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ABSTRACT

Presented in this teacher's guide for grades 9-12 are lesson plans and ideas for integrating business education (general business, typing, shorthand, clerical and secretarial practice, and bookkeeping) and environmental education. Each lesson originates with a fundamental concept pertaining to the environment and states, in addition, its discipline area, subject area, and problem orientation. Following this, behavioral objectives and suggested learning experiences are outlined. Behavioral objectives include cognitive and affective objectives and skills to be learned, while learning experiences list student-centered in-class activities and outside resource and community activities. Space is provided for teachers to note resource and reference materials--publications, audio-visual aids, and community resources. The guides are supplementary in nature and the lessons or episodes are designed to be placed in existing course content at appropriate times. This work was prepared under an ESEA Title III contract for Project I-C-E (Instruction-Curriculum-Environment). (BL)

ED 079151

Project I - C - E

INSTRUCTION - CURRICULUM - ENVIRONMENT

A SUPPLEMENTARY PROGRAM FOR ENVIRONMENTAL EDUCATION

DISCIPLINE AREA Business Education GRADE 9-12

1. General Business
2. Typing I and II
3. Shorthand
4. Clerical & Secretarial Practice
5. Bookkeeping

Produced under Title III E.S.E.A.
PROJECT I-C-E
Serving Schools in CESA's 3-8-9
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SE 016 539

INSTRUCTION - CURRICULUM - ENVIRONMENT

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AM FOR ENVIRONMENTAL EDUCATION

Business Education GRADE 9-12

General Business

Typing I and II

Shorthand

Clerical & Secretarial Practice

Bookkeeping

III E.S.E.A.

SA's 3-8-9

54301

468-7464)

Robert Warpinski, Director
Robert Kellner, Asst. Director
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PREFACE

"Oikos" for house is the Greek origin of the term "ecology". This guide studies our house--whatever or wherever it may be. Like an organism, it can expand or contract to fit many ranges--natural and man-made environments, our many "houses" if we omit rancor and cite local complexities. Our "oikos" uses the insights of all subjects. A multidisciplinary program like ours necessarily results. Also, for a long time, our program ranges K thru 12. The environment matters. These values have their origin in the "oikos" of our minds. Let us become masters of our house by replacing the Greek with "Know thyself and thine house."

1. Written and designed by your fellow teachers, this guide is designed to fit appropriately into existing, logical course content.
2. Each page or episode offers suggestions. Knowing your students, you can adapt or adopt. Limitless chances are here for your experiments. Many episodes are self contained, some open-minded, still others developed over a few days.
3. Try these episodes, but please pre-plan. Why? Simply, no curriculum will work unless viewed in the context of your students.
4. React to this guide with scratch ideas and notes on the episodes.
5. After using an episode, fill out the attached evaluation form. duplicate, or request more of these forms. Send them singly. We sincerely want your reactions or suggestions--negative and positive. Evaluations are the key in telling us "what works" and in improving the guides.

TERMS AND ABBREVIATIONS

ICE RMC is Project ICE Resource Materials Center serving all school districts in CESA 3, 8, and 9. Check the Project ICE B resources. Our address and phone number is on this guide's cover or call us for any materials or help.

BAVI is Bureau of Audio Visual Instruction, 1327 University Madison, Wisconsin 53701 (Phone: 608-262-1644).

Cognitive means a measurable mental skill, ability, or process. Affective refers to student attitudes, values, and feelings.

PREFACE

is the Greek origin of the term "ecology". Environmental education whatever or wherever it may be. Like an umbrella, our house can fit many ranges--natural and man-made. We can add quality to our any "houses" if we omit rancor and cite long range gains, costs, and "oikos" uses the insights of all subjects. Thus, a rational, positive, program like ours necessarily results. Also, since attitudes grow over program ranges K thru 12. The environment mirrors our attitudes or es have their origin in the "oikos" of our collective and individual me masters of our house by replacing the Greek adage of "Know thyself" and thine house."

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CTIONS

e ICE Resource Materials Center serving all public and non-public CESA 3, 8, and 9. Check the Project ICE Bibliography of available ess and phone number is on this guide's cover. Feel free to write materials or help.

Audio Visual Instruction, 1327 University Avenue, P. O. Box 2093, 3701 (Phone: 608-262-1644).

measurable mental skill, ability, or process based on factual data. o student attitudes, values, and feelings.

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Mary Wadzinski, How.-Suam.

ESEA Title III - 59-70-0135-2 Project I-C-E

C 1. Energy from the sun, the basic
O source of all energy is converted
N through plant photosynthesis into
C a form all living things can use for
E life.
P
T

Discipline Area Bu
Subject Ge
Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students will trace sun energy as it reaches earth, how stored, make use of by living organisms, use bulletin board display -- Produced, Used and Wasted Energy.
Affective: Student will appreciate the sun's energy and green plants to survival of man and everyday activities.

Skills to be Learned
Development materialistic and functional display of energy materials.
Panel discussion by student leaders or volunteers.

- I. Student-Centered in class activity
 - A. Students prepare material in sequence as to sun energy to electric light bulb.
 1. Is there any human or business activity that does not need sun energy?
 2. Why we need green plants to make sun energy useful?
 3. What is happening to earth's green plants?
 - B. Panel discussion on how business could use sun energy directly.
 1. Solar cells - Development.
 2. Solar power plants.
 3. As solar power develops how other forms of energy will be affected?

from the sun, the basic
energy is converted
photosynthesis into
living things can use for

Discipline Area Business Education
Subject General Business
Source and Use of
Problem Orientation Electrical Power Grade 9-12

OBJECTIVES

Students will
energy as it
how stored,
living
bulletin
-- Produced,
Energy.
Student will
sun's energy
nts to survival
everyday activities.

Learned
materialistic
display of
als.
ion by student
volunteers.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Students prepare material in sequence as to sun energy to electric light bulb.
 1. Is there any human or business activity that does not need sun energy?
 2. Why we need green plants to make sun energy useful?
 3. What is happening to earth's green plants?
 - B. Panel discussion on how business could use sun energy directly.
 1. Solar cells - Development.
 2. Solar power plants.
 3. As solar power developed, how other forms of energy will be affected.

- II. Outside Resource and Community Activities
 - A. Power companies at local level.
 - B. Outside Reading
 1. Sun energy into electrical power.
 2. New developments into energy for individual and business.

Resource and Reference Materials	Continued and Additional Suggested Learning Materials
<p><u>Publications:</u></p> <p><u>Place In the Sun and Living World,</u> Darling, Lois & Louis, Morrow, 1968, \$3.95 - (574^{FA}).</p> <p>Check Reader's Guide for Problems of International Sources - Energy and Transportation: Wall Street Journal Business Week U.S. News & World Report Fortune Magazine</p> <p><u>Audio-Visual:</u></p> <p><u>Sun's Energy (BAVI) #6949</u> Petroleum Associations films and filmstrips (Madison, WI)</p> <p><u>Community:</u></p> <p>Local representative of Power company : speaker. Petroleum Association members. Gas Company representative.</p>	

Materials	Continued and Additional Suggested Learning Experiences
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World, row, blems Energy	
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es.	
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C	2. All living things or systems	Discipline Area	Business Ed
O			
N	interact among themselves and their	Subject	General Bus
C			Balance
E	environment forming an intricate	Problem Orientation	Nature
P			
T	unit called an ecosystem.		

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> The student will be able to orally list 3 industrial products that could be harmful to our ecosystem.</p> <p><u>Affective:</u> Students curiosity aroused as he sees industries effect on our ecosystem.</p>	<p>I. Student-Centered in class activity</p> <p>A. What examples of air or water pollution could upset our ecosystem which consists of plants as food energy producers, animals as energy consumers and decay organisms recycling organic matter for plant use.</p> <p>B. Lead students in discussion of industries effect on our ecosystem.</p> <p>1. Supplementary - How certain products could be harmful to our delicate balance of nature-uninvited additions.</p> <p>C. Study economic vs social environmental costs of agri-business use of land and soft pesticides.</p> <p>D. Introduce concept of regulatory agencies, enforcing environmental control regulations:</p> <ol style="list-style-type: none"> 1. FDA 2. Dept. of Agri. 3. EPA 4. DNR (cont.) 	<p>II. Out</p> <p>Comm</p> <p>A. U</p> <p>i</p> <p>p</p> <p>g</p> <p>r</p> <p>n</p> <p>h</p> <p>e</p> <p>B. I</p> <p>f</p> <p>o</p> <p>f</p> <p>a</p> <p>s</p>
<p><u>Skills to be Learned</u></p> <p>Critical Analysis of material</p> <p>Understanding of interaction between plants, animals and decay organisms</p> <p>Letter writing</p>		

or systems _____ Discipline Area Business Education

elves and their _____ Subject General Business

an intricate _____ Problem Orientation Balance of Nature Grade 9-12

stem. _____

SUGGESTED LEARNING EXPERIENCES	
<p>I. Student-Centered in class activity</p> <p>A. What examples of air or water pollution could upset our ecosystem which consists of plants as food energy producers, animals as energy consumers and decay organisms recycling organic matter for plant use.</p> <p>B. Lead students in discussion of industries effect on our ecosystem.</p> <p>1. Supplementary - How certain products could be harmful to our delicate balance of nature-uninvited additions.</p> <p>C. Study economic vs social environmental costs of agri-business use of land and soft pesticides.</p> <p>D. Introduce concept of regulatory agencies, enforcing environmental control regulations:</p> <p>1. FDA</p> <p>2. Dept. of Agri.</p> <p>3. EPA</p> <p>4. DNR (cont.)</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Use library to gather information for newspapers--articles that give account of local/regional air, water, noise pollution that has an effect on our ecosystem:</p> <p>B. Invite a representative from FDA (USDA) to talk on cyclamates or other food additives and to answer questions that students have prepared.</p>

Resource and Reference Materials	Continued and Addit
<p><u>Publications:</u> <u>Basic Speech Experiences,</u> Clark Publishing Co. <u>Introduction to the study</u> <u>of Animal Population,</u> University of Chicago Press. USDA manuals on Pesticides. Farm Journals - articles on pesticide.</p> <p><u>Audio-Visual:</u> Overhead transparency on additives and how they are used. "Gifts", A film in I-C-E Bibliography, Resource Center.</p> <p><u>Community:</u> DNR Dept. of Agriculture Rep. (USDA)</p>	<p>I. (cont.)</p> <p>a. Develop sta</p> <ol style="list-style-type: none"> 1. Effect o 2. Effect o <p>and cons</p> <p>E. Introduce add foods as oppo front page.</p>

Reference Materials	Continued and Additional Suggested Learning Experiences
<p>periences, ng Co. the study lation, Chicago Press. Pesticides. articles on.</p> <p>arency on how they</p> <p>in I-C-E Resource Center.</p> <p>lture Rep.</p>	<p>I. (cont.)</p> <p>a. Develop statements:</p> <ol style="list-style-type: none"> 1. Effect of DDT on cows' milk. 2. Effect of mercury contamination in fish and consumers. <p>E. Introduce additions that man knowingly uses in foods as opposed to uninvited additives shown on front page.</p>

C 3: Environmental factors are
O limiting on the number of organisms
N
C living within their influence, thus
E
P each environment has a carrying
T capacity.

Discipline Area Business
Subject General
Problem Orientation Science

BEHAVIORAL OBJECTIVES

Cognitive: Students will calculate from zero capacity to maximum capacity of a specific area.
Affective: Student will recognize that the business world's production capacity is limited. Idea of limited goods, unlimited wants - environment.

Skills to be Learned
Use of outline note taking.
Comparison and analysis of data.

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. To develop a list of two other parallels, similar to those discussed in class.
 - B. Compare the list of man's basic needs to that of business.
 1. Industry and government. (Write a one page paper.)
 - C. Analyze the basic needs into priority groups. Describe the difference between wants and needs.
 - D. Use the simulation game to show concept of carrying capacity.
 - E. A special project would be to take the present class, and with the help of another instructor, combine the two classes:
 1. Each day make the class a few larger until you have engulfed two classes into one class.
 2. Make students write a report on the changes that have to be made as (cont.)

Discipline Area Business Education
Subject General Business
Problem Orientation Carrying Capacity Grade 9-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. To develop a list of two other parallels, similar to those discussed in class.
- B. Compare the list of man's basic needs to that of business.
 1. Industry and government. (Write a one page paper.)
- C. Analyze the basic needs into priority groups. Describe the difference between wants and needs.
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 2. Make students write a report on the changes that have to be made as (cont.)

II. Outside Resource and Community Activities

- A. Have community leaders, both private and public, speak to the students and give views of present population trends in the area.
- B. Have a local doctor discuss with the class, local population growth, pros and cons of birth control, effect on employment taxes, etc.

Resource and Reference Materials	Continued and Additional
<p data-bbox="599 851 838 886"><u>Publications:</u></p> <p data-bbox="616 886 1137 1046"> <u>General Business,</u> <u>Southwestern Publishing Co.</u> <u>Populations, U. of C.,</u> <u>Berkeley (110 Co)</u> <u>I-C-E Resource Center</u> </p> <p data-bbox="599 1138 838 1173"><u>Audio-Visual:</u></p> <p data-bbox="616 1173 1188 1311"> <u>Simulation games from I-C-E</u> <u>Resource Center</u> <u>Man and His Environment</u> <u>Spaceship Game (Coca-Cola Co.)</u> </p> <p data-bbox="599 1460 778 1494"><u>Community:</u></p> <p data-bbox="616 1494 1026 1632"> <u>Speakers - Local Areas</u> <u>Industry</u> <u>Business</u> <u>Medical</u> </p>	<p data-bbox="1282 851 1701 955"> I. (cont.) population doubles (Use classroom as a </p>

1s Continued and Additional Suggested Learning Experiences

I. (cont.)
population doubles in a given area.
(Use classroom as an example.)

C 4. An adequate supply of pure
C
N water is essential to life.
C
E
P
T

Discipline Area Business Education
Subject General Business
Problem Orientation Water Pollution

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: The students will be able to do research and give a written or oral report on their findings on water pollution in relationship to local business and agriculture production.

Affective: Individuals should have an awareness of the problems of business, farming and society as a whole to good clean waters.

Skills to be Learned

Researching
Listening
Discussion
Reporting
Summarizing - Condensing

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Students discuss the idea: "Business must provide some type of water pollution abatement."
 1. The idea of Costs vs Pollution should be presented to class.
 - B. Class to view films:
 1. The Stream.
 2. The Gifts.
 - C. Prepare question sheet concerning the films.
 - D. Students to research/prepare a paper showing the types and reasons for water pollution in the local area.
 - E. Class divided into groups to alternate playing "Dirty Water" game.

- II. Outside Community
 - A. Field sewage
 - B. Secure water abatement
 - C. Interview local federal problem encourage these
 1. What do
 2. What sta
 3. Who
 4. Tim
 5. Pla sta

pure. Discipline Area Business Education
fe. Subject General Business
Problem Orientation Water Pollution Grade 9-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Students discuss the idea:
"Business must provide some type of water pollution abatement."
 - 1. The idea of Costs vs Pollution should be presented to class.
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- C. Prepare question sheet concerning the films.
- D. Students to research/prepare a paper showing the types and reasons for water pollution in the local area.
- E. Class divided into groups to alternate playing "Dirty Water" game.

II. Outside Resource and Community Activities

- A. Field trip to local sewage plant.
- B. Secure a speaker on water pollution or abatement problem.
- C. Interview management of local firms for future federal stand aids and problems which will be encountered in meeting these requirements:
 - 1. What is your company doing to diminish pollution?
 - 2. What are government standards?
 - 3. Who pays the cost?
 - 4. Time is of essence.
 - 5. Plan of approach in starting action.

Resource and Reference Materials	Continued and Additional Suggested	Mat
<p data-bbox="369 840 609 862"><u>Publications:</u></p> <p data-bbox="369 862 982 929"><u>Water Fit to Use</u>, Carlson & Day, 1966.</p> <p data-bbox="369 929 846 996"><u>Water Pollution</u>, G. Berg, Scientist's Institute</p> <p data-bbox="369 996 646 1019">EPA guidelines</p> <p data-bbox="369 1019 910 1086">DNR publications, <u>Wis. Cons. Bulletin</u></p> <p data-bbox="369 1086 682 1131">Local newspapers</p> <p data-bbox="360 1243 600 1288"><u>Audio-Visual:</u></p> <p data-bbox="369 1288 955 1321"><u>Water Pollution</u> - Filmstrip NEA</p> <p data-bbox="369 1321 773 1355"><u>The Gifts</u> - I-C-E RMC</p> <p data-bbox="369 1355 791 1388"><u>The Stream</u> - I-C-E RMC</p> <p data-bbox="369 1388 809 1422"><u>Dirty Water</u> - I-C-E RMC</p> <p data-bbox="409 1422 991 1579">A simulation game which provides the complexities of keeping local bodies of water in a normal state of ecological balance.</p> <p data-bbox="360 1646 536 1680"><u>Community:</u></p> <p data-bbox="369 1680 982 1780">City Engineer - Local water dept. Local sewage treatment plant</p> <p data-bbox="369 1780 427 1803">DNR</p> <p data-bbox="369 1803 445 1836">UWGB</p> <p data-bbox="369 1836 782 1870">Fish factory personnel</p> <p data-bbox="369 1870 609 1904">Cheese plants</p> <p data-bbox="369 1904 664 1937">Paper/pulp mills</p>		<p data-bbox="1756 873 1810 907">on</p> <p data-bbox="1756 940 1810 974">g.</p> <p data-bbox="1756 1030 1810 1064">Con</p> <p data-bbox="1756 1288 1810 1321">tri</p> <p data-bbox="1756 1422 1810 1556">ch tie of eco</p> <p data-bbox="1756 1680 1810 1780">ate ewa ent</p>

Materials	Continued and Additional Suggested Learning Experiences
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Cons.

trip NEA

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ties of
of water
ecological

ater dept.
ewage
ent plant

CONCEPT

5. An adequate supply of clean
air is essential for life.

Discipline Area Business
 Subject General B
 Problem Orientation Air Pol

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will be able to identify area or regional industries having severe problems with air pollution. Student will be able to list 5 things he can do to combat air pollution.
Affective: Student becomes aware of local air pollution problems.

Skills to be Learned
 Discussion techniques
 Observation of plants
 Research methods
 Secretarial recording of material
 Construction (typing) of report - typing is preferred for students of typing.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Identify area industries having severe problems of air pollution.
 1. Pulp and paper
 2. Power plants
 3. Foundries
 - B. Teacher could put the following material on blackboard or transparency as major contributors to air pollution.
 1. Automobiles 60%
 2. Ind. Plants 16%
 3. Power Plants 13%
 4. Heating 7%
 5. Incinerators
 - C. What measures are used by agencies to combat air pollution.
 1. Attorney General who uses public nuisance laws against industries.
 2. Bureau of solid wastes - open burning in dumps.
 3. Newly passed federal legislation aims (cont.)
- II.

ly of clean Discipline Area Business Education
 for life. Subject General Business
 Problem Orientation Air Pollution Grade 9-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Identify area industries having severe problems of air pollution.

1. Pulp and paper
2. Power plants
3. Foundries

B. Teacher could put the following material on blackboard or transparency as major contributors to air pollution.

1. Automobiles 60%
2. Ind. Plants 16%
3. Power Plants 13%
4. Heating 7%
5. Incinerators

C. What measures are used by agencies to combat air pollution.

1. Attorney General who uses public nuisance laws against industries.
2. Bureau of solid wastes - open burning in dumps.
3. Newly passed federal legislation aims (cont.)

II. Outside Resource and Community Activities

A. Student observation of industries that contribute to air pollution in locality. From this observation, students would report orally, in class about what they observed. A class reporter could record and pass out summary sheets in one of the next class sessions.

Assignment: From newspapers or research material, students obtain material or methods used to combat air pollution. From this research, write a 3-5 page report concerning "The Lessening of Air Pollution."

Resource and Reference Materials

Publications:

Air Pollution Activities & Disasters
Vanishing Air, Ralph Nader
Study Group, Grossman Pub., 1970.
Fresh Air, (See Geo. Howlett
Library).
Survival Hand Book, Doug,
LaFollette Pub., 1971.
Wis. Cons. Bulletin & Federal
Standards, (Wis. Senators)
Washington D.C.

Audio-Visual:

Film:

With Each Breath
Health Ed. Service
Box 7283 - Albany, N.Y.
Air Pollution - Take a Deep
Breath
National Medical Aides-
Visual Center
Chamblee, Ga. 30005

Community:

Local pollution inspector
Speakers from:
Paper mills
Foundries
Power plants

Continued and Additional Su

I. (cont.)

to severely limit
by 1976.

D. What can you as an in
pollution?

1. Use car only when
2. Don't burn leaves
3. Keep car well tuned
4. Stop smoking.
5. Give up gas-powered
6. Use less products
- burn coal to produce
7. Minimum horse power
8. Shut off car engine
- a. Waiting for traffic
- b. Deliveries being made

E. Student learns use of
working.

- a. How to maintain good
- b. Cost of air conditioning

Reference Materials Continued and Additional Suggested Learning Experiences

Activities &
 Ralph Nader
 G. P. Putnam Pub., 1970.
 Geo. Howlett
 Book, Doug,
 1971.
 in & Federal
 Senators)

I. (cont.)

to severely limit automobile exhaust emission
 by 1976.

