

PLANNING AND USING A
CLASSROOM LIBRARY

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PREFACE

For almost two centuries it has been recognized that science is essential to the education of youth in a democracy. The objectives of school experiences have been stated in countless ways, but the main idea is to help youth gain the ideals, understanding, and skills essential to becoming good citizens.

The modern science program has as a major objective helping our young people train their senses so that they may gather data by first-hand observation, appraise it critically, and use these data in working out answers to their own questions or problems.

Some of the young people enrolled in science courses today will be the scientists of tomorrow. These youngsters need to be guided in their thinking and experiences so they may develop a broad over-all view of the value of scientific progress to mankind. This is the challenge to science teaching today.

Scarcely any method of teaching now in use in secondary schools can be carried on without the help of a school library. There must be a consistent integration of classroom and library activity so that textbook assignments may be supplemented and enriched by adequate reference material.

This supplementary material consisting of reference books, textbooks, books on special topics, biographies, magazines, and pamphlets pertaining to science and related fields should comprise a library which is an integral part of every science room, readily accessible to every student. In this way students may be encouraged to become acquainted with some of

the literature of science. In this way they can be helped toward the goal of becoming better citizens.

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PART I

INVITATION TO READ

The study of science should help young people develop a command of scientific generalizations or principles which they can use in solving the problems of their environment. Also, science should help pupils grow in their ability to solve their own problems more effectively.¹ Good books remain the most reliable guide to an understanding of contemporary society. Since this is an age of science and technology, books relating to these fields offer the best means of understanding today's world and tomorrow's future.

Youth are maturing at a rapid pace today. There are 16,500,000 young people from 13 to 19 years of age with an estimated increase of over two million expected in the next five years. This span of years is a period of important growth; the younger adolescents exuberant, fun-loving, and energetic; and the young adults eager and ready to find their place in society. Youngsters are ready for new interests and ideas, new hobbies, and more information on all kinds of subjects relating to themselves and their world.² This is the time when books can help youth into the world of science.

Science teachers feel their students' understanding of our changing environment demands a knowledge of some basic principles and laws of

¹Brown, Clyde M., "Reading in Science as a Means of Improving the Junior High School Program." The Science Teacher, XXI (1954), 281.

²Roos, Jean C., "Help Youth Over the Threshold." Junior Libraries, II (1956), 1.

science. But, unless these laws and principles are set in modern dress, there is difficulty in getting them across to the students. Teachers complain that students do not read; they do not read the text assignments and they depend more and more on class presentations for their understanding of basic fundamentals. This is a challenge to the teacher to create a desire for more information on the part of the student.

Boys and girls are naturally curious individuals and science should provide them with opportunities to find out the hows and whys of their environment. They can be encouraged to read in their search for answers to their questions rather than to read just for facts. They should be encouraged to question the data presented to them and to determine the authority by which the author arrives at the conclusions he makes. In science classes, help can be provided by reliable, authoritative sources in a classroom library.

Too often students get the idea that the text is "the word" as far as a certain subject is concerned. How much better it would be if they understood that each paragraph or even a few sentences of the text could be expanded into whole books, university courses, and even life-time pursuits.

To encourage reading there have been many devices used. These range all the way from forms of coercion, such as threatened failure if a certain number of book reports are not in, to voluntary reading for extra credit. Each teacher should determine his own method best suited to his own teaching philosophy and pupil type. It would seem, however, that such reading should be largely voluntary in order to create a taste for reading for pleasure.

In connection with their interest in science, students often bring things to school, especially if they are encouraged to do so. The things

they bring range all the way from rocks to rabbits, and generally they are interested in finding out something about them. Books again can come to the rescue.

Current newspaper articles often stimulate interest in scientific phenomena. For example, frequent reference to atomic energy has stimulated questions about atoms and molecules. The planned launching of the artificial satellite has created much interest in astronomy. Again, there are supplementary books which can answer questions and provide a wealth of other information.

