

DOCUMENT RESUME

ED 076 642

TM 002 647

AUTHOR Cohen, Stuart J.
TITLE The Effect on One's Own Performance of Evaluating Peers.
PUB DATE 1 Mar 73
NOTE 23p.; Paper presented at Annual Meeting of American Educational Research Association (New Orleans, Louisiana, February 25-March 1, 1973)
EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Criterion Referenced Tests; *Evaluation Techniques; Males; *Peer Groups; Research Methodology; Secondary Grades; Speeches; *Student Evaluation; *Test Construction

ABSTRACT

Fifty-three high school males took a minicourse on library usage. All were randomly assigned a topic and given response sheets requiring the use of dictionaries, encyclopedias, periodicals, and books. In a discussion session, all received instructional handouts. Students were assigned either to evaluating two peers' pretests (experimental) or researching two new topics (control). New topics were randomly assigned for the posttest. Both groups mastered 50 percent more objectives on the posttest than on the pretest. No significant differences between the gains for the two groups were found. Evaluating a peer's work was as effective as performing additional tasks. (Author)

FORM 8510

PRINTED IN U.S.A.

ED 076642

THE EFFECT ON ONE'S OWN PERFORMANCE
OF EVALUATING PEERS¹

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

Stuart J. Cohen, University of Toledo

Fifty-three high school males took a minicourse on library usage. All were randomly assigned a topic and given response sheets requiring the use of dictionaries, encyclopedias, periodicals, and books. In a discussion session, all received instructional handouts. Students were randomly assigned either to evaluating two peers' pretests (experimental) or researching two new topics (control). New topics were randomly assigned for the posttest. Both groups mastered 50 percent more objectives on the posttest than on the pretest. No significant differences between the gains for the two groups was found. Evaluating a peer's work was as effective as performing additional tasks.

TM 002 642

¹Paper presented at the annual meeting of the American Educational Research Association, New Orleans, March 1, 1973.

THE EFFECT ON ONE'S OWN PERFORMANCE
OF EVALUATING PEERS²

Stuart Cohen, University of Toledo

In recent years, the trend in education has been toward greater individualization of instruction. Along with this development has been the concomitant focus on behavioral objectives, mastery learning, criterion-referenced measurement, and formative evaluation (see, for example, Bloom, Hastings, and Madaus, 1971 or Block, 1971). The likelihood that school systems will shift from a norm-referenced screening approach to an individualized, diagnostic, criterion-referenced approach is not only a function of sound theory and practice but also a function of the ease with which these approaches can be incorporated into current school practice and the defenses which teachers and administrators can build against them.

Time has always been a valuable commodity in education. Any innovation which greatly increases the teacher's effort is not likely to become common practice. One reason that many teachers eschew greater individualization of instruction is the geometric increase in evaluation that the approach necessitates. Instructional individualization also requires an effective assessment system. However, the teacher does not have to be the person evaluating pupil performance. Peer evaluation is relatively easy, especially when the assessment instruments require nothing more than selection among constructed alternatives such as multiple-choice format. Peer evaluation can also be performed quickly

²The author would like to thank Robert Bolger, his English classes, and the staff of St. John's High School for their cooperation.

and accurately even when students must construct their own responses so long as the instruments are criterion-referenced with clearly measurable criteria. One possible objection that may arise to the notion of peer evaluation is the belief that this evaluation wastes the student's time. Presumably, this time could be more productively spent in additional learning activities. The untested assumption is that peer evaluation is not a learning variable.

The major objective of this study was to examine the effect of evaluating peers on one's own performance. An ancillary objective was to demonstrate that peer evaluation can be utilized even when the objectives require complex, student constructed responses.

METHOD

Subjects

Fifty-three high school freshman with no prior formal instruction in the use of the library were the subjects. Twenty-three were in one English class and the remaining were in an other English class taught by the same teacher.

Procedure

Each student was randomly assigned a topic from a pool of 70 topics. The topic pool was developed by the teacher and contained such topics as: the moon, Moslems, President Truman, etc. (see Appendix A for the complete list). In each class, students selected from a box a slip of paper containing one of the topics. Any topic in the pool could be selected for the pretest; however, once a topic was selected, it was not replaced in the pool and new items were drawn for the posttest.

