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**ABSTRACT**

The occupational resource unit, one of a series encompassing grade levels one through ten, was prepared by the Lincoln County (West Virginia) Exemplary Project staff for classroom use at the fourth grade level or for use as a teaching model. The guide contains a synopsis of the entire unit, general objectives, behavioral objectives, teaching strategies, evaluation techniques, methods for correlating subject matter, and specific lesson plans, comprising more than half the document, each focusing on a particular occupation or group of occupations. Moving the focus of occupational studies to job opportunities on a State level, the lesson plans emphasize the development of positive personal and career attitudes. Jobs within the State's major industries, the coal industry, glass production, and law enforcement occupations are the occupational areas examined. Also included are suggested field trip sites, techniques for use of experience charts, suggested parental letters, and a resource bibliography of available materials. Each lesson plan has a behavioral objective, and is divided into three basic components: procedures, student activity, and notes and resources. The career education model implemented in this series is developed around five elements: field trips, simulated exercises, competence development, resource role models, and multi-media occupational information. (MW)

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LINCOLN COUNTY EXEMPLARY PROGRAM

IN

VOCATIONAL EDUCATION

Elementary School Project

for

Level Four

RESOURCE UNIT

Lincoln County Board of Education  
Hamlin, West Virginia

003740

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## A Suggestive Resource Unit

for

Level Four

Career Awareness

Synopsis

The fourth level of career awareness in the middle school is concerned with investigating and interpreting the work of family members as it relates to a larger segment of the society.

This level should also focus on the development of positive attitudes, appropriate to both personal growth and career choices, building upon experiences developed in preceding levels. By moving to new levels of experience, individual decision making abilities can be enhanced, as students' sense of dignity and worth are increased through deeper understanding of the intrinsic value of occupational awareness.

We now proceed from the family, local and immediate environment to occupational awareness on a state, national, and world-wide level. The students should realize that they gain from and contribute to occupational awareness by being a participant in our world of challenge and change.

### General Objectives

1. To provide students with occupational information to make them aware of the meaning of work and its importance to them and society.
2. To provide experiences in which the world of work is presented in a manner that is realistic and

- appropriate to the student's state of development.
3. To inform students about the multitude of occupational opportunities.
  4. To present to students a realistic view of the world of work and to encourage them to consider their own abilities and limitations.
  5. To provide students with basic information about major occupational fields.
  6. To stress the dignity in work and the fact that every worker performs a useful function.
  7. To visit local businesses and industries to get a first-hand view of the "world of work".

#### Behavioral Objectives

1. To name the many occupations and job skills that are available to the student within the state.
2. To comprehend the vastness of our natural resources as related to the economic prosperity of the nation by focusing on the coal industry.
3. To become aware of the glass industry in development and an awareness of and an appreciation for the vocational techniques as related to existing industries within the state.
4. To do exploratory analysis of the many facets of protective services as provided by the state.

## Teaching Strategies

1. The individual should become involved in an in-depth project of some phase of business as performed within our state.
  - A. Individual students could make a scrapbook of an in-depth project.
  - B. Workable models could be made by the students as they relate to the in-depth project.
  - C. A structured dramatization could be presented to the entire class, based on the in-depth project, and on the model.
2. Small group activities stemming from classroom discussion of the different facets presented in the in-depth project should be carried out.
  - A. Students should write down what they see as relevant about the project.
  - B. A group unit could easily be developed from this project dealing with various industries or businesses in our state.
3. Plan some field trips to the places considered most relevant in this study.
  - A. Consult with staff to avoid repetition of previous trips, thereby insuring continuity in the overall career awareness program.
  - B. Consult with and have the approval of the manager or the supervisor of each place you plan to visit.

- C. Obtain parental consent as in previous field trips.
- 4. Role Playing
  - A. Illustrate both desirable and undesirable job interviewees' behavior.
  - B. Discuss the various kinds of information needed before the interview.
  - C. Discuss the over-all type of questions which one could be expected to be asked in an interview.
  - D. Arrange for an interview between each student and a member of the staff.
    - 1. Classroom practice should be given in filling out questionnaires and applications.
    - 2. If possible, tape record or video-tape the interview session.
    - 3. After taping interviews, it should be played back and followed by a general classroom discussion on ways of self-improvement in interview behavior.
    - 4. Interpret the result and let each student draw individual conclusions as to how they can improve their interview technique.
- 5. Students should work in teams.
  - A. They should interview one another.
  - B. A discussion of the activity by the entire group should follow.
- 6. The group should prepare a scrapbook or a notebook

on interviewing as a result of the work they have performed.

- A. The scrapebook should consist of students in actual situations.
  - B. The scrapbook should contain:
    1. Questionnaires
    2. Interview Questions
    3. Interview Answers
    4. Group Interviews
    5. Group Answers
7. Business and industrial people will visit the class
- A. They will state their companies' objectives and requirements for employment.
  - B. This should be varied so it will encompass the interests of the students at this level.
8. Students should be able to write letters:
- A. Requesting information from various companies.
  - B. Thank you letters
9. The students could perform role playing as to the above activities.
- A. Video Tape
  - B. Tape Recorder
10. Students should perform role playing activity in realistic situations.
- A. Washing Dishes
  - B. Cleaning Room



- C. Washing Family Auto
  - D. Mowing Lawn
  - E. Related Activities
11. Appropriate films, filmstrips or slides showing different phases of careers within the state.
  12. Classroom involvement in songs, games, records, or recreation about the role of work in contributing to the dignity of man.
  13. Career development information and activities.
  14. Evaluation
    - A. Observation of active pupil involvement in discussions and questioning.
    - B. A summary by students on the opportunities offered to each of them in the state of West Virginia.
    - C. Capability of students in conducting an interview.
    - D. Statements by staff members.
    - E. Amount and quality of materials used and brought by students.
    - G. Fulfillment of objectives.
    - H. Readminister standardized and non-standardized measures given at the beginning of the year.
    - I. Attitude development and change.
  15. Resource Materials
    1. Films
    2. Filmstrips