Hobbies often are excellent sources from which to identify interest in further study. An insect collection, for example, may end in a jumble of legs and wings in the bottom of a cigar box, but it might just as well lead to a career as an entomologist, the inspiration for which might have been supplied by a book on insect identification.³

During the past twenty years the number of scientific and informational books for young people had doubled and redoubled. From a few wordy, sentimental or sometimes terrifying and poorly illustrated early books, there has been a steady improvement resulting in the beautifully illustrated and well written books of today.⁴

This brings up the question of the right book for the right child. How can we introduce students to science books which will interest them, and what should we use as incentives in our effort to stimulate the use of supplementary books in science? And, if we are to encourage the

³Niles, Olive, and Earley, Margaret J., "Give Them a Reason for Reading." Journal of Education, CXXXVI (1954), 119.

⁴Zim, Herbert, "Science Learning Through Books." The Science Teacher, XXVII (1950), 114.

acquisition of reliable information by teaching students to question what they see, hear, or read, how shall we do it?

Young people are reading. At the University School of Southern Illinois University a check in a science class showed fourteen students reading forty-four magazines. The boys read from twenty-four magazines while the girls read from twenty-one. Both junior-high and senior-high students frankly admitted reading comic books, especially those presenting scientific or pseudo-scientific ideas of space travel and explorations. Science fiction stories also had great appeal. Our young readers are impressionable and to a certain degree gullible consumers of materials presented to them. They need help in distinguishing between the truths, half-truths, part-truths, and no-truths that they come upon in their reading.⁵

The radio, television, motion pictures, comic books, and science fiction all may be used as incentives to encourage reading. Classroom activities may include a period in which questions suggested by readings may be brought up and the answers searched out in the science books in the room library. This will give the students a chance to evaluate the opinions of different authors and to arrive at logical conclusions for themselves.

The teacher may budget class time in order to give as much emphasis as possible to those phases which arouse greatest interest. A useful guide in making choices is enthusiasm. What the teacher and students are enthusiastic about certainly will stimulate interest and curiosity. The teacher with a keen interest in scientific literature needs only to plan ways to let his enthusiasm show to have his students hunting more things

⁵Brown, Clyde, "Reading in Science as a Means of Improving the Junior High School Program." The Science Teacher, XXI (1954), 281.

to read. Enthusiasm is contagious and will spread. Such an old but effective trick as telling the most exciting or appealing bit of the book and then leaving the listener "cliff hanging" full of interest and anxiety to know what comes next, has motivated the reading of books. Teachers who make their own curiosity clear and contagious and sometimes start an assignment with, "The other day I was reading" rather than, "Read this chapter and hand in a report tomorrow." are motivating good reading.⁶

Newspapers, magazines, and pamphlets are a constant source of current news items and up-to-date information interesting to science students. These can give rise to lively class discussions or individual reports. Students may be encouraged to write critical reviews of articles and books read. These may be placed on the bulletin board or in files. Practically every textbook lists supplementary sources of material which will add interest to the subject matter being studied. These lists should be called to the attention of the students.

"Youth turns naturally to books and reading for satisfactions which they bring. His curiosity concerning all manner of things, his eagerness to share in the experiences of others, and his need to escape from his own limited environment lead him to find in books food for the mind and spirit. Through his reading he finds a deeper significance to life, since books bring fresh territories, a different and wider view, the life of the world as it was and as it is now. Through their pages he is presented with a diversity of human experiences and comes to respect other ways of thought and living."⁷

⁶Tozier, Virginia, "What Motivates Secondary School Reading?" Wilson Library Bulletin, XXX (1955), 168.

⁷Long, Harriet, Rich the Treasure. Chicago: American Library Association, 1953, 116.

PART II

SELECTING SCIENCE BOOKS

Too often the smallest amount of money in school budgets is allotted to books. Yet, a well selected library made use of by teachers and students is perhaps the best single incentive to better teaching. And, the better the teaching, the more reading and research are utilized. These call for reference books and supplementary materials which are adequate.

The science library should be an integral part of every science room. While it need not be elaborate, it should be well chosen, well organized, and accessible at all times. The eager curiosity of youth and the variety of their interests and hobbies necessitate the careful selection of informational materials. Problems of selection are concerned with accuracy and timeliness of the content, the style of presentation and general format of the book.⁸

Lately there has appeared such a flood of science and pseudo-science books that one may become quite confused in making selections for the science library. However, there have been numerous studies made concerning what young people from the first grade through high school like and dislike in books. Some conclusions from these studies are as follows:

1. "There is a time when a child collects facts as at other times he collects buttons and marbles. A good science book should tell straight

⁸Jackson, William N., "Reflective Thinking as a Purpose in High School Science." The Science Teacher, XXII (1955), 275.

facts." Children read factual material extensively and would read more if it were presented in a suitable and attractive form. Boys are interested in books on invention and construction. Girls are interested in learning more about themselves and in biographies.