After all the students in the class had drawn a topic, they went to the school library with instructions to build a bibliography following a mimeographed handout (see Appendix B). The handout required skills to be demonstrated in four major areas: use of dictionary, use of encyclopedia, use of magazines and periodicals, and use of books. For example, under the heading entitled "Dictionary" eight objectives were required. "The student will write out the following: 1. Definitions from two different dictionaries; 2. Underline the preferred definition; 3. Give the name of the dictionaries used; and 4. Give the page numbers on which the definitions were found." A maximum of 58 different objectives could be accomplished for any one topic. At the end of the class period, the teacher collected the pretest results for each class.

The day after the pretest, all students received a handout detailing the use of the card catalog, reference books, and the "Reader's Guide to Periodical Literature" (see Appendix C). Students were instructed to read the handout after which all questions concerning either the handout or the use of the library were answered.

On the third day, all students were given a 58 item check list which corresponded to the 58 objectives being sampled on the pretest (see Appendix D). Also on the third day, students in each class were randomly assigned to either the peer evaluation group (experimental) or to an additional topic group (control). The evaluation group was assigned one half of the pretests and told to use the library and evaluation sheets to score the result of the peer whose paper they had received. For each class, the control group was randomly assigned a new topic from the pretest topic pool. The control group procedure for the new topic was identical to the pretest.

The procedure for day four was identical to day three. No one in the experimental group was allowed to evaluate his own pretest. No one in the control group was allowed to research the same topic twice.

On the fifth day all students in each class randomly selected a new topic from the posttest pool and followed the same procedure as during day one. Day five results on the posttest were evaluated by the teacher.

RESULTS

Since there were no significant differences in the number of objectives mastered on the pretest by the two classes, data for both classes was pooled. The mean number of objectives mastered by the experimental group on the pretest was 25 and for the control group was 25.5. The mean number of objectives mastered on the posttest for the experimental group was 37.5 and for the control group was 40.5. Both groups had more than a 50 percent gain in the number of objectives mastered between the pretest and posttest. A correlated t-test revealed no significant differences between the groups in the magnitude of the gains made. In other words, performing the additional learning exercised produced no significantly greater gain than evaluating peer work.

CONCLUSIONS

Many teachers assign numerous exercises to students that require drill on the same skill believing that the added practice will enhance student performance. Yet these same teachers might regard student effort spent in evaluating peers as a waste of time. On the other hand, some teachers have utilized peer evaluation in an effort to reduce their own work load and at the same time have assumed that peer evaluation is an aid to learning.

This exploratory study of the effect of peer evaluation may lend support to both positions. This study indicates that gains in performance can accrue both from working on additional tasks and from peer evaluation. However, peer evaluation did not produce significantly superior performance.

An interesting finding about the effectiveness of peer evaluation of a complex, constructed response resulted from a random check of the accuracy of a sample of the peer evaluations by the teacher. In not ~~one case did a peer evaluator incorrectly evaluate a peer's performance.~~

The most promising conclusion from this study was that using criterion-referenced measurement, the students were able to assess without error objectives requiring student-constructed responses, thus saving valuable teacher time and also enhancing their own performance.

References

Block, J. H. (Ed.) Mastery Learning: Theory and Practice. New York: Holt Rinehart and Winston, 1971.

Bloom, B. S., Hastings, J. T., and Madaus, G. F. Handbook on Formative and Summative Evaluation of Student Learning. New York: McGraw-Hill, 1971.