3. Records
4. Tapes
5. Books
6. Pamphlets
7. Magazines
8. Pictures
9. Maps
10. Brochures
11. Transparencies
12. Slides
13. Documentaries
14. Bibliography
15. Autobiography
16. Guest lecturer
17. Field trips eg. (Sunrise and Huntington Galleries)
18. Opaque projector
19. Filmstrip projector
20. Film projector
21. Art supplies
22. Tape recorder
23. Sample 4th. grade units and guides for developing  
--West Virginia
24. Chamber of Commerce information on industrial  
and recreational sites in West Virginia
25. Samples of interview questions and techniques
26. Guidance units--attitude development
27. Career book and series list

28. General textbook list--catalogs
29. Letter guides, parents, employers
30. Poems
31. Stories
32. Recordings.
33. Games
34. Files

### Evaluation Techniques

Evaluation within this unit should be a continuous process in which the classroom teacher can use several methods to gain deeper insights into the overall student learning processes.

Role playing the different activities at this grade level is an excellent way for the classroom teacher to gain valuable outputs of student behavior in any learning situation. Not only is it good for students as an effective evaluation instrument, but through role playing the students can learn self-discipline measures which they can use later in the occupational world.

Evaluation should be approached in terms of growth that has taken place in the students. Students should tell what they have learned during the unit. Evaluation can consist of self appraisal by the students and the teachers as to the degree to which the students have attained the expected outcomes of the unit. The success of the students is measured by his understandings, attitudes, appreciations, and skills acquired during the unit.

### Methods of Evaluation

1. The observation of pupil participation in group discussion as they relate to career awareness.
2. Observation of pupil participation in activities.
  - A. Materials brought to class
  - B. Participation in role playing
  - C. Oral questioning of students
  - D. Participation in group discussions
3. Responsibilities
  - A. Responsibilities students had when school started.
  - B. Responsibilities students now perform at the closing of school.
  - C. Occupations that students now can observe.
  - D. Occupations that students now can perform.
  - E. Pre and post testing

### Correlation of Subjects Taught

Social studies, reading textbooks, stories, and related units are areas which can easily be adapted to the study of jobs. Other subject areas, such as music, science, and math can also be used effectively. Occupations should be shown in their relationship to each subject of career awareness. The language arts program could easily include oral and written reports, role playing, interviews, stories, poems, riddles, and letter writing. Math should include the relationship of math to skills needed by workers in order to obtain, perform, and function in various occupations in the world of work. Art can be related to worker requirements

in occupations that require artists' skills. Music and correlated activities such as records, tapes, slides, film strips, and flannelboards are available in a wide selection of career awareness activity.

In addition to the suggested resource unit, teachers, can by using games, songs, stories, records, poems, visiting personnel, tapes, career book lists, video tapes, and discussions of information derived from the field trips, increase the student's awareness of roles they must perform to be effective citizens in tomorrow's world of work.

APPENDICES

## Appendices

- A. Field Trip
- B. Suggested Parental Letter
- C. Resource Bibliography
- D. Teaching Units

## FIELD TRIPS

Children in the primary grades are eager to examine the outside world. They are curious at this age, and field trips present an opportunity for children to react to real-life situations. The importance of providing early career awareness cannot be over emphasized. The teacher should point out the workers they will encounter on field trips and the jobs they perform. This will be another method which will serve to assist the child to become more aware of the world of work. Pupils are given an opportunity to see, smell, touch, hear, and taste. Talking about careers may be somewhat informative, but much more will be learned in actual observation.

Prior to a trip, the children should understand that they are taking the trip because they are going to see things and do things that could not be done and seen in the class room.

Some of the purposes of a field trip are as follows:

1. Having student develop an awareness of the many different workers in the community.
  - a. Home
  - b. School
  - c. Neighborhood
  - d. Local or nearby town
2. Helping them observe working conditions.
3. Helping them develop an awareness of the interdependence of workers.



Certain preparation should be made before making a trip:

1. Consult principal to obtain permission for the trip.
2. Teacher, and/or committee of pupils, make the trip first. (If feasible)
  - a. Get idea of time involved
  - b. Find out who the people are
  - c. Find out the problems to be met
  - d. Find out what background information students should have
3. Make plans for transportation
  - a. What kind?
  - b. Who will provide it?
  - c. What will it cost?
4. Obtain signed statements from parents allowing children to make trip.

Teacher and students plan the trip together.

1. Generalizations should be given
  - a. Stories
  - b. Pictures
  - c. Role playing
  - d. Class discussion
2. Student committee should gather career information.
  - a. Kind of workers
  - b. Working conditions
  - c. Training of workers
  - d. Duties of workers

3. Safety precautions should be discussed.

4. Behavior as guest should be made clear.

Post trip questions should be asked by the teacher to reinforce the career aspects of the trip. The purpose of the trip will determine the questions asked.

1. What kind of workers did you see on the trip?

2. What do these workers do each day?

3. What are their working days?

4. What kind of training do these workers need?

The class will want to write thank you notes or letters to the individual, agency, or business visited. Further reports and discussions may be planned by the teachers if there is interest on the part of the students.

The exemplary staff plans to set up, in advance, resource people to use as needed. The staff also intends to plan field trips in conjunction with each unit of study.