D. What can you as an individual do to combat air
 pollution?

1. Use car only when necessary.
2. Don't burn leaves or trash.
3. Keep car well tuned.
4. Stop smoking.
5. Give up gas-powered lawn mower, snowmobiles.
6. Use less products that require factories to
 burn coal to produce products.
7. Minimum horse power for auto.
8. Shut off car engine when long stops made.
 - a. Waiting for train at crossing.
 - b. Deliveries being made.

E. Student learns use of proper air in office for
 working.

- a. How to maintain good air level.
- b. Cost of air conditioning in modern office.

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 ny, N.Y.
 Take a Deep

Aides-

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Inspector

C 6. Natural resources are not equally Discipline Area Busin an
O distributed over the earth or over Subject Gener ea
N time and greatly affect the geographic Problem Orientation Natu Natu
E conditions and quality of life. vs I ect
P
T

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXP
<p><u>Cognitive:</u> Student will be able to identify and list 5 local businesses and the natural resources that they use.</p> <p><u>Affective:</u> The student will become aware of the feelings business and industry have toward curtailing the use of natural resources.</p>	<p>I. Student-Centered in class activity.</p> <p>A. Research each of the natural resources so the students will know where and how each resource originated and where it is found.</p> <p>B. List the various natural resources round and used in the businesses of the community.</p> <p>1. Organize into small study groups (3-4 in a group).</p> <p>2. Divide the local businesses into clusters that may be similar or dependent on others.</p> <p>C. Collect materials from classroom library/school library.</p> <p>1. Each student spend at least 1 period in the library.</p> <p>2. Organize data.</p> <p>D. Get the reactions from all groups in a classroom discussion on what (cont.)</p>
<p><u>Skills to be Learned</u></p> <p>Researching</p> <p>Discussion</p> <p>Reporting</p> <p>Analyzing data</p> <p>Organization of data</p>	

are not equally Discipline Area Business Education
 earth or over Subject General Business
 Natural Resources
 ect the geographic Problem Orientation vs Business Grade 9-12
 ty of life.

S	SUGGESTED LEARNING EXPERIENCES	
be st the will lings ave. se	<p>I. Student-Centered in class activity</p> <p>A. Research each of the natural resources so the students will know where and how each resource originated and where it is found.</p> <p>B. List the various natural resources found and used in the businesses of the community.</p> <ol style="list-style-type: none"> 1. Organize into small study groups (3-4 in a group). 2. Divide the local businesses into clusters that may be similar or dependent on others. <p>C. Collect materials from classroom library/school library.</p> <ol style="list-style-type: none"> 1. Each student spend at least 1 period in the library. 2. Organize data. <p>D. Get the reactions from all groups in a classroom discussion on what (cont.)</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Visit local industry to find out what they are doing to conserve the natural resources that they use.</p> <p>B. Have community leaders in government and industry speak to class.</p> <ol style="list-style-type: none"> 1. Give views on the effect natural resources have had on the area and in particular on the community.

Resource and Reference Materials
Publications:

General Business - Southwestern
Publishing Co.
National Wildlife Federation, 1971
EQ Index, I-C-E RMC
100 Bu Daydreams and Nightmares,
I-C-E RMC

Audio-Visual:

Our Part in Conservation,
McGraw Hill
Our Vanishing Land,
McGraw Hill
Simulation game - Ecology; The
Game of Man and Nature, I-C-E RMC

Community:

Local organizations and clubs
State Dept. of Natural Resources
Local business/government personnel
Electrical utility
Natural gas company
Oil company
Coal company

Continued and Additional Suggest

I. (cont.)

they think the role of bu
in regard to our natural
E. Identify resources as to
renewable. Also include
resources to any business
report.

Materials	Continued and Additional Suggested Learning Experiences
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1971

es,

I. (cont.)

they think the role of business and industry is, in regard to our natural resources.

3. Identify resources as to renewable and non-renewable. Also include the importance of the resources to any business. Include this in report.

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onnel

ESEA Title III - 59-70-0135-2 Project I-C-E

C 7. Factors such as facilitating _____ Discipline Area
 C transportation, economic conditions, _____ Subject
 N population growth, and increased _____ Problem Orientation
 E leisure time have a great influence on
 P changes in land use and centers of population density.
 T

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

Cognitive: Students will list orally the types of transportation, industry, and population in community at its founding.

Affective: Students will become aware of local historical changes and possible reasons for such changes.

Skills to be Learned

Library work

Discussion

Organization

Beginning land use analysis

Beginning land use planning

I. Student-Centered in class activity

- A. Divide class by committee. Each committee will present a short report on one of the following topics about the community.
 1. Why it was started?
 2. Why this location?
 3. What businesses originally started here?
 4. What were the transportation economic conditions and population at that time?
 5. How was the land used?
- B. Have group discussion on changes in land use.
- C. Discuss tax base in regard to change.
- D. Play simulation game on land use.
- E. Write a paper on movement to the suburbs.

ors such as facilitating
 ctation, economic conditions,
 ion growth, and increased

Discipline Area Business Education
 Subject General Business
 Problem Orientation Economic Growth & Change Grade 9-12

time have a great influence on
 in land use and centers of population density.

GENERAL OBJECTIVES

Students will
 y the types of
 ction, industry,
 ction in
 at its founding.

Students will
 re of local
 changes and
 easons for such

be Learned
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on
 Land use analysis
 Land use planning

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Divide class by committees. Each committee will present a short report on one of the following topics about the community.
 1. Why it was started?
 2. Why this location?
 3. What businesses originally started here?
 4. What were the transportation economic conditions, and population at that time?
 5. How was the land used?
- B. Have group discussion on changes in land use.
- C. Discuss tax base in regard to change.
- D. Play simulation game on land use.
- E. Write a paper on movement to the suburbs.

II. Outside Resource and Community Activities

- A. Resource person on zoning and future land use.
- B. Use library for research.
- C. Current articles from newspaper on zoning and land use.
- D. Local body of government agency on zoning laws and planning of future land still not developed for business and industry.
- E. Sanitary land fill questions: Where should it be located? How does it work? What better ways are there to save the land?
- F. Tour some of the recreational sites.

Resource and Reference Materials	Continued and Additional
<p><u>Publications:</u></p> <p>VF Environmental Science Center, Give Earth a Chance series, I-C-E RMC</p> <p>VF Scientists Institute for Public Information, I-C-E RMC</p> <p>VF A Handbook for Environmental Action, I-C-E RMC</p> <p>C.O.G. Information & Regional Comm. of Upper Fox Wolf System</p> <p><u>Audio-Visual:</u></p> <p>Man at Bay, I-C-E RMC</p> <p>BAVI catalog</p> <p><u>Community:</u></p> <p>Chamber of Commerce</p> <p>Local college/university environmental instructor</p> <p>DNR representative</p> <p>Planning/Zoning commission</p> <p>Wis. Dept. of local affairs and development</p>	

nce Materials

Continued and Additional Suggested Learning Experiences

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8. Cultural, economic, social,
and political factors determine
status of man's values and
attitudes toward his environment.

Discipline Area Business
Subject General Bu
Problem Orientation Economic

BEHAVIORAL OBJECTIVES

Cognitive: Student will state in writing, the current level of Gross National Product, the % of growth in the last year and the definition and purpose of GNP.

Affective: Student will become aware of the difference between qualitative measurement and quantitative measurement in determining national wealth.

Skills to be Learned
Preparing charts and graphs
Composing and relating facts to concepts
Problem solving
Group discussion

SUGGESTED LEARNING EXPER

- I. Student-Centered in class activity
 - A. Students prepare charts showing GNP over the past 40 years.
 1. Charts should define GNP.
 2. Charts should plot GNP over time.
 - B. Students write an essay (2 page maximum) relating resources to GNP.
 1. List natural resources used up.
 2. Capital needs to provide goods and services.
 3. Human resources needed.
 - C. Discuss American focus on GNP as a measure of national health when it is an advantage of "free goods" (water, air). Material value system vs Human value system
 - D. Write letters to U.S. Senators concerning current legislation on environment.

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 - B. P
 - C. S

ESEA Title III - 59-70-0135-2 Project I-C-E

social, Discipline Area Business Education
 determine Subject General Business
 es and Problem Orientation Measurement of
 environment, Economic Growth Grade 9-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Students prepare charts showing GNP over the past 40 years.
 1. Charts should define GNP.
 2. Charts should plot GNP over time.
- B. Students write an essay (2 page maximum) relating resources to GNP.
 1. List natural resources used up.
 2. Capital needs to provide goods and services.
 3. Human resources needed.
- C. Discuss American focus on GNP as a measure of national health when it is an advantage of "free goods" (water, air). Material value system vs Human value system
- D. Write letters to U.S. Senators concerning current legislation on environment.

II. Outside Resource and Community Activities

- A. Use library for research.
- B. Panel discussion for class on quality of life in local community.
 1. Doctor
 2. Politician (local)
 3. Businessman
- C. Students could role play a panel discussion on the quality of life in local community. (How to develop, but maintain a healthy environment.)

Resource and Reference Materials	Continued and Additional Sources
<p data-bbox="462 929 709 952"><u>Publications:</u></p> <p data-bbox="462 952 973 1108">Bureau of Census Report U.S. News and World Report Wall Street Journal Business Week Fortune</p> <p data-bbox="462 1332 973 1534"><u>Audio-Visual:</u> Simulation game - <u>Ecology</u>, I-C-E RMC Later - <u>Perhaps</u>, I-C-E RMC <u>The Environmental Crisis</u>, I-C-E RMC</p> <p data-bbox="462 1702 746 1769"><u>Community:</u> Land developer</p>	<p data-bbox="1756 875 1816 907">Eren</p> <p data-bbox="1756 940 1816 1041">Repo d R 1</p> <p data-bbox="1756 1366 1816 1500">Eco -C- Cri</p>

Reference Materials	Continued and Additional Suggested Learning Experiences
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Report
d Report
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Ecology,
-C-E RMC
Crisis,

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9. Man has the ability to manage,
manipulate, and change his
environment.

Discipline Area Business
Subject General
Problem Orientation of

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Through varied types of discussion and writings, students will show how man changes his surroundings.

Affective: Students will acknowledge the many problems in disposing of solid waste.

Skills to be Learned
Research projects
Group participation

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Student teacher discussion:
 1. Resources from soil
 - a. Production of food
How has this changed the land?
 - b. Highways
How did the materials used change environment?
 - c. How have minerals extracted changed the environment?
 2. Water changes
 - a. What changes have taken place in water conditions?
 - b. Status of solid waste in relation to water?
 - c. How solids are treated today.
- B. Write a summary on the questions and discussion.

II.

ability to manage, Discipline Area Business Education
 change his Subject General Business
Problem Orientation Conquest of Nature Grade9-12

TIVES	SUGGESTED LEARNING EXPERIENCES	
varied and will his will g of	<p>I. Student-Centered in class activity</p> <p>A. Student teacher discussion:</p> <ol style="list-style-type: none"> 1. Resources from soil <ol style="list-style-type: none"> a. Production of food How has this changed the land? b. Highways How did the materials used change environment? c. How have minerals extracted changed the environment? 2. Water changes <ol style="list-style-type: none"> a. What changes have taken place in water conditions? b. Status of solid waste in relation to water? c. How solids are treated today. <p>B. Write a summary on the questions and discussion.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Sewerage treatment plants</p> <ol style="list-style-type: none"> 1. Visit local plant 2. How are solids disposed of? 3. Personnel of plant to explain his plant's operation to class. <p>B. Solid waste disposal - no reusables</p> <ol style="list-style-type: none"> 1. Burying of burnable materials 2. Open face dumps and burning 3. Operation of sanitary land fills <p>C. Solid waste - usable</p> <ol style="list-style-type: none"> 1. Recycling, paper, glass, cans & iron products 2. Get local civic leader to explain recycling program. 3. Visit a recycling plant. (cont.)

Resource and Reference Materials	Continued and Additional Suggested
<p data-bbox="371 913 611 947"><u>Publications:</u></p> <p data-bbox="393 947 972 1104">Reference books, magazines & newspapers about products made and waste produced DNR bulletins and articles I-C-E RMC</p> <p data-bbox="371 1368 611 1402"><u>Audio-Visual:</u></p> <p data-bbox="393 1402 768 1469"><u>The Gifts</u>, I-C-E RMC <u>Garbage</u>, I-C-E RMC</p> <p data-bbox="371 1704 556 1738"><u>Community:</u></p> <p data-bbox="393 1738 750 1839">DNR personnel County land planner Business leaders</p>	<p data-bbox="1095 920 1304 954">II. (cont.)</p> <p data-bbox="1169 954 1544 987">D. Industrial plants</p> <ol data-bbox="1225 987 1748 1088" style="list-style-type: none"> 1. What is being done with t 2. How does waste affect a f 3. What are some ways of red

his Continued and Additional Suggested Learning Experiences

II. (cont.)

D. Industrial plants

1. What is being done with the waste?
2. How does waste affect a firm's profit?
3. What are some ways of reducing wastes?

CONCEPT

10. Short-term economic gains may produce long-term environmental losses.

Discipline Area Business

Subject General

Problem Orientation Organizational

BEHAVIORAL OBJECTIVES

Cognitive: Students will list and describe in-plant practices which can be harmful to the employees and the corrective action that could take place.

Affective: Student will understand that industry can control its pollution within the plant for the welfare of its employees and still maintain a fair profit.

Skills to be learned
 Discussion
 Participation
 Analysis of classroom participation
 Making judgments
 Letter writing

SUGGESTED LEARNING

I. Student-Centered in class activity

A. Have students indicate some industries which have put short-term gains ahead of the welfare of its employees.

B. What products have been produced in mass quantity that could possibly cause long-term environmental losses?

C. Lead discussions on:
 Are these previously discussed industries and products more harmful or beneficial to society as a whole?

D. How harmful are in-plant practices to employees for some industries?

1. Steel workers - sulfur dioxide poisoning
2. Agricultural workers - pesticides
3. Painters, dry cleaners - benzine odors
4. Textile workers - breathing lint particles (cont.)

II.

ESEA Title III - 59-70-0135-2 Project I-C-E

term economic gains may	Discipline Area	<u>Business Education</u>
term environmental	Subject	<u>General Business</u>
		<u>Business</u>
	Problem Orientation	<u>Organization</u> <u>Grade9-12</u>

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>nts will e in- which o the e corrective i take</p> <p>at will industry pollution for the employees an a</p>	<p>I. Student-Centered in class activity</p> <p>A. Have students indicate some industries which have put short-term gains ahead of the welfare of its employees.</p> <p>B. What products have been produced in mass quantity that could possibly cause long-term environmental losses?</p> <p>C. Lead discussions on: Are these previously discussed industries and products more harmful or beneficial to society as a whole?</p> <p>D. How harmful are in-plant practices to employees for some industries?</p> <ol style="list-style-type: none"> 1. Steel workers - sulfur dioxide poisoning 2. Agricultural workers - pesticides 3. Painters, dry cleaners - benzine odors 4. Textile workers - breathing lint particles (cotton) 	<p>II. Outside Resource and Community Activities</p> <p>A. Speaker from DNR on use of wooden area for a development project.</p>
<p>ned</p> <p>room</p>		

Resource and Reference Materials
Publications:

Wisconsin Survival Handbook,
I-C-E RMC
The User's Guide to Protection
of the Environment, Paul Swantek,
1970

Audio-Visual:

Film: Bulldozed America
Carousel Films, Inc.
1501 Broadway
New York, N.Y. 10035

Community:

Representative from DNR
Representative from local
industry

Continued and Additional Suggested
I. (cont.)

- 5. Miners - black lung disease
- 6. Migrant workers - the school includes their poor physical condition
- E. Students could write to the key committee at the state level
- F. The class should decide on the best worded and what proposal

Materials	Continued and Additional Suggested Learning Experiences
on antek,	<p>I. (cont.)</p> <ul style="list-style-type: none"> 5. Miners - black lung disease 6. Migrant workers - the social environment includes their poor physical environment E. Students could write to the chairman of some key committee at the state and federal level. F. The class should decide on how the letter should be worded and what proposals should be made.

C 11. Individual acts, duplicated or
 O compounded, produce significant
 N environmental alterations over time.
 C
 E
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Discipline Area Business
 Subject General Bu
 Problem Orientation Depletio
 Resource

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Student will choose an economic resource and explain, through his choice of media, how individual consumption is eliminating this resource.

Affective: Student will become aware of the fact that natural resources are limited and must be widely used.

Skills to be Learned
 Report preparing
 Graphs
 Speech presentation
 Analyzing data
 Organizing data
 Researching

SUGGESTED LEARNING EXPERI

I. Student-Centered in class activity

- A. Group discussion
 - 1. Status of available natural resources
 - a. Natural
 - 1. Surface land
 - 2. Within land
 - 3. Water areas
 - 4. Air
 - 2. Human resources
 - 3. Capital
- B. How can natural resources be consumed?
 - 1. Recycling
 - 2. Conservation
 - 3. Basic need for product
- C. Students to prepare report on natural resources.
 - 1. They can choose their own type of media (oral, written, film-strip).
 - a. Gather materials
 - b. Organize data

*Note: Discussion format
 1. Each discussion should have a clearly stated and developed goal.
 (cont.)

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- C. G sou
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- D.

al acts, duplicated or Discipline Area Business Education
produce significant Subject General Business
1 alterations over time. Problem Orientation Depletion of Resources Grade 9-12

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>ent will mic plain, ice of vidual eliminating</p> <p>ent will the fact resources must be</p>	<p>I. Student-Centered in class activity</p> <p>A. Group discussion</p> <ol style="list-style-type: none"> 1. Status of available natural resources <ol style="list-style-type: none"> a. Natural <ol style="list-style-type: none"> 1. Surface land 2. Within land 3. Water areas 4. Air 2. Human resources 3. Capital B. How can natural resources be consumed? <ol style="list-style-type: none"> 1. Recycling 2. Conservation 3. Basic need for product C. Students to prepare report on natural resources. <ol style="list-style-type: none"> 1. They can choose their own type of media (oral, written, film-strip). <ol style="list-style-type: none"> a. Gather materials b. Organize data <p>*Note: Discussion format</p> <ol style="list-style-type: none"> 1. Each discussion should have a clearly stated and developed goal. <p>(cont.)</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Visit recycling companies for metal and glass.</p> <p>B. Paper usage on large scale.</p> <ol style="list-style-type: none"> 1. Have a visitation to a paper company for reusable paper. <p>C. Get local groups to promote conservation.</p> <ol style="list-style-type: none"> 1. Does recycling pay? <p>D. Short research on what other parts of the country are doing on environmental study.</p> <ol style="list-style-type: none"> 1. Use library <p>D. Field trips</p> <ol style="list-style-type: none"> 1. Green Bay Packaging 2. Fort Howard Paper 3. W.S. Paper 4. Bergstrom Paper 5. Neenah Foundry 6. Rothe Foundry
<p>earned</p> <p>ng</p> <p>ation</p>		

as	Continued and Additional Suggested Learning Experiences
on, 01	I. (cont.) 2. Provide time for adequate summary to finalize the discussion.

s,

C O N C E P T	<u>12. Private ownership must be</u>	Discipline Area	<u>Business E</u>	ip r
	<u>regarded as a stewardship and should</u>	Subject	<u>General BU</u>	rdsh
	<u>not encroach upon or violate the</u>	Problem Orientation	<u>Land us</u>	r vi
	<u>individual rights of others.</u>			f o

ESEA Title III - 59-70-0135-2 Project I-C-3

BEHAVIORAL OBJECTIVES

Cognitive: Students will orally present, in a discussion, present and future land use problems. Write a 1 page paper on "Land Ethics".

Affective: Students will understand problems of business concerns in relationship to the concept "Land Ethics".

Skills to be Learned
 Creative thinking
 Group discussion
 Research
 Writing
 Reporting facts
 Listening

SUGGESTED LEARNING EX

- I. Student-Centered in class activity
 - A. Divide students into small groups.
 1. Compile a list of present land use problems of businesses.
 2. Predict future land use problems of businesses.
 - B. Have a group discussion of present and future problems.
 - C. Small groups geographically illustrate conclusions from class display.
 - D. Discuss questions of private gain vs community service responsibility.

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ip must be _____ Discipline Area Business Education
 rdship and should _____ Subject General Business
 r violate the _____ Problem Orientation Land use Planning Grade 9-12
 f others. _____

VES	SUGGESTED LEARNING EXPERIENCES	
11	I. Student-Centered in class activity	II. Outside Resource and Community Activities
d	A. Divide students into small groups.	A. Have a person from
ms.	1. Compile a list of	local government
n	present land use	speak on young laws,
11	problems of businesses.	city ordinances, and
	2. Predict future land	licenses that limit
	use problems of	and regulate
	businesses.	business concerns.
	B. Have a group discussion	B. Collect newspaper
	of present and future	and magazine articles
	problems.	on restrictions of
	C. Small groups geographically	business use.
	illustrate conclusions	1. Have student give
	from class display.	an extra credit
	D. Discuss questions of	report on these
	private gain vs community	articles.
	service responsibility.	C. For a long range
		report, students
		could note in a given
		area the type of land
		posted for <u>no</u>
		<u>trespassing</u> . Contact
		owners to see why it
		is posted, as open
		areas for recreation
		are needed for
		population increase.