APPENDIX A

TOPICS

Abortion	Hammarskjold
Adoption	Heroin
Advertising	Hiroshima
Air Pollution	Horseracing
Alaska	Ignatius Loyola
Antarctic	Impressionistic Art
Archery	Income Tax
Architecture	Incense
Argentina	Indians (American)
Astronaut	Inflation
Automobile	Kennedy, J. F.
Aztec	Lion
Bach	Marijuana
Bacteria	Moon
Beethoven	Moslem
Boston	Mount Everest
Cairo	Nationalism
Chicago	Northern Ireland
Coal Mining	Oil
Coffee	Pelican
Columbus, C.	Perfume
Computer	Planets
Conservation	Police
Conservatives (politics)	Prisons
Cosmetics	Radiation (radioactive)
Crime Prevention	Rocketry
DeGaulle, C.	Russian Government
Divorce	Sculpture
Earthquakes	Shakespeare
Eisenhower	Skiing
Flag	Sun
Folkmusic	Vaccine
Glass	Vietnam
Guerilla Warfare	Violins
Guitar	Vitamins

APPENDIX B

Given a topic the student will be able to develop a bibliography which includes the following:

1. **DICTIONARY:** The student will write out the following:
 1. Two definitions (each from a different dictionary.)
 2. Underline the preferred definition.
 3. Give the names of the dictionaries used.
 4. Give the page numbers on which the definitions are found.
-

2. **ENCYCLOPEDIA:** The student will list the location of information dealing with his assigned topic from two encyclopedias. The information will include the following:
 1. Name of the encyclopedia
 2. Volume number
 3. Page number (s)

3. MAGAZINES and PERIODICALS: The student will locate four different magazines dealing with his assigned topic, and describe each in terms of:

1. Name of magazine
2. Title of article (if any)
3. Volume number
4. Page(s) number
5. Author (if listed)
6. Date of magazine

4. BOOKS: The student will be able to find two books dealing with his assigned topic, and he will list the following information:

1. Name of author
2. Title of book
3. Date of publication
4. Place of publication
5. Number of pages
6. Dewey decimal system number
7. Illustrator (if any)
8. Whether the book has an index
9. Page(s) on which information dealing with your topic is found.
10. Name of publisher

APPENDIX C³

RE: REFERENCE BOOKS

The term "reference book" has come to mean a specific kind of publication which has been planned and written to be consulted for items of information rather than read throughout. It contains facts that have been brought together from many sources and organized for quick and easy use, either in an alphabetical or chronological arrangement or by the use of detailed indexes and numerous cross references.

If a student is to use reference books effectively and advantageously, he must develop a facility in using them independently. He acquires this facility as he learns what reference books are, the kinds that are available, the types of questions each kind will answer, and how each is arranged.

There are two types of reference books: (1) those which contain the needed information, such as dictionaries, atlases, etc.; and (2) those which tell the user where the information can be found, such as indexes, bibliographies, and directories.

Each kind of reference book is designed to do specific things. In theory, a given reference book does the specific things it is planned to do better than any other reference work; thus it should be consulted first for the kind of information that it covers, even though other reference books may include the same kind of information. E.g., a dictionary or an encyclopedia may give information about a geographical location, but a gazetteer, which is designed for the sole purpose of providing information about geographical names and places is the first place to look for information concerning a geographical location.

The kinds of general reference books, the purposes they serve, and examples of each kind are listed below:

1. A dictionary provides information about WORDS--meaning, derivation, spelling, pronunciation, syllabication, usage, and current status.

e.g. Oxford English Dictionary: Webster's New International

Related terms: VOCABULARY: a work in which only a few words, a small part of those belonging to a subject, are given, or when those words are only partially explained.

³This handout was compiled by the library staff of St. John's High School for use in their own library.

GLOSSARY: A list of explanations of technical words and expressions in some particular subject or book.

2. An **ENCYCLOPEDIA** is concerned with subjects. It gives an overview of a topic, including definition, description, background, and bibliographical references.

e.g. Encyclopedia Britannica; Encyclopedia Americana

3. An **INDEX** points out where information is found. There are indexes to articles which appear in periodicals and there are indexes to articles which appear in collected works. An index does not provide the information which is sought; it indicates where it can be found.

e.g. Reader's Guide to Periodical Literature; Essay and Gen'l Lit. Index

Related terms:

PERIODICALS: by the end of the 18th century, the term was applied to all regularly issued publications except newspapers.

MAGAZINE: a "storehouse". The word "magazine" referred at first to content only; it now includes form also, and means a collection of miscellaneous stories, articles, essays and poems, and illustrations appearing at regular intervals.

JOURNAL: has come to mean any publication which contains news or material of current interest in any particular field.

Note: the above three words are often used interchangeably.