## Suggested Field Trips

1. Sheriff's Office
2. Prosecuting Attorney's Office
3. State Police Training Center--Dunbar
4. State Police Crime Laboratory--South Charleston
5. City Police Headquarters--Charleston--Huntington
6. Courtroom
7. Dunbar Detention Center
8. Hamlin Volunteer Fire Department
9. Coal Mine--Beckley Exhibition Mine
10. Kanawha Glass Company--Dunbar
11. Huntington Fire Department--Huntington
12. Charleston Fire Department--Charleston
13. Blenko Glass--Milton
14. Rainbow Glass--Huntington
15. Union Carbide Chemicals--South Charleston
16. International Nickel--Huntington
17. Corbin Limited--Men's Clothing Mfg.--Huntington
18. Huntington Manufacturing Company--Women's Clothing
19. Perry Norvell Shoe Factory--Huntington
20. Kanawha Airport--Charleston
21. Tri-State Airport--Huntington
22. American Car and Foundry--Huntington
23. Libby Owens Ford--Kanawha City
24. Du Pont--Belle
25. etc.

SUGGESTED LETTER TO PARENTS

Dear Mr. \_\_\_\_\_  
Parent or Guardian

The students in our class are studying about the importance of all types of work. We want to learn more about the work of each of the parents of all the boys and girls in \_\_\_\_\_'s class.

Would you answer these questions for us and send it to school by your child? We will study how your job affects our lives.

1. What is your job? \_\_\_\_\_  
\_\_\_\_\_
2. What are some of your duties? \_\_\_\_\_  
\_\_\_\_\_
3. Is there anything about your work which the children in our class would enjoy seeing (pictures, materials, tools, uniforms, etc.)?  
\_\_\_\_\_  
\_\_\_\_\_
4. Would a field trip to your place of employment be beneficial at this grade level? \_\_\_\_\_  
\_\_\_\_\_
5. Would you serve as a field trip aide when we take field trips? \_\_\_\_\_
6. Would you share as a classroom consultant in relating skills and occupations you use?  
yes                      no

Sincerely  
\_\_\_\_\_

Resource Bibliography

Level Four

Career Awareness

Exemplary Project

Books

- Ambler, Charles. West Virginia History.
- Clagg, Sam. West Virginia Conceptual Atlas. Rand McNally, 1970.
- Markun, Patricia. The First Book of Mining. Watts, 1959.
- Eberle, Irmengarde. The New World of Glass. Dodd, Meade and Company, 1963.
- Epstein, Sam and Beryl. The First Book of Glass. Watts, 1955.
- Sootin, Laura. Let's Go To A Police Station. Putnam, 1957.
- Williams, Barbara. I Know A Mayor. Putnam, 1967.
- Williams, Barbara. I Know A Fireman. Putnam, 1967.
- Williams, Barbara. I Know A Policeman. Putnam, 1966.
- Hyde, Wayne. What Does A Secret Service Agent Do? Dodd, Meade and Company, 1962.
- Liston, Robert. Your Career In Law Enforcement. Messner, 1967.
- McCarty, Agnes. Let's Go To Court. Putnam, 1961.
- Rosenfield, Bernard. Let's Go To The F. B. I. Putnam, 1960.
- Wheeler, Billy E. Song Of A Woods Colt. Droke House, 1969.
- Sutton, Felix. West Virginia. Coward-McCann, 1968.
- Caudill, Rebecca. My Appalachia. Holt, Rinehart and Winston, 1969.
- Glenn, Max E. Appalachia In Transition. Bethany Press, 1970.
- Roberts, Bruce and Nancy. Where Time Stood Still. Crowell-Collier Press, 1970.

Clarkson, Roy B. Tumult On the Mountains. McCain, 1964.

Price, Otis K. The Allegheny Frontier. University Press of Kentucky, 1970.

Brooks, Maurice. The Appalachians. Houghton Mifflin, 1965.

Occupational Briefs (SRA)

51 Coal Miner  
194 Metal Mining Workers  
207 Mining Engineers  
198 Tool and Die Makers  
260 Surveyors  
182 Statistical Workers  
292 Safety Engineers  
184 Geologist  
193 Diesel Mechanics  
3 Electrical Engineers  
25 Electricians  
16 Bookkeeping Machine Operators  
393 Union Business Agents  
252 Typists  
204 Ceramic Engineers  
228 Ceramic Industry Manufacturing Workers  
318 Chemical Technicians  
40 Display Workers  
327 Factory Inspectors  
234 Gift Shop Owners and Managers  
174 Glass Manufacturing Workers  
109 Laborers  
114 Manufacturing and Wholesaler Salesman  
178 Package Manufacturing Workers  
97 Purchasing Agents  
352 Shipping Clerks  
110 Warehouse Workers  
385 Criminologists  
274 Detectives  
55 F.B.I. Agents  
297 Guards, Watchmen, and Alarm System Workers  
9 Lawyers  
300 Legal Secretaries  
54 Police  
107 Policewoman

Filmstrips

Mining and Industry-----Coronet

Natural Resources-----Coronet

John Henry-----Coronet

Maps (42H)-----Eyegate

Glass Making in Colonial Days-----Corning Glass  
Company

West Virginia: A Changing Land-----McGraw Hill

Slides

West Virginia: A set of 112 colored slides showing the  
history and industry of the mountain state.

SRA Our Working World

## TEACHING UNITS

- I. Opportunities in Our State
- II. Black Gold
- III. Rainbow of Color
- IV. Protective Services Provided by Our State



These lesson plans are a guide for the classroom teacher as to what possible activities may take place during the learning period. This unit is subject to change and it is by no means intended to dictate a precise minute-by-minute schedule of activities.

LINCOLN COUNTY EXEMPLARY PROGRAM  
IN  
VOCATIONAL EDUCATION

Elementary School Project  
for  
Level Four

OPPORTUNITIES IN OUR STATE

Lincoln County Board of Education  
Hamlin, West Virginia

Teaching Unit  
Level Four

Title: Opportunities In Our State

Behavioral Objective: To name the many occupations and job skills that are available to the student within the state.

