Rationale for an effective outdoor education program in several Ohio counties is presented. Five general purposes for outdoor education are given: (1) to teach specific knowledge, (2) to use the outdoors as a laboratory, (3) to show man's dependence on nature, (4) to increase appreciation of nature's beauty, and (5) to give the student opportunity for a 24-hour community living experience. Each of these purposes is analyzed with respect to specific curricular needs. Two models are proposed for an overall general curriculum. Methods and instruments for the evaluation of a program are given, and 16 recommendations are made for development of an optimum program. Related documents are RC 004 245 and RC 004 246.
THE REPORT OF THE CURRICULUM SUB-COMMITTEE

OF

THE COMMITTEE FOR OUTDOOR EDUCATION

RICHLAND, HURON, KNOX, CRAWFORD, AND ASHLAND COUNTIES

BY

MARGARET CARPENTER
ROBERT DANIELS, CHAIRMAN
KEITH EVANS
EVA FRIESEN
GEORGE MARTIN
RONALD LEED
BENITA WALES

LEXINGTON LOCAL DISTRICT
MADISON LOCAL DISTRICT
SPRINGFIELD LOCAL DISTRICT
MADISON LOCAL DISTRICT
MANSFIELD CITY DISTRICT
MADISON LOCAL DISTRICT
MADISON LOCAL DISTRICT

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official position or policy.

Mansfield, Ohio

May 4, 1965
## CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Need for Outdoor Education</td>
<td>1</td>
</tr>
<tr>
<td>2 General Purposes</td>
<td>7</td>
</tr>
<tr>
<td>Teaching Specific Knowledge</td>
<td>7</td>
</tr>
<tr>
<td>Using Nature As a Laboratory</td>
<td>8</td>
</tr>
<tr>
<td>Man's Dependence Upon Nature</td>
<td>9</td>
</tr>
<tr>
<td>Appreciation of Nature's Beauty</td>
<td>10</td>
</tr>
<tr>
<td>The 24-Hour Day of Community Living &amp; Learning</td>
<td>11</td>
</tr>
<tr>
<td>3 Course of Study</td>
<td>14</td>
</tr>
<tr>
<td>First Suggestion</td>
<td>15</td>
</tr>
<tr>
<td>Second Suggestion</td>
<td>22</td>
</tr>
<tr>
<td>As Related To General Curriculum</td>
<td>26</td>
</tr>
<tr>
<td>4 Evaluation</td>
<td>28</td>
</tr>
<tr>
<td>5 Recommendations</td>
<td>30</td>
</tr>
<tr>
<td>Bibliography</td>
<td>33</td>
</tr>
<tr>
<td>Appendixes</td>
<td>34</td>
</tr>
</tbody>
</table>
CHAPTER ONE

THE NEED FOR OUTDOOR EDUCATION

The need for outdoor education is based upon the estrangement of man from nature. Modern technology has created an environment which places strong stresses upon man and very often obliterates man's vision and understanding of those basic resources found in the relatively undisturbed outdoors.

Outdoor education is an organized attempt to create and strengthen ties between each pupil and those important values found in nature. It is no panacea for today's ills, but it is a step in the right direction.

Not only is outdoor education important in itself, it is a more efficient way of teaching many things traditionally associated with indoor classroom or laboratory. Outdoor education should be considered a teaching technique and is adaptable to grades kindergarten through twelve.

The well-planned resident program of outdoor education is an extension of the normal classroom activities and is an integral part of a good educational program. It is not confined to a few days at camp -- probably the most intense experience that a pupil has with outdoor education. It begins with classroom work leading up to the camping experience and, it is hoped, post-camp learning will never cease. School grounds, parks, lawns, woodlands, fields, and even indoor planters take on a greater utility as teaching resources after the learner has had a good outdoor education camping experience.