NEWSPAPERS: developed from the 17th century "broadside", which was a single large page printed on one side only.

ANTHOLOGY: the original use of this word to mean a volume containing only the "flower" of literature has been extended to mean any collection of extracts from the writings of various authors--often on one subject or of one kind, such as a collection of poems, essays, etc.

4. A **YEARBOOK**, often called an **ANNUAL**, presents the events of the past year in brief, concise form.

Types:

Encyclopedia Annuals bring an encyc. up to date, are comprehensive in coverage and give a summary all the major events of the preceding year.

e.g. Britannica Book of the year.

ALMANACS: which were originally calendars of months and days with special dates and anniversaries, forecasts of the weather, and astronomical calculations, are now collections of miscellaneous facts and statistics. e.g. Information Please Almanac

DIRECTORIES: which list persons or organizations in alphabetical or classed arrangements, include addresses and affiliations for individuals and officers and other data for organizations. e.g. N.W. Ayer & Son's Directory of Newspapers and Periodicals.

5. A HANDBOOK (literally a small book which can be held in the hand) is a volume which treats broad subjects in brief fashion. It may include odd bits of information about a variety of topics.

Types:

- MANUALS: which give information and instruction on, or serve as guides to, occupations, hobbies, art forms, trades, etc.
- MISCELLANIES: which include bits of unusual and hard-to-find information on various subjects
- COMPENDIUMS: which provide brief but comprehensive summaries of a subject
- COMPANIONS: which explain and interpret various aspects of a subject
- DIGESTS: which present in condensed form information that is classified and arranged under proper headings or titles; e.g., digests of articles from periodicals, or digests of the plots of novels, etc. e.g. BOOK REVIEW DIGEST

6. An ATLAS has come to mean any volume containing not only maps-- a representation, usually flat, of the earth's surface or a part of it or of the celestial sphere or a part of it--but also plates, engravings, charts and tables with or without descriptive text. A historical atlas is a collection of modern maps--not a collection of old maps--which delineates past events or periods of history.

7. A GAZETTEER is a dictionary of geographical places. In addition to geographic location, it gives historical, statistical, cultural, and other relevant information about these places; e.g. pronunciation.

8. A BIOGRAPHICAL DICTIONARY is a collection of sketches of varying lengths about the lives of individuals, arranged alphabetically by surname.
e.g. Who's Who New Century Cyclopedia of Names DAB DNB

Related terms:

- AUTOBIOGRAPHY: the narration of a person's life by himself
- MEMOIRS: the history of his times as seen by the individual who writes them
- DIARY: a day-by-day account of the happenings and events in a person's life, recorded by that person
- LETTERS: written communications of a personal nature, which may be intimate narratives, records of events, or expressions of the writer's thoughts and philosophy

- N.B. The student who seeks material on a country, a civilization, or a period of history will do well to include in his search and investigation of the lives of outstanding persons who were a part of that country or period, even though individual biography is not considered reference material.

There are two kinds of books here:

- (1) Biographical indexes, which point out where information can be found
- (2) Biographical dictionaries, which contain the information sought.

Learn which biographical dictionaries will provide you with that information. You should ask yourself (establish) some facts about a person before you try to find him in an individual dictionary, viz.,

- (1) His dates of birth and death, if he is not living
- (2) His nationality, and (3) His profession or occupation.

9. A BIBLIOGRAPHY is a list of books and other materials which have some relationship to each other. The materials listed are described as to author, title, publisher, price, and number of pages. In some bibliographies the materials are evaluated.

e.g. CBI Bibliography of Bibliographies Winchell's Guide

Related meanings:

1. It's the systematic description of groups of books, mss., and other publications as to authorship, title, edition and imprint.

Bibliographies are useful sources for any search for material on a subject.

1. They locate material on the subject in question.
2. They provide a means of verifying author's name; complete title; etc., which are needed for bibliographies of papers which you write.
3. If they are annotated, they indicate the scope of the subject and the manner in which it is treated; the annotation could also contain a critical evaluation of the work and its usefulness.
4. They point out material, including parts of books, which cannot be analyzed (found) in the card catalog.
5. They group works according to form, location, and period.

