plete study of the application of punched cards to library uses could be presented.

Librarians began writing about methods and machines used in the business world and applicable to library operations more than Many of these early twenty years ago. efforts were simple management studies of isolated uses of various types of mechanical equipment which, under a given set of circumstances, produced savings in time, money or effort in the pursuit of the library's daily business. The mechanical aids were in the main easily mastered devices and many came into general usage. Punched card tabulation was talked about, a few articles appeared on its possible adaptation to library procedures, but for the most part, it was not understood, considered too expensive, and left to its more common applications in business and government accounting and statistical work. Perhaps punched cards first aroused librarians' interest when, as the author writes in his preface, "Miss Marjorie Quigley, who is Librarian of the Montclair, New Jersey, Free Public Library, had the temerity to try so radically new an idea as automatic book-charging. . . . '

Mr. Parker has taken the magic out of the punched card for the librarian. carefully describes the operation of punched card equipment, the two makes available in this country, their differences and limitations, and the basic equipment required. By avoiding technical details as much as possible, he successfully carries the reader through all library activities and discusses the application of punched cards to each one-order work, processing operations, borrower's records, circulation control and analysis, bibliographic and indexing services, personnel records, fiscal records and controls and the administration More imof punched card installations. portant, he concerns himself with a program of unified record control for the library. As he points out, "the greatest value of punched cards comes from their use in a coordinated program." The punched card is not presented as the panacea which will solve all library management problems. The suggested procedures, forms, and applications are not considered common to all library situations. Local needs, local procedures, must be evaluated before punched cards will work.

The author serves well the library administrator in helping him to understand

punched card systems, and the various kinds of machines available, and in particular, to evaluate both of them in consideration of his local requirements and his local problems. A bibliography, a glossary and generous use of figures, tables, and charts are most help-The library administrator will also appreciate, as the author points out, that punched cards do not necessarily represent savings in themselves, but that through increased efficiency additional work can be accomplished and the administrator will have at his command data to help him do a more informed job in decision making, in the study of his use of funds, and in his efforts to control the book collection, to name a few examples. In this connection, Mr. Parker's projection of the organizational pattern of a library employing punched cards in all suggested applications and in a coordinated program offers stimulating reading.

Here then is a complete and careful examination of punched cards and punched card machines for libraries. It is a book for both the experienced and the inexperienced, and it should be read by all interested in library management problems and the mechanization of library clerical routines.—John H. Ottemiller, Yale University Library.

General Education

General Education in Action... By B. Lamar Johnson. Washington, D.C., The American Council on Education, 1952. 409p. \$4.00.

Action, power and vision are the keynotes of General Education in Action, a Report of the California Study of General Education in the Junior College, written by Dr. B. Lamar Johnson of Stephens College, Columbia, Missouri, under the auspices of four educational organizations, and with the aid of a grant from the Carnegie Foundation for the Advancement of Teaching. Dr. Johnson is well known as the very able librarian and dean of instruction of one of the nation's outstanding junior colleges.

The four far-reaching organizations which sponsored this study are the California State Junior College Association, the California State Department of Education, the School of Education at the University of California at Los Angeles, and the Pacific Coast Committee of the American Council on Education.

These organizations deserve credit for their encouragement and sponsoring of this report.

Dr. Johnson is to be heartily commended for the tremendous task which he undertook in 1950 of evaluating, identifying and describing the programs and practices, the general education advances, and developments of the junior colleges of California. Of the 59 junior colleges in California, Dr. Johnson participated in conferences attended by 4300 participants on 41 campuses in California and has reported first hand findings gleaned from talks and discussions with faculty members, administrators and students of the junior colleges of California. It is fitting that a study of this sort should have been made in a state where more than half of the junior college students in public junior colleges in the United States are enrolled, in a state which has a larger number of junior colleges than any other state in the country, and in a state where one might say the greatest advances in public education on the junior college level have been made.

The book is divided into four parts: Part one, Identifying the Common Needs of Youth and of Society; part two, Meeting the Common Needs of Youth and of Society; part three, Operating the Programs; part four, Unfinished Business.