The first learning that took place in our country was in the outdoors. Only in recent times has learning tended to be confined to the indoors. About twenty years ago, some teachers in Michigan
decided to take their youngsters to a camp to teach in some first-hand situations. Since that time, outdoor education has expanded to more than 40 states. A total of over 700 schools conduct various forms of outdoor education. Presently, there are about 45 school systems in Ohio with programs of outdoor education.

"By 1976, it is predicted, 76% of all children will be born in and live in urban areas.”¹ More and more, we lose contact with the world of the outdoors -- its mysteries that excite, its beauty that inspires, and its place in the proper balance of life.

Children are losing the realization that food, clothing, and shelter each had an origin. Knowledge of the interdependence of living things is necessary before people can be interested in conservation. Therefore, appreciation and knowledge of the outdoors must come before conservation of natural resources is either practiced or supported at the polls.

The school bus, as necessary as it is, has taken away the contact with the outdoors that once came with the long walk to school. Television has been a wonderful asset in the education of youth, but it keeps them inside and away from first-hand outdoor experiences which were once common with most youngsters.

Even in the rural areas, the school bus and television tend to destroy the differences that once existed between rural and urban experiences. This has been so aptly demonstrated in Madison Local

¹ Conservation In The People's Hands, American Association of School Administrators, 1964, p. 271.
Schools where rural children show as much ignorance about outdoor experiences as do their urban neighbors. Place of abode seems to have little significance as to the degree of understanding of outdoor experiences.

Industrialization and automation are rapidly removing the need for physical labor. Unless compensated for, this lack of demand upon the muscles of the body will increase physical softness and laziness among our people. Rejection from military service for physical reasons in recent years is alarming! "Intelligence and skill can only function at the peak of their capacity when the body is healthy and strong." Outdoor activities can slow, or even reverse, a trend toward physical deterioration.

Among youngsters today, there is a trend toward being lazy. They want to do things "the easy way". Enjoyable outdoor study may be able, to some degree, to overcome this problem.

Much of modern man's work is stress producing, yet seemingly meaningless. Time for leisure has been increased, but man has not learned to use it effectively. It is quite noticeable that children have difficulty entertaining themselves. Outdoor education can introduce and/or strengthen effective ways of using leisure.

Instruction confined to the four walls of a classroom is highly verbal and secondhand. An outdoor setting provides a stimulus to learning. The student can touch, see, and hear or smell what is happening. Knowledge learned in this kind of teaching situation is remembered longer. Problem situations arise often in the outdoors and

---

need to be solved. As these problems are solved, the student feels a direct sense of participation.

"Basic concept learning is especially important to students between the ages of 6-12". Concepts learned in the classroom are often learned by the student and repeated without ever really understanding what was learned. Words are learned without meaning. Students learn to say or to write the right word or phrase but miss the real significance or meaning. For example, on a hike with Madison seventh graders, a snail was found. Five of the fifteen youngsters were not able to identify it. They had read about snails or had seen pictures many times, and maybe they had even observed snails in an aquarium; but the concept had not been learned. The students were not able to transfer the knowledge from the classroom to the snail and its natural environment.

Limited contact with animate and inanimate objects of the outdoors has permitted imaginary fears upon misinformation to grow and plague many children. Fears of snakes, insects, sitting on the ground, walking outdoors at night, sounds in the woods, are common among today's youngsters. Proper experiences in outdoor experiences in outdoor education will help to reduce or eliminate those phobias.

In spite of more and more urban living, people are losing the friendliness and neighborliness of earlier times. In a democracy we must know our dependence upon one another and we must develop a mutual trust. The community of an outdoor education camp introduces and strengthens many skills and values of democratic living.

Modern living tends to breed a lack of appreciation of the

---

3Donald and William Hannerman, Teaching In The Outdoors, p. 4.
natural beauty around us. Stream pollution, trash along the highways, the thoughtless destruction of natural beauties are evidences of this. Only when enough people are sufficiently aroused and informed can these blights be curbed. Outdoor education can build appreciation of and provide information on the natural resources around us.