THE READER'S GUIDE TO PERIODICAL LITERATURE

Magazines contain short, interesting, contemporary or up-to-date articles and cover all kinds of subjects. Their timely, diversified viewpoint, and fund of material which has never been published in book form are some of the advantages of using magazines. They are an excellent supplement to books.

Magazine indexes provide a means of finding particular articles or subjects quickly. Just as the Card Catalog tells us what
WHERE TO LOOK books the library has, the (abridged) READERS' GUIDE TO PERIODICAL LITERATURE tells us what magazine articles are available on any subject. At the present time, the guide indexes about (40) 120 magazines. It is published frequently and cumulated at intervals.

The READER'S Guide is arranged in the same way as the Card Catalog, with all the authors, and subjects of articles it indexes arranged
WHAT YOU FIND alphabetically. Sometimes subjects entered in the guide are so large that they have to be broken up into parts called divisions and subdivisions. In addition to listing articles on specific subjects, it furnishes a key to individual poems, short stories, and reviews of plays, motion pictures and some book reviews

which have appeared in magazines. (Other reviews of books can be found by using the Book Review Digest). For each article listed, the index supplies the name of the author (if known), the title of the article, the name of the magazine, volume number (before the colon), the pages on which the article may be found (after the colon), and the date of the magazine. The names of magazines are abbreviated in these entries to save space, also the name of months and other terms are abbreviated. All abbreviations used in the READERS' GUIDE are explained in the front of each issue. One list gives the abbreviation and full name of each magazine indexed. The other list explains all other abbreviations used.

For current topics or latest data on any subject, begin with the latest paperbound number and then work back systematically.

HINTS FOR USING For material on a subject connected with a certain date or limited to a brief period of time, consult first the volumes of the index covering that time, looking in others if necessary. For your own information copy the complete entry on a separate card. In asking for a magazine, copy accurately, on the slips provided for that purpose, the complete name of the magazine (consult the list of magazines in the front of the volume), volume number and complete date of the magazine. Slips must be signed before handing them to the librarian at the desk.

The abridged READERS' GUIDE TO PERIODICAL LITERATURE is one of the magazine indexes owned by the library. The Catholic Periodical Index ARE THERE OTHERS? is a similar index providing the same service.

ASK QUESTIONS!

HELP YOURSELF!

ABBREVIATIONS

*	following name entry, a printer's device	Jl	July
†	continued on later pages of same issue	jr	junior
		jt	joint author
abp	archbishop	ltd	limited
abr	abridged	m	monthly
Ag	August	mr	March
Ap	April	My	May
arch	architect	N	November
assn	association	no	number
Aut	Autumn	O	October
av	avenue	por	portrait
bart	baronet	pseud	pseudonym
bibliog	bibliography	pt	part
bibliog f	bibliographical footnotes	pub	published, publisher, publishing
bi-m	bimonthly	q	quarterly
bi-w	biweekly	rev	revised
bldg	building	S	September
bp	bishop	semi-m	semimonthly
co	company		
comp	compiled, compiler	soc	society
cond	condensed	Spr	Spring
cont	continued	sq	square
corp	corporation	sr	senior
D	December	st	street
dept	department	Sum	Summer
ed	edited, edition, editor	sup	supplement
F	February	supt	superintendent
Hon	Honorable	tr	translated, translation, translator
il	illustrated, illustration, illustrator	v	volume
inc	incorporated	w	weekly
introd	introduction, introductory	Wint	Winter
Ja	January	yr	year
Je	June		

For those unfamiliar with form of reference used in the entries,
the following explanation is given.

Sample entry: AUTOMOBILE trailers
Hard-top tent camper rides dual-use trailer.
M. Philips. il Pop Sci 196:88-91+ Ap '70

An illustrated article on the subject AUTO-
MOBILE trailers entitled "Hard-top tent
camper rides dual-use trailer," by M.
Philips, will be found in volume 196 of
Popular Science, pages 88-91 (continued on later
pages of the same issue) the April 1970 number.