2. Youth is inquisitive. One of the chief characteristics of a true scientist is his inquisitiveness. We must encourage and nurture this quality.

3. Youth possesses imagination. Imagination has been responsible for some of our greatest scientific discoveries.

4. Youth is skeptical. Healthy doubting should be encouraged. The scientist is skeptical of hastily drawn conclusions. He needs to prove by experimenting.

5. Youth likes to do things, to manipulate gadgets. Science is a good field for tying hand and head together. Students should have a chance to try experiments of their own.

6. Youth likes to be shown. Some children turn to reading for an interpretation of the world they live in rather than for emotional satisfaction.

7. Young people are hero worshipers. They can be inspired by such heroes as Galileo, Lavoisier, Pasteur, Bell, Madam Curie, and George Washington Carver.

8. Youth is stimulated by challenges of adventure. Most geographical frontiers have been penetrated but there remains the greatest frontier of all, the frontier of science, which has only begun to be explored.⁹

⁹Baker, Woolford, "Conspiring to Inspire Through the Teaching of Science." The Science Teacher, XX (1953), 274-75.

There are a number of sources to which the teacher may turn for assistance in selecting books. One of these is a project of the American Association for the Advancement of Science. This organization is sponsoring the Graveling Science Library, a project started in 1955 to help bolster the library facilities of high schools in small communities. A collection of 150 books divided into six units of twenty-five each was circulated. These were adult books but all could be read and understood by persons with little or no science background. The books were predominately biographies, autobiographies, history of science, and books on applied science. For the most part, science in action books were selected because they appear to have most student appeal.

The program was developed and the books selected with the advice and suggestions of the United States Office of Education, the National Education Association and its affiliated organizations, the New York Public Library, and over 350 scientists, science teachers, and librarians. A grant from the National Science Foundation supported the program.¹⁰ During 1956-57 the Traveling Library was enlarged to 200 books, 112 of the original titles and 88 new ones being circulated to 104 schools. The books are used for two months in each school and during the summer will be used at the institutes for science and mathematics teachers being sponsored by the National Science Foundation.

The American Association for the Advancement of Science, with the co-operation of the National Science Foundation, late in 1957 will publish a basic list of science and mathematics books for high school libraries and other libraries used by young people. The titles in the

¹⁰"Traveling Libraries: Stimulating High School Students' Interest in Science." Chemical and Engineering News, XXXIII (1956), 5,646.

proposed list will include the kinds of books in the Traveling Library as well as standard reference books, natural history keys and field guides, and a selected group of basic textbooks. The list will be based on the many suggestions made by individuals and representatives of organizations, and will be compiled by a small committee of specialists in the teaching of science and mathematics, library supervisors, and others. Such a list will meet a need frequently mentioned by school officers, teachers, and librarians.¹¹

In 1945, the University of Chicago Graduate School organized The Center for Children's Books. The purpose of the center is, "To analyze and evaluate current books for young people (first grade through high school) in terms of the needs of readers in schools and public libraries and to make this information available to adults working with children." About 75 per cent of such books issued each year are so evaluated. A report, Bulletin of the Children's Book Center, is issued each year. All books reviewed, whether recommended or not, are listed with critical annotations indicating strengths or weaknesses, uses of the books, and suitable grade level. The subscription price of the publication is \$2.50 for eleven issues.¹²

The American Library Association issues a yearly supplement to its original bulletin in which much helpful information is included. The Wilson Library Bulletin also is available. Journals and magazines also list new books along with critical reviews. Some of these sources are Junior Libraries, The Science Teacher, The American Biology Teacher,

¹¹Deason, Hilary J., "Traveling High School Libraries." The Scientific Monthly, LXXXIII (1956), 305.

¹²"The Center for Children's Books at the University of Chicago." School Libraries, V (1956), 19.

The Journal of the National Education Association, The Journal of the Oklahoma Education Association, and many others.