Procedures	Student Activity	Notes & Resources
<p>Provide the students with an introduction to the state through "A look at W. Va."</p>	<p>Have a general discussion of places students have visited in the state, and places they would like to go.</p>	
<p>Encourage student research using encyclopedias, class reports and other sources.</p>	<p>When students are naming places they have been or would like to visit within the state, see if they can name the different jobs that are involved in getting them there.</p>	<p><u>Materials:</u> Outline Map of the State Ribbon Thumbtack Magic Marker Overhead Projector W.Va. Map Transparency</p>
<p>Using mimeograph maps, let students, at their desks, mark the locations of various state industries.</p>	<p>Students will use small mimeograph maps at their desks, marking the different industries and occupations as they are located.</p>	<p>This can be correlated with a <u>Study of West Virginia</u> by Charles Ambler.</p>

(cont.)

Display a large map of the state, using transparencies.

Students can mark the major industries of the state.

eg. Use Stars or Ribbons

Make a chart using information already available on jobs within the state, showing the skills needed to perform these jobs.

Use field trip information.

Appendix-B

in the states various cities and geographical areas.

Draw a picture showing the exercise of the different job skills needed in performing a certain occupation. Use small group activities to let each student explain to the class what his picture represents.

Take the students on field trips to various industries or businesses within the state.

Students should review filmstrips of jobs performed within

Example attached; see appendix A.

#### Resources

W.Va. Map Transparencies.

W.Va. Chamber of Commerce Information.

#### Filmstrips

Use filmstrips that pertain to the field

businesses and industries visited.

trip sites.

- e.g. 1. Banker  
2. Businesses  
3. Factory  
4. etc.

Have the students create displays depicting the industries of the state.

Students can make murals, bulletin boards, posters, charts, exhibits, and friezes of the major industries in the state, showing the different occupations that are involved with each.

Book:

Our Working World  
S.R.A.

Students should be exposed to stories, tapes, and records related to work in the state. They can also develop a frieze from what has been covered.

Arts and crafts techniques could be used to make model products such as those turned out by industries studied.

Materials:

paint  
poster paper  
paste  
tacks  
construction paper  
and etc.

Filmstrip

West Virginia: A  
Changing Land---  
---McGraw Hill.

Slides

West Virginia: Set of  
12 colored slides  
showing history and  
industry of the  
mountain state.

Books

Wheeler, Billy Ed.  
Song of a Woods Col  
Droke House, 1969.

Sutton, Felix. West  
Virginia. Coward-  
McCann, 1968.

Caudill, Rebecca. My  
Appalachia. Holt,  
Rinehart, and Win-  
ston, 1969.

Glenn, Max E. Appalac  
in Transition.  
Bethany Press, 1970

Roberts, Bruce and Nan  
Where Time Stood  
Still. Crowell-  
Collier Press, 1970.

Clarkson, Roy B. Turn  
on the Mountains.  
McClain, 1964.

Price, Otis K. The  
Allegheny Frontier.  
University Press of  
Kentucky, 1970.

Brooks, Maurice. The  
Appalachians. Houg-  
ton Mifflin, 1965.

## RESOURCE

### Information on the State

#### Chambers of Commerce

Huntington, W.Va.  
Charleston, W.Va.  
Wheeling, W.Va.  
Bluefield, W.Va.

#### Pamphlet

Facts and Statistics of West Virginia

#### Area Development Departments

APPALACHIAN POWER COMPANY  
Huntington, W. Va.  
Charleston, W.VVa.

#### Chesapeake and Potomac Telephone Company

1101 6th Avenue  
Huntington, West Virginia

#### Educational films available for school's use.

History of Telephone Company  
Use of the Telephone  
(Telephone equipment can be obtained on loan from the  
C&P Telephone company.)

#### Department of Natural Resources

Charleston, W. Va.

#### Around the Mountain State

Huntington and Charleston  
Newspaper Offices

Sam Clagg, West Virginia Conceptual Atlas, Rand Mc Nally and  
Company, 1970

LINCOLN COUNTY EXEMPLARY PROGRAM  
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Level Four

BLACK GOLD

Lincoln County Board of Education  
Hamlin, West Virginia



Teaching Unit  
Level Four

Title: Black Gold

Behavioral Objective: To comprehend the vastness of our natural resources as related to the economic prosperity of the nation by focusing on the coal industry.

Procedures	Student Activity	Notes & Resources
<p>Hold a class discussion on how many students have seen coal.</p>	<p>This is a simple responsive period in which the students could use general knowledge of a local nature.</p>	<p>Include all students in the class discussion.</p>
<p>Generate continued interaction by asking, "Does anyone in the class know someone who makes a living from mining?"</p>	<p>The response would depend upon the area in which the school is located.</p>	<p>This response could easily be correlated with economic aspects of the community that are related to the mining industry.</p>
<p>Initiate picture collections dealing with mines.</p>	<p>Students collect pictures of various types of mines and miners.</p>	<p>Correlate this with art class.</p>
<p>Move the class into a discussion of the pictures.</p>	<p>Discuss the performances of the occupations shown in the pictures.</p>	<p>Correlate this with English as the students tell what they see in each picture.</p>

Students should make a class scrapbook.

Students do research on the locations of coal deposited.

Display maps on a bulletin board.

Class does research on coal, using small group approaches.

Students make a class scrapbook containing pictures of miners and mines.

Students do map work locating the areas of coal.

1. State
2. Nation

These maps could be displayed on bulletin boards, and one map of each type could be added to the scrapbook.

Members of the class do research on the different kinds of coal and how coal was first found in our state.

1. anthracite
2. bituminous

Students should list the types of occupations being performed in each picture.

Correlate this with social studies, showing the vast areas where supplies of coal are located.

The display of the students' maps will encourage them to be more accurate with facts and details.

This activity would be correlated with social studies.

Coal in West Virginia was discovered by John Peter Sally.

History of West Virginia

by Charles Ambler

In locating the deposits of coal, the students could either use Encyclopedias or social studies textbooks. Correlate this with career awareness in the occupational research area.

Organize a panel discussion.

Students should hold panel discussions of their research results.

Students should learn how to prepare for panel discussion and how to explain to other people the results of their research.

A write-up period should follow in which students summarize their research findings.