ABBREVIATIONS OF PERIODICALS INDEXED

Am Herit Lige--American Heritage	Natur Hist--Natural History
America--America	Newsweek--Newsweek
Americas--Americas	
Atlan--Atlantic	Outdoor Life--Outdoor Life
Bet Hom & Gard--Better Homes and Gardens	Pop Electr--Popular Electronics
Bsns W--Business Week	Pop Mech--Popular Mechanics
	Pop Sci--Popular Science Monthly
Changing T--Changing Times	
	Read Digest--Reader's Digest
Ebony--Ebony	
Ed Digest--Education Digest	Sat R--Saturday Review
	Scho Arts--School Arts
Farm J--Farm Journal (Central edition)	Schol Teach--Scholastic Teacher
Field & S--Field & Stream	Bound in Senior Scholastic
Flying--Flying	Schol Teach Jr-Sr High--Scholastic Teacher
	Junior/Senior High Teachers' Edition
Good H--Good Housekeeping	Schol Teach Sec Teach Sup--Scholastic
	Teacher Secondary Teachers' Supplement
Harper--Harper's Magazine	Continued as Scholastic Teacher Junior
Hi Fi--High Fidelity and Musical America	Senior High Teacher's Edition 3 Q1 '70
(sections I and II)	School Library Journal. See Library
Holiday--Holiday	Journal
	Sci Am--Scientific American
Ladies Home J--Ladies Home Journal	Sci Digest--Science Digest
Library J--Library Journal	Sci N--Science News
Includes School Library Journal	Science--Science
Life--Life	Seventeen--Seventeen
Look--Look	Sports Illus--Sports Illustrated
	Sr Schol--Senior Scholastic (Teacher edition)
N Y Times Mag--New York Times Magazine	
Nat Geog--National Geographic Magazine	Time--Time
Nat Wildlife--National Wildlife	Todays Ed--Today's Education
	Todays Health--Today's Health
	U S News--U.S. News & World Report
	Wilson Lib Bul--Wilson Library Bulletin

OUTSTANDING REFERENCE BOOKS FOR HIGH SCHOOL LIBRARIES

Compiled by: Toledo Public Library Staff

ENCYCLOPEDIAS

- R/031/C699 Collier's Encyclopedia....popular style, with short articles. Senior high level.
- R/031/W927 World Book Encyclopedia....useful for elementary and high school students and an excellent home encyclopedia.
- R/031/L736 Lincoln Library of Essential information....an up-to-date encyclopedia in one volume, with a subject arrangement, concise articles, many tables and charts.
- R/503/M147 McGraw-Hill Encyclopedia of Science and Technology....15v. This set is the first modern, multivolume encyclopedia aimed at authoritative, comprehensive coverage of the physical, natural, and applied sciences.

GENERAL HANDBOOKS

- R/317.3/W927 World Almanac also Information Please Almanac....two annuals with a wealth of miscellaneous facts, including statistics of population, government, schools, sports, as well as yearly chronology of events.
- R/031/K16 Famous First Facts, 3rd. ed. 1964 - Kane Lists the dates and circumstances of American "firsts" in a wide variety of fields, covering several thousand different subjects.
- 651/T The Secretary's Handbook - Taintor....useful for capitalization, punctuation, abbreviations, points of grammar, letter writing.
- R/353.9/B724 Book of the States....Chicago-Council of State Governments... Comprehensive manual on state activities. Kept up to date by frequent new editions and supplements.
- R/317/U58 Statistical Abstract of the United States....Published annually by the U.S. Government, it is the best source for national statistics..

BIOGRAPHICAL

- R/920.03/W628 Who's Who In America and Monthly Supplement....brief sketches of famous living Americans. The supplement has a vocational-geographical index, and an index to non-current listings.

- R/920.03/K96T Twentieth Century Authors and Supplement....these volumes include 2500 biographies of modern writers with bibliographies and some portraits.
- R/920.03/C976 Current Biography....Monthly and Annual...readable, quite lengthy sketches of men and women in the news, with photographs and name pronunciation.
- R/920.03/A512 Dictionary of American Biography, 20 vols....includes noteworthy persons no longer living. Companion set for history is Dictionary of American History, 6 volumes.
- R/920.03/D554 Dictionary of National Biography, 22v. + Supp. This monumental work is the most important book of reference for English biography, including inhabitants of the British Isles and its Colonies, and excluding living persons. The articles are generally scholarly and accurate, and the bibliographies are particularly fine.
- R/920.03/W385 Webster's Biographical Dictionary....Comprehensive listing of noteworthy people with pronunciations and concise biographies.