Part one, "Identifying the Common Needs of Youth and of Society," attempts to formulate the goals of general education. educators and members of the instructional staffs of the junior colleges of California met at the General Education Workshop in the summer of 1950. They felt that before they could begin their work, they must define the term general education. After much discussion and considerable thought six principles were drawn up to amplify the definition, followed by twelve statements of goals evolved from the principles. It was agreed that general education could be defined simply: "General education is that part of education which encompasses the common knowledge, skills, and attitudes needed by each individual to be effective as a person, a member of a family, a worker, and a citizen. General education is complementary to, but different in emphasis and approach from, special training for a job, for a profession, or for scholarship in a particular field of knowledge."

Students in California public junior col-

leges differ greatly in experiences, needs, capacities, interests, and aspirations. The general education program aims to help each student increase his competence in:

- 1. Exercising the privileges and responsibilities of democratic citizenship.
- 2. Developing a set of sound moral and spiritual values by which he guides his life.
- 3. Expressing his thoughts clearly in speaking and writing, and in reading and listening with understanding.
- 4. Using the basic mathematical and mechanical skills necessary in everyday life.
- 5. Using methods of critical thinking for the solution of problems and for the discrimination among values.
- 6. Understanding his cultural heritage so that he may gain a perspective of his time and place in the world.
- Understanding his interaction with his biological and physical environment so that he may adjust to and improve that environment.
- 8. Maintaining good mental and physical health for himself, his family, and his community.
- 9. Developing a balanced personal and social adjustment.
- Sharing in the development of a satisfactory home and family life.
- Achieving a satisfactory vocational adjustment.
- 12. Taking part in some form of satisfying creative activity and in appreciating the creative activities of others.

These twelve goals warrant serious study by all junior college educators.

Part two, Meeting the Common Needs of Youth and of Society, contains eleven chapters, the first of which is entitled "Approaches to General Education." Here the author points out the factors and problems with which junior college educators must deal. Some of the characteristics or approaches of general education are: 1. General education should aim to educate the total personality; 2. The general education program should be planned for all students; 3. General education must permeate the total college curriculum; 4. Junior colleges should organize courses addressed primarily to general education on a basis which is consistent

with the educational philosophy of the college. Particularly recommended in the Study is a functional approach to general education which builds courses and programs directly on the basis of the needs and characteristics of students and of society; 5. The general education program should include both required and recommended courses and other experiences.

The rest of part two is divided into the ten following chapters:

- I. The Advising, Guidance, and Counseling of Students
- 2. Psychology and Personal Adjustment
- 3. Health, Physical Education and Recreation
- 4. Family Life Education
- 5. Communication
- 6. The Creative Arts and the Humanities
- 7. The Natural Sciences and Mathematics
- 8. Vocational Courses
- 9. Citizenship and the Social Studies
- 10. The Extraclass Program

Logically, each of these groupings fits very nicely into one or more of the twelve principles in the definition of general education. The author gives the whys and wherefores of each subject grouping, statistics on the subject as discovered in his study, and the type of program offered at different junior colleges. For example, the chapter "Psychology and Personal Adjustment" is divided into the following subheadings: the importance of psychology in general education; varying practices in psychology courses, courses in action, problems and promises. Each of these subject groupings is presented in a similar manner.

"Operating the Program" is the title of part three of the report. In it are two chapters, "Administration: facilitating general education" and "The Library: an opportunity." The chapter on administration is one of extreme importance. The author admits to four different types of administrators and leaves no doubt as to the ideal type; establishes four steps and elaborates upon these steps in educational engineering by giving concrete examples. The effective educational engineering for general education purposes which has been accomplished at San Francisco State College and Orange Coast College is carefully detailed to show clearly

the steps taken by administrators to bring about the necessary changes and improvements needed in their college programs.

Librarians can find a wealth of information in the chapter entitled "The Library: an opportunity." In fact, to those of us who know Dr. Johnson's already published works on the junior college library it is a very complete summary in a few pages of his basic ideas and beliefs on the administration and organization of an effective and efficient library in a junior college community. only can librarians find information of interest, but also the instructional staffs. This chapter is meant for junior college educators and offers many concrete suggestions. Dr. Johnson states that the administrator should: 1. make the position of librarian of major importance on the instructional staff; 2. make the library the resource center of instructional materials; 3. use the library as an avenue of instructional supervision; 4. recognize the role of the library in educational engineering. For the entire instructional staff, the author lists nine excellent services which the teachers can do for the librarian, and eight suggested activities which the librarians can do for the teachers. author's excellent summary leaves the reader in no doubt as to the library's very important part in the life of the junior college.