Man seems bound to become dependent upon new clothes, television, makeup, radios, records, movies, etc., as a source of amusement and a way to spend time. Four days and nights at an outdoor education camp away from artificial means of stimulation cause youngsters to realize that life can be enjoyable without the above.

We live in a world where scientific knowledge and skills are essential for survival. An outdoor laboratory is most efficient and effective for many kinds of learning. These kinds of learning should be taught there! Furthermore, learning in the outdoors leads to greater appreciation of human and spiritual values than does the indoor classroom or laboratory. It is essential that we develop the "heart" to control the "head".

Outdoor education, though limited in time, has unusual opportunities for reactions between the pupil and the teacher. Experience shows that the "real" pupil is more apparent to the teacher, and most pupils find a more approachable and warm" teacher in the outdoor setting. Both discoveries contribute greatly to the overall effectiveness of a good educational program for young people.

In summary, it can be said, the purpose of outdoor education is to enrich, vitalize, and complement the content areas of the school curriculum by first-hand observation and participation. Outdoor teaching is an attempt to improve instruction. Instruction has become "too book-centered", "too building oriented", and "too arti-
ficial" in our schools. There is a need to teach things first-hand; to go where what we read about is really happening. We need to do a better job of teaching youngsters to observe by looking, smelling, listening, and touching. Direct-experience learning needs to be added to our curriculum to improve upon the artificial atmosphere.

The idea of teaching outdoors is not new in America. Our forefathers learned much of what they knew from the outdoors. It was later that education became more formalized and began to be moved indoors.

Outdoor education is an attempt to use the outdoors as a teaching environment where learners can watch things happen in their natural setting. We would not think of confining the football team to a classroom or gym; they can best learn on the field! Schools should make an attempt to teach where teaching is best accomplished!
CHAPTER TWO

GENERAL PURPOSES

While the specific benefits of outdoor education are many, as suggested in chapter one, five general purposes for resident outdoor education have been identified. These are:

1) To teach specific knowledge
2) To use the out-of-doors (nature) as a laboratory
3) To show man's dependence upon nature
4) To increase the appreciation of nature's beauty
5) To give an experience of 24-hour day of community living and learning

This chapter is devoted to the amplification of the ideas expressed as purposes above. Three of these ideas lend themselves readily to outline form and are presented in that manner. The other two are presented in prose form.

It is the intent of the authors of this report that the five general purposes, as expressed there, constitute the basic philosophy upon which a resident program in outdoor education is based.

I. TEACHING SPECIFIC KNOWLEDGE

1. Science
   a. Weather (read instruments - elementary weather signs)
   b. Elementary identification of plant life - trees, insects, wildlife, rocks
   c. Elementary ecology
   d. Astronomy
   e. Appreciation and awareness of new or waning life - birds, buds and leaves, small plants

2. Math
   a. Use of compass
   b. Concept of measuring areas
   c. Estimating distances and heights
   d. Using elementary forestry measuring devices
3. Social Studies
   a. History of the area - country, township
   b. Geography of the area
   c. Problems of pioneer life
   d. Democratic living lesson

4. Language Arts
   a. Appreciation of nature - listening, watching
   b. Creative writing
   c. Letter writing - thank you notes
   d. Keeping a daily journal

5. Conservation
   a. Soil, water, and wildlife
   b. Simple projects
   c. Desire to know and practice basic conservation methods
   d. Awakening of new leisure time activities

II. USING NATURE AS A LABORATORY

1. Getting acquainted with nature by direct contact

2. Examining soil, rocks, and vegetation
   a. Kinds and names
   b. Shape, form, and size of all parts
   c. Location (as on hilly or level land)
   d. How useful to man

3. Weather Study
   a. Daily temperature, wind velocity and direction, degree of overcast, type of clouds, humidity, etc.
   b. Forecasting and planning for further activities
   c. Influence of nature upon soil, rocks and plants (or animals)

4. Animals and Insect Life
   a. Kinds
   b. Dens or homes
   c. Tracks
   d. Food
   e. Usefulness
5. Conservation
   a. Erosion on hilly land
   b. Creek or stream affect
   c. Fields where crops are grown
   d. Planting of trees