Students can write up panel reports to be added to the class scrapbook.

Correlate with English occupations such as writer and editor.

Schedule a classroom visit by a coal miner or a coal company official.

After the visit be sure to engage in class discussions of the points made by the

Perhaps there is a miner in the community who works the night shift who

resource persons.

would come to class and discuss coal mining from a miner's point of view. This would be extremely meaningful to the students. It could be possible to have both a miner and a coal official to visit the classroom, thus broadening the students concept of the mining industry.

Organize for class discussion the types of coal mines.

Students do group work on the different types of mines:

1. research
2. draw a scale model

Students do research on the types of mines and draw a scale model for each type of mine.

The four types of mines are:

1. shaft
2. slope
3. drift
4. surface

Correlate this with English and math, also with art

Plan a field trip to a mine.

Students should visit a mine and see these operations that are available for them to observe.

and the occupation of the statistician.

It is doubtful if local mines would let students go underground, yet they can observe many of the outside operations of the mining industry such as the tibble and the loading operations. Perhaps the Beckley Exhibition Mine could be visited.

Hold class discussions of the field trip.

Students discuss the field trip focusing on the occupations the occupations they observed and the types of equipment they saw.

This discussion would depend upon the activities the students observed during the field trip.

Naming of occupations and equipment should be carried out.

Students name the occupations and equipment that they saw during the trip.

A list of each occupation should be added to the class scrapbook. Correlate

Teachers should have students write thank-you letters.

Initiate study of occupations within the mining industry.

Class writes thank you letter to the place they visited.

Students study the mining occupations, becoming familiar with the tools and equipment the miner uses in performing his job. The students should also become familiar with the different duties of the occupations in the mining industry.

this with career awareness.

This could be correlated with English and connected with secretarial occupations.

Occupations that can be discussed are many, here is a random sampling:

1. machine operator.
2. mine operator
3. electrician
4. safety engineer
5. motorman
6. driller
7. roof bolter
8. dumper
9. inspector
10. grader (types of coal)
11. greaser
12. trackman
13. engineer
14. tipple operator
15. tipple mechanic
16. weigher
17. secretary
18. bookkeeper
19. salesman
20. auditor
21. time dispatcher
22. etc.

A scale model of a coal mine can be made by students.

Students should utilize knowledge obtained from previous activities in creating the model.

This should be made according to a scale model. Teacher could use salt and flour mixture to make the model. Other students could make models of equipment.

All of this activity could be correlated with art and math. Related activities to career awareness could be engineering, designing, carpentering, mathematics, and etc.

Conduct a study of materials and by-products of coal.

Students can do group research of the by-products of coal.

This could be done by using information from the American Coal Association and

the West Virginia  
Coal Association.

Have students  
list by-products  
from coal dis-  
covered in their  
study.

Students make a  
bulletin board with  
a lump of coal being  
the focal point.

This listing  
should be placed  
in the class scrap-  
book.

Teacher initiates  
bulletin board  
project.

Students make a  
bulletin board with a  
lump of coal being  
the focal point.

A lump of coal  
could be the focal  
point using rib-  
bons to attach the  
by-products of coal.  
The by-products of  
coal could be cor-  
related with science.  
Occupations cor-  
related could be  
chemist and other  
scientific careers.

Occupations that  
can be discussed in  
conjunction with  
this unit:

1. machine runner
2. machine helper
3. mine operators
4. electrician



5. mechanic
6. motorman
7. brakeman
8. rock driller
9. car operator
10. roof bolters
11. coal driller
12. spragger
13. snapper
14. trackman
15. timberman
16. inspector
17. foreman
18. timekeeper
19. dumper
20. blacksmith
21. car dropper
22. car cleaner
23. car trimmer
24. bit sharpener
25. car repairman
26. greasers
27. sand dryers
28. slate picker
29. tipple mechanic
30. carpenter
31. mason
32. lamphouse  
operator
33. hoist operator
34. weigher
35. bookkeeper
36. secretary
37. payroll clerk
38. union steward
39. dispatcher  
(by whom  
cargo is to  
be shipped)
40. salesman
41. etc.

Vocabulary enrichment could be extensive in this area of study which would cover

a broad spectrum  
of occupations  
and general terms.

Classroom materials

1. paper
2. pencils
3. art paper
4. art supplies
  - a. brushes
  - b. finger paint
  - c. watercolors
5. filmstrip  
projector
6. salt
7. flour
8. pan for mixture
9. blank maps
10. old magazines

Resources

Encyclopedias

Amber, Charles.  
West Virginia  
History.

Clagg, Sam.  
West Virginia  
Conceptual Atlas.  
Rand McNally, 1970.

Markun, Patricia.  
The First Book  
of Mining.  
Watts, 1959.

Filmstrips

Mining and In-  
dustry-----  
-----Coronet.

Natural Resources-  
-----Coronet.

Maps  
Eyegate filmstrip  
42 H.

Materials from  
American and  
West Virginia  
Coal Mining  
Association.

SRA Occupational Brie

51 Coal Miner  
194 Metal Mining  
Workers  
207 Mining Engineers  
198 Tool and Die  
Makers  
260 Surveyors  
182 Statistical  
Workers  
292 Safety Engineers  
184 Geologist  
193 Diesel Mechanics  
3 Electrical  
Engineers  
25 Electricians  
16 Bookkeeping  
Machine Operators  
393 Union Business  
Agents  
252 Typists

LINCOLN COUNTY EXEMPLARY PROGRAM  
IN  
VOCATIONAL EDUCATION

Elementary School Project  
for  
Level Four

RAINBOW OF COLOR

Lincoln County Board of Education  
Hamlin, West Virginia

Teaching Unit  
Level Four

Title: Rainbow of Color

Behavioral Objective: To become aware of the glass industry in developing an awareness of and an appreciation for the industry's vocational techniques as related to existing jobs within the state.