Part four, entitled "Unfinished Business," contains two chapters which summarize many of the principles elaborated in the text. Chapter fourteen, "Continuing Problems and Opportunities" considers some of the problems and opportunities of junior colleges. These are junior college-high school relationships; adult education; education of women; recognizing varied aptitudes, abilities and interests; the small junior college; the training of teachers. The author presents the problems that each of these statements holds and the opportunities which each offers.

The last chapter entitled "Looking Ahead" singles out certain general education developments, nine of them to be exact, which seem particularly significant, and recommends specific lines of development that appear vital to the service of California junior college students and to the communities and the state which support the junior college as part of the system of public education. This chapter is general education in action for the ad-

ministrator, instructors, and all junior college personnel.

In conclusion, the reviewer feels that this is a book which every faculty member, librarian, administrator, member of the boards of trustees in the junior college field should read carefully. It will be found interesting and inviting in readability, inclusive in scope, thought provoking in its objectiveness, stimulating enough to make the reader want to put into operation many of the suggested recommendations.—Ruth E. Scarborough, Centenary Junior College Library, Hackettstown, N.J.

New Books About the Book Arts

The Alexandrian Library, Glory of the Hellenic World; Its Rise, Antiquities, and Destruction. By Edward Alexander Parsons. Amsterdam, etc., The Elsevier Press, 1952. 468p. \$7.50.

The Roman Letter, a Study of Notable Graven and Written Forms from Twenty Centuries in Which Our Latin Alphabet Moved towards Its High Destiny as the Basic Medium of Printed Communication throughout the Western World. Prepared by James Hayes... on the occasion of an exhibition dealing with this subject held by R. R. Donnelley & Sons Company in its Lakeside Press Galleries... Chicago... 1951-52. 54p. commentary, 59 illus.

Schoene Fischbucher. By Clauss Nissen. Stuttgart, Lothar Hempe Verlag, 1951. 108p.

Buecher bewegten die Welt: eine Kulturgeschichte des Buches. By Karl Schottenloher. Stuttgart, Hiersemann, 1951. Vol. I: Antiquity to Renaissance. 278p. DM 20-.

Das Buch im wandel der Zeiten. By Wilhelm H. Lange. 6th ed. Wiesbaden, F. Steiner, 1951. 196p., with 158 illus.

The Alexandrian Library, to quote from the Proem to this important work, "certainly the greatest of all Antiquity and the greatest before the invention of printing, was perhaps potentially the most important ever collected. Because of the neglect in the annals of history and letters, we have only the existing fragments of original minor comments in the ancient authorities and mostly casual remarks of many modern writers out of which to attempt a restoration of the Alexandria."

During the past seven years this restoration was undertaken by Edward Alexander Parsons, man of letters and bibliographer, lifelong resident of New Orleans and founder of the Bibliotheca Parsoniana.

The results of his efforts, a labor of love in the finest sense of the word, are now before us in a volume which is certain to take an honored place on the shelves of every collector, student and librarian interested in books.

As one reads this magnificent account of the conception of the building of the library, founded "at the close of the classic period of the world's greatest literature, when Athens, its mother, no longer afforded the means, power or genius necessary for its protection or preservation," one wonders why this outstanding achievement in the intellectual life of man has not before now been the subject of a truly exhaustive study.

With meticulous care and scrupulous appraisal of its validity Mr. Parsons has tried to locate every single reference to the library of Alexandria in the ancient sources and in the studies of modern scholars. Out of these efforts there arises an astonishingly vivid and complete picture of the founding of this library under the Ptolemies, of its scholarly and administrative staff, of the method of acquisition of its vast holdings, their storage, cataloging and editing and of the alternating destruction and rebirth of this great institution through nine centuries.

We witness the origin of the science of bibliography and of literary criticism and history. But we are also given a most lively picture of the Hellenistic world, its leading personalities, its political issues and, above all, its cultural mission. It may be that the specialist student of the Hellenistic tradition would differ here and there in points of detail from the conclusions and interpretations offered in this-book. The general reader will notice a tendency toward repetition and he may sometimes wish that the picture might have been presented in a more concentrated manner. He will also notice a fair number of printers' errors. But scholar and layman