In order to encourage the building up of school libraries, the State of Oklahoma allows one-half cent per pupil per day of attendance for the purchase of trade books. These books are selected from a list drawn up annually by the State Board of Education. There are on this list a large number of very worthwhile science books each year.¹³

It may be seen that using supplementary science books entails selecting books which will fill the needs of the students. Then, because there is so much more to science than just providing a ready answer to questions, the students must be assisted in making appropriate use of the information to stimulate rather than stifle his interest; to lead to action rather than substitute for it; and to encourage curiosity, questioning, and experimentation.

"A science book should possess the attributes of a well designed puzzle. It should be hard to master, but not too hard, for in that case it will be rejected before it awakens the imagination necessary to master it."¹⁴

¹³Smart, Jake, "Oklahoma School Library Book Lists." Oklahoma Librarian, VI (1956), 6.

¹⁴Larrick, Nancy, "Making the Most of Children's Interests." Education, LXXIII (1953), 224.

PART III

SUGGESTED CHOICES FOR THE LIBRARY

A good science library takes a long time to build, but it does build as books are added. The following list, therefore, is but a suggestion. The books included here are fairly representative but in no sense a complete collection. They have been chosen from the various sources mentioned previously, from the lists included in numerous textbooks, and from suggestions made by teachers. Most of the books are recent. Some may already be in the school library for they are older books which by their appeal have continued to be popular.

Books for both the junior-high and senior-high level have been included. Those best suited for junior high are marked with a "j", while those best for senior high are marked "s". Those books especially recommended are marked with an "*".

Astronomy

- *js Adler, Irving. The Stars. New York: The John Day Company, 1956, \$2.95.
- *j Brindze, Ruth. Story of Our Calendar. New York: Vanguard Press, Inc., 1949, \$2.50.
- *js Hood, Peter. How Time Is Measured. New York: Oxford University Press, 1954, \$1.95.
- *j Jeans, James. Mysterious Universe. New York: Macmillan Company, 1931, \$2.25.
- *j Reed, William M. The Stars For Sam. New York: Harcourt, Brace and Company, 1933, \$2.75.
- j White, Anne Terry. All About The Stars. New York: Random House, 1954, \$1.95.

- *j Wilkins, H. Percy. Clouds, Rings and Crocodiles. Boston: Little, Brown and Company, 1956, \$3.00.

Aviation

- j Cooke, David C. How Airplanes are Made. New York: Dodd, Mead and Company, 1956, \$1.75.
- j Langewiesche-Brandt, Wolfgang. Stick and Rudder. New York: McGraw-Hill Book Company, 1951, \$5.00.

Biography

- *js Baker, Rachel. The First Woman Doctor. New York: Messner, Inc., 1944, \$2.50.
- *js Beaty, John Y. Luther Burbank: Plant Magician. New York: Messner, Inc., 1943, \$2.50.
- *j Burlingame, Roger. Whittling Boy, The Story of Eli Whitney. New York: Harcourt, Brace and Company, 1941, \$3.00.
- *j Cottler, Joseph, and Haym Jaffee. Heroes of Civilization. Boston: Little, Brown and Company, 1947, \$3.00.
- *s Dobell, Clifford. Anthony van Leeuwenhoek and His Little Animals. New York: Harcourt, Brace and Company, 1932, \$7.50.
- *s German, William McKee. Doctors Anonymous. Toronto: Blue Ribbon Books, 1944, \$1.39.
- *js Graham, Shirley, and George D. Lipscomb. George Washington Carver; Scientist. New York: Messner, Inc., 1944, \$2.50.
- *j Hogeboom, Amy. Audubon and His Sons. New York: Lathrop, Lee and Shephard Company, 1956, \$3.00.
- *s Iltis, Hugo. Life of Mendell. New York: W. W. Norton and Company, 1932, \$5.00.
- *s Kieran, Margaret, and John Kieran. John James Audubon. New York: Random House, 1954, \$1.50.
- *s Manton, Jo. The Story of Albert Schweitzer. New York: Abelard-Schuman, Inc., 1955, \$2.00.
- *s Peattie, D. C. Green Laurels. New York: Simon and Schuster, Inc., 1937, \$3.75.
- *j Pratt, Fletcher. Famous Inventors and Their Inventions. New York: Random House, 1955, \$2.75.
- *s Robinson, Mabel L. Runner of the Mountain Tops: The Life of Louis Agassiz. New York: Random House, 1939, \$3.35.