Procedures	Student Activity	Notes and Resources
<p>Introduction of this unit could involve discussion of a simple drinking glass.</p>	<p>Ask for a volunteer to bring a glass to school the next day.</p>	
<p>Continue the discussion of the drinking glass and its uses.</p>	<p>Students could list the obvious usages of a drinking glass.</p>	<p>The students could make a list of the uses of glass.</p> <p>The teacher could put the list on the board so the students could copy it.</p>
<p>Have students name the uses of glass.</p>	<p>Students could name the uses of glass and the major occupation associated with each.</p>	<p>This could be an open ended type of discussion. The uses and occupations should be listed on the chalk board and copied down by students.</p>

Plan for classroom visitation of someone who is knowledgeable in the glass industry.

Students could write about the classroom visitation.

Allow for ample time for class discussion after the presentation.

Students could write a simple theme concerning the classroom visitation.

Correlate this with English, penmanship, and etc.

Some obvious answers would be:

1. Window glass-----  
Construction
2. Automobile glass-  
Transportation
3. Eyeglasses-----  
Medical
4. Drinking glass---  
Homemaking  
Restaurant
5. Lightbulbs-----  
Manufacturing
6. etc.

This could be correlated with English class. The teacher should stress the occupations as mentioned by the guest

Plan for field trip to a local industry.

Students should plan for a field trip to a local glass industry by noting the many different skills and occupations listed in books and other materials on glass.

Students observe and note the various phases of the job of producing glass products.

Class discussion of the field trip.

Students discuss the activities that they observed during the trip.

lecturer, and correlate activities with the secretarial work involved in theme writing.

Field trip should be planned for Pilgrim Glass Co.--Huntington, W.Va.; Rainbow Glass Co.--Huntington; or Blenko Glass Co.--Milton, W.Va.

Some of the activities or job careers should be:

1. mixer
2. blob blower
3. apprentice
4. stoker
5. cutter
6. baker
7. sorter
8. packer
9. examiner
10. pricer

Students write thank-you note or letter.

Class activity could now center around designing junk glass into a mural or other project.

Class writes thank-you letter to the place they visited.

Students use junk glass to make murals or other creative artistic projects.

11. designer
12. mold maker
13. salesman
14. chemist
15. scientist
16. pipe fitter
17. etc.

Correlate this with English and office practices.

While on the field trip to a glass plant, the students or adult leaders could visit the scrapyards and gather pieces of discarded glass, getting as many different colors as possible. They could in turn let the students make a mural or numerous other items.

#### Materials Needed

1. broken glass
2. Elmer's glue
3. heavy cardboard or beaver board

Correlate this with art class.



Picture collection.

Class collects pictures from old magazines showing different kinds of glassware as related to occupational activities involved in the products creation.

Class mural

Students make a class mural from the picture collection.

Occupations that could be emphasized are:

1. artist
2. designer
3. layout person
4. interior decorator
5. draftsman
6. etc.

These should be collected from different magazines and newspapers.

Correlate this with art.

Occupations to be stressed are:

1. artist
2. designer
3. interior decorator
4. craftsman
5. etc.

Occupations to be discussed in this unit are:

1. carpenter
2. pipefitter
3. boilermaker.

4. mixer
5. chemical engineer
6. chemist
7. apprentice
8. cutter
9. temperature specialist
10. examiner
11. pricer
12. designer
13. artist in residence
14. mold maker
15. salesman
16. interior decorator
17. secretary
18. bookkeeper
19. draftsman
20. packer
21. shipper
22. etc.

Classroom materials

pencil  
paper  
ruler  
Elmer's glue  
hammer  
old magazines

Resource materials

Glass collected  
from the scrapyards  
of the glass plants.

Vocabulary

Vocabulary could  
be extensive in this  
unit or study. Some  
of the more common  
ones would be:

1. blown
2. pressed

3. molted
4. melted
5. weight
6. distance
7. packing
8. shipping
9. cherry wood
10. maple wood
11. pine chips
12. design
18. variation
14. color depth
15. consistency
16. temperature
17. blob
13. sand
19. gas
20. transportation
21. etc.

Resources:

Filmstrip

Glass Making in Colonial Days by Corning Glass Company.  
(this is in the demonstration center)

SRA Occupational Brie

- 204 Ceramic Engineers
- 228 Ceramic Industry  
Manufacturing  
Workers
- 318 Chemical Technicians
- 40 Display Workers
- 327 Factory Inspector.
- 234 Gift Shop Owners  
and Managers
- 174 Glass Manufacturing  
Workers
- 109 Laborers
- 114 Manufacturing and  
Wholesaler Salesman
- 178 Package Manufacturing  
Workers
- 97 Purchasing Agents
- 352 Shipping Clerks
- 110 Warehouse Workers

Books:

Eberle, Irmengarde.  
The New World of  
Glass. Dodd, Mead  
and Company, 1963.

Epstein, Sam and Bery  
The First Book of  
Glass. Watts, 1955

LINCOLN COUNTY EXEMPLARY PROGRAM  
IN  
VOCATIONAL EDUCATION

Elementary School Project  
for  
Level Four

PROTECTIVE SERVICES PROVIDED BY OUR STATE

Lincoln County Board of Education  
Hamlin, West Virginia

Teaching Unit  
Level Four

Title: Protective Services Provided by Our State

Behavioral Objective: To do exploratory analysis of the many facets of protective services as provided by state governments.