Resource and Reference Materials
Publications:

Continued and Additional Suggest

Community Planning Handbook,
I-C-E RMC
Sand County Almanac, Aldo Leopold,
local library

Audio-Visual:

Using Community Resources,
I-C-E RMC
All of the People All the Time,
#3345 BAVI

Community:

City Planning Commission

Speakers:

City manager
Representative DNR
City engineer

Continued and Additional Suggested Learning Experiences

ESEA Title III - 59-70-0135-2 Project I-C-E

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1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.

Discipline Area Business
Subject Typing
Problem Orientation & Potential

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to type the material at a 50 wpm rate for 5 minutes with no more than 5 errors.

Affective: Students will appreciate the basic source of energy as related to life.

Skills to be Learned
Research
Interviewing
Typing
Proofreading

SUGGESTED LEARNING

I. Student-Centered in class activity

A. After interviews, type the reports.

1. Take timings

- a. 1 minute
- b. 3 minutes
- c. 5 minutes
- d. Record

2. Proofread

- a. Circle each error
- b. Analyze each error
- c. Record

3. Sort out each key concept of each paragraph by underscoring.

- a. List each student's concept on board.
- b. Break down and sort for basic ten or twelve
- c. Discuss each concept as it is selected.
- d. Use each sentence as 12 second interval timings.

y from the sun, the basic
of all energy, is converted
plant photosynthesis into a
living things can use for life
s.

Discipline Area Business Education
 Subject Typing I and II
 Problem Orientation Power Consumption
& Distribution Grade 9-12

AL OBJECTIVES

The student will
 type the material
 at a rate for 5
 minutes or more than

Students will
 identify the basic source
 of power related to

What is Learned

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. After interviews, type the reports.
 1. Take timings
 - a. 1 minute
 - b. 3 minutes
 - c. 5 minutes
 - d. Record
 2. Proofread
 - a. Circle each error
 - b. Analyze each error
 - c. Record
 3. Sort out each key concept of each paragraph by underscoring.
 - a. List each student's concept on board.
 - b. Break down and sort for basic ten or twelve
 - c. Discuss each concept as it is selected.
 - d. Use each sentence as 12 second interval timings.

- II. Outside Resource and Community Activities
 - A. Collect data relevant to the use of power consumption and distribution.
 1. Industrial
 2. Business
 3. Chemical producing
 4. Agricultural data
 5. A living process
 - B. Interview a businessman and type up a report for use in class and timings.
 1. Also may consider an official of the Public Utility Company - electrical power and gas.

Materials	Continued and Additional Suggested Learning Experiences
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Environment, ical Unit	
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VI I-C-E RMC	
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ESEA Title III - 59-70-0135-2 Project I-C-E

C 2. All living organisms interact Discipline Area Business
O among themselves and their Subject Typing I
N environment, forming an intricate Problem Orientation Water On
E unit called an ecosystem. Control fo
P
T

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPER
<p><u>Cognitive:</u> Students will identify causes by reading and typing two articles concerning water pollution.</p> <p><u>Affective:</u> Students will appreciate reasons for maintaining clean water.</p>	<p>I. Student-Centered in class activity</p> <p>A. Collect two articles covering water pollution from any magazine, newspaper, etc.</p> <p>B. Write a summary on the article during free time.</p> <p>C. Type summary of article from rough draft.</p> <p>D. Take timed writings on finished copy.</p>
<p><u>Skills to be Learned</u></p> <p>Collection of data</p> <p>Summarizing</p> <p>Handwriting</p> <p>Typing</p> <p>Proofreading</p>	<p>II. Co</p> <p>Con</p> <p>A.</p> <p>5.</p> <p>C.</p> <p>D.</p>

g organisms interact Discipline Area Business Education
lives and their Subject Typing I and II
forming an intricate Problem Orientation Water Quality
an ecosystem. Control Grade 9-12

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>ents will by reading articles pollution.</p> <p>ents will ons for en water.</p>	<p>I. Student-Centered in class activity</p> <p>A. Collect two articles covering water pollution from any magazine, newspaper, etc.</p> <p>B. Write a summary on the article during free time.</p> <p>C. Type summary of article from rough draft.</p> <p>D. Take timed writings on finished copy.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Observe conditions of the local river and write up a summary.</p> <p>B. Have science teacher come in and talk on problems of local water pollution. Write and type summary of talk.</p> <p>C. Type letters to congressmen showing you concern of local water quality control.</p> <p>D. Type letters to the Bureau of National Resources requesting information regarding water pollution.</p>
<p>arned</p> <p>ata</p>		

Resource and Reference Materials	Continued and Additional
<u>Publications:</u> Weekly magazines on pollution to be checked for source material <u>An Alternative Future for America</u> I-C-E RMC <u>VF A Primer on Waste Water Treatment</u> I-C-E RMC <u>Water Pollution, I-C-E RMC</u>	
<u>Audio-Visual:</u> <u>City Water Supply #0433</u> BAVI <u>The Gifts, I-C-E IMC</u> Teacher may want to check other listings of conservation and environment films from the I-C-E RMC vertical file	
<u>Community:</u> Business leader Science teacher	

ence Materials | Continued and Additional Suggested Learning Experiences

pollution to be
aterial
e for America

Water Treatment

-E RMC

433 BAVI

check other
ation and
rom the I-C-E

C 3. Environmental factors are limiting
 O on the numbers of organisms living
 N within their influence, thus, each
 C environment has a carrying capacity.
 E
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 T

Discipline Area Business
 Subject Typing I
 Problem Orientation Carrying Capacity

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will list dwindling environmental resources and the reasons for their decline.

Affective: Students will distinguish what man really needs, what he wants and why.

Skills to be Learned
 Collection of data
 Sorting
 Critical analysis
 Researching
 Composing

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Have a class discussion, analyzing an environmental problem illustrating limited capacity.
 - B. Each student will prepare a research manuscript on the above problem(s).
 - C. After exchanging papers, the students will check for errors and then return papers for revision.
 - D. A group of students will prepare a bulletin board on environmental capacity limits.

- II.
 - A. Have a class discussion, analyzing an environmental problem illustrating limited capacity.

Factors are limiting Discipline Area Business Education
of organisms living Subject Typing I and II
influence, thus, each Problem Orientation Carrying Capacity Grade 9-12
a carrying capacity.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>ts will viron- and the decline.</p> <p>ts will man s he</p>	<p>I. Student-Centered in class activity</p> <p>A. Have a class discussion, analyzing an environmental problem illustrating limited capacity.</p> <p>B. Each student will prepare a research manuscript on the above problem(s).</p> <p>C. After exchanging papers, the students will check for errors and then return papers for revision.</p> <p>D. A group of students will prepare a bulletin board on environmental capacity limits.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Use library to find material needed for research paper or any other place the student feels he can find valuable information.</p> <p>B. Students will contact local DNR representative and school science teacher to have them speak to the class.</p> <p>C. Students can bring clippings from local newspaper or magazines to class for a bulletin board.</p>

Materials	Continued and Additional Suggested Learning Experiences
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Public Cost MC	
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4. An adequate supply of pure

water is essential for life.

Discipline Area

Business

Subject

Typing I a

Problem Orientation Polluted V

BEHAVIORAL OBJECTIVES

Cognitive: The student will be able to name specific areas of water pollution, its causes and ways in which he and his classmates can help stop pollution.

Affective: Students will become more aware of the causes of water pollution and ways in which he can help stop pollution.

Skills to be Learned
Improving typing speed and accuracy
Effective thinking

SUGGESTED LEARNING EXPERIEN

I. Student-Centered in class activity

A. Show filmstrip on water pollution.

B. Students discuss filmstrip and apply their own experience.

1. Evidence of lakes and river pollution

2. Possible causes of pollution

3. Steps they can take to help stop pollution

4 Steps they can take to encourage others to help stop pollution

C. Take typing timings on material having to do with water pollution.

II. Ou

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ESEA Title III - 59-70-0135-2 Project I-C-E

ly of pure _____ Discipline Area Business Education
 for life. _____ Subject Typing I and II
 _____ Problem Orientation Polluted Water Grade 9-12

ES	SUGGESTED LEARNING EXPERIENCES	
will ic on, which can ll ne ion an	I. Student-Centered in class activity A. Show filmstrip on water pollution. B. Students discuss filmstrip and apply their own experience. 1. Evidence of lakes and river pollution 2. Possible causes of pollution 3. Steps they can take to help stop pollution 4. Steps they can take to encourage others to help stop pollution C. Take typing timings on material having to do with water pollution.	II. Outside Resource and Community Activities A. Obtain articles from local newspapers. B. Students watch for pollution of streams or lakes near their homes, farms, vacation sites, etc.
and		

Resource and Reference Materials Publications:	Continued and Additional Suggested Learning
<p>Timing Material, Madison Business College, 215 W. Washington, Madison, Wi. 53703</p> <p>National Wildlife, 1971 EQ Index, I-C-E RMC</p> <p>VF What You Can Do About Water Pollution, I-C-E RMC</p> <p>VF Clean Water - It's Up to You, I-C-E RMC</p>	
<p><u>Audio-Visual:</u></p> <p><u>Films:</u></p> <p><u>Lakes - Aging & Pollution</u> #3967 BAVI</p> <p><u>Water Pollution</u> #7875 BAVI</p> <p><u>What Are They Doing to Our World?</u> #7251 EAVI</p> <p><u>Kit:</u></p> <p><u>KT12 Ecology: Water Pollution</u> I-C-E RMC</p> <p><u>Filmstrip:</u></p> <p><u>Environmental Pollution...Our World in Crisis, I-C-E RMC</u></p> <p><u>Simulation Games:</u></p> <p><u>Ecology, I-C-E RMC</u></p> <p><u>Dirty Water, I-C-E RMC</u></p>	
<p><u>Community:</u></p>	

Continued and Additional Suggested Learning Experiences

C 5. An adequate supply of clean air Discipline Area Business
 O is essential because most organisms Subject Typing I
 N depend on oxygen, through respiration, Problem Orientation Air Po
 C to release the energy in their food. th

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> Students will write to the U.S. representative in their district requesting action for cleaner air.</p> <p><u>Affective:</u> Students will become motivated into thinking of ways he can help stop air pollution.</p>	<p>I. Student-Centered in class activity</p> <p>A. Students write letters in draft form, long hand or type.</p> <ol style="list-style-type: none"> 1. Proofread letters and make necessary corrections. 2. Prepare typewriter for typing and make up carbon pack. 3. Type original and carbon 4. Mail the original to their representative. 5. File the carbon copy. <p>B. For one-quarter of the school term, develop a bulletin board on news articles taken from newspapers, local, state and national level.</p>	<p>II. Objective</p> <p>A. Cor</p> <p>B.</p> <p>C.</p> <p>D.</p>
<p><u>Skills to be learned</u></p> <p>Letter writing</p> <p>Filing</p>		

clean air Discipline Area Business Education
organisms Subject Typing I & II
h respiration, Problem Orientation Air Pollution Grade 9-12
their food.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Students write letters in draft form, long hand or type.
1. Proofread letters and make necessary corrections.
 2. Prepare typewriter for typing and make up carbon pack.
 3. Type original and carbon
 4. Mail the original to their representative.
 5. File the carbon copy.
- B. For one-quarter of the school term, develop a bulletin board on news articles taken from newspapers, local, state and national level.

- II. Outside Resource and Community Activities
- A. Students read several sources of air pollution in the library.
- B. Write a letter from summary to know what to explain to your representative.
- C. View types of air pollution locally.
- D. Report to class on findings of air pollution.

Resource and Reference Materials	Continued and Additional
<u>Publications:</u> <u>Air and Water Pollution, I-C-E RMC</u> <u>Conserving Our Waters & Cleaning</u> <u>Up the Air, (Teachers Guide &</u> <u>Students Manual) I-C-E RMC</u> <u>Air Pollution: Where Are We Going?</u> <u>I-C-E RMC</u> <u>Dirty Air, Environmental Science</u> <u>Center series I-C-E RMC</u> <u>Air Pollution, Scientists Institute</u> <u>for Public Information I-C-E RMC</u>	
<u>Audio-Visual:</u> <u>KT 6 Crisis of the Environment</u> <u>I-C-E RMC</u> <u>Air Pollution BAVI</u>	
<u>Community:</u> <u>Local planners</u> <u>Visit local manufacturing firms</u> <u>to observe air pollution</u>	

Materials	Continued and Additional Suggested Learning Experiences
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-C-E RMC
eaning
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e Going?

cience

Institute
-C-E RMC

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forms

C 6. Natural resources are not equally Discipline Area Business
 O distributed over the earth or over Subject Typing I
 N time and greatly affect the Problem Orientation Natural
 C geographic conditions and quality of life.

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Student will be able to center each line with 99% accuracy, using natural resource terms.
Affective: Student will be able to recognize terms related to natural resources and the unequal distribution of natural resources.

Skills to be Learned

Centering
 Proofreading
 Data collection
 Comparison
 Typing

SUGGESTED LEARNING EXPER

I. Student-Centered in class activity
 A. Type an exercise of terms relative to natural resources.
 1. Type 25 lines
 2. Each line must be centered horizontally
 3. Entire exercise centered in reading position.
 B. Proofread and make corrections.
 C. Show film, tracing the production of paper from its origin to finished product of typing paper.
 D. Discuss recycled typing paper, emphasizing the need to conserve our natural resources.
 E. Students to type an answer to the following question:
 1. Can we have progress without destroying the environment? Reasons.
 Note: Suggested list of terms on reverse side.

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ot equally Discipline Area Business Education
or over Subject Typing I & II
 Distribution of
 Natural Resources Grade 9-12
quality of life.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Type an exercise of terms relative to natural resources.
 - 1. Type 25 lines
 - 2. Each line must be centered horizontally
 - 3. Entire exercise centered in reading position.
 - B. Proofread and make corrections.
 - C. Show film, tracing the production of paper from its origin to finished product of typing paper.
 - D. Discuss recycled typing paper, emphasizing the need to conserve our natural resources.
 - E. Students to type an answer to the following question:
 - 1. Can we have progress without destroying the environment? Reasons.

Note: Suggested list of
terms on reverse side.

- II. Outside Resource and Community Activities
- A. Use a dictionary to collect natural resource terms to type.
 - B. Classify according to length.
 - C. Obtain recycled paper in various stages from mill.

Resource and Reference Materials	Continued and Additional Suggested
<u>Publications:</u>	<u>Some suggested terms</u>
<u>The Environmental Crisis, I-C-E RMC</u> <u>Natural Resources for U. S. Growth,</u> Hans H. Landsberg, John Hopkins Press.	solar energy pulp forest management aluminum minerals crude oil watershed natural gas zinc anthracite coal ore oxygen class I soil open pit mining strip mining magnesium uranium timber copper
<u>Audio-Visual:</u> A list of films on paper production can be obtained from a local paper company	
<u>Community:</u> Paper samples of different stages Paper mills/converting plant	

als	Continued and Additional Suggested Learning Experiences
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E RMC owth, ns	<u>Some suggested terms</u>
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E RMC owth, ns	<p> solar energy pulp forest management aluminum minerals crude oil watershed natural gas zinc anthracite coal ore oxygen class I soil open pit mining strip mining magnesium uranium timber c per </p>
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ESEA Title III - 59-70-0135-2 Project I-C-3

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7. Factors such as facilitating _____ Discipline Area _____ Bus _____ ac _____
 transportation, economic conditions, _____ Subject _____ Typ _____ nom _____
 population growth, and increased time _____ Problem Orientation _____ and _____
 have a great influence on changes in land use and centers of population density.

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students will be able to identify areas of greater population density and list the reasons and effects of high population density upon life.

Affective: Students will realize an increasing population growth will effect life and our economic system, whether the student lives in an area of high population or not.

Skills to be learned
 Column Heading
 Centering
 Tabulation
 Margin setting
 Composing letters
 Dictionary work

- I. Student-Centered in class activity
 - A. Students discuss table to be typed as to regions with larger population, the factors causing areas to be high in population, effect of increased population growth upon leisure time, land use and noise.
 - B. Students set up properly and type tabulation consisting of the largest U.S. areas, population and rank.
 - C. Compose letters to State Board of Transportation requesting information on any new approach about pending road construction in the state and what areas are being developed.

Facilitating _____ Discipline Area Business Education
 Economic conditions, _____ Subject Typing I & II
 and increased time _____ Problem Orientation Population Density Grade 9-12

Effect on changes in land
 population density.

SUGGESTED LEARNING EXPERIENCES

ES II Areas y II popu- ect Student gh	I. Student-Centered in class activity A. Students discuss table to be typed as to regions with larger population, the factors causing areas to be high in population, effect of increased population growth upon leisure time, land use and noise. B. Students set up properly and type tabulation consisting of the largest U.S. areas, population and rank. C. Compose letters to State Board of Transportation requesting information on any new approach about pending road construction in the state and what areas are being developed.	II. Outside Resource and Community Activities A. Student will check the library for current periodicals for information about: 1. Growth of leisure time facilities in the past ten years. 2. Park usage 3. Noise pollution (Students will arrange data in proper order for typing tabulation.) B. Students contact county officials to compare over-all growth in all areas. Also contact Chamber of Commerce of various communities within the county for more information.
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Resource and Reference Materials	Continued and Additional Suggested
<p><u>Publications:</u> World Almanac 1970 census report National Wildlife Federation, 1971 EC Index, p. 9, I-C-E RMC The Traffic Jam, I-C-E RMC <u>The City as a Community, I-C-E RMC</u></p> <p><u>Audio-Visual:</u> <u>Spaceship Without a Skipper,</u> I-C-E RMC Kit: KT 6 <u>Crisis of the Environment,</u> I-C-E RMC Filmstrip: Biology - <u>The Ecological Crisis</u> <u>Population Trends, I-C-E RMC</u></p> <p><u>Community:</u> Chamber of Commerce City Manager Local doctor Local park manager</p>	

Continued and Additional Suggested Learning Experiences

71
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C 8. Cultural, economic, social, and
O political factors determine status
N of man's values and attitudes
C toward his environment.
E
P
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Discipline Area
Subject
Problem Orientation
nt.

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Student will be able to type an exercise using terms related to values.

Affective: Student will be able to recognize terms related to man's values and attitudes toward his environment.

Skills to be Learned
Tabulation
Vertical centering
Typing

- I. Student-Centered in class activity
 - A. Type an exercise in problem form of terms related to values.
 1. Twenty lines in length
 2. Three columns
 3. Ten spaces between columns
 4. Vertical centering
 - B. Proofread
 1. Circle errors
 2. Analyze
 - C. Show film on landfill area
 1. Discuss with the class, ten basic ways students can help eliminate this waste, correlating this with values.
 2. Have students type a master carbon.

Note: Some suggested terms
needs
wants
stewardship
conservation
preservation
beautification
land ethic
management
recycling
quality of
life-style

ESEA Title III - 59-70-0135-2 Project I-C-3

Discipline Area	Business Education
Subject	Typing I & II
Problem Orientation	Land Use Conflict
Grade	9-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Type an exercise in problem form of terms related to values.
 - 1. Twenty lines in length
 - 2. Three columns
 - 3. Ten spaces between columns
 - 4. Vertical centering
- B. Proofread
 - 1. Circle errors
 - 2. Analyze
- C. Show film on landfill area.
 - 1. Discuss with the class, ten basic ways students can help eliminate this waste, correlating this with values.
 - 2. Have students type a master carbon.

Note: Some suggested terms

needs	recycling
wants	quality of life
stewardship	life-style
conservation	
preservation	
beautification	
land ethic	
management	

II. Outside Resource and Community Activities

- A. Take a trip to a landfill area.
- B. Obtain film on landfill areas.
- C. Construct a map, pin point various landfill areas.
 - 1. Bring advantages and disadvantages.
- C. Get diversified view points from agriculture and commercial people and write a report.

Resource and Reference Materials	Continued and Additional Suggested Learning
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Publications:

Pamphlets & booklets from Wis.
Dept. of Natural Resources
Free booklets from U.S. Dept.
of Agriculture

Audio-Visual:

Land Betrayed, #6878 BAVI
Land, #5529-5530 BAVI

Community:

Learn names of development
companies and invite speakers
to class to explain why a section
of land is being used for a
special project.

ar ls Continued and Additional Suggested Learning Experiences

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9. Man has the ability to manage,
manipulate, and change his
environment.

Discipline Area Bu the
Subject Ty an
Problem Orientation

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Student makes an outline on how man can manipulate the environment.

Affective: Students are motivated to thinking about their environment at present and the course to pursue for future preservation.