- *j Sootin, Harry. Isaac Newton. New York: Julian Messner, Inc., 1955, \$2.95.
- *js Thomas, Henry, and Dana Lee Thomas. Living Biographies of Great Scientists. Garden City: Garden City Publishing Company, 1941, \$1.98.

Botany

- *s Allen, Durward L. Our Wildlife Legacy. New York: Funk and Wagnalls Company, 1954, \$6.00.
- *js Collingwood, George Harris. Knowing Your Trees. Washington, D.C.: American Forestry Association, 1945, \$2.50.
- *j Du Puy, William A. Our Plant Friends and Foes. Philadelphia: J. C. Winston Company, 1948, \$1.52.
- *s Guilcher, J. M. The Hidden Life of Flowers. New York: The Philosophical Library, 1954, \$4.75.
- *js Hausman, Ethel (Hinckley). Beginner's Guide to Wild Flowers. New York: G. P. Putnam's Sons, 1948, \$3.50.
- *s McKay, H. Easy Experiments with Plants. New York: Oxford University Press, 1938, \$.75.
- *s Platt, Rutherford. Our Flowering World. New York: Dodd, Mead and Company, 1956, \$6.00.
- *js Stefferud, Alfred. The Wonders of Seeds. New York: Harcourt, Brace and Company, 1956, \$2.75.
- *js Wherry, Edgar T. Wild Flower Guide. New York: Doubleday and Company, Inc., 1948, \$3.00.
- s Zim, Herbert S., and A. C. Martin. Flowers, A Guide To The Familiar American Wildflowers. New York: Simon and Schuster, Inc., 1950, \$1.50.

Chemistry

- *j Morgan, Alfred Powell. Simple Chemical Experiments. New York: Appleton-Century-Craft, Inc., 1941, \$2.75.
- j Baker, R. Ray. So That's Chemistry. Philadelphia: The Peter Reilly Company, 1940, \$1.00
- *j Freeman, Ira. All About The Wonders of Chemistry. New York: Random House, 1954, \$1.98.

Conservation

- *js Blough, Glenn O. Not Only for Ducks - The Story of Rain. New York: Whittlesey House, McGraw-Hill Book Company, Inc., 1948, \$2.25.
- *js Peterson, Roger Tory, and James Fisher. Wild America. Boston: Houghton Mifflin Company, 1955, \$5.00.
- *js Van Dersal, William R., and Edward H. Graham. Land Renewed, The Story of Soil Conservation. New York: Oxford Book Company, 1946, \$2.00.
- *js _____. Water For America. New York: Oxford University Press, 1956, \$3.50.

Electronics, Radio, and Television

- *j Bendick, Jeanne. Electronics For Young People. New York: Whittlesey House, McGraw-Hill Book Company, Inc., 1955, \$2.75.
- j _____, and Robert Bendick. Television Works Like This. New York: Whittlesey House, McGraw-Hill Book Company, Inc., 1954, \$2.25.
- *s Hyde, Margaret O. Atoms Today and Tomorrow. New York: McGraw-Hill Book Company, Inc., 1955, \$2.50.
- *j Morgan, Alfred. The Boy's First Book of Radio and Electronics. New York: Charles Scribner's Sons, 1954, \$2.75.
- j Zimm, Herbert S. Things Around The House. New York: William Morrow and Company, 1954, \$1.75.

General Biology

- *s Asimov, Isaac, and William C. Boyd. Races and People. New York: Abelard-Schuman, 1955, \$2.75.
- *s Beebe, William. Book of Boys. New York: Harcourt, Brace and Company, 1942, \$3.50.
- *s Brown, Vinson. The Amateur Naturalists' Handbook. Boston: Little, Brown and Company, 1948, \$3.50.
- *js Buchsbaum, Ralph M. Animals Without Backbones. Chicago: University of Chicago Press, 1938, \$3.75.
- *j Comstock, Anna Botsford. Handbook of Nature Study. Ithaca: Comstock Publishing Company, 1939, \$5.00.
- *j Cruikshank, Helen G. Wonders of the Bird World. New York: Dodd, Mead and Company, 1956, \$2.50.
- *s Ditmars, Raymond Lee. Snakes of the World. New York: Macmillan Company, 1931, \$2.95.