6. Using Simple Instruments and Processes
   a. Rain gauge (handmade), barometer, thermometer, psychrometer
   b. Compass
   c. Sun Dial
   d. Filtration of water

7. Professional Help
   a. Surveyor
   b. Astronomer
   c. Soil Experts
   d. Botanist

8. Importance of Keeping Nature Beautiful
   a. Free of trash
   b. Others to enjoy
   c. Recreation

9. Awareness to all conditions found in nature, new or old

III. MAN'S DEPENDENCE ON NATURE

Man needs to recognize the degree that he depends upon nature
and how best to guard and utilize these natural resources:

1. Water
   a. Introduce and/or expand concept of water cycle
   b. Show soil as a water reservoir
   c. Show plant life as run-off retardants
   d. Show soil and rock as water purifier
   e. Show purifying effect of a bubbling stream
   f. Show destructive force of moving water
   g. Show water as a necessity for plant and animal life
   h. Show methods of acquiring water for man's needs
   i. Show water effects in building soil

2. Recreation - restoration of the soul (physical, spiritual, emotional)
   a. Stress the beauties of the out-of-doors
   b. Stretch the physical body in the wide-open spaces
   c. Be still and absorb the peace out-of-doors can give to one
d. Benefit by the clean air and the healthy appetite for nourishing food

e. Rest motivated by physical rather than emotional tiredness

3. Cleansing of the Air

a. Learn of the processes that take contaminants from the air
b. Learn of the oxygen cycle and its significance to air purity
c. Learn of the effect of plant life upon the control of air contaminants, such as blowing dust

4. Food and Fiber

a. Learn the source of materials needed by man
   1. The renewable raw materials
   2. The nonrenewable raw materials
b. Learn the food cycle and the requirements for each part
c. Learn of the interrelationship of water, soil, plants, and animals

5. Control of Competitive Life

a. Show relationship between harmful and beneficial living things - insects, birds

IV. APPRECIATION OF NATURE'S BEAUTY

The out-of-doors is the perfect "classroom" for showing the beauties of nature and helping to make the appreciation of these beauties an asset in the life of the student.

Most adults know of the beauty of nature but time does not permit them to sit and ponder the beauty of a tree or to see nature's animals preparing for winter or renewing their activities in the Spring.

Time is more plentiful for children. How many times does a child bring a treasured find from nature to show his parents, only to find them engaged in work of adults or unable to answer his questions? Children need answers! Outdoor education will not only show the child a process for finding answers to questions arising from encounters with nature, but it will increase the number of questions because of its effects upon the child's powers of perception. When the child has an
opportunity to see the beauty and meaningfulness of nature's phenomena through the eyes of experienced teachers and counselors, his own powers of perception and understanding of natural beauties are increased.

If a student sees a tree hanging desperately to a hillside, a bird struggling to free itself from an egg, a squirrel storing nuts for the winter, or a bee collecting nectar and incidentally cross pollinating a flower; he not only sees something of beauty, he may see his own responsibility to protect and preserve nature's beauty and utility for all of us. If this happens, the child becomes an asset to our society.

V. THE 24-HOUR DAY OF COMMUNITY LIVING AND LEARNING

Outdoor education is a twenty-four hour experience for student and teacher. Few people can hide their true identity over several days of this type living. The students get to know the teacher and the teacher gets to know each child much more intimately than is possible in a classroom situation. Artificial attitudes are lost. Strict scheduling is not necessary. Individual attention is possible in the team-teaching common to outdoor education.

The student who feels confined by four walls finds himself in a classroom with only the sky and the horizon as bounds. His mind and his energies stretch to meet these widened scopes. He may have never before been so aware of the vastness of his world. There are so many ways he can express himself. The raised hand waiting for attention is almost unknown. In most instances a teacher or resource person is near to share his discovery or help him seek answers to a question. No matter how limited or how broad his scholastic ability,
there is something to challenge him in this vast laboratory.