Skills to be Learned
Prepare outline
Typing
Recall facts

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Outline preparation
 1. Discuss environmental changes with members of class.
 2. Prepare an outline.
 3. Using prepared outline, type the report.
 4. Student papers can be posted on bulletin board.
 - B. Follow-up: Student could use data on land changes in his immediate environment.
 - C. Write a final report on how man manipulates the environment.

the ability to manage, Discipline Area Business Education
 and change his Subject Typing I & II
 Problem Orientation Manipulation Grade 9-12

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>Student makes an man can environment.</p> <p>Students are thinking about present to pursue ervation.</p>	<p>I. Student-Centered in class activity</p> <p>A. Outline preparation</p> <ol style="list-style-type: none"> 1. Discuss environmental changes with members of class. 2. Prepare an outline. 3. Using prepared outline, type the report. 4. Student papers can be posted on bulletin board. <p>B. Follow-up: Student could use data on land changes in his immediate environment.</p> <p>C. Write a final report on how man manipulates the environment.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Possible sources:</p> <ol style="list-style-type: none"> 1. Area planning commission 2. Government development of land use - state and federal 3. Local government on zoning laws 4. Newspapers to obtain articles on recent ways man is manipulating/changing his environment.
<p>Learned</p>		

Resource and Reference Materials	Continued and Additional Suggested Learning Materials
<p><u>Publications:</u></p> <p><u>Highlights, DNR publications,</u> I-C-E RMC</p> <p><u>Our Man-Made Environment,</u> I-C-E RMC</p> <p><u>America the Raped, I-C-E RMC</u></p> <p><u>Trash is Taking Over, I-C-E RMC</u></p> <p><u>Audio-Visual:</u></p> <p><u>Film:</u></p> <p><u>Wisconsin Manufacturing & Mining,</u> BAVI</p> <p><u>Kits:</u></p> <p>KT 4 <u>Man in His Environment,</u> I-C-E RMC</p> <p>KT 5 <u>Aggradation - Degradation,</u> I-C-E RMC</p> <p><u>Community:</u></p> <p>Member of local government</p> <p>Member of area planning committee</p>	

Materials	Continued and Additional Suggested Learning Experiences
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C 10. Short-term economic gains
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N produce long-term environmental
C
E losses.
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Discipline Area Business
Subject Typing
Problem Orientation Short-term
Long-term
Environment

BEHAVIORAL OBJECTIVES

Cognitive: Students will compose a 2-3 page manuscript with a title page, answering the following questions: What is more important - higher GNP or a better environment? Is it possible to have both, an increasing GNP and a better, cleaner environment?

Affective: Students will be able to evaluate the present growth of GNP as compared to the present and questionable future of the environment.

Skills to be Learned
Tabulation
Composing
Researching
Critical analysis
Preparing graphs
Preparing a title paper

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. An open discussion on the question of GNP growth vs environmental decline.
 - B. Students to compose a short paragraph on the purpose of the paper which they are to write (letter of transmittal).
 - C. Students to research and type up the 2-3 page paper, with title page on the question discussed in class.

II.

ESEA Title III - 59-70-0135-2 Project I-C-E

nic gains may _____ Discipline Area Business Education
 vironmental _____ Subject Typing: I & II
 _____ Short-term Gains
 Problem Orientation Long-term Grade 9-12
 _____ Environment

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. An open discussion on the question of GNP growth vs environmental decline.
- B. Students to compose a short paragraph on the purpose of the paper which they are to write (letter of transmittal).
- C. Students to research and type up the 2-3 page paper, with title page on the question discussed in class.

II. Outside Resource and Community Activities

- A. Use the library in researching report.
- B. Students will tour local employment commission and local industry to interview personnel and observe methods production.
- C. A group of students to gather materials for a bulletin board comparing GNP vs Environment.
 1. Contact federal agencies dealing with GNP
 2. City manager
- D. Have a math teacher speak to class or ask for information you need from him.

Resource and Reference Materials	Continued and Additional Suggestions
<p data-bbox="387 938 637 972"><u>Publications:</u></p> <p data-bbox="414 972 1028 1109">National Wildlife Federation, 1971 EQ Index, I-C-E RMC VF Congressional Record, Feb. 10, 1970, I-C-E RMC</p> <p data-bbox="387 1267 637 1301"><u>Audio-Visual:</u></p> <p data-bbox="414 1301 1051 1573">Simulation games: SG 1 <u>Smog: The Air Pollution Game</u> I-C-E RMC SG 2 <u>Ecology; The Game of Man and Nature</u>, I-C-E RMC Wanted for Murder, 1970 poster Film: <u>Men at Bay</u>, #250, I-C-E RMC</p> <p data-bbox="387 1721 582 1755"><u>Community:</u></p> <p data-bbox="414 1755 791 1857">City manager Local businessmar Local industrialists</p>	

ials	Continued and Additional Suggested Learning Experiences
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Game	
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C O N C E P T	<u>11. Individual acts, duplicated or</u>	Disciplin
	<u>compounded, produce significant</u>	Subject
	<u>environmental alterations over time.</u>	Problem O

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGEST
<p><u>Cognitive:</u> Student will be able to type a modified block, mixed punctuation business letter on waste disposal with 95% accuracy.</p> <p><u>Affective:</u> The student will appreciate the need to conserve products to eliminate the need for waste.</p>	<p>I. Student-Centered in activity</p> <p>A. Students type a letter to a local employer on various aspects of disposal and what company has done to solve the problem.</p> <ol style="list-style-type: none"> 1. Use block form 2. Use mixed punctuation <p>B. Show a film on waste disposal.</p> <p>C. Show on overhead transparencies, the difference in spacing of single spaced and double spaced reports emphasizing the amount of space saved by single spacing.</p> <ol style="list-style-type: none"> 1. Type short report single spaced. 2. Type short report double spaced. 3. Compute the amount of lines saved. 4. Show the amount that is saved by using this as one typing student. Use both sides of paper.
<p><u>Skills to be Learned</u></p> <p>Interviewing</p> <p>Typing</p> <p>Composing</p>	

ects, duplicated or
duce significant
iterations over time.

Discipline Area Business Education
Subject Typing I & II
Problem Orientation Waste Disposal Grade 10-12

ACTIVITIES	SUGGESTED LEARNING EXPERIENCES	
will be ified ation waste ent need ts to for	<p>I. Student-Centered in class activity</p> <p>A. Students type a letter to a local employer on the various aspects of waste disposal and what that company has done to help solve the problem.</p> <ol style="list-style-type: none">1. Use block form2. Use mixed punctuation <p>B. Show a film on waste disposal.</p> <p>C. Show on overhead transparencies, the difference in spacing of single and doubled spaced reports, emphasizing the amount of space saved by single spacing.</p> <ol style="list-style-type: none">1. Type short report single spaced.2. Type short report double spaced.3. Compute the amount of lines saved.4. Show the amount of waste that is saved by pointing out this is one way typing students can help. Use both sides of typing paper.	<p>II. Outside Resource and Community Activities</p> <p>A. Interview local businessman and have him give the recent ways they have employed to help solve the waste disposal problem.</p> <ol style="list-style-type: none">1. Construct in business letter form2. Construct in work copy form <p>B. Tour a paper mill to see the way by-products are handled and recycled.</p>
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Resource and Reference Materials	Continued and Additional Suggest
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<p><u>Publications:</u></p>	
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<p>Local newspaper articles on recycled products or attempts to form a recycled process type business</p>	
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<p><u>Audio-Visual:</u></p>	
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<p>Junk Dump, I-C-E RMC</p>	
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<p>Garbage, I-C-E RMC</p>	
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<p>Stuff We Throw Away, #7923 BAVI</p>	
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<p><u>Community:</u></p>	
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<p>Business executive</p>	
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<p>Local paper mill/converting plant</p>	
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Continued and Additional Suggested Learning Experiences

ESEA Title III - 59-70-0135-2 Project I-C-F

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12. Private ownership must be
regarded as a stewardship and should
not encroach upon or violate the
individual rights of others.

Discipline A

Subject

Problem Orier

BEHAVIORAL OBJECTIVES

SUGGESTED

Cognitive: Student will be able to align the typewritten letter on private ownership with 90% accuracy.

Affective: The student will become aware of the concept of private ownership.

Skills to be learned
Alignment
Paper insertion
Paper removal

I. Student-Centered in activity

A. Type from a snowmobile club manual.

1. Student types a from manual omit certain letters.

2. Take paper out of typewriter.

3. Reinsert sheet.

4. Align the sheet.

5. Type in the missing letters.

B. Project transparenc snowmobile club pur

1. Point out the se where private pr should be respec

2. Discuss the ways which students c show respect for private ownershi

must be _____ Discipline Area Business Education
 ship and should _____ Subject Typing I & II
 violate the _____ Problem Orientation Private Ownership Grade 10-12
 others. _____

S	SUGGESTED LEARNING EXPERIENCES	
be itten hip ill ept	I. Student-Centered in class activity A. Type from a snowmobile club manual. 1. Student types a page from manual omitting certain letters. 2. Take paper out of the typewriter. 3. Reinsert sheet. 4. Align the sheet. 5. Type in the missing letters. B. Project transparency of snowmobile club purpose. 1. Point out the section where private property should be respected. 2. Discuss the ways in which students can show respect for private ownership.	II. Outside Resource and Community Activities A. Student will find a snowmobile club manual containing rules and regulations governing private ownership and bring it to class. B. Interview a person who has had numerous amounts of damage done to his property. Report to the class. C. Ask representative of a snowmobile club to speak to class.

als	Continued and Additional Suggested Learning Experiences
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C	1. <u>Energy from the sun, the basic source</u>	Discipline Area	Business	as
O	<u>of all energy, is converted through</u>	Subject	Shorthand	thro
N			Power	
G	<u>plant photosynthesis into a form all</u>	Problem Orientation & Dist		for
E				
P	<u>living things can use for life processes.</u>			te
T				

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students are given a report to punctuate, capitalize, hyphenate and use numbers with at least 70% accuracy in transcription.

Affective: The report used would show the energy used to gain a point in everyday living.

Skills to be Learned
 Points of communication
 Punctuation
 Capitalization
 Numbers
 Hyphen
 Oral discussion
 Vocabulary

SUGGESTED LEARNING EXP

I. Student-Centered in class activity

- A. Students are given 10 sentences on energy to:
 1. Punctuate
 2. Capitalize
 3. Write numbers correctly
 4. Spell words correctly
- B. Sentences are corrected and returned to students. They are then used for discussing energy.
- C. Energy terms are used in development of crossword puzzles.
- D. Discuss how shorthand employees use more energy today than 20 yrs. ago in doing their daily work. Why?

II. Out

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Basic source Discipline Area Business Education
through Subject Shorthand
er Power Consumption
ist form all Problem Orientation & Distribution Grade 10-12
e processes.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Students are given 10 sentences on energy to:
 1. Punctuate
 2. Capitalize
 3. Write numbers correctly
 4. Spell words correctly
- B. Sentences are corrected and returned to students. They are then used for discussing energy.
- C. Energy terms are used in development of crossword puzzles.
- D. Discuss how shorthand employees use more energy today than 20 yrs. ago in doing their daily work. Why?

II. Outside Resource and Community Activities

- A. Have an engineer in energy resources speak to class and explain how an office worker uses energy to perform daily work.
- B. Students can obtain a list from the County Agriculture Agent regarding the crops grown in the area that need extensive sunlight and is used for human food.

Resource and Reference Materials

Continued and Addit

Publications:

Current newspapers, periodicals
and pamphlets found in school
library on energy
National Wildlife Magazine for
Oct.-Nov. 1971, p. 10 illustration,
Your Life Depends on the Sun

Audio-Visual:

Film:

Green Plants and Sunlight,
BAVI #6743

Community:

Engineer in energy resource
County Agriculture Agent

dit Continued and Additional Suggested Learning Experiences

C
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2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

Discipline Area
Subject
Problem Orientation

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
<p>Cognitive: Given a test, the student will get 95% accuracy on the spelling, 100% accuracy on the shorthand outline and transcription of notes and correctly identify terms and their use in the sentence.</p> <p>Affective: Student will begin to appreciate the dependency of one thing upon another in every aspect of life.</p>	<p>I. Student-Centered in class activity</p> <p>A. Students will be given spelling test.</p> <p>B. Students will be taught by use of an overhead, to illustrate the proper procedure in writing the environmental terms in shorthand.</p> <p>C. The class will then discuss the meanings of environmental terms and their correct use.</p> <p>D. Students will construct sentences using the terms discussed in class.</p> <p><u>Note: Partial list of terms listed on the reverse side.</u></p>
<p><u>Skills to be learned</u></p> <p>Spelling</p> <p>Taking shorthand notes</p> <p>Shorthand outline construction</p> <p>Vocabulary</p> <p>Typing</p>	

Discipline Area Business Education

ment, Subject Shorthand

n Problem Orientation Balance of Nature Grade 10-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
Activity
Students will be given a spelling test.
Students will be taught, by use of an overhead, to illustrate the proper procedure in writing the environmental terms in shorthand.
The class will then discuss the meanings of environmental terms and their correct use.
Students will construct 3 sentences using the terms discussed in class.
Note: Partial list of terms listed on the reverse side.

II. Outside Resource and Community Activities

- A. Students will research the origin of the environmental terms discussed in class. Use the library.
- B. Students will take notes (in shorthand) on a speech given by a DNR representative about the inter-relationship of organisms in the environment.
 1. After the speech, students will use their transcription for discussion.

Resource and Reference Materials	Continued and Additional Su
<u>Publications:</u> Current newspaper articles in which certain environmental terms are used 110 Ec <u>Investigations into Ecology</u> , I-C-E RMC 110 Br <u>Interaction and Systems</u> , I-C-E RMC	<u>Partial list of terms:</u> Ecology Environment Ecosystem Pollution Recycling Biomass Land Ethic Pesticides Limnology Herbicides Toxic Conservation Resources a. natural b. renewable Photosynthesis
<u>Audio-Visual:</u> <u>Ecology</u> , simulation game, I-C-E RMC <u>This Vital Earth</u> , #2359 EAVI	
<u>Community:</u> DNR representative	

Supplemental Materials	Continued and Additional Suggested Learning Experiences
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in al Ecology, tems,	Partial list of terms: Ecology Environment Ecosystem Pollution Recycling Biomass Land Ethic Pesticides Limnology Herbicides Toxic Conservation Resources a. natural b. renewable Photosynthesis
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C 3. Environmental factors are limiting Discipline Area Business
 O on the numbers of organisms living Subject Shorthand
 C within their influence, thus, each Problem Orientation Ca
 E environment has a carrying capacity. Ca
 P
 T

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EXPERIENCES

Cognitive: Students will
be able to correctly
compose shorthand outlines
from written environmental
material.

Affective: Students will
come to appreciate good
environmental management
techniques.

Skills to be Learned
Research skill
Group interaction
Shorthand outline
Construction

I. Student-Centered in class activity

- A. Students will bring in an article about some type of management of environmental techniques.
- B. Using shorthand skills previously learned, have students write the above mentioned article in shorthand.
- C. The class will discuss the articles about environmental management techniques.
- D. Students will type shorthand notes in manuscript style.

Project I-C-E

ESEA Title III - 59-70-0135-2

SUGGESTED LEARNING EXPERIENCES	
<p>ECTIVES</p> <p>ts will</p> <p>tly</p> <p>outlines</p> <p>ronmental</p> <p>ts will</p> <p>te good</p> <p>agement</p> <p>ned</p>	<p>I. Student-Centered in class activity</p> <p>A. Students will bring in an article about some type of management of environmental techniques.</p> <p>B. Using shorthand skills previously learned, have students write the above mentioned article in shorthand.</p> <p>C. The class will discuss the articles about environmental management techniques.</p> <p>D. Students will type shorthand notes in manuscript style.</p>
	<p>II. Outside Resource and Community Activities</p> <p>A. Use library to help prepare and find articles.</p> <p>B. Students can gather materials for a bulletin board titled "Carrying Capacity".</p> <p>1. Sources:</p> <p>a. Industry</p> <p>b. DNR</p> <p>c. Business</p> <p>d. Land developer</p> <p>2. Students will prepare all titles for bulletin board in shorthand figures.</p>

Source Materials	Continued and Additional Suggested Learning Experiences
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-C-E bibliography the teacher may dents in ticle	
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C O N C E P T	4. An adequate supply of pure	Discipline Area	Business Edu
	water is essential for life.	Subject	Shorthand
		Problem Orientation	Water Con

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will list facts they observed on bad water conditions and methods of improvement.

Affective: Students will appreciate the need for clean water and the steps being taken to preserve clean water.

Skills to be Learned

Shorthand notes
Transcription
Punctuation
Capitalization
Report forms

SUGGESTED LEARNING EXPERI

I. Student-Centered in class activity

- A. After a class field trip, students and teacher discuss reports.
Discussion centers around:
 1. Points of interest observed on field trip
 2. Problems/solutions
- B. Compose a letter to learn what research is being done in the area. Plan to send these to:
 1. Firms concerned with water usage
 2. Government agencies
- C. Revise typed letters and students make corrections.
- D. Mail letters to firms or agencies selected.

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Subject Shorthand

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Problem Orientation Water Conditions Grade 10-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. After a class field trip, students and teacher discuss reports. Discussion centers around:
 - 1. Points of interest observed on field trip
 - 2. Problems/solutions
- B. Compose a letter to learn what research is being done in the area. Plan to send these to:
 - 1. Firms concerned with water usage
 - 2. Government agencies
- C. Revise typed letters and students make corrections.
- D. Mail letters to firms or agencies selected.

II. Outside Resource and Community Activities

- A. Paper mill representative to speak to class on what pure water means to job opportunities in paper making industry.
- B. Field trips to area plants.
 - 1. Paper mills bordering Fox River
 - 2. Canning companies
 - 3. Milk plants
 - 4. Sewerage treatment plants

Resource and Reference Materials	Continued and Additional Suggested L
<u>Publications:</u> <u>Everyman's Guide to Ecological Living</u> <u>Water Is Everybody's Business</u> <u>The Environmental Crisis</u> All available at I-C-E RMC	
<u>Audio-Visual:</u> <u>Film:</u> <u>Littering, DNR resources</u> <u>Madison, Wi.</u> <u>Kits:</u> <u>KT6 Crisis of the Environment,</u> I-C-E RMC	
<u>Community:</u> Speakers from a Paper mill Cannery Milk plant Sewerage treatment plant	

Materials	Continued and Additional Suggested Learning Experiences
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C 5. An adequate supply of clean air: Discipline Area Business
 O is essential because most organisms Subject Short
 N depend on oxygen, through respiration, Problem Orientation ox
 C to release the energy in their food. t

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will list effects air pollution has on our lives and the ways in which air pollution is being controlled.

Affective: Students will be able to appreciate the need for clean air and realize that steps are being taken to control air pollution.

Skills to be Learned

Dictation
 Transcription
 Punctuation
 Spelling
 Capitalization
 Proofreading
 Research
 Typing
 Composition

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Show filmstrip on air pollution.
 - B. Students, with some research, will compose a letter to companies in NE Wisconsin, asking businessmen what they are doing about air pollution.
 - C. Upon revision and selection of the 10 best letters, the teacher will dictate them to the class.
 - D. Students will transcribe shorthand notes, type and proofread.
 1. Prepare letters for mailing and mail them to the correct business.

adequate supply of clean air: Discipline Area Business Education
al because most organisms Subject Shorthand
oxygen, through respiration, Problem Orientation Dirty Air Grade 10-12
the energy in their food.

L OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>Students will air pollution ves and the air pollution rolled.</p> <p>Students will be ciate the need and realize e being taken r pollution.</p>	<p>I. Student-Centered in class activity</p> <p>A. Show filmstrip on air pollution.</p> <p>B. Students, with some research, will compose a letter to companies in NE Wisconsin, asking businessmen what they are doing about air pollution.</p> <p>C. Upon revision and selection of the 10 best letters, the teacher will dictate them to the class.</p> <p>D. Students will transcribe shorthand notes, type and proofread.</p> <p>1. Prepare letters for mailing and mail them to the correct business.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Speakers from local industries.</p> <p>1. Paper mills eg. Fort Howard</p> <p>2. Car dealers eg. Van Boxtel Ford</p> <p>B. Students will take notes on speeches in shorthand and transcribe.</p> <p>C. Field trips to local paper mill, to observe the amount of air pollution, and the controls being used.</p> <p>1. Students will take shorthand notes and transcribe later in the classroom.</p> <p>D. Bulletin board will be prepared from letters and returned answers. Titles can be prepared in shorthand.</p>
<p><u>Learned</u></p>		

Resource and Reference Materials	Continued and Additional Sugg
<p><u>Publications:</u> VF 1969 <u>Clean Air For Your Community</u> VF 1969 <u>Take 3 Giant Steps to Clean Air</u> VF 1969 <u>Air Pollution - Where We Are Going</u> All available at I-C-E RMC</p> <p><u>Audio-Visual:</u> Kits KT6 <u>Crisis of the Environment</u>, I-C-E RMC</p> <p><u>Community:</u> Industry leaders Auto sales businessman Trucking firms City official in charge of health conditiors in given community</p>	

Materials	Continued and Additional Suggested Learning Experiences
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C 6. Natural resources are not equally Discipline Area
 O distributed over the earth or over Subject
 N time and greatly affect the Problem Orientation
 C
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 T geographic conditions and quality of life.

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will
 list the areas where
 Wisconsin has depleted its
 resources and present
 environment results.

Affective: Students will
 become aware of Wisconsin's
 present status in terms of
 its capacity of its
 environmental resources.

Skills to be Learned
 Interview techniques
 Shorthand note taking
 Group interaction

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Class discussion or findings derived from interviews.
 - B. Added activities
 1. Take part in a mock job interview.
 2. Leadership role could be developed. Have a panel discussion.

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u> The Environmental Crisis, Man's struggle to live with himself, I-C-E RMC</p>	
<p><u>Audio-Visual:</u> Simulation game - <u>Man In His</u> <u>Environment</u>, I-C-E RMC</p>	
<p><u>Community:</u> Local business leaders</p>	

rest e Materials Continued and Additional Suggested Learning Experiences

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ESEA Title III - 59-70-0135-2 Project I-C-E

C O N C E P T 7. Factors such as facilitating transportation, economic conditions, population growth, and increased leisure time have a great influence on changes in land use and centers of population density.

