in Triezenberg, Postlethwait, Weisgerber, Shiman, and the ALERT Sourcebook. but none of these is mentioned in the comprehensive bibliography of 73 references keyed to the chapters and optional units.1

Some other useful unit options, of 22 possibilities, are: "Expanding the Size of Your Classroom," "Getting Your Money's Worth," "Working with (or if Necessary, Dealing with) Your Principal," "Obtaining Funding for Your Individualized Classroom," "Parents and Your Individualized Curriculum," and "Keeping Track of Your Students' Progress: Designing Recordkeeping Systems."

After surveying 33 books on or related to individualized learning, this reviewer selected Champagne and Goldman as the textbook for a new inservice course at Jersey City State College.2 Three attributes of the work led to this decision: (1) it is a book on individualization which is, itself, individualized; it does what it advocates and by virtue of this, facilitates teaching a course in an individualized fashion, (2) it presents individualized learning/instruction in the context of real - not utopian - public schools, and (3) it leads the reader-learner to a practical, usable take-home product: either an action-plan for implementing an individualized learning system or a tangible product of both.

In conclusion, the book is a useful navigational aid for guiding an instructor and his/her students to a first approximate destination. Additional lighthouses and compasses are needed along the way. These can be provided by the sources in the footnotes, other references, other media, and experts in the class working on particular units. A choice text.

Mitchell E. Batoff Jersey City State College

notes

- 1. H. J. Triezenberg, ed., Individualized Science (Washington: National Science Teachers Association, 1972); Samuel N. Postlethwait, Joseph D. Novak, and H. T. Murray, Jr., The Audio-Tutorial Approach to Learning through Independent Study and Integrated Experiences (Minneapolis: Burgess, 1972); Robert A. Weisgerber, Developmental Efforts in Individualized Learning (Itasca, Illinois: F. E. Peacock, 1971); D. A. Shiman, C. M. Culver, and A. Lieberman, eds., Teachers on Individualization: The Way We Do It (New York: McGraw-Hill, 1974); S. N. Henrie, S. H. L. Chow, K. Devaney, and S. Entwistle, eds., ALERT Information System Sourcebook of Elementary Curricula Programs and Proiects (San Francisco: Far West Laboratory for Educational Research and Development, 1972), chapter 15 and p. 488 in Index.
- Individualized Learning: Models, Instructional Modes, Classroom Practices, and Uses of Educational Technology—3 s.h. graduate credit.
- For example: J. H. Block, ed., Mastery Learning: Theory and Practice (New York: Holt, Rinehart and Winston, 1971); Maurice Gibbons, Individualized Instruction: A Descriptive Analysis (New York: Teachers College Press, Columbia University, 1971); others.