Knowledge from books is essential in the outdoors but often the student uses this as the secondary method rather than the primary. He needs to read about something because of his own personal observation. Even poor readers volunteer to give weather reports before the group. Many times the child appreciates himself as an individual much more in the outdoor situation.

The student needs to feel responsibility for others. He sometimes is detailed to help prepare the dining room for the next meal. He has cleaning duties. He handles valuable equipment. Failure to report for duty or care for equipment is important enough that the child seldom "forgets" as he does inside the building.

There are some periods when he must be acutely aware of those around him. He must go to bed and get up when it is convenient for the rest of the group. He must eat regular meals. He must share restroom facilities and be responsible for the cleanliness of the camp. For many students in small families this concern for others may be the first such experience. Even four days of community living will make some impression.

Good manners receive a fair share of attention. Students and teachers eat in small table groups with someone designated as the host or hostess. Emphasis is put on eating all foods in the proper order. One may not move from course to course until all are ready. He cannot leave the table until all are finished. "Please" and "thank you" are encouraged. Interrupting is discouraged.

These things may shed a favorable or unfavorable light on his own family habits. The student becomes aware of himself apart from his family. He is learning to assume social responsibility.
Living and learning in the outdoors relaxes restrictions felt inside four walls. The student is too busy with new experiences; he disciplines himself. Even the most troublesome indoor students have been good citizens at outdoor education. They see that they can work with teachers not against them. They feel freer to volunteer information and service. Their true personality emerges in the security of the camp community.
CHAPTER THREE

COURSE OF STUDY

In Chapter Two, the general purpose of an outdoor education program are discussed. These purposes are to serve as standards against which each specific outdoor education experience is to be evaluated. Unless each specific experience contributes to one or more of the general purposes it should not be included in the program.

Two kinds of suggestions for the content of an outdoor education program are offered in this chapter. The first, and more general, is a listing of suitable experiences that would serve the purposes of outdoor education. The second suggestion is a tentative schedule for a five-day program. Both suggestions are meant to serve as models for those who would construct the actual curriculum and to give the reader of this report a concept of the curriculum as proposed at this time.

Because the actual happenings in a camp will depend upon the time of the year, the weather, the camp site, and the current interests of the learners, the order of the learning experiences listed in the first suggestion is not significant, excepting those of orientative nature have been grouped at the beginning for obvious reasons. The camp staff would select experiences from this list appropriate for the time, the children's needs, and the place. The second suggestion, a tentative schedule of a "week's activity", is self-explanatory. In practice, it would be adjusted to the needs of the time.

In the first suggestion for a course of study, the left-hand column contains experiences thought to be supportive of the general objectives of outdoor education. The right-hand column contains
remarks and lists of resources thought to be pertinent for the success of that particular experience.

AFTERNOON OF THE FIRST DAY

Unload buses and group for briefing
- Welcome children
- General instructions for the camp
- Specific instructions on housing

Take sub-groups to sleeping quarters
- Prepare sleeping facilities
- Locate and explain expected behavior in restrooms
- Point out emergency exits
- Explain proper stowage of baggage in sleeping quarters

Return to large group assembly for further orientation or for a "first" learning experience

The First Meal
- Introduce children to expected dining hall behavior
- Clarify the mechanical arrangements such as cleanup crews, table assignments, etc.
- Provide kindly but firm suggestions to guide correct behavior
- Make certain the meal is well prepared and served
- Provide some relaxing activities such as singing, merriment, etc.

The camp site, weather, and number of children will affect the procedure used. The quicker children are informed of these matters, the less chaos and feeling of insecurity.

Use all available help for this task. Emphasis should be placed upon making the child feel secure.

Often the "First" learning experience should be of sufficient strenuousness to dissipate some of the excitement of the new experience. The temperament of the camp staff may determine how much excess energy needs dissipating.