Discipline Area Subject Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

Cognitive: Student will identify changes in land use in his community and cite reasons for such changes.

Affective: Students become aware of changes that are taking place concerning land use and population changes and the effect these changes will have upon him.

Skills to be learned
Improvement of shorthand vocabulary
Improvement in shorthand speed
Note taking from talks and interviews
Make judgments
Draw conclusions
Interviewing

- I. Student-Centered in class activity
 - A. Students are assigned to find census figures for community or township for 1970, 1960, 1950, etc.
 1. Discuss with reference to homebuilding, number of farms, size of farms, new manufacturing, airports or resort facilities.
 2. Speaker from the community can add facts to the above period.
 - B. Report on interview trying to draw conclusions as to effect on students today and in the near future.
 - C. Word study involved in dictating material on changes in land use.
 - D. Dictation of material concerning changes in land use.

such as facilitating Discipline Area Business Education
 on, economic conditions, Subject Shorthand
 Causes & Effects
 growth, and increased Problem Orientation of land use Grade 10-12
 changes

have a great influence on
 and use and centers of population density.

OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p>ent will e in land unity and r such</p> <p>ents become s that are icerning opulation effect all have</p>	<p>I. Student-Centered in class activity</p> <p>A. Students are assigned to find census figures for community or township for 1970, 1960, 1950, etc.</p> <p>1. Discuss with reference to homebuilding, number of farms, size of farms, new manufacturing, airports or resort facilities.</p> <p>2. Speaker from the community can add facts to the above period.</p> <p>B. Report on interview trying to draw conclusions as to effect on students today and in the near future.</p> <p>C. Word study involved in dictating material on changes in land use.</p> <p>D. Dictation of material concerning changes in land use.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Students interview sources for census:</p> <ol style="list-style-type: none"> 1. Newspapers 2. Older residents 3. Local historians 4. Museum curator 5. Representative of city, county or state historical society
<p>arned shorthand</p> <p>shorthand</p> <p>m talks</p>		

Resource and Reference Materials	Continued and Additions
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Publications:

Man in The Web of Life, I-C-E RMC
Urban America, The Ecological
Balance, p. 163. I-C-E RMC
Technology - The God That Failed,
I-C-E RMC

Audio-Visual:

KT5 Crisis of the Environment,
I-C-E RMC
Expanding City, #3849. BAVI

Community:

Chamber of Commerce official
 President of local real estate
 board in city.
 County planner for small rural
 area

Reference Materials	Continued and Additional Suggested Learning Experiences
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of Life, I-C-E RMC
The Ecological
3. I-C-E RMC
the God That Failed,

the Environment,

#3849. BAVI

erce official
 cal real estate
 for small rural

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8. Cultural, economic, social, and
political factors determine status
of man's values and attitudes
toward his environment.

Discipline Area.
Subject
Problem Orientation

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will
list ways in which dense
population centers promote
heavy pollution.

Affective: Students will
appreciate the need for
zoning and population
control.

Skills to be Learned
Composition
Shorthand outline
Group interaction
Transcription
Typing

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. With an overhead projector show a transparency of p. 1971 EQ Index.
 - B. Have students discuss the transparency and pick out certain terms to learn how to write in shorthand and use in sentences.
 - C. Students assigned (in shorthand written on board) a poem about concept #8 to be composed by them.

economic, social, and
factors determine status
and attitudes
environment.

Discipline Area Business Education
Subject Shorthand
Problem Orientation Pollution density Grade 10-12

SUGGESTED LEARNING EXPERIENCES	
OBJECTIVES Students will in dense s promote Students will ed for gion ned	I. Student-Centered in class activity A. With an overhead projector, show a transparency of p. 9, 1971 EQ Index. B. Have students discuss the transparency and pick out certain terms to learn how to write in shorthand and use in sentences. C. Students assigned (in shorthand written on board) a poem about concept #8 to be composed by them.
	II. Outside Resource and Community Activities A. Bulletin board display of poems. 1. Use titles that are written in shorthand. B. Local doctor to speak on population growth. 1. Students to take notes on speech in shorthand. 2. After the speech, students will transcribe and type in outline form. C. Students do a research paper on how density of population has affected the cultural values of people - large city living. D. Interview a person who has moved from the city to a rural area.

Resource and Reference Materials	Continued and Additio
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Publications:

National Wildlife Federation,
 1971 EQ Index, Oct. - Nov. Issue,
 1412 16th St. NW
 Washington, D.C. 20036. I-C-E RMC
Urban America, I-C-E RMC

Audio-Visual:

#3345 All of the People All of the
Time, BAVI
 #6947 Standing Room Only, BAVI

Community:

Local doctor or medical center

File Materials	Continued and Additional Suggested Learning Experiences
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eration,
Nov. Issue,

6. I-C-E RMC
RMC

te All of the

ly, BAVI

l center

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9. Man has the ability to manage,
manipulate, and change his
environment.

Discipline Area Bus

Subject Sho

Problem Orientation Ma

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students will
state ways man is
polluting wilderness
areas.

Affective: Student will
learn why wilderness areas
are needed to exist in
world of change.

Skills to be learned
Research for materials
Note taking in shorthand
Typing skill of composing
Grammar
Proofreading for result
of project

I. Student-Centered in class
activity

A. Show a film or filmstrip
on environmental change.

B. Students take notes
during showing.

C. Write report on their
thoughts as to learning
from film lesson.

1. Report could be in
factual form for
panel discussion set-
up.

2. An essay report for
bulletin board display.

D. Use reports by panel
leaders in discussing
the lesson and class
participation.

ESEA Title III - 59-70-0135-2 Project I-C-E

ability to manage, Discipline Area Business Education
 change his Subject Shorthand
Destroying
 Problem Orientation Natural Resources Grade 10-12

ACTIVITIES	SUGGESTED LEARNING EXPERIENCES	
s will ss will ss areas t in	I. Student-Centered in class activity A. Show a film or filmstrip on environmental change. B. Students take notes during showing. C. Write report on their thoughts as to learning from film lesson. 1. Report could be in factual form for panel discussion set-up. 2. An essay report for bulletin board display. D. Use reports by panel leaders, in discussing the lesson and class participation.	II. Outside Resource and Community Activities A. Research articles on what is taking place in our environment. B. Bulletin board display developed from gathering materials of area.
ed als tthand mposing esult		

Resource and Reference Materials	Continued and Additional Sugge
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Publications:

The Traffic Jam, I-C-E RMC

Audio-Visual:

Single, Kit 13, I-C-E RMC
Ecology and Man, FS ST 11,
I-C-E RMC

Community:

Planner of community on the
development of new housing
area and impact on number
of cars coming into the main
artery of traffic

Materials	Continued and Additional Suggested Learning Experiences
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<p>RMC</p>	
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C O N C E P T	<u>10. Short-term economic gains may</u>	Discipline Area	<u>Busine</u>
	<u>produce long-term environmental</u>	Subject	<u>Shorth</u>
	<u>losses.</u>	Problem Orientation	<u>Ec</u>

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX
<p><u>Cognitive:</u> Students will be able to name specific ways in which economic robbery is occurring in each of the 8 areas named.</p> <p><u>Affective:</u> Students will attempt to identify ways to combat this robbery or at least to hold it down.</p> <p><u>Skills to be learned</u> Shorthand outline Research Group interaction</p>	<p>I. Student-Centered in class activity</p> <p>A. Have students bring in an article concerning economic robbery in relation to:</p> <ol style="list-style-type: none"> 1. Air 2. Wildlife 3. Water 4. Soil 5. Timber 6. Living space 7. Minerals 8. People <p>B. Discuss the articles and then transcribe them into shorthand.</p>

Economic gains may Discipline Area Business Education
 environmental Subject Shorthand
 Problem Orientation Economic Profits Grade 10-12

EX	SUGGESTED LEARNING EXPERIENCES	
I. Specific will ways it	I. Student-Centered in class activity A. Have students bring in an article concerning economic robbery in relation to: 1. Air 2. Wildlife 3. Water 4. Soil 5. Timber 6. Living space 7. Minerals 8. People B. Discuss the articles and then transcribe them into shorthand.	II. Outside Resource and Community Activities A. Speakers concerning any one of the 8 areas. Examples: 1. DNR 2. Paper mill personnel 3. Coast Guard 4. Lumberman 5. Farmers 6. Doctors
d		

Resource and Reference Materials	Continued and Additional Suggested Learning
<p><u>Publications:</u> Newspapers, magazines or books concerning articles on environ- mental conditions <u>Pollution, Property and Prices,</u> I-C-E RMC <u>110 La Material Objects, 1970,</u> I-C-E RMC VF Series of materials from Scientists Institute for Public Information, I-C-E RMC</p> <p><u>Audio-Visual:</u> <u>Films:</u> <u>Bulldozed America, #6429</u> BAVI <u>The Gifts, I-C-E RMC</u> <u>Simulation game:</u> <u>Man in His Environment, SC 4</u> I-C-E RMC <u>Kit:</u> <u>Crisis of the Environment, KT 6</u> I-C-E RMC</p> <p><u>Community:</u> Speakers from DNR Coast Guard Paper mills</p>	

ing Materials	Continued and Additional Suggested Learning Experiences
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ces,

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BAVI

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C O N C E P T	<u>11. Individual acts, duplicated</u>	Discipline Area	<u>Business Ed</u>
	<u>or compounded, produce significant</u>	Subject	<u>Shorthand</u>
	<u>environmental alterations over</u>	Problem Orientation	<u>Waste</u>
	<u>time.</u>		

ESEA Title III - 59-70-0135-2 Project I-C-3

BEHAVIORAL OBJECTIVES

Cognitive: Students will be able to list positive steps that local businessmen are taking to combat internal pollution.

Affective: Students will be able to see the need for constant checks on internal pollution.

Skills to be Learned
 Interviewing
 Note taking
 Composition
 Typing
 Speaking

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity	II. Outsid
A. From their shorthand notes, students will compose and type up a short report, regarding their interview with a businessman.	Commun A. St vi ma he in hi co 1.
B. Students will present a brief resume of their interview to the rest of the class.	
C. Students will turn in resume, and the remaining students will exchange shorthand notes taken during the student's presentation and then transcribe the other students notes.	

Ed ts, duplicated Discipline Area Business Education
 d oduce significant Subject Shorthand
 ste erations over Problem Orientation Waste Gradé 10-12

VES		SUGGESTED LEARNING EXPERIENCES	
IEN uts mmu St vi ma he in hi co l.	ill ive g ill ed for	I. Student-Centered in class activity A. From their shorthand notes, students will compose and type up a short report, regarding their interview with a businessman. B. Students will present a brief resume of their interview to the rest of the class. C. Students will turn in resume, and the remaining students will exchange shorthand notes taken during the student's presentation and then transcribe the other students notes.	II. Outside Resource and Community Activities A. Students will interview a local businessman in regard to what he is doing to combat internal pollution in his own business concern. 1. Students take notes in shorthand.

Goals	Continued and Additional Suggested Learning Experiences
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c

C 12. Private ownership must be
O
N regarded as a stewardship and should
C
E not encroach upon or violate the
P
T individual right of others.

Discipline Area Business
Subject Shorthand
Problem Orientation Pollution

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will compile a list of polluters in the local area.

Affective: Students will appreciate the need for such a watch to improve living conditions.

Skills to be Learned
Shorthand outline
Typing
Researching

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Students will compile (in shorthand) a list of local polluters:

1. In the city
2. On the highway
3. In waterways
4. In wooded areas

B. These lists can be compiled and organized. The letter/letters should be sent to government officials and businesses or industries.

C. Note: Sample newspaper report form on reverse side.

II.

esship must be Discipline Area Business Education
 harwardship and should Subject Shorthand
 ontControl of
 ollor violate the Problem Orientation Pollution Grade 10-12
 of others.

SUGGESTED LEARNING EXPERIENCES	
EXP	
1. Will	I. Student-Centered in class activity
1	A. Students will compile (in shorthand) a list of local polluters:
1	1. In the city
Will	2. On the highway
For	3. In waterways
ove	4. In wooded areas
	B. These lists can be compiled and organized. The letter/letters should be sent to government officials and businesses or industries.
	C. Note: <u>Sample newspaper report form on reverse side.</u>
	II. Outside Resource and Community Activities
	A. Use library resources to gather information.
	B. Students consult local business leaders about controls put on business/industry in the area.
	1. Another field of possible resource could be a DNR representative.

Resource and Reference Materials

Publications:

A Sand County Almanac, I-C-E RMC
Air and Water Pollution, I-C-E RMC

Audio-Visual:

Film:

Troubled Waters

U.S. Senate Public Works Committee
Rm. 4204, New Senate Office Bldg.
Washington, D.C. 20510

Community:

Local business leader
DNR representative

Continued and Additional Sugg
Sample Newspaper Report Form

POLLUT

It's Your Fight to

Do you know of pollution
spend your recreational
the highways, in waterway
If you do, report it to
Information you supply w
agencies charged with pro

Pollution Watch

Name & Address of
your local newspaper

Type of pollution:

Water _____ Air _____
Other _____

Names, Address, Dates, Ti
Comments: _____

Additional information:

Your Name _____
Address _____
City _____
Telephone _____
(Your report will be kep
desired.)

ce Materials

, I-C-E RMC
on, I-C-E RMC

Works Committee
e Office Bldg.
510

Continued and Additional Suggested Learning Experiences
Sample Newspaper Report Form

POLLUTION WATCH

It's Your Fight to a Better Environment

Do you know of pollution where you live, work or spend your recreational hours - in the city, on the highways, in waterways or in wooded areas? If you do, report it to your local newspaper. Information you supply will be relayed to the agencies charged with protecting our environment.

Pollution Watch
Name & Address of
your local newspaper

Type of pollution:

Water _____ Air _____ Litter _____
Other _____

Names, Address, Dates, Times, License No., Location,
Comments: _____

Additional information:

Your Name _____
Address _____
City _____ ZIP _____
Telephone _____

(Your report will be kept confidential if you
desire.)

C 1. Energy from the sun, the basic
O source of all energy, is converted
N through plant photosynthesis into
C a form that all living things can
E use for life processes.
P
T

Discipline Area Business Education
Subject Clerical & Secretarial
Problem Orientation Excessive use of Energy

BEHAVIORAL OBJECTIVES

Cognitive: Students will list ways to practice conservation of electricity in their use of electrical office equipment.
Affective: The student becomes aware of the waste of power in the classroom and in the office. The student practices good economy habits when operating electrical equipment.

Skills to be Learned

Good habits in their use of classroom equipment.
Note taking - Shorthand will be applied toward Secretarial-Office Practice, in Clerical Office Practice, notes will be taken in long hand.
Report typing

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Students discuss equipment in school and offices that use electricity.
 1. Students discuss ways in which waste of electricity occurs:
 - a. Forgetfulness
 - b. Poor work habits
 - c. Laziness
 - B. School business manager or Superintendent talks to students on cost of electricity for school, broken down into departments, if possible.
 - C. A business machine representative (IBM for example) talks to students on power usage. Give suggestions for conserving power.
 - D. An office manager from a local business tells the students about his office operations on power usage.
 - E. Students type summary of talk.

- II. Outside the classroom
 - A. Local business representative talks to students on power usage.
 - B. Local business representative talks to students on power usage.
 - C. Superintendent talks to students on power usage.
 - D. Add to the list of suggestions for conserving power.

Educate the sun, the basic
 & Se energy, is converted
 ve
 erg photosynthesis into
 living things can
 cesses.

Discipline Area Business Education
 Subject Clerical & Secretarial Practice
 Problem Orientation Excessive Consumption of Energy Grade 12

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 Loc electricity
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SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
 - A. Students discuss equipment in school and offices that use electricity.
 1. Students discuss ways in which waste of electricity occurs:
 - a. Forgetfulness
 - b. Poor work habits
 - c. Laziness
 - B. School business manager or superintendent talks to students on cost of electricity for school, broken down into departments, if possible.
 - C. A business machine representative (IBM for example) talks to students on power usage. Give suggestions for conserving power.
 - D. An office manager from a local business tells the students about his office operations on power usage.
 - E. Students type summary of talk.

- II. Outside Resource and Community Activities
 - A. Local businessman
 - B. Local business machine representative
 - C. Survey of manual usage to electric usage-office managers.
 - D. Additional research could be on use of energy by individual in 24 hours (all day and night). Write report on individual level that student finds on research.

Resource and Reference Materials	Continued and Additional Suggested Le
<p><u>Publications:</u> Science books in school library regarding stories on energy.</p> <p><u>Audio-Visual:</u> <u>Filmstrip:</u> <u>Biology - Ecology & Man Set I</u> <u>Energy Relationship</u> McGraw Hill</p> <p><u>Film:</u> <u>Electricity & How it is Made</u> #6074 - BAVI Relates to Light, Heat & Power</p> <p><u>Community:</u> Energy production source & usage of your local area: Power Company Gas Company Oil Companies</p>	

Materials	Continued and Additional Suggested Learning Experiences
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ade	
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Power	
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usage	
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C 2. All living systems interact among
O themselves and their environment
N
C forming an intricate unit called
E
P
T an ecosystem.

Discipline Area Business Edu
Subject Secretarial
Check and
Problem Orientation Balance Sy

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES	
<p><u>Cognitive:</u> The student will be able to flow-chart an office using the data processing symbols.</p> <p><u>Affective:</u> The student will have an appreciation of the dependency of one ecosystem on another.</p>	<p>I. Student-Centered in class activity</p> <p>A. In a simulated office situation in the classroom, have students make out a flowchart.</p> <ol style="list-style-type: none"> 1. Show the relationship between stations. 2. Show the amount of dependency from one job to another. <p>B. Play a game of nature by using various stations of the office as elements of nature.</p> <ol style="list-style-type: none"> 1. Place signs to label. 2. Students do flowcharts to see relationship. 3. Office manager (student) has a simulated board meeting (all involved students) meet and discuss the relevancy of one element of nature to another and stress how our ecosystem cannot survive without all functioning properly. 	<p>II. Outside Classroom</p> <p>A. Visit to nature place</p> <p>B. Visit to nature place</p> <p>C. Have students speak what ideas</p>
<p><u>Skills to be Learned</u></p> <p>Flowcharting</p> <p>Researching</p> <p>Recording</p> <p>Conducting a meeting</p> <p>Labeling</p>		

du	Interact among	Discipline Area	<u>Business Education</u>
1	Environment	Subject	<u>Secretarial & Clerical Office</u>
d			<u>Check and Practice</u>
Sy	t called	Problem Orientation	<u>Balance System</u> Grade <u>12</u>

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. In a simulated office situation in the classroom, have students make out a flowchart.

1. Show the relationship between stations.
2. Show the amount of dependency from one job to another.

B. Play a game of nature by using various stations of the office as elements of nature.

1. Place signs to label.
2. Students do flowcharts to see relationship.
3. Office manager (student) has a simulated board meeting (all involved students) meet and discuss the relevancy of one element of nature to another and stress how our ecosystem cannot survive without all functioning properly.

II. Outside Resource and Community Activities

A. Visit business office to make flowchart.

B. Visit natural resource place to get elements of nature and how it is related to the other flowchart.

C. Have local school ecology club member speak to class on what this concept or idea means to the club.

Resource and Reference Materials	Continued and Additional
<p data-bbox="630 911 891 947"><u>Publications:</u></p> <p data-bbox="630 947 1195 982"><u>Since Silent Spring</u> - 180 Gr</p> <p data-bbox="630 982 858 1018">I-C-E RMC</p> <p data-bbox="630 1018 1271 1054"><u>Interaction and Systems</u> - 110 Br</p> <p data-bbox="630 1054 858 1090">I-C-E RMC</p> <p data-bbox="630 1209 896 1244"><u>Audio-Visual:</u></p> <p data-bbox="630 1244 1182 1280"><u>Topics in Ecology; 5 Single</u></p> <p data-bbox="630 1280 1068 1316"><u>Concept Lessons</u> - KT</p> <p data-bbox="630 1316 1125 1351"><u>Ecology Game</u> - I-C-E RMC</p> <p data-bbox="630 1447 839 1482"><u>Community:</u></p> <p data-bbox="630 1482 1068 1518">Local business office</p> <p data-bbox="630 1518 1030 1554">School Ecology Club</p> <p data-bbox="630 1554 1182 1589">School Ecology Club advisor</p>	

nal | Continued and Additional Suggested Learning Experiences

C 3. Environmental factors are limiting Discipline Area Business E
 O on the number of organisms living Subject Clerical &
 N within their influence, thus each Problem Orientation Overpo
 C environment has a carrying capacity.

BEHAVIORAL OBJECTIVES

Cognitive: Students prepare a list of problems resulting from overpopulation, what should be done, and steps taken thus far in problem of overpopulation.

Affective: Student learns the effect of overpopulation in a given area and the effect of the problem in his life time.

Skills to be Learned

Research of facts

Rough draft of report

Prepare copy on typewriter for use

Use original copy to produce other copies for a duplicating device.