- *js Dudley, Ruth. Sea Shells. New York: The Thomas Y. Crowell Company, 1953, \$2.00.
- *js Edell, May. Story of Our Ancestors. Boston: Little, Brown and Company, 1955, \$3.00.
- *s Goldman, Irving, and Hannah Goldman. First Men: The Story of Human Beginnings. New York: Abelard-Schumann, 1955, \$3.00.
- *js Hegner, Robert, and Jane Hegner. The Parade of the Animal Kingdom. New York: The Macmillan Company, 1935, \$5.00.
- *s Fairchild, David. The World Was My Garden, Travels of a Plant Explorer. New York: Charles Scribner's Sons, 1938, \$3.75.
- *j Lauer, James. The Young Collector's Book. New York: Simon and Schuster, 1956, \$2.75.
- *js Lucus, Jannette M. Man's First Million Years. New York: Harcourt, Brace and Company, 1941, \$2.50.
- *js Macon, T. T., and E. B. Worthington. Life in Lakes and Rivers. New York: Frederick A. Praeger, Inc., 1954, \$4.50.
- s Matschat, Cecile. American Butterflies and Moths. New York: Random House, 1942, \$1.75.
- *js Moore, Clifford B. Ways of Mammals In Fact and Fancy. New York: Ronald Press Company, 1953, \$3.50.
- *s Moore, Ruth E. Man, Time and Fossils. New York: Knopf, Inc., 1953, \$5.75.
- js Morgan, Ann Haven. Field Book of Ponds and Streams. New York: G. P. Putnam's Sons, 1930, \$3.50.
- *js Peterson, Roger Tory. Junior Book of Birds. Boston: Houghton Mifflin Company, 1939, \$2.00.
- *js Platt, Rutherford. The River of Life. New York: Simon and Schuster, 1956, \$5.00.
- *s Pope, Clifford H. Reptile World. New York: Knaff Inc., 1955, \$7.50.
- *j _____. Snakes Alive. New York: The Viking Press, 1946, \$3.50.
- *j Teale, Edwin Way. Grassroot Jungles, A Book of Insects. New York: Dodd, Mead and Company, 1944, \$3.75.
- *j _____. The Junior Book of Insects. New York: E. P. Dutton and Company, Inc., 1953, \$3.75.
- *j Zimm, Herbert S. Dinosaurs. New York: William Morrow and Company, Inc., 1954, \$2.00.
- *j _____. Your Senses and How They Work. New York: William Morrow and Company, 1956, \$2.00.

Genetics

- *j Altenberg, Edgar. How We Inherit. New York: Henry Holt and Company, Inc., 1928, \$2.40.
- *s Scheinfeld, Amram. The New You and Heredity. Philadelphia: J. B. Lippincott Company, 1950, \$5.50.

Geology and Geography

- *j Raisz, Erwin. Mapping The world, Mother Earth's Portrait. New York: Abelard-Schuman, 1950, \$5.00.
- *j Reed, William Maxwell. The Earth for Sam. New York: Harcourt, Brace and Company, 1930, \$3.75.
- js Schneider, Herman, and Nina Schneider. Rocks, Rivers and the Changing Earth. New York: Scott, Torssman and Company, 1952, \$3.00.
- *j Zimm, Herbert S., and Elizabeth K. Cooper. Minerals; Their Identification, Uses, and How To Collect Them. New York: Harcourt, Brace and Company, 1943, \$3.00.

Growth and Development

- *J Brownell, Clifford., and Jesse Williams. The Human Body and How It Works. New York: The American Book Company, 1946, \$1.52.
- *s Beck, Lester F., and Margie Robinson. Human Growth. New York: Harcourt, Brace and Company, 1949, \$2.00.
- *s De Leeuw, Adele L., and Cateau De Leeuw. Make Your Habits Work For You. New York: Farrar, Straus, 1952, \$3.95.
- *s Langdon-Davis, John. The Seeds of Life. New York: The Devin-Adair Company, 1955, \$3.50.
- s Ravielli, Anthony. Wonders of The Human Body. New York: The Viking Press, 1954, \$2.50.
- *j Schneider, Leo. You and Your Senses. New York: Harcourt, Brace and Company, 1956, \$2.75.
- *js Shippman, Katherine Binney. Men, Microscopes and Living Things. New York: The Viking Press, 1955, \$3.00.