Procedures	Student Activity	Notes & Resources
<p>Start this unit by asking this question, "Who protects us as citizens?"</p>	<p>The students should be encouraged to answer "state police" after a free exchange of questions and answers.</p>	
<p>Conduct a classroom discussion of the role of the policeman as he performs his job.</p>	<p>Use pictures of policeman on the beat, as a desk sergeant, on traffic control, as motorcycle officer, a sheriff, and working in crime labs. Include the role of the policewoman.</p>	<p><u>Resources</u> Magazines, paste, stick finish art paper, ink pad and blotter.</p>
<p>Discussion of various police jobs and their particular functions.</p>	<p>Students can predict how policeman would react to various situations:</p> <ol style="list-style-type: none"> <li>a. arrest</li> <li>b. ticketing</li> <li>c. murder</li> <li>d. mob control</li> </ol>	

- e. assault
- f. accident
  - 1. car
  - 2. truck
  - 3. airplane
  - 4. motor cycle
  - 5. train
- g. gambling
  - 1. dice
  - 2. horses
- h. drugs

Utilize the concept: The policeman has responsibility to the community.

Teachers could use school patrol boys as an example on the child's level of a police type of activity.

Students discuss each role, and its importance to us as a protective service.

Students create and dramatize stories about policemen.

Role playing: Role play policeman helping lost child. (Students can reate other role play situations.)

Patrol boys role play their duties.

Role play duties of police and F.B.I. agents as related to different vocational possibilities within the law enforce-

Individual students tell stories.

Individual students tell of different aspects of how policemen perform this role.

Individual students perform duties they would perform in a real life job situation as a law

Have students  
make a scrapbook.

Re-inforce the  
concept: "There  
are various jobs  
employing the  
policeman."

Vocabulary de-  
velopment can be  
correlated.

Students can re-  
search and write-up  
job descriptions  
for protective ser-  
vice workers.

ment field.

Students use small  
group approach in  
beginning a scrapbook  
to include relevant  
data on protective  
services.

From research of fin-  
ger printing let stu-  
dents show how finger  
prints are used for  
identification purposes.  
e.g. fingerprint every-  
one in class.

Student can formulate  
a workable vocabulary  
which pertains to law  
enforcement agencies or  
departments.

List regulations for  
law enforcement agencies.

- a. tests
- b. physical require-  
ments
- c. personal charact-  
eristics
- d. educational re-  
quirements

enforcement re-  
presentative.

Simple ink pad  
and typing paper.  
Students roll their  
finger on ink pad  
and then roll finger  
on typing paper.



Students collect pertinent data.

Children can enumerate occupational choices within the protective services.

Assign oral reports.

Move students into a consideration of the role of the protective services in our government.

Students gather information about regulations and qualifications, and discuss qualifications for various positions such as legal knowledge necessary for different jobs.

Individual research can be conducted on the different aspects of protective services as related to state government and to the welfare of the citizenry.

Student can explain the duties of the various personnel found within the protective service.

Discuss the role of a law enforcement agent in protecting the government.

Pamphlets from the different departments to be studied should be obtained.

These could be added to the group scrapbook.

These reports could be given either individually or by a panel discussion.

Individual reports or panel discussions could be given.

Begin to plan for classroom interview with a selected number of law enforcement people from different governmental levels.

Invite resource people in and conduct interviews.

Report on how each law enforcement agency protects the government.

Class discusses various things that need to be brought out during the actual classroom visitation of enforcement persons.

Students send invitations to prospective resource people.

Interview state policemen, F.B.I. agents, sheriff and others involved in the law enforcement agencies which protect us and our government.

Have agents talk about job requirements.

Have agents explain arrest procedure, book-

Students should be encouraged to ask questions that are important to them and their interest in the unit.

ing procedures, and  
courtroom procedures.

Teacher should  
lead discussion of  
resource persons  
visitation.

General classroom dis-  
cussion of the resource  
person and his comments.

Students could do  
group or individual  
work on the classroom  
visitation such as doing  
write ups of the visit,  
including areas or  
topics that are of  
special interest.

All of this work  
could be added to  
the group scrap-  
book.

Begin picture  
collection.

Students collect and  
share pictures of var-  
ious law enforcement  
agents in a dangerous or  
threatening situations.

Current magazines,  
newspapers in which  
pictures and articles  
are included.

Student volunteers  
research and present to  
the class statistics of  
law enforcement officers  
dying in the line of  
duty.

Both the picture  
collection and this  
report could be  
added to scrapbooks  
after presentation.

Teacher initiates current events scrapbook.

Field trip to the State Police Center at Dunbar or State Police Crime Laboratory at South Charleston.

Current event scrapbook could portray state policemen as they perform their roles in carrying out their job.

Students to observe various state police agents at their specific jobs or training activities. Students list reasons for various training activities.

Explain different training demands of each job.

Observe special training components within training center and crime lab.

Discuss skills that need to be attained to do an effective job in the various areas.

Observe the practice of marksmanship on the target range.

Students should observe good manners and common courtesy while on the field trip.

These visits can be correlated with films on each area.

Visit:

Ballistics Laboratory

Identification Laboratory

Civil Disturbances

Blood Sampling

Espionage Techniques

Wire Tapping

Narcotics

Stolen Property

Interstate Traffic  
within and between  
states

Films may be acquired from Superintendent of State Police or F.B.I., Washington, D.C.

Class returns to school and discusses field trip.

Students hold classroom discussion of things they observed and saw during the field trip.

Teachers assign students to write a theme on the field trip experiences.

Students to write up their visual perceptions and interpretations resulting from the field trip.

This could be done on an individual or group basis and added to the scrapbook or put on the bulletin board. This could be correlated with English and Science classes.

Implement role playing.

Role playing: Students practice some of the training activities observed in the field trip through role playing and dramatization.

This could be easily correlated with their Physical Education period.

Construction of a bulletin board:

Bulletin Board:  
a. stages of training  
b. pictures  
c. student drawing  
Suggest training act for patrol boys and girls within the class.

This activity can be easily correlated with Art.

Story writing:

Students real and fantasy stories about jobs they observed on the field trip.

This could be correlated with English and Spelling classes.

Class discussion of the economic and social values of the law enforcement agencies to the community.

Discuss the role of each law enforcement agency in the protection of economic interests.  
Discuss ways in which each law enforcement agency generates a feeling of security in our

This could be done emphasizing the cost of crime and showing that certain crimes are on the increase.

community, state and nation.