SUGGESTED LEARNING EXP

I. Student-Centered in class activity

A. Give source materials where students may obtain needed facts for research.

1. Discussion on note taking.

2. How to outline.

3. How to rough draft from outline.

4. How to make correct original reports on typewriter.

B. Discussion by using selected class members for panel leaders.

1. Population growth.

2. Steps taken thus far on population growth.

3. Future steps needed to be done for control.

C. After discussion, students exchange papers and make corrections found or OK it for printing.

1. Students in class could gather pictures on population of a rural, urban or city and show the areas as to concentration of (cont.)

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ing Discipline Area Business Education

Subject Clerical & Secretarial Practice

Problem Orientation Overpopulation Grade 12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class

1. Give source materials where students may obtain needed facts for research.
Discussion on note taking.
How to outline.
How to rough draft from outline.
How to make correct original reports on typewriter.
Discussion by using selected class members as panel leaders.
Population growth.
Steps taken thus far on population growth.
Future steps needed to be done for control.
After discussion, students change papers and make corrections found or OK for printing.
Students in class could gather pictures on population of a rural, urban or city and show the areas as to concentration of (cont.)

II. Outside Resource and Community Activities

A. Sources

1. County Social Services, Court House.
 - a. Number of caseloads.
2. Local Planners
 - a. Number of persons in a given area. More than area can support.
3. Medical Assoc.
4. Dept. of Health, Education and Welfare.

B. Better housing study in areas of poor conditions.

C. Housing for elderly as to bring together into one unit.

Resource and Reference Materials	Continued and Additional Sug
<u>Publications:</u> <u>Education for Survival</u> , US Dept. HEW, I-C-E (V.F.) <u>Too Many People</u> , Kimball Richard, 190 Ki I-C-E RMC <u>Population</u> (Card index-local library) <u>America the Raped</u> , Gene Marin, Discus books by Avon	I. (cont.) person per square mile 2. Local school condition increases and space re
<u>Audio-Visual:</u> <u>Film:</u> 230 <u>Family Planning</u> , I-C-E RMC Walt Disney Ed. Mtl's Co. <u>Cities In Crisis, What's</u> <u>Happening</u> #6843 BAVI	
<u>Community:</u> Housing Authority Committee in county Zone planning committee	

Suggested and Additional Suggested Learning Experiences

ile person per square mile.
ion local school conditions as school population
re increases and space remaining stationary.

ESEA Title III - 59-70-0135-2 Project I-C-E

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4. An adequate supply of pure
water is essential to life.

Discipline Area Business

Subject Clerical

Problem Orientation Water

BEHAVIORAL OBJECTIVES

Cognitive: The student is able to name source of local water supply. Student can list ways to conserve water.
Affective: The student has become aware of excessive consumption of water. Student appreciates the value of pure water.

Skills to be Learned
Improvement of vocabulary
Report writing
Increase shorthand speed
Increase typing speed
Summarize & draw conclusions
Proofreading
Duplication process

SUGGESTED LEARNING EXPERIENCES

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-------|
| I. Student-Centered in class activity | II. C |
| A. Students see film or filmstrip. | Co |
| B. Speaker talks to the students on sources of local water supply. | A. |
| 1. Importance to the community. | B. |
| 2. Future outlook of pure water for: | |
| a. Local area | |
| b. State | |
| c. Nation | |
| C. Students will transcribe notes taken during research and type a brief report, in the correct style. | C. |
| D. Students will write letters to local or area businesses asking them to explain what they are doing about water pollution abatement. | |
| 1. Students exchange papers and proofread. | |
| 2. Students retype if needed. | |
| E. Letters are discussed as to content and are revised if necessary. | |
| F. Better letters can be duplicated. Class will practice. | |

(cont.)

Discipline Area Business Education
 Subject Clerical & Secretarial Office
 Practice
 Problem Orientation Water Pollution Grade 12

SUGGESTED LEARNING EXPERIENCES

- | Centered in class | II. Outside Resource and Community Activities |
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| <p>ts see film or
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r talks to the
ts on sources
al water supply.
ortance to the
munity.
ure outlook of pure
er for:
Local area
State
Nation
ts will transcribe
taken during
ch and type a brief
, in the correct</p> <p>ts will write letters
al or area businesses
them to explain what
re doing about water
ion abatement.
dents exchange papers
proofread.
dents retype if needed.
s are discussed as to
t and are revised if
ary.
letters can be dupli-
Class will practice
(cont.)</p> | <p>A. Member of local water
commission will speak
to the class on present
trend and outlook for
supply of pure water.</p> <p>B. Use of library to
conduct research on
water supply. Take
notes in shorthand.
1. Causes of pollution.
2. Prevention of
pollution.
3. Correction process.</p> <p>C. Field trip to water
treatment plant.
1. Students to take
notes in shorthand
about field trip.</p> |

Resource and Reference Materials	Continued and Additional Sources
<u>Publications:</u> Post Crescent, February 27, 1972. <u>A Primer on Waste Water Treatment,</u> VF U.S. Dept. of Interior, 1969.	I. (cont.) typing letters and taking
<u>Audio-Visual:</u> <u>Film:</u> <u>Water Pollution, #7875</u> BAVI	
<u>Filmstrip:</u> <u>Biology - The Ecology Crisis -</u> <u>Pollution, QED Products</u>	
<u>Community:</u> Local Businessmen Local Water Commission	

Materials	Continued and Additional Suggested Learning Experiences
<p> y 27, 1972. er Treatment, terior, 1969. </p>	<p> I. (cont.) typing letters and take timings on typewriter. </p>
<p>75</p> <p> <u>y Crisis -</u> ucts </p>	

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5. An adequate supply of clean
 air is essential for life.

Discipline Area Business
 Subject Secretar
 Problem Orientation Air Po

ESEA Title III - 59-70-0135-2 Project 2-C-E

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EX
<p><u>Cognitive:</u> The student will type up sources of air pollution in tabulation form: Company - Products - Source of Pollution</p> <p><u>Affective:</u> Student will become more aware of causes of air pollution. Student will become aware of the control methods which could be used.</p>	<p>I. Student-Centered in class activity</p> <p>A. Show filmstrip on air pollution.</p> <p>B. Students discuss causes of air pollution:</p> <p>1. Possible starting questions:</p> <p>a. Who are the local air polluters?</p> <p>b. What products do they manufacture?</p> <p>c. What controls could be placed on industry? (Specific companies)</p> <p>C. Students practice, type and take typing timings on material containing statistics on air pollution.</p>
<p><u>Skills to be Learned</u></p> <p>Typing of numbers with increased speed and accuracy</p> <p>Tabulation</p> <p>Researching</p>	<p>II.</p>

Discipline Area Business Education
Subject Secretarial & Clerical Office
Practice
Problem Orientation Air Pollution Grade 12

SUGGESTED LEARNING EXPERIENCES

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I. Student-Centered in class
a. Show filmstrip on air pollution.
b. Students discuss causes of air pollution:
Possible starting questions:
1. Who are the local air polluters?
2. What products do they manufacture?
3. What controls could be placed on industry?
(Specific companies)
c. Students practice, type and take typing timings on material containing statistics on air pollution. | II. Outside Resource and Community Activities
A. Newspaper articles in library or at home of student--concerning local air polluters.
B. Research material for facts--numbers; date, etc. concerning air pollution or polluters.
1. Use library
2. Newspapers
3. City records - City Hall |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Resource and Reference Materials	Continued and Additional
<p data-bbox="645 923 889 961"><u>Publications:</u></p> <p data-bbox="664 952 1301 1056"><u>With Every Breath You Take</u>, Lewis, Howard, Crown Publishers, Inc. New York.</p> <p data-bbox="664 1047 1301 1085"><u>Air and Water Pollution</u>, I-C-E RMC</p> <p data-bbox="645 1213 889 1251"><u>Audio-Visual:</u></p> <p data-bbox="645 1242 1301 1347">FS Stl <u>Environmental Pollution...</u> <u>Our world in Crisis</u> - I-C-E RMC</p> <p data-bbox="645 1347 1114 1451">Film: <u>Poisoned Air</u>, #6576-6577 BAVI</p> <p data-bbox="645 1604 926 1675"><u>Community:</u> <u>Local library</u></p>	

al	als	Continued and Additional Suggested Learning Experiences
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Lewis,
ne.

-E RMC

on...
I-C-E

C 6. Natural resources are not equally Discipline Area Business
 C distributed over the earth or over Subject Secretar
 N time and greatly affect the Problem Orientation Rich
 C geographic conditions and quality of Nati
 E life.

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING EX

Cognitive: Students make a list of natural resources that make a country prosperous and how they are used to create wealth.
Affective: Students will appreciate importance of natural resource to a community.

Skills to be Learned
 Taking notes in shorthand and transcription

I. Student-Centered in class activity -

A. Resource research

1. Students research types of resources in U.S. and organize categories.
 - a. Underground
 - b. Surface
2. Prepare a list of resources found in local area.
3. Prepare a list of firms in area using local resources.
4. Students prepare or type analysis report on how local resources are utilized in community or shipped elsewhere.

II.

ESEA Title III - 59-70-0135-2 Project I-C-E

ess e equally Discipline Area Business Education
tar or over Subject Secretarial & Clerical Practice
ch Rich & Poor
lati Problem Orientation Nations Grade 12
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SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

A. Resource research

1. Students research types of resources in U.S. and organize categories.
 - a. Underground
 - b. Surface
2. Prepare a list of resources found in local area.
3. Prepare a list of firms in area using local resources.
4. Students prepare or type analysis report on how local resources are utilized in community or shipped elsewhere.

II. Outside Resource and Community Activities

A. Use library references for finding list of resources.

1. Area distribution in U.S.
- B. Community leaders will speak to class and tell how their firms use raw materials.(Natural resources)
- C. Students make a survey of the importance of resources for jobs in the community.
- D. Field trip in an area using natural resources.
 1. Student observes type of materials being used.
 2. Waste from resource materials and disposition.
- E. Student returns to classroom and makes out an outline of facts observed on trip.
- F. Prepare rough draft.
- G. Type resource material into a final report for publication.

Resource and Reference Materials	Continued and
<u>Publications:</u> <u>Man's Control of the Environment,</u> <u>Congressional quarterly, 1970,</u> <u>DNR, Madison, Vi.</u> <u>The Delight Destroyers, Geo.</u> <u>Laycoch, I-C-E RMC 150 La</u>	
<u>Audio-Visual:</u> <u>Kt 5 Eye Gate House, Inc.</u> <u>Aggradation-Degradation</u> <u>I-C-E RMC</u> <u>Conservation of Natural Resources,</u> <u>#0467, BAVI</u>	
<u>Community:</u> <u>Local leaders concerned about</u> <u>local natural resources</u> <u>Government:</u> <u>State Dept of Resources</u> <u>Federal Dept of Interior</u> <u>Paper Mill perscnnel</u>	

Continued and Additional Suggested Learning Experiences

C O N C E P T	7. Factors such as facilitating		Discipline Area	Business
	transportation, economic conditions,		Subject	Clerical
	population growth, and increased		Problem Orientation	Population
	leisure time have a great influence on changes in land use and centers of population density.			
BEHAVIORAL OBJECTIVES		SUGGESTED LEARNING EXPERIENCES		
Project I-C-E ESEA Title III - 59-70-0135-2 Cognitive: The student can list ways that changes in population trends will effect him. Affective: The student realizes that population trends will effect him positively or negatively in relation to finding employment.		I. Student-Centered in class activity A. Students watch filmstrip 1 or 2 of Kit 14. Secretarial students take notes in shorthand and the clerical students use longhand. 1. Students transcribe notes in report form, including tabulation in report. 2. Discussion: a. Reason for increase or decrease in population growth. b. Effect of population change on student. c. Effect of changes in land use on people. B. Students discuss employment situation in relation to population. 1. Areas of state where employment is in crisis. 2. Fields in which employment will grow. C. Students will write a letter of application for a specific job in the field of ecology.		
Skills to be Learned Write an application letter Typing report form Shorthand skills Tabulation				

Discipline Area Business Education
 Subject Clerical & Secretarial Office Practice
 Problem Orientation Population Growth Grade 12

on
 population density.

SUGGESTED LEARNING EXPERIENCES

II. Student-Centered in class
 Students watch filmstrip
 or 2 of Kit 14.
 Secretarial students take
 notes in shorthand and
 the clerical students use
 shorthand.
 Students transcribe
 notes in report form,
 including tabulation
 in report.
 Discussion:
 a. Reason for increase
 or decrease in
 population growth.
 b. Effect of population
 change on student.
 c. Effect of changes in
 land use on people.
 Students discuss employment
 situation in relation to
 population.
 Areas of state where
 employment is in crisis.
 Fields in which employ-
 ment will grow.
 Students will write a letter
 of application for a specific
 job in the field of ecology.

II. Outside Resource and
 Community Activities
 A. Speaker from area
 technical school
 could speak on:
 1. Employment trends.
 2. Changes in types
 of employment.
 3. Predictions for
 future employment.
 B. Speaker from DNR on
 expansion of the
 community.
 C. Field trip to City
 Planning Commission
 Office to observe
 the methods used to
 determine location
 or zoning laws and
 the reasons why.

Continued and Additional Suggested Learning Experiences

C O N C E P T	8. Cultural, economic, social, and	Discipline Area	Busi
	political factors determine status	Subject	Secr
	of man's values and attitudes	Problem Orientation	
	toward his environment.		

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students can list results of pollution abatement upon company involved, its employees and its economy.
Affective: The students realize the difficulties involved in cleaning up rivers and air.

Skills to be learned
 Use of calculator to add, subtract, divide and multiply.

- I. Student-Centered in class activity
 - A. Students are assigned to read articles on the cost of fighting pollution.
 Discuss:
 1. Cost of pollution abatement equipment.
 2. Results on profits.
 3. Results upon economy of some mills closing down.
 - B. Using adding machines and calculators, students do problems in calculating:
 1. Total cost of equipment.
 2. Percent of increase or decrease in consumption of product.
 3. Percent of increase or decrease of profit.
 - C. Students take dictation on material about cost of fighting pollution.
 - D. Students transcribe their notes on typewriter in correct form.

ESEA Title III - 59-70-0135-2 Project I-C-E

usi	and	Discipline Area	<u>Business Education</u>
ecr	atus	Subject	<u>Secretarial & Clerical Office</u>
n			<u>Costs of Fighting Practice</u>
		Problem Orientation	<u>Pollution</u> Grade <u>12</u>

SUGGESTED LEARNING EXPERIENCES

Student-Centered in class Activity

Students are assigned to read articles on the cost of fighting pollution.

Discuss:

1. Cost of pollution abatement equipment.
2. Results on profits.
3. Results upon economy of some mills closing down.

Using adding machines and calculators, students do problems in calculating:

1. Total cost of equipment.
2. Percent of increase or decrease in consumption of product.
3. Percent of increase or decrease of profit.

Students take dictation on material about cost of fighting pollution.

Students transcribe their notes on typewriter in correct form.

II. Outside Resource and Community Activities

- A. Representative or speaker from local firm involved in pollution abatement speak to class on costs involved.

Resource and Reference Materials	Continued and Additional
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Publications:

Post Crescent, February 27, 1972.

Page 1

VF Clean Air for Our Community,
1969, I-C-E RMC

Man in the Web of Life, I-C-E RMC

VF So You're Going to the Beach!
I-C-E RMC

Audio-Visual:

Film:

Pollution is a Matter of Choice,
#7437-7438 BAVI

Community:

Local paper mill

Continued and Additional Suggested Learning Experiences

C O N C E P T	9. Man has the ability to manage,	Discipline Area
	manipulate, and change his	Subject
	environment.	Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED

ESEA Title III - 59-70-0135-2 Project I C-E

Cognitive: The student lists ways in which our environment (trees) can be protected. The student can compose a letter.

Affective: The student becomes aware of recycling efforts and realizes he is helping the environment by buying products made of recycled paper.

Skills to be Learned

Composing letters
Proper filing procedure
Dictating skills
Improvement of shorthand vocabulary
Transcription skills

- I. Student-Centered in class activity
 - A. Students are assigned articles or sources to learn:
 1. Which companies use recycled paper in their products.
 2. The products themselves notebooks, phone books etc.
 - B. Students prepare a list of companies.
 - C. Composition letter is discussed.
 - D. Letters are composed, commending companies on their use of recycled paper.
 - E. Students dictate their composed letters to each other. They are then transcribed and discussed as to composition.

manage, Discipline Area Business Education
Subject Secretarial & Clerical Office
Destroying Our Practice
Problem Orientation Natural Resources Grade 12

SUGGESTED LEARNING ACTIVITIES

I. Student-Centered in class activity

- A. Students are assigned articles or sources to learn:
 - 1. Which companies recycled paper in their products.
 - 2. The products themselves - notebooks, phone books, etc.
- B. Students prepare a list of companies.
- C. Composition letter is discussed.
- D. Letters are composed, commending companies on their use of recycled paper.
- E. Students dictate their composed letters to each other. They are then transcribed and discussed as to composition.

II. Outside Resource and Community Activities

- A. Field trip to recycling plant.
- B. Students bring in as many samples of recycled paper as he can find citing:
 - 1. Where is the paper waste obtained used in recycling?
 - 2. What difficulties are found in making use of waste paper.

Continued and Additional Suggested Learning Experiences

C O N C E P T	<u>10. Short-term economic gains may</u>	Discipline Area
	<u>produce long-term environmental</u>	Subject
	<u>losses.</u>	Problem Orientation

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

ESEA Title III - 59-70-0135-2 Project I-C-E

Cognitive: Students will list the "free goods" of the environment. Students will write a paper evaluating the local use of these "free goods" and their effects.

Affective: The students will form judgments as to their responsibilities concerning these "free goods".

Skills to be Learned

Researching
Typing
Note taking (shorthand)
Evaluating
Typing an outline form
Preparing a manuscript
Composition

- I. Student-Centered in class activity
 - A. Students will take notes while viewing filmstrip (FS st 3). Then type notes in an outline form.
 - B. Students are given folders for keeping gathered data in developing this concept.
 - C. Students take notes on speeches or research work. Type up notes.
 - D. Students organize notes from folder:
 1. Compose/prepare a manuscript developing the idea "abuse of free goods" as gathered from filmstrip, research and speeches.
 2. Manuscript will be in correct order including
 - a. Title paper
 - b. Table of contents
 - c. Bibliography

Discipline Area Business Education
 Subject Secretarial & Clerical Office
 Quick Profits vs Practice
 Problem Orientation Long-term Envir. Grade 12
 Losses

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class
 Students will take notes
 while viewing filmstrip
 (st 3). Then type notes
 in an outline form.
 Students are given folders
 to keep gathered data
 while developing this concept.
 Students take notes on
 speeches or research work.
 Students organize notes
 in folder:
 Compose/prepare a
 manuscript developing
 the idea "abuse of
 free goods" as gathered
 from filmstrip, research
 and speeches.
 Manuscript will be in
 correct order including:
 a. Title paper
 b. Table of contents
 c. Bibliography

II. Outside Resource and
 Community Activities
 A. Students view
 community industrial
 areas to observe
 their uses of "free
 goods".
 B. Use of library to
 research current
 publications
 concerning environ-
 mental losses caused
 by industry.
 C. Speaker from local
 manufacturing company:
 1. Paper mill
 2. Mining company
 3. Construction
 company

I S	s	Continued and Additional Suggested Learning Experiences
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ESEA Title III - 53-70-0135-2 Project I-C-E

C	11. Individual acts, duplicated	Discipline Area	Business
C	or compounded, produce significant	Subject	Secretar
M	environmental alterations over time.	Problem Orientation	Waste
C			
E			
P			
T			

BEHAVIORAL OBJECTIVES		SUGGESTED LEARNING E	
<p><u>Cognitive:</u> Students list ways to lower consumption of supplies in office and school.</p> <p><u>Affective:</u> Student becomes economical minded in personal usage of supplies and the supplies of emp'oyers.</p> <p><u>Skills to be Learned</u></p> <p>Prepare budget for purchase of supplies</p> <p>Prepare charge out system to know who uses supplies</p> <p>Inventory control by periodical inventory</p>		I. Student-Centered in class activity	II.
		<p>A. Discuss ways of controlling the inventory of supplies.</p> <p>B. Explain how supplies can be conserved.</p> <p>C. Obtain forms to record inventory.</p> <p>D. Record receipts on forms.</p> <p>E. Have individuals sign for supplies used and make a record as to usage by individual.</p> <p>F. Make an inventory check at end of period.</p> <p>G. Have class write up:</p> <ol style="list-style-type: none"> 1. A program of inventory control as a final report. 2. A final report on inventory control for personal or business affairs. 	

Discipline Area Business Education
Subject Secretarial & Clerical Practice
Problem Orientation Waste of Supplies Grade 12

SUGGESTED LEARNING EXPERIENCES

Student-Centered in class activity

- A. Discuss ways of controlling the inventory of supplies.
- B. Explain how supplies can be conserved.
- C. Obtain forms to record inventory.
- D. Record receipts on forms.
- E. Have individuals sign for supplies used and make a record as to usage by individual.
- F. Make an inventory check at end of period.
- G. Have class write up:
 1. A program of inventory control as a final report.
 2. A final report on inventory control for personal or business affairs.

II. Outside Resource and Community Activities

- A. A local planner speak to class as to land development.
- B. Area Planning Committee on land use in local area.
- C. Get inventory of land uses and projection of land use.
- D. Visit a local plant for materials on inventory procedure.
- E. Speaker from business on inventory control.