Inspiration and Adventure

- *s Borland, Hal. High, Wide and Lonesome. Philadelphia: J. B. Lippincott Company, 1956, \$3.75.

- *j Broschart, Charles B. The Young Engineer. New York: Exposition Press Inc., 1953, \$3.00.
- s Carson, Rachel. The Edge of the Sea. Boston: Houghton, Mifflin Company, 1955, \$3.95.
- *s _____. The Sea Around Us. New York: Oxford University Press, 1951, \$3.50.
- *s _____. Under The Sea Wind. New York: Oxford University Press, 1952, \$3.50.
- s Consteau, Jacques Yves, and Frederick Dumas. The Silent World. New York: Harper and Brothers, 1953, \$4.00.
- *js Darling, Louis. Greenhead. New York: William Morrow and Company, Inc., 1954, \$3.00.
- *s Durrell, Gerald. The Drunken Forest. New York: Viking Press, 1956, \$3.75.
- *j Fisher, Aileen. All on a Mountain Day. New York: Thomas Nelson and Sons, 1956, \$2.75.
- *s Gain, Olive Bown. World Outside My Door. New York: The Macmillan Company, 1955, \$3.50.
- *s Killeffer, D. H. Two Ears of Corn, Two Blades of Grass. New York: D. van Nostrand Company, Inc., 1955, \$4.00.
- *s Platz, Helen. Imaginations Other Place. New York: Thomas Y. Crowell Company, 1955, \$3.50.
- *js Pallack, Philip. Careers and Opportunities In Science. New York: E. P. Dutton and Company, Inc., 1954, \$3.75.
- *s Steele, Evelyn M. Careers for Girls in Science and Engineering. New York: E. P. Dutton and Company, 1943, \$2.50.
- *s Storer, John Humphries. The Web of Life. New York: The Devin-Adair Company, 1953, \$3.00.
- *js Stuart, Frank S. City of the Bees. New York: Whittlesey House, McGraw-Hill Book Company, Inc., 1947, \$3.00.
- *s Teale, Edwin Way. Autumn Across America. New York: Dodd, Mead and Company, 1956, \$5.75.
- *s _____. North With The Spring. New York: Dodd, Mead and Company, 1951, \$5.00.
- *js Turner, D. M. The Book of Scientific Discovery. New York: Frederick Ungar Publishing Company, 1953, \$3.95.
- *s Vinton, Kenneth. The Jungle Whispers. New York: Pageant Press, 1956, \$4.00. —————

- *s White, Anne. Last Worlds: The Romance of Archeology. New York: Random House, 1941, \$2.50.
- *s Williams, Jay. The Fall of the Sparrow. New York: Oxford University Press, 1951, \$3.00.
- *s Wright, Helen, and Samuel Rapport, Editors. Great Adventures In Science. New York: Harper and Brothers, 1956, \$3.75.

Physics

- *j Adler, Irving. Tools In Your Life. New York: John Day Company, 1956, \$2.75.
- j Barrow, George. Your World In Motion: The Story of Energy. Boston: Harcourt, Brace and Company, 1956, \$2.95.
- j Branley, Franklin M. Experiments in the Principles of Space Travel. New York: Thomas Y. Crowell Company, 1955, \$2.00.
- *js Burns, William A. Man and His Tools. New York: Whittlesey House, McGraw-Hill Book Company, 1956, \$2.50.
- j Huey, Edward Green. What Makes The Wheels Go Round? Boston: Harcourt, Brace and Company, 1952, \$3.00.
- *j Pallack, Philip. Your Career In Physics. New York: E. P. Dutton and Company, Inc., 1955, \$2.75.

Weather

- j Fenton, Carol Lane, and Mildred Fenton. Our Changing Weather. New York: Doubleday and Company, 1954, \$2.50.
- j Schneider, Herman. Everyday Weather and How It works. New York: Whittlesey House, McGraw-Hill Book Company, 1951, \$2.75.