Students do a show or write a description of the economic values which his family derives from having efficient law enforcement within the community.

Students could be encouraged to talk with business leaders of the community as to how they see police protection helping their business. This information would give students a frame of reference from which to draw conclusions as to valuable economic reasons for competent law enforcement.

Discuss others who help directly and indirectly in the efficient performance of protective services.

There are certain systems and auxiliary personnel that support the enforcement personnel in each law enforcement agency:

- a. lab technician
- b. data collectors

- c. data processors
- d. dispatchers
- e. clerical helpers

Show pictures of these various supporters at their jobs.

Develop job description of each supporter as it relates to a phase of protective service.

List qualifications for each of the supporting services (personal and academic).

Write stories about how these areas are supportive of the law enforcement agencies in our community.

Involve students in understanding how protective services can work in our school.

Write safety rules for the classroom and the school.

Formulate punishment for various infractions

May be obtained from pamphlets and booklets from Superintendent of State Police.

This activity could be related to English class.

With cooperation of the principal,



of school rules committed by students.  
e.g. running in hall,  
pushing other students.

the students could participate in making a set of school rules to be carried on within the school.

Be a volunteer hall policeman and note types of activity being performed by other students.

Observable infractions of school rules could be reported to the class.

Help students create a detective problem in the school or classroom.

Set up a situation where the students will do detective work.

- a. Keeping notes of what they do.
- b. Talking with other people.
- c. Examine facts.
- d. Reporting findings

Differentiate between reporting, squealing, and tattling.

Aid students in setting up crime laboratory.

Things to be included:

1. finger printing equipment

Role play different people within the police laboratory.

2. simple communicators
3. radio
4. walkie talkie
5. radio frequency
6. wanted posters
7. types of alarms
8. drivers license
9. mug shot of each student

Students should be familiar with each role and duty that they portray. Suggested list of roles are:

1. patrolman
2. motorcycle policeman
3. crime technician
4. radio dispatcher
5. policewoman
6. dectective
7. crime investigator
8. narcotics investigator
9. juvenile officer
10. recorder and record keeper
11. secret service agent

Members of the class could assume the different roles as they relate to police work. Students could demonstrate their duties as they perform their individual role.

12. desk sergeant
13. vice squad
14. lab technician
15. artist

Have students  
build bulletin  
board.

Create a bulletin  
board or large mural  
showing the phases of  
protective services at  
work.

Correlate with  
Art class.

Display:

Display equipment  
used by protective  
service people in their  
daily work.  
e.g. picture of guns,  
hand cuffs, cars, siren,  
night stick.

Other areas of  
Protective Services  
that could be stud-  
ied in conjunction  
with this unit are:

1. Fire Department
2. Safety Procedure
3. Water Consumption
4. Sewage Disposal  
Systems
5. F.B.I.

6. Health Standard:  
for Public  
Employees
7. Car Inspection  
Agencies (laws)
8. Weights and  
Measures (in-  
spection service)
9. Coast Guard
10. Border Patrol
11. National Guard
12. Air Line  
Marshalls
13. U.S. Marshalls
14. Driver Safety
15. Legal Aspects
  - a. Judges
  - b. Lawyers

#### Resources

paper

colored chalk

crayons

paints

soap

cardboard

aluminum foil

motors (simple)

bells

switch

ink

ink pad

newspapers

hammer

saw

nails

play dough

microscope

slides

test tubes

tape recorder

record player

film projector

filmstrip projector

camera

film

overhead projector

screen

walkie talkie

Other activities

that could be in-

corporated into

the unit.

wanted posters

construct model of  
Police Station

dress model in  
uniform

build a simple  
radio

discuss radio  
frequency

discuss policemen  
around the world

show films on  
drug abuse

show films on  
traffic safety

car motor number  
for identification  
purposes

puppets

Canadian Mountie

British Bobbie

Books:

Sootin, Laura.  
Let's Go To A  
Police Station.  
Putnam, 1957.

Williams, Barbara.  
I Know A Mayor.  
Putnam, 1967.

Williams, Barbara.  
I Know A Fireman  
Putnam, 1967.

Williams, Barbara.  
I Know A Policeman.  
Putnam, 1966.

Hyde, Wayne.  
What Does A Secret  
Service Agent Do?  
Dodd, Mead & Co.,  
1962.

Liston, Robert.  
Your Career In Law  
Enforcement.  
Messner, 1967.

McCarty, Agnes.  
Let's Go To Court.  
Putnam, 1961.

Rosenfield, Bernard.  
Let's Go To The F.?  
Putnam, 1960.

Filmstrips:

The Policeman

Materials:

Life Games

Community Helpers I

Community Helpers II

Records:

I Wish I Were,  
Ed Record Catalog.

World of Work Series,  
S.R.A.

Government Publication

What It's Like To Be  
An F.B.I. Agent

Information Concerning  
The Position of Special  
Agent In The Federal  
Bureau of Investigation

Jobs For Women In The  
F.B.I.

Information Concerning  
The Clerical and  
Clerical-Skilled  
Oriented Position In  
The Federal Bureau  
Of Investigation  
United States Depart-  
ment of Justice

How To Become A  
Fingerprint Identifi-  
cation Examiner  
With The F.B.I.

F.B.I. Career  
Opportunities

99 Facts About The F.B.I.  
Questions and Answers

Know Your...F.B.I.  
Federal Bureau of  
Investigation, United  
State Department  
of Justice

The Story of The  
Federal Bureau of  
Investigation\*

SRA Occupational  
Briefs:

385 Criminologists  
274 Detectives  
55 F.B.I. Agents  
297 Guards, Watch-  
men, and Alarm  
System Workers  
9 Lawyers  
300 Legal Secretaries  
54 Police  
107 Policewomen  
252 Typists

\*All government  
publications are  
in the Demonstration  
Center of the Lin-  
coln County Board  
of Education