Resource and Reference Materials
Publications:

Continued and Additional Suggested

The Only Earth We Have, Pringle,
Macmillan Co., N.Y.
Urban America, Branson, Scott-
Foresman & Co.
Investigating Man's World,
Scott-Foresman & Co.

Audio-Visual:

Films:

City and its Region, #5893 BAVI
Stuff We Throw Away, #7923 BAVI

Community:

Leaders of material handling people
to talk to class on inventory control
against waste.

Continued and Additional Suggested Learning Experiences.

C	<u>12. Private ownership must be</u>	Discipline Area	Busi
O			
N	<u>regarded as a stewardship and should</u>	Subject	Cler
C			
E	<u>not encroach upon or violate the</u>	Problem Orientation	vi
P			
T	<u>individual right of others</u>		th

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students will predict the consequences of present trends in the world of industry to use the environment for their own use, without regard for others. They will give examples by listing industries in the state where abuse occurs.

Affective: Students will be able to weigh the alternatives available to industry concerning their disregard for property, "free goods", and the rights of others.

Skills to be Learned
 Typing of reports
 Organization of data
 Researching
 Report preparing
 Chart preparation

- I. Student-Centered in class activity
 - A. As an introduction, the students will view the films:
 1. The Stream
 2. Junk Dump
 - B. Students research the industry of the state; preparing a 5" x 7" index card for each industry.
 1. The cards will be arranged according to the leading violator listed first, etc.
 2. The student will prepare a chart showing the specific areas of pollution where manufacturers have a responsibility. (Chart on back)
 - C. The students will prepare a report to explain chart and predict consequences if present trend continues.
 1. This will be typed in correct report form with title page, etc.
 - D. Student will send the final conclusions to area newspaper for possible. (cont.)

ESEA Title III - 59-70-0135-2 Project I-C-E

must be _____ Discipline Area Business Education
 ship and should _____ Subject Clerical & Secretarial Office
 violate the _____ Problem Orientation Encroach of Practice
 others _____ Ownership on the Grade 12
Environment

SUGGESTED LEARNING EXPERIENCES

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>I. Student-Centered in class activity</p> <p>A. As an introduction, the students will view the films:</p> <ol style="list-style-type: none"> 1. <u>The Stream</u> 2. <u>Junk Dump</u> <p>B. Students research the industry of the state; preparing a 5" x 7" index card for each industry.</p> <ol style="list-style-type: none"> 1. The cards will be arranged according to the leading violator listed first, etc. 2. The student will prepare a chart showing the specific areas of pollution where manufacturers have a responsibility. (Chart on back) <p>C. The students will prepare a report to explain chart and predict consequences if present trend continues.</p> <ol style="list-style-type: none"> 1. This will be typed in correct report form with title page, etc. <p>D. Student will send the final conclusions to area newspaper for possible. (cont.)</p> | <p>II. Outside Resource and Community Activities</p> <p>A. Use library to gather data concerning the report and chart on pollution causes in the state.</p> <p>B. Students contact local and regional manufacturers to gather information about their efforts to control their present pollution level.</p> <p>C. A group of students (4-5) to contact DNR representative to gather data concerning the state's new anti-pollution laws. (If a Pollution Abatement Commission available, contact them.)</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Resource and Reference Materials
Publications:

America the Raped, I-C-E RMC
150 La The Diligent Destroyers,
I-C-E RMC
VF Environmental Science Center,
I-C-E RMC
VF Scientists Inst. for Public
Information, I-C-E RMC
Pollution Property & Places,
I-C-E RMC

Audio-Visual:

Films:

The Stream, I-C-E RMC
Junk Dump, I-C-E RMC

Community:

Local manufacturer--type will
vary with different areas
DNR representatives

Continued and Additional Sugg

I. (cont.)

publication. Also send to
State Assembly representat
1. Chart will be included.

TYPES OF P

Name of Company	Human	Water

(Place a (✓) check in square
of pollution occurs. Under
of Company", list the com
was conducted.)

Continued and Additional Suggested Learning Experiences

I. (cont.)

publication. Also send to Congressman, Senator or State Assembly representative.

1. Chart will be included.

TYPES OF POLLUTION

Name of Company	Human	Water	Air	Noise	Land

(Place a (✓) check in square where a specific type of pollution occurs. Under column heading "Name of Company", list the companies where research was conducted.)

CONCEPT 1. Energy from the sun, the basic source of all energy, is converted through plant photosynthesis into a form all living things can use for life processes.

Discipline Area Business
Subject Bookkeeping
Problem Orientation Ecological

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING ACTIVITIES

Cognitive: Through the simulation of accounting procedures for a greenhouse, students will list 3 ways the sun helps to provide the profit for the business.
Affective: Students will observe that any business activity requires energy from the sun.

Skills to be Learned
Analyze the environmental needs of all businesses
Design charts and graphs
Decision making

- I. Student-Centered in class activity
 - A. Design a chart of accounts for a greenhouse and nursery.
 1. Write, visit or phone a local greenhouse and nursery. Find out what the titles of the accounts are that they use in their accounting process.
 - B. From pre-determined account balance, complete:
 1. Trial balance
 2. Income statement
 3. Balance sheet
 - C. Research the profits of the business and the part the sun's energy played in the profit.
 - D. Contact other businessmen:
 1. Study other businesses in the area to learn how they use energy.
 2. Trace their energy source back to the sun's energy.
 - E. Impress upon students that all business as well as life needs energy for its existence.

ESEA Title III - 59-70-0135-2 Project I-C-E

sun, the basic Discipline Area Business Education
 energy, is converted Subject Bookkeeping
 photosynthesis into a Problem Orientation Energy Source Grade 10-12
 things can use for

VIVES	SUGGESTED LEARNING EXPERIENCES	
ne ing en" list to or will nness ergy	<p>I. Student-Centered in class activity</p> <p>A. Design a chart of accounts for a greenhouse and nursery.</p> <ol style="list-style-type: none"> 1. Write, visit or phone a local greenhouse and nursery. Find out what the titles of the accounts are that they use in their accounting process. <p>B. From pre-determined account balance, complete:</p> <ol style="list-style-type: none"> 1. Trial balance 2. Income statement 3. Balance sheet <p>C. Research the profits of the business and the part the sun's energy played in the profit.</p> <p>D. Contact other businessmen:</p> <ol style="list-style-type: none"> 1. Study other businesses in the area to learn how they use energy. 2. Trace their energy source back to the sun's energy. <p>E. Impress upon students that all business as well as life, needs energy for its existence.</p>	<p>II. Outside Resource and Community Activities</p> <p>A. Field trip to local greenhouse/nursery. Observe the use of sun energy in production.</p> <p>B. Speaker from other industry. Discuss the type of energy used in his business and its effect on our total energy resources.</p>

Resource and Reference Materials

Continued and Additional Sug

Publications:

VF 1969, Clean Air For Your
Community, I-C-E RMC
Take Three Giant Steps to Clean
Air, I-C-E RMC
The Limits to Growth, part II
I-C-E RMC
Wallstreet Journal - various
articles concerning environment

Audio-Visual:

Tape recorder
Camera
FS St2 Eye Gate House, Inc.
1970, Ecological Imbalance:
Six Systems Spoiled -
6 filmstrips I-C-E RMC

Community:

Businessmen from local area
DNR
Industrialists

Sug als | Continued and Additional Suggested Learning Experiences

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C
O
N
C
E
P
T

2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

Discipline Area Busin
Subject Bookk
Problem Orientation B

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: The students will establish an analogy between the assets, liabilities, and the proprietorship of our economic system and its parallels to an ecosystem.

Affective: Students curiosity aroused as to the parts of equation correlation, assets, liabilities and proprietorship to the way it is used in an ecosystem.

Skills to be Learned
Problem solving;
Decision making
Planning work
Conclude the above skill into a final report

I. Student-Centered in class activity

A. At the end of the 4th week, the students of bookkeeping have a good understanding of the equation - Assets equals liabilities plus proprietorship.

B. Review fundamentals of bookkeeping and the uses of this thinking on environmental concepts.

Questions:

1. Natural Resources minus Industrial & Human Depletion equals environmental status.
2. Our environment equals Industrial & Personal Depletion plus Natural Resources.

C. Students will write comments concerning before mentioned equation as a home assignment. At the next meeting:

1. Students orally voice their opinion from notes, regarding the closing of this equation to meet new environmental (cont.)

ESEA Title III - 59-70-0135-2 Project I-C-E

Interact among Discipline Area Business Education
 Environment, Subject Bookkeeping
 Problem Orientation Basic Bookkeeping
Equation Grade 10-12

SUGGESTED LEARNING EXPERIENCES

Student-Centered in class activity
 A. At the end of the 4th week, the students of bookkeeping have a good understanding of the equation - Assets equals liabilities plus proprietorship.
 B. Review fundamentals of bookkeeping and the uses of this thinking on environmental concepts.
 Questions:
 1. Natural Resources minus Industrial & Human Depletion equals environmental status.
 2. Our environment equals Industrial & Personal Depletion plus Natural Resources.
 C. Students will write comments concerning before mentioned equation as a home assignment.
 At the next meeting:
 1. Students orally voice their opinion from notes, regarding the changing of this equation to meet new environmental (cont.)

II. Outside Resource and Community Activities
 A. Business reports as to usage of resources and result on elements of the equation.
 B. Visit local business and see how resources are used for the means of impact on our environment and the profit decision arrived.

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u> Any bookkeeping or accounting textbook Business publications as to results of operations.</p> <p><u>Audio-Visual:</u> <u>Film:</u> <u>Seeds of Destruction,</u> #3327 BAVI Transparency use</p> <p><u>Community:</u> Speaker from a business using natural resources</p>	<p>I. (cont.) changes. (eg. Slow down use a. Tape record oral discussion b. Play back remarks and stop if needed.</p>

gges s Continued and Additional Suggested Learning Experience

I. (cont.)

changes. (eg. Slow down use of resources.)

a. Tape record oral discussion.

b. Play back remarks and stop tape when a remark
is needed.

ESEA Title III - 59-70-0135-2 Project I-C-E

C 3. Environmental factors are limiting
 C on the numbers of organisms living
 N within their influence, thus, each
 C environment has a carrying capacity.
 E
 P
 T

Discipline Area Business
 Subject Bookkeeping
 Problem Orientation Case Study

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students explain, orally, the value of natural resources to business success. They must be specific and use examples.
Affective: Students analyze relationship between assets and liabilities in businesses that face financial difficulty because of limited natural resources.

Skills to be Learned
 Problem solving
 Brainstorming
 Letter writing
 Discussion
 Analyze balance sheet

- I. Student-Centered in class activity
 - A. Start with concept: A business losing their natural resources will soon go bankrupt or face financial difficulty.
 Solutions:
 1. Could analyze balance sheet. Students can see how assets (land, buildings, machinery) take care of the liabilities and expenses.
 2. Alternate route: Should a business borrow more money and go deeper in debt to solve problems or convert machinery to use a different resource?
 3. Hire research firm.

sine are limiting Discipline Area Business Education
 bkke ms living Subject Bookkeeping
 Ca Carrying
 Ca thus, each Problem Orientation Capacity Grade 10-12
 ng capacity.

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Start with concept: A business losing their natural resources will soon go bankrupt or face financial difficulty. Solutions:
1. Could analyze balance sheet. Students can see how assets (land, buildings, machinery) take care of the liabilities and expenses.
 2. Alternate route: Should a business borrow more money and go deeper in debt to solve problems or convert machinery to use a different resource?
 3. Hire research firm.

- II. Outside Resource and Community Activities
- A. Have students write letters to a small business administration asking about loans to financially troubled small businesses.
- B. Field trip to local industry that uses one or more local natural resources. Use to show both business principles and environmental principles.

Resource and Reference Materials	Continued and Additional Suggest
<p><u>Publications:</u></p> <p>100 Ma Congressional Quarterly, 1970, <u>Man's Control of the Environment</u>, I-C-E RMC</p> <p><u>The Limits to Growth</u>, Donella H. Meadows, Universe Books, \$2.75.</p> <p><u>Audio-Visual:</u></p> <p><u>Filmstrip:</u></p> <p>Kt 5 Eye Gate House, Inc. 1970, <u>Aggradation - Degradation</u>, Set of 10, I-C-E RMC</p> <p><u>Community:</u></p> <p>Speaker - Local bank to discuss how to analyze a business for a loan</p>	

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Continued and Additional Suggested Learning Experiences

C
O
N
C
E
P
T

4. An adequate supply of pure
water is essential for life.

Discipline Area Bus
Subject Boc
Problem Orientation

BEHAVIORAL OBJECTIVES

Cognitive: Each student will describe orally the effect of added expenses on the financial statements and potential sources of revenue to offset the added expenses.
Affective: Appreciation of free use of limited resources and awareness of their great value.

Skills to be Learned
Interviews
Outside Research
Income statement analysis
Reports to class
Letter writing

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Question and answer period.
 1. Is water supply limited?
 2. Should the use of limited resource be free or should there be a charge for use?
 - B. Students assigned to interview industry or businessman - water expense for their operation.
 1. Added expense to pay for water use?
 2. Sewer expense on water use?
 - C. Teacher and students discuss User's Fee vs "Free Goods" concept.
 1. Pollution abatement costs are part of operating/production costs?
 2. Does a business have the right to use "free goods" at the expense of the community?

ESEA Title III - 59-70-0135-2 Project I-C-E

Bus of pure Discipline Area Business Education
 Book life. Subject Bookkeeping
 Problem Orientation Utilities & Expenses of Various Kinds Grade 10-12

SUGGESTED LEARNING EXPERIENCES	
S	I. Student-Centered in class activity
	A. Question and answer period. 1. Is water supply limited? 2. Should the use of limited resource be free or should there be a charge for use? B. Students assigned to interview industry or businessman - water expense for their operation. 1. Added expense to pay for water use? 2. Sewer expense on water use? C. Teacher and students discuss User's Fee vs "Free Goods" concept. 1. Pollution abatement costs are part of operating/production costs? 2. Does a business have the right to use "free goods" at the expense of the community?
II. Outside Resource and Community Activities	A. Government representative to explain charge for sewer tax levied against water consumption. B. Reaction of business and manufacturing firms as to sewer tax charge.

Resource and Reference Materials Publications:	Continued and Additional Suggest
<p><u>Conserving Our Water and Cleaning the Air</u>, American Petroleum Institute, 1968.</p> <p>VF Dept. of the Interior, 1970, <u>Clean Water? It's Up To You</u>, Federal Water Quality Admin.</p> <p>VF 1970, <u>Wanted for Murder</u>, Water pollution poster</p> <p>Federal Water Pollution Control Administration</p> <p>All available at I-C-E RMC</p>	
<p><u>Audio-Visual:</u></p> <p><u>The Gifts</u>, Film. 230</p> <p>I-C-E RMC</p> <p><u>Crisis of the Environment</u>, Kt 6</p> <p>Set of 5 filmstrips discussing pollution of air & water,</p> <p>I-C-E RMC</p>	
<p><u>Community:</u></p>	

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C 5. An adequate supply of clean air is Discipline Area Business
 O essential because most organisms Subject Bookkeeping
 N depend on oxygen, through respiration, Problem Orientation for
 E to release the energy in their food.
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ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Student identifies
the costs involved in
installing air quality
control for local, regional,
and state areas. eg. Fox
River
Affective: Students'
curiosity is aroused as
they observe the cost to
build air control devices.

Skills to be Learned
 Letter writing
 Cost analysis
 Interview methods

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Teacher and students discuss guidelines appropriate to learning the bookkeeping area, concerning air quality control.
 - B. Prepare letters to various businesses on anti-pollution that they use (time, reason, and cost)
 1. Obtain information. Students will role play.
 - a. Act as a bookkeeper of a corporation and figure out how the company would absorb these added costs.
 2. Role playing players:
 - a. Speak in 1st person.
 - b. Use facts gathered from research.
 - c. Believe you are the person/position.
 3. Audience - other students
 - a. Come prepared with at least 2 written (cont.)

since only of clean air is Discipline Area Business Education
 okke most organisms Subject Bookkeeping
 Hi Hidden Costs
 for through respiration, Problem Orientation for Pure Air Grade 10-12
 ey in their food.

NG I	ES SUGGESTED LEARNING EXPERIENCES		
ativities onal, ox s to es.	<table border="1"> <tr> <td data-bbox="238 1173 885 2200"> <p>I. Student-Centered in class activity</p> <p>A. Teacher and students discuss guidelines appropriate to learning the bookkeeping area, concerning air quality control.</p> <p>B. Prepare letters to various businesses on anti-pollution that they use (time, reason, and cost)</p> <p>1. Obtain information. Students will role play.</p> <p>a. Act as a bookkeeper of a corporation and figure out how the company would absorb these added costs.</p> <p>2. Role playing players:</p> <p>a. Speak in 1st person.</p> <p>b. Use facts gathered from research.</p> <p>c. Believe you are the person/position.</p> <p>3. Audience - other students</p> <p>a. Come prepared with at least 2 written (cont.)</p> </td><td data-bbox="885 1173 1408 2200"> <p>I. Outside Resource and Community Activities</p> <p>A. Field trip to local industries to observe methods uses to control air quality.</p> <p>1. Students question industrial personnel concerning the cost of air quality controls.</p> <p>a. Wis. Public Service</p> <p>b. Air Pollution inspector of city gov't</p> <p>c. DNR Air Pollution specialist</p> <p>d. CESA field specialist</p> </td></tr> </table>	<p>I. Student-Centered in class activity</p> <p>A. Teacher and students discuss guidelines appropriate to learning the bookkeeping area, concerning air quality control.</p> <p>B. Prepare letters to various businesses on anti-pollution that they use (time, reason, and cost)</p> <p>1. Obtain information. Students will role play.</p> <p>a. Act as a bookkeeper of a corporation and figure out how the company would absorb these added costs.</p> <p>2. Role playing players:</p> <p>a. Speak in 1st person.</p> <p>b. Use facts gathered from research.</p> <p>c. Believe you are the person/position.</p> <p>3. Audience - other students</p> <p>a. Come prepared with at least 2 written (cont.)</p>	<p>I. Outside Resource and Community Activities</p> <p>A. Field trip to local industries to observe methods uses to control air quality.</p> <p>1. Students question industrial personnel concerning the cost of air quality controls.</p> <p>a. Wis. Public Service</p> <p>b. Air Pollution inspector of city gov't</p> <p>c. DNR Air Pollution specialist</p> <p>d. CESA field specialist</p>
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Resource and Reference Materials

Publications:

Local industry's annual report
Local newspaper
Wall Street Journal
New York Times
articles concerned with pollution laws
EPA - DNR air quality standards

Audio-Visual:

Overhead
Smog, stimulation game
I-C-E RMC
KT 9 ...America is in Trouble.
I-C-E RMC

Community:

Rep. of local industry
DNR air pollution specialist
City air pollution inspector

Continued and Additional Suggested

I. (cont.)

- questions for role player
2. Prepare to challenge the
VARIATIONS:
Role - Board of Directors and
or Business Leaders vs Envir
C. Use overhead to show, with a
pollution costs can be passed

Continued and Additional Suggested Learning Experiences

1. (cont.)

questions for role players.

2. Prepare to challenge the role players.

VARIATIONS:

Role - Board of Directors and Accounting Staff
or Business Leaders vs Environmentalists

C. Use overhead to show, with a flowchart, how anti-pollution costs can be passed on to the consumer.

C 6. Natural resources are not equally
 O distributed over the earth or over
 N time and greatly affect the geographic
 E conditions and quality of life.
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Discipline Area Bu
 Subject Bo
 Problem Orientation P

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Student will relate orally the percentage differences between production costs in various areas of the country.
Affective: The student will appreciate the relationship between plant location and location of natural resources and costs.

Skills to be Learned
 Letter writing
 Interviewing
 Analysis of annual reports
 Preparing written reports

SUGGESTED LEARNING

- I. Student-Centered in class activity
 - A. Compare and contrast in oral reports, the revenue, costs and expenses of plants or factories producing similar products in different locations.
 1. Get annual reports for corporations in area of interest.
 2. Note the following for comparison - purchases, freight cost, labor cost and overhead cost.
 - B. Write a final report as to why various companies are located in the present community of operations.
 1. Report could cover a number of the following questions:
 - a. What social costs are payable in various taxes?
 - b. What does pollution cost a company?
 - c. What environmental costs result (cont.)

Business Equally Discipline Area Business Education
 Bookkeeping over Subject Bookkeeping
 Profit Analysis &
 Geographic Problem Orientation Plant Location Grade 10-12

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Compare and contrast in oral reports, the revenue, costs and expenses of plants or factories producing similar products in different locations.
 1. Get annual reports for corporations in area of interest.
 2. Note the following for comparison - purchases, freight cost, labor cost and overhead cost.
- B. Write a final report as to why various companies are located in the present community of operations.
 1. Report could cover a number of the following questions:
 - a. What social costs are payable in various taxes?
 - b. What does pollution cost a company?
 - c. What environmental costs result (cont.)

II. Outside Resource and Community Activities

- A. Gather corporation reports from corporations, brokerage houses or government units.
- B. Interview local business heads of manufacturing firms.
 1. Sales manager
 2. Marketing manager
 3. Production or research personnel

Resource and Reference Materials
Publications:

American Petroleum Institution:
Bulletin board displays on
natural resource locations in
the United States.