GEOGRAPHICAL

- R/912/G647 Goode's World Atlas....ninth edition of a well-known atlas. 160 maps and many special features.
- R/910.3/W385 Webster's Geographical Dictionary, Rev. Ed....a pronouncing dictionary of over 40,000 geographical names, including not only current but historical names from Biblical times to date.
- R/909.82/W927 The Worldmark Encyclopedia of the Nations.....a practical guide to... all nations, their international relationships, and the United Nations system.

INDEXES

- Ref. Catholic Periodical and Literature Index (Formerly Catholic Periodical index) a cumulative author, title, and subject bibliography of Catholic books, and articles in selected catholic periodicals.
- R/808.81/G757 Granger's Index to Poetry and Recitations....Poems are indexed by author, title and subject. A key list tells where each poem indexed may be found.
- R/808.82/S559 Short Story Index....An index of 60,000 stories in 4320 collections, by author, title and subject, with a list of collections indexed.

DICTIONARIES

- R/423/W385 Webster's New International Dictionary (Unabridged Merriam-Webster)
...An indispensable tool for derivation, pronunciation, spelling
and meaning of words.
- R/423/B262 American College Dictionary.....The entire in this dictionary including
foreign phrases, place names, famous people, and abbreviations
are in one alphabet.
- R/424/R732 Roget's Thesaurus of English Words and Phrases.....Words are arranged
according to the ideas they express. Invaluable for the
writer, and available in many editions including low-priced ones.

LITERATURE

- R/808.88 Familiar Quotations - Bartlett.....Classical and modern quotations with
a useful author arrangement and word index.
- R/821.08/S847 Home Book of Verse - Stevenson
- R/810.3/H325 The Oxford Companion to American Literature - Hart
- R/820.3/H342 The Oxford Companion to English Literature - Harvey
- R/803/B465 Reader's Encyclopedia - Benet...Fictional characters, authors, titles
and places in literature and art briefly identified.

THE FIVE W'S OF A LIBRARY

WHO? WHAT? WHERE? WHEN? WHY?

GENERAL REFERENCE BOOKS

DICT. Webster's New International Dictionary of the English Language
STAND (unabridged).....gives pronunciation, derivation, meanings of words.

ENCYCLOPEDIAS

- R/031/A512 Americana...especially good for U.S. history, government, science and technology.
- R/031/B862 Britannica...scholarly, good for civics, literature and science
- R/031/C699 Collier's...modern, good for political science, current problems, without bias.
- R/203/C363 Catholic.....best authority on Catholic Church; recommended for medieval art, etc. 1967-
- R/031/L736 Lincoln Library...two volumes, condensed, popular, arranged by general subject.
- R/031/W927 World Book...simple, concise explanations; full of pictures and diagrams.

ALMANACS

- R/317.3/W927 World Almanac...wealth of miscellaneous facts and summaries of the year's events.
- R/317.3/1-43 Information Please Almanac...annual information on U.S. and the world.
- R/317.71/S966 Ohio Almanac.....annual information on the state of Ohio.

POLITICS AND GOVERNMENT

- R/909.82/W927 Worldmark Encyclopedia of the Nations...account of the nations of the world, alphabetically arranged; includes climate, population, language, religion, travel and commerce, taxes, foreign investments, housing, education, press, etc.
- R/310.25/S797 Statesman's Yearbook...reliable manual of descriptive and statistical (British publication). information about the governments of the world.
- R/353.9/B724 Book of the States...issued biennially; a comprehensive manual on state activities, elections, legislation, major state services, statistics, and directory.
- Political Handbook of the World...usually gives chief government officials, party programs and leaders, political events, and the press.

Politics and Government continued:

- R/317/U58 Statistical Abstract of the U.S....annual which presents quantitative summary statistics on political, social, industrial, and economic organization of the U.S.