Periodicals

- j Junior Natural History. American Museum of Natural History, 79th Street at Central Park West, New York 24, New York.
- *s National Geographic Magazine. National Geographic Society, 1146 - 16th Street, N. W., Washington 6, D. C.
- s Natural History. American Museum of Natural History, 79th Street at Central Park West, New York 24, New York.
- *js Nature Magazine. American Nature Association, 1214 - 16th Street, N. W., Washington 6, D. C.

- s Science Digest. Science Digest, Inc., 200 East Ontario Street,
Chicago 11, Illinois.
- s Science News Letter. Science Service, 1719 North Street, N. W.,
Washington 6, D. C.
- s Scientific American. 2 West 45th Street, New York 36, New York.
- s Scientific Monthly. American Association for the Advancement of
Science, 1515 Mass. Avenue, N. W., Washington 5, D. C.
- s The Quarterly Review of Biology. The Williams and Wilkins Company,
Baltimore, Maryland.

BIBLIOGRAPHY

Books

- Adams, Bess Porter. About Books and Children. New York: Henry Holt and Company, 1953.
- Berner, Elsa, and Mabel Sacra. A Basic Book Collection for Junior High Schools. Chicago: American Library Association, 1950.
- Long, Harriet G. Rich The Treasure. Chicago: American Library Association, 1953.
- McConnell, Marion L., Editor. Standard Catalog for High School Libraries. New York: The Wilson Company, 1956.
- Williams, Alice Marietta. Children's Choices In Science Books. New York: Teacher's College, Columbia University, 1939.

Articles

- Baker, Woolford B. "Conspiring to Inspire Through the Teaching of Science." The Science Teacher, XX (1953), 273-76, 309-10.
- Blough, Glenn O. "Using Nature Literature in School Programs." The Science Teacher, XVI (1949), 67-8, 92.
- Brown, Clyde M. "Reading in Science As a Means of Improving the Junior High School Program." The Science Teacher, XXI (1954), 281-83.
- Chutte, Marchette. "Lifetime Reading Habits." Wilson Library Bulletin, XXX (1956), 619-20.
- Cordell, Anthony. "Answering Children's Questions Through Science Experiences." School Science and Mathematics, XLIX (1949), 395-401.
- Davis, E. Louise. "New Spring Books for Children." Junior Libraries, VIII (1956), 1-44.
- Deason, Hilary J. "Traveling High-School Science Libraries." The Scientific Monthly, LXXXIII (1956), 300-306.
- Denslow, Cornelius. "What Happens If-?" The Science Teacher, XXIII (1956), 385-87.
- Gardner, John. "Wonder." NEA Journal, XLVI (1957), 73-74.

- Hurley, Beatrice J. "Science Experiences for Nine to Twelve." Childhood Education, XXVI (1950), 300-303.
- Jackson, William N. "Reflective Thinking as a Purpose in High School Science." The Science Teacher, XXII (1955), 273-76.
- Larrick, Nancy. "Making the Most of Children's Interests." Education, LXXIII (1953), 523-31.
- Niles, Olive S., and Margaret J. Earley. "Give Them a Reason for Reading." Journal of Education, CXXXVI (1954), 102-104.
- Ort, Lorrene L. "Reading Is Catching When You Know Their Dreams, Interests." Clearing House, XXV (1950), 242-244.
- Roos, Jean C. "Help Youth Over The Threshold." Junior Libraries, II (1956), 1.
- Smart, Jake. "Oklahoma School Library Book Lists." Oklahoma Librarian, VI (1956), 6, 18.
- Stauffer, D. C. "Book a Week Habit." Scholastic, LXIX (1957), 6-7.
- Statler, Donald W. "Junior High School Level Science." The Science Teacher, XXIII (1956), 233-236.
- "The Center for Children's Books at the University of Chicago." School Libraries, V (1956), 19.
- Tozier, Virginia. "What Motivates Secondary School Reading?" Wilson Library Bulletin, XXX (1955), 166-198.
- "Traveling Libraries: Stimulating High School Students' Interest In Science." Chemical and Engineering News, XXXIII (1956), 5646.
- Zim, Herbert S. "Science Learning Through Books." The Science Teacher, XXVII (1950), 114-116.

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