Audio-Visual:

Films from American Petroleum
Institution

Community:

Resource leaders of area to
explain why their firm is
located in given area and
their source of raw material

Continued and Additional Suggest
I. (cont.)

- in picking sites in urban
are "economically efficient"
d. Will present industry of
for many years or more to
materials (resources)?
e. Will the concentration/g
change the pleasant environment
urban areas?

Continued and Additional Suggested Learning Experiences
(cont.)

- in picking sites in urban areas because these are "economically efficient"?
- Will present industry of community be retained for many years or more to a new source of raw materials (resources)?
- Will the concentration/growth of new industry change the pleasant environment of smaller urban areas?

ESEA Title III - 59-70-0135-2 Project I-C-E

C 7. Factors such as facilitating Discipline Area B
 C transportation, economic conditions, Subject B
 N population growth, and increased Problem Orientation B
 C leisure time have a great influence
 E on changes in land use and centers of population density.
 P
 T

BEHAVIORAL OBJECTIVES

SUGGESTED LEARNING

Cognitive: Students will write up an investigative report and budget on establishing a leisure type business.
Affective: Students will become aware that development of recreational/leisure time activities will have an environmental impact which must be considered and may even be regulated now and in the future.

Skills to be Learned
 Problem solving
 Group research
 Investigation
 Writing a report
 Oral reporting
 Civic responsibility

- I. Student-Centered in class activity
 - A. Students split up into small groups representing leisure types of business in barren areas of the country.
 1. Problem areas:
 - a. Income producing activity
 - b. Cost of land
 - c. Expenses of development including site preparation to meet codes
 - d. Current operating expenses
 - e. Amount to charge customer for activity
 - f. Obtaining financing
 - g. Preparing budget
 - B. Have groups report their findings orally to the group and in writing to their instructor.

Discipline Area	Business Education
Subject	Bookkeeping
Problem Orientation	Leisure time Business in barren areas
Grade	10-12

Influence
centers of population density.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Students split up into small groups representing leisure types of business in barren areas of the country.
 1. Problem areas:
 - a. Income producing activity
 - b. Cost of land
 - c. Expenses of development including site preparation to meet codes
 - d. Current operating expenses
 - e. Amount to charge customer for activity
 - f. Obtaining financing
 - g. Preparing budget
- B. Have groups report their findings orally to the group and in writing to their instructor.

II. Outside Resource and Community Activities

- A. Go to library or give an assignment to research leisure type business and land development ventures.
- B. Have each group write to a Chamber of Commerce or a state government to find out costs and offers of various communities.
- C. Review code restrictions for development.
- D. Preparation of environmental impact statement.
- E. Review pending legislation on land use policy and zoning and its rationals.

Resource and Reference Materials

Continued and Additional Su

Publications:

Newspapers - Wall Street Journal
A Place to Live, VF 100A I-C-E RMC
Too Many People? 190Ki I-C-E RMC
Wisconsin, VF I-C-E RMC

Audio-Visual:

One Day at Teton Marsh, 48 min.,
color, 16mm film I-C-E RMC

Community:

Chamber of Commerce
DNR
Zoning-planning official

Subjects	Continued and Additional Suggested Learning Experiences
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C O N C E P T	8. <u>Cultural, economic, social, and</u>	Discipline Area
	<u>political factors determine status</u>	Subject
	<u>of man's values and attitudes</u>	Problem Orientation
	<u>toward his environment.</u>	

ESEA Title III - 59-70-0135-2 Project I-C-E	BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING ACTIVITIES
	<p><u>Cognitive:</u> Students will write a budget showing costs and income of a waste collection business.</p> <p><u>Affective:</u> The students will create a mock waste collection business and possibly persist to run an actual mini concern.</p>	<p>I. Student-Centered in class activity</p> <p>A. Have students set up a waste collection business.</p> <p>1. Divide class into five areas of business.</p> <p>a. Paper</p> <p>b. Glass</p> <p>c. Aluminum</p> <p>d. Metal</p> <p>e. Other</p> <p>2. Groups should:</p> <p>a. Find out how much income they could receive per ton in each area.</p> <p>b. Find out how they could collect, store and then sell to make a profit.</p> <p>c. Prepare a budget for their respective area.</p>
	<p><u>Skills to be Learned</u></p> <p>Problem solving</p> <p>Group research</p> <p>Interviewing</p> <p>Investigation</p> <p>Planning</p> <p>Communication skills</p>	

ial, and	Discipline Area	<u>Business Education</u>
e status	Subject	<u>Bookkeeping</u>
		<u>Profit</u>
des	Problem Orientation	<u>from Waste</u> <u>Gradel1-12</u>

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Have students set up a waste collection business.
 1. Divide class into five areas of business.
 - a. Paper
 - b. Glass
 - c. Aluminum
 - d. Metal
 - e. Other
 2. Groups should:
 - a. Find out how much income they could receive per ton in each area.
 - b. Find out how they could collect, store and then sell to make a profit.
 - c. Prepare a budget for their respective area.

II. Outside Resource and Community Activities

- A. Have each group write, phone or make a personal contact to a waste collection business and find out how much income each could receive per ton in their respective area.
 - B. Have a student obtain a taped interview from a local government official on any aspects of starting this type of business.
 1. What responsibility does the business community have to aid recycling by providing a market?
 2. What responsibility does the government have to enforce recycling by forbidding the use of "throw aways", etc.?
- (cont.)

Resource and Reference Materials	Continued and Additional Sources
<p data-bbox="583 962 821 990"><u>Publications:</u></p> <p data-bbox="583 990 1193 1152"><u>Daydreams and Nightmares</u>, Busch, William, 1971, 100B. <u>Community Planning Handbook</u>, Ginn and Co., 1970, 100G1. Both available at I-C-E RMC</p> <p data-bbox="577 1443 817 1471"><u>Audio-Visual:</u></p> <p data-bbox="596 1471 709 1498"><u>Films:</u></p> <p data-bbox="615 1498 1020 1610"><u>Garbage</u>, I-C-E RMC <u>Men at Bay</u>, I-C-E RMC <u>Recycling</u>, #3970 BAVI</p> <p data-bbox="577 1803 757 1831"><u>Community:</u></p> <p data-bbox="596 1831 1146 1935">City Government officials Community Civic Ecology Groups School administration</p>	<p data-bbox="1283 962 1489 990">II. (cont.)</p> <p data-bbox="1358 990 1791 1099">C. If possible, actually business on a class of March and April, 1972</p> <p data-bbox="1358 1099 1791 1396">D. Type of questions for 1. Can a school sponsor community? 2. Kind of collection 3. How long can contact emptying? 4. What are the disposal community? 5. How are disposal for</p>

Continued and Additional Suggested Learning Experiences

II. (cont.)

- C. If possible, actually start and run this business on a class or school level. (See March and April, 1972, I-C-E CAP.)
- D. Type of questions for student and teacher:
 - 1. Can a school sponsored program do this in a community?
 - 2. Kind of collection containers to meet codes.
 - 3. How long can containers stand before emptying?
 - 4. What are the disposal procedures in your community?
 - 5. How are disposal funds obtained?

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9. Man has the ability to manage, _____
 manipulate, and change his _____
 environment. _____

Discipline Area Business
 Subject Bookkeeping
 Problem Orientation Experimental

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will make a cost analysis of a new industry, showing the amount to be spent on pollution abatement equipment and type.
Affective: Students will discuss that industrial expansion is not necessarily progress, that growth brings growth problems as well as benefits.

Skills to be Learned

Problem solving
 Researching
 Letter writing
 Typing
 Knowledge of government services
 Cost benefit analysis

SUGGESTED LEARNING EXPERIENCES

- | I. | II. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <p>Student-Centered in class activity</p> <p>A. Cost analysis</p> <ol style="list-style-type: none"> Original land <ol style="list-style-type: none"> Ad valorem value Production value/yr. Tax return Per capita income Environmental values Land use as industrial site <ol style="list-style-type: none"> Ad valorem value Production value/yr. Tax return Per capita income Developmental cost Changes in environmental value <p>B. Compare the difference of density in the area and see what amount of density has the most advantages per capita income. Example: Small farmers in Wisconsin average a little over \$5,000 per year income. Large farms in Arizona make over \$26,000.</p> <ol style="list-style-type: none"> Do they need industry to come in and give them pollution problems and less income? (cont.) | |

Discipline Area Business Education
 Subject Bookkeeping
 Expenses from
 Problem Orientation new industry Grade 10-12

SUGGESTED LEARNING EXPERIENCES

I. Centered in class
 analysis
 original land
 . Ad valorem value
 . Production value/yr.
 . Tax return
 . Per capita income
 . Environmental values
 and use as industrial
 site
 . Ad valorem value
 . Production value/yr.
 . Tax return
 . Per capita income
 . Developmental cost
 . Changes in environ-
 mental value
 are the difference of
 ity in the area and see
 amount of density has
 most advantages per
 ca income. Example:
 1 farmers in Wisconsin
 age a little over \$5,000
 year income. Large farms
 rizona make over \$26,000.
 o they need industry to
 come in and give them
 ollution problems and
 esc income? (cont.)

II. Outside Resource and
 Community Activities
 A. What are local
 industries doing
 relative to land use
 in expanding?
 B. Prepare a letter to
 an industrial
 developer about plans
 for pollution control.
 C. Compare present
 government service
 costs to an estimate
 of the service costs
 when new industry
 moves into a community.
 How to expand services
 to control pollution.
 Use balance sheet
 approach for your
 comparison.

Resource and Reference Materials	Continued and Additional Sources
<p><u>Publications:</u></p> <ul style="list-style-type: none"> Year books Colliers Comptons World Book Britannica The Traffic Jam, I-C-E RMC DNR publications on air-water solid waste standards <p><u>Audio-Visual:</u></p> <p><u>Films:</u></p> <ul style="list-style-type: none"> Junk Dump, I-C-E RMC The Stream, I-C-E RMC <p><u>Community:</u></p> <ul style="list-style-type: none"> Land developer Local zoning official Local tax assessor Officials of county government Local school system 	<p>I. (cont.)</p> <ul style="list-style-type: none"> 2. If industry does not farm income increase <p>C. Investigate pollution for siting new industry (California air pollution)</p>

als	Continued and Additional Suggested Learning Experiences
s no reas tion ust llu	I. (cont.) 2. If industry does not pollute the area, will farm income increase? C. Investigate pollution abatement costs necessary for siting new industry to strictest standards. (California air pollution standards)

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10. Short-term economic gains may
produce long-term environmental
losses.

Discipline Area Business Edu
Subject Bookkeeping
Problem Orientation per Gover
Sched

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will describe the effect of accelerated depreciation on financial statements.
Affective: Students will realize business problems related to short term gains vs long term effects on society.

Skills to be Learned
Analysis of financial statements
Problem solving
Role playing in decisions
Listening

SUGGESTED LEARNING EXPERIE

- I. Student-Centered in class activity
 - A. Student must have prior knowledge of methods of depreciation. Tax laws.
 - B. Discuss the following:
 1. Why accelerated depreciation rates?
 - a. Effect on profit and income taxes.
 - b. Effect on cash flow.
 2. Questions and answers:
 - a. What does it mean to have accelerated depreciation on income statement?
 - b. Effect on balance sheet?
 - c. Dividends to stockholders?
 3. Long term depreciation on demand for equipment.
 4. Corporate goals vs society goals.
 5. What have short term economic thoughts done to accumulation of unwanted equipment?
 6. What has the solid waste from industrial plants

(cont.)

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gains may Discipline Area Business Education
 nmental Subject Bookkeeping
 Depreciation Rates
 Problem Orientation per Government Grade 10-12
 Schedule

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Student must have prior knowledge of methods of depreciation. Tax laws.
- B. Discuss the following:
 1. Why accelerated depreciation rates?
 - a. Effect on profit and income taxes.
 - b. Effect on cash flow.
 2. Questions and answers:
 - a. What does it mean to have accelerated depreciation on income statement?
 - b. Effect on balance sheet?
 - c. Dividends to stockholders?
 3. Long term depreciation on demand for equipment.
 4. Corporate goals vs society goals.
 5. What have short term economic thoughts done to accumulation of unwanted equipment?
 6. What has the solid waste from industrial plants

(cont.)

II. Outside Resource and Community Activities

- A. Have a member of a CPA firm discuss methods of depreciation.
- B. If possible, have a tax consultant from either state or federal gov't. come to class and discuss depreciation methods.

Resource and Reference Materials	Continued and Additional Sources
<p><u>Publications:</u> Tax publications on depreciation - state and federal The Wis. Dept. of Natural Resources <u>Wis. Conservation Bulletin</u>, Madison, Wi.</p> <p><u>Audio-Visual:</u> <u>Film:</u> Junk Dump, I-C-E RMC <u>Filmstrip:</u> Kt 5 Eye Gate House, Inc., 1970, <u>Aggradation - Degradation</u> 10 filmstrips, I-C-E RMC</p> <p><u>Community:</u> Visit various salvage auto dumps and see the age of types in junk pile Note: Disposal by individuals of community left for rubbish collection</p>	<p>I. (cont.) done to environmental 7. What has the state of solid waste? 8. As our stock-pile of solid waste is increasing, what is happening to natural resources?</p>

Suggested Materials	Continued and Additional Suggested Learning Experiences
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<p>tail appreciation - of natural Resources of <u>Michigan</u>, al</p>	<p>I. (cont.) done to environmental sites? 7. What has the state of Wis. DNR done in handling solid waste? 8. As our stock-pile of solid waste grows, what is happening to natural resource deposits?</p>
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11. Individual acts, duplicated
or compounded, produce significant
environmental alterations over time.

Discipline Area Business Education
Subject Bookkeeping
Problem Orientation Environmental Alterations

BEHAVIORAL OBJECTIVES	SUGGESTED LEARNING EXPERIENCES
<p>Cognitive: Identify 2 competitive firms and 2 or 3 harmful effects of this competition to our environment.</p> <p>Affective: Students will develop a feeling of urgency in regard to the depletion of our natural resources for this purpose.</p>	<p>I. Student-Centered in class activity</p> <p>A. Draw up a questionnaire to determine the following:</p> <ol style="list-style-type: none"> 1. Name of business 2. Type of product and by-product 3. Raw materials used 4. Natural resources used 5. Type of pollution <p>B. List businesses within the state that make the same or similar product.</p> <p>C. Research the availability and extent of the raw materials used.</p> <p>D. Discuss with the students the use of raw materials by businesses and the harmful effects that are involved in the production of a product.</p> <p>E. An example of both competitive business would be:</p> <ol style="list-style-type: none"> 1. Name Fort Howard vs. Charmin Paper Co. Paper Co. 2. Products Paper or Paper or other products others <p>(cont.)</p>
<p><u>Skills to be Learned</u></p> <p>Research Report writing Interviewing</p>	<p>II. Outside Community</p> <p>A. Invite persons from business to tell them what conservation resources produced special products.</p> <p>B. DNR send the business natural</p>

ESEA Title III - 59-70-0135-2 Project I-C-E

duplicated Discipline Area Business Education
 significant Subject Bookkeeping
 Environmental
 ons over time. Problem Orientation Alterations Grade 10-12

SUGGESTED LEARNING EXPERIENCES

- I. Student-Centered in class activity
- A. Draw up a questionnaire to determine the following:
 1. Name of business
 2. Type of product and by-product
 3. Raw materials used
 4. Natural resources used
 5. Type of pollution
 - B. List businesses within the state that make the same or similar product.
 - C. Research the availability and extent of the raw materials used.
 - D. Discuss with the students the use of raw materials by businesses and the harmful effects that are involved in the production of a product.
 - E. An example of both competitive business would be:
 1. Name
Fort Howard vs Charmin Paper Co. Paper Co.
 2. Products
Paper or Paper or
other products others
(cont.)

- II. Outside Resource and Community Activities
- A. Invite research personnel from local businesses and have them tell what is what is being done to conserve the natural resources used in the production of their specific products.
 - B. DNR or UWGB representatives to discuss the impact of various businesses on our natural resources.

Resource and Reference Materials	Continued and Additional Suggested
<p data-bbox="452 943 690 973"><u>Publications:</u></p> <p data-bbox="452 973 1020 1166"><u>VF 10 years to Save Mankind</u>, 1970, MacMallan, Ralph, I-C-E RMC <u>The Limits to Growth</u>, Meadows, Donnella H., Universe Books, 1972.</p> <p data-bbox="452 1425 1043 1563"><u>Audio-Visual:</u> <u>Ecology</u> - simulation game I-C-E RMC Recycling resources - I-C-E RMC</p> <p data-bbox="452 1786 1093 1924"><u>Community:</u> DNR or UWGB speaker Research personnel from businesses Industrialists</p>	<p data-bbox="1146 943 1333 973">I. (cont.)</p> <p data-bbox="1202 973 1793 1042">3. <u>Raw Materials</u> Pulp Pu</p> <p data-bbox="1202 1042 1793 1111">4. <u>Natural Resources</u> Trees Tr</p> <p data-bbox="1202 1111 1793 1214">5. <u>Type of Pollution</u> Air and Water Ai (Students to explain each typ</p>

ed	s	<u>Continued and Additional Suggested Learning Experiences</u>	
		I. (cont.)	
		3. <u>Raw Materials</u>	
Pu		Pulp	Pulp
Tr		4. <u>Natural Resources</u>	
		Trees	Trees
Ai		5. <u>Type of Pollution</u>	
typ		Air and Water	Air and Water
		(Students to explain each type of pollution.)	

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C 12. Private ownership must be
 O regarded as a stewardship and should
 N not encroach upon or violate the
 C individual right of others.
 E
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Discipline Area Business Educa
 Subject Bookkeeping
 Problem Orientation Private Ownership

ESEA Title III - 59-70-0135-2 Project I-C-E

BEHAVIORAL OBJECTIVES

Cognitive: Students will interpret data relative to environmental costs and their long range beneficial effects upon an individual's rights.
Affective: Students will be able to recognize that the abuse of "free loads" by businesses is a costly mistake and it will require money to correct. The cost could be passed on to the consumer.

Skills to be Learned
 Discussion
 Interviewing
 Letter writing
 Analyzing costs

SUGGESTED LEARNING EXPERI

- I. Student-Centered in class activity
 - A. Students orally list 3 local business corporations.
 1. Analyze the ownership of these companies.
 2. What type of organization are they?
 - B. Students send for information from these companies concerning their activities in the area of pollution and the costs during the last 5 years.
 - C. Students write a response to the following statement: "Owners of business spend money to conserve the rights of individuals in the long run."

- II. Out
 - A. S
 - B. E
 - C.

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 ing ship and should Subject Bookkeeping
 vate Private
 ship violate the Problem Orientation Ownership Grade 10-12
 thers.

SUGGESTED LEARNING EXPERIENCES

I. Student-Centered in class activity

- A. Students orally list 3 local business corporations.
 1. Analyze the ownership of these companies.
 2. What type of organization are they?
- B. Students send for information from these companies concerning their activities in the area of pollution and the costs during the last 5 years.
- C. Students write a response to the following statement: "Owners of business spend money to conserve the rights of individuals in the long run."

II. Outside Resource and Community Activities

- A. Students can write to 3 companies and obtain speakers for the class that will explain what their company has done in the area of environmental protection for the past 5 years.
- B. Have students mention that this is a bookkeeping class (in the letter) and therefore are primarily interested in figures and analyzing these figures.
- C. Have students prepare questions 2 weeks ahead of time and send questions to the speakers so they can prepare answers to them.

Resource and Reference Materials	Continued and Additional Suggested
<u>Publications:</u> 100 6t Community Planning Handbook, I-C-E RMC Environmental Handbook, Garrett De Fall, Ballantine Books, Inc.	

Audio-Visual:

Filmstrip:

FS Stl Environmental Pollution -
Our World in Crisis, 6 film-
strips plus study guide,
I-C-E RMC

Community:

Speakers from area production
companies

Materials	Continued and Additional Suggested Learning Experiences
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Handbook,	
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PROJECT I-C-E Episode Evaluation Form (Reproduce or duplicate)

Please fill in:

Subject: _____

Grade: _____

Concept No. Used: _____

In commenting on each episode used in your form. Feel free to adapt it and add more of your critiques and comments - negative and positive. In the right hand column, please rate (poor, good, excellent). If you have space, make specific comments or suggestions if provided to help us make this a more usable guide.

Poor	Good	Exc.	
			I. Behavioral Objectives A. Cognitive:
			B. Affective:
			II. Skills Developed
			III. Suggested Learning Experiences A. In Class:
			B. Outside & Community Activities:
			IV. Suggested Resource & Reference Materials (specific suggestions & comments)

Episode Evaluation Form (Reproduce or duplicate as needed)

In commenting on each episode used in your class, please use this form. Feel free to adapt it and add more pages. Let us know all your critiques and comments - negative and positive. In the left-hand column, please rate (poor, good, excellent) each item. Also, make specific comments or suggestions if possible in the space provided to help us make this a more usable guide. Thank you.

Moral Objectives
Cognitive:

Effective:

Developed

Student Learning Experiences
Class:

Outside & Community Activities:

Additional Resource & Reference Materials
Specific suggestions & comments)

Project I-C-E
Serving Schools in CESA 3-8-9
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