SCIENCE

- R/503/M147 McGraw-Hill Encyclopedia of Science and Technology...15 volumes... subject matter of the various branches of science systematically arranged with diagrams and illustrations. Includes index.
- R/503/V272 Van Nostrand's Scientific Encyclopedia...includes articles on aeronautics to zoology in one alphabet...one volume.
- Encyclopedia of the Biological Sciences...a survey, alphabetically arranged and written by famous scientists.

DICTIONARIES

- R/423/O-98E Oxford English Dictionary, 13 volumes. The most scholarly dictionary of the English language. In it may be found the history of every word which has been used in England since 1150. It shows when, how, and in what form each word has come into the language, and the changes that have taken place in spelling, meaning and usage.

LITERATURE

- R/920.03/K96T Twentieth Century Authors...biographies and portraits of author; lists principal works of each author. Has Supplements bringing it up to date.
- R/920.03/K96B British Authors before 1800.
- R/920.03/K96B British Authors of the 19th Century...short biographies alphabetically arranged.
- R/920.03/K96A American Authors 1600-1900...biographical dictionary of American literature.
- R/928/M194 Cyclopedia of World Authors, by Frank Magil...works, biography and short criticism with bibliography for each author.
- R/808.81/G757 Granger's Index to Poetry...poems are indexed by authors, title, subject; a key list in front tells where each poem may be found.
- R/808.88/B289 Familiar Quotations by Bartlett...arranged by author, indexed by leading word. Home Book of Quotations, by Stevenson...Indexed by subjects, authors and leading words.
- R/808.83/S559 Short Story Index, by Cook...alphabetical index of authors, titles, and subjects of short stories found in collected works, separate volumes and periodicals.

BIOGRAPHY

- Who's Who...brief sketches of prominent living persons, primarily British. Annual.
- R/920.03/W628 Who's Who in America...brief sketches of living Americans, both men and women.
- R/920.03/C976 Current Biography (monthly, annual)...entertaining life sketches of men and women in the news; includes actors, generals, writers, artists, scientists, athletes.
- R/920.03/W385 Webster's Biographical Dictionary...concise biographies of noteworthy men and women from the earliest times to the present.
- R/920.03/A512 Dictionary of American Biography...includes all persons who lived in the territory now known as the United States. None are now living.

GEOGRAPHY AND HISTORY

- R/910.3/W385 Webster's Geographical Dictionary...current and historical names of Biblical times.
- Lippincott's New Gazetteer...pronouncing gazetteer and geographical dictionary.
- Rand McNally Commercial Atlas...revised annually.
- 973.03/H758 Dictionary of American History...brief articles, alphabetically arranged.

INDEXES TO MAGAZINES

- R/050/A163 Abridged Readers' Guide to Periodical Literature...an index to the contents of over 45 periodicals; monthly, cumulates to a yearly volume.

Business

- Thomas' Register of American Manufacturers...trade names and brands, Boards of Trade and Commercial organizations, product classifications.

APPENDIX D

EVALUATION SHEET

NAME: _____ TOPIC: _____

DIRECTIONS FOR EVALUATION: Place + on the line if the information is correct
Place - on the line if the information is incorrect.
Place 0 on the line if the information is missing.

1. DICTIONARIES: (Two dictionaries must be used.)

Name of dictionary: _____
Definitions: _____
Page numbers _____
Preferred definitions _____
underlined _____

2. ENCYCLOPEDIA: (Two encyclopedias must be used.)

Name of encyclopedia _____
Volume number _____
Page numbers _____

3. MAGAZINES AND PERIODICALS: (Four different magazines must be used.)

Name of magazine; _____
Title of article _____
(if given: _____
Volume numbers _____
Page numbers _____
Author (if listed): _____
Date of magazines: _____

4. BOOKS: (Two different books must be used.)

Author: _____
Title: _____
Publication date: _____
Publication city: _____
Publisher: _____
Number of pages: _____
Dewey decimal number: _____
Illustrator (if given): _____
Indexes _____
Pages on which information
was found _____

EVALUATOR'S NAME: _____ DATE: _____

TOTAL NUMBER OF + _____

TOTAL NUMBER OF - _____

TOTAL NUMBER OF 0 _____