Much can be done at this time to lessen the effects of homesickness and other insecure feelings engendered by new surroundings and strange people. Also, much future misunderstanding can be reduced by careful and kindly guidance at this time.
Provide 15-20 minute period after dinner, free for resting, restroom needs, exploring, visiting, etc.

The First Evening Session

Should be informative but in a relaxing manner.
The local staff and pupils will have much influence in making the actual selection of an activity

Perhaps a film, or an interesting story teller or a camp-fire situation would serve as a proper introduction to the following days of work together. A refreshing snack before bedtime, properly prepared, would be helpful.

Preparation for Bed

Should be firmly supervised by the adults
Orderliness should be stressed within practical limits

All adults might profitably share the first night's supervision. Following nights could be handled by dormitory monitors.

Taps

Could serve as a concrete signal for lights out.
Could improve emotional quality of camping experience.

Prerecorded over a PA system safest. Some staffs may have a person who could do this well.

Reveille

Can serve as a concrete symbol for an orderly arising.
Allow sufficient time for personal preparation for the day.

Experience should dictate the time of rising and the time needed to prepare for breakfast.

The following experiences can occur at any time after the children are orientated to camp. Weather, time of year, special interests, etc. would affect the activities selected for a particular time.

Tree Identification

Use trees found in natural setting.

Observe distribution of natural plant life and value of each kind

Study hikes can be followed by writing, sketching, and further study in references.
Temperature changes
Effects of plants
Effects of burrowing animals and insects

Bird Study
Identification
Habitats
Food habits
Esthetic value to man
Economic value to man

Experiences With Astronomy
The patterns of the sky
Observations through telescopes
Distances in space

Observances of historical evidence of man's early efforts in the area and speculation upon the significance of these efforts.

The quiet observance of nights the sounds of nature

Study of the Water Cycle
Precipitation, runoff, infiltration, springs, streams, wells

The Life Cycle of Ponds, Swamps, and Lakes

built. Direct observations of the actual forces would be most useful. Examination of a soil profile could be a good culminating experience.

If this is introduced relatively early in the camp week, advantage may be taken of the casual encounters with birds during the week.

Advantage should be taken of the most favorable night weather. If possible, telescopes should be available when the weather is suitable. Concepts of distances may be touched upon while the children are motivated by observation.

Cemeteries, old foundations, old orchards, roadbeds, etc. can stimulate the child's creative imagination when properly utilized.

This can be a most unusual experience for children living in a noisy and fast moving world. It can be a beginning to much creative writing and thinking.

These can be readily observed at most camp sites.

Some sites may lend themselves to this, others may not.
Good Manners

Table
Elsewhere

The need for orderliness
In the dining area
In the sleeping area
In the play area
In the work area

The need for sanitation
Personal hygiene
Food preparation and serving
Toilet areas
Sleeping areas
Work areas

The need to respect the rights of others
In the dormitory
In the dining hall
In the work areas
In the washrooms and toilets

The need to contribute to the welfare of the group
Sharing chores
Helping entertain
Evaluating self purposes against group purposes

To teach respect for one's country
Proper display of the flag
Appreciation of the beauty of the land and the need to conserve
The need to conserve resources

Informality of camp life contributes to easy teaching of good manners.

A well-planned camp program can include teaching these concepts with relatively little effort.

The need for care in keeping the environment sanitary is more clearly defined in the camp situation. Current situations can be used to teach these basic concepts.

The effects of failure to respect the rights of others are more readily observable in the "camp" situation than elsewhere. Good concern about student behavior and the exploiting of typical behavior enables teachers to emphasize the rights of others.

Children who are to be in camp for a short time will more readily accept the firm guidance of the permanent camp staff in these matters of personality development because they can readily see the need for quick compliance with "rules", for failure to comply shows the undesirable results quickly.

This may be the outgrowth of many planned camping experiences. The out-of-doors lends itself to the sensibility to basic values essential for good citizenship.
Outdoor Safety

Recognition of poisonous plants
Avoidance of harmful insects and animals
Proper care of feet while hiking
First aid for scratches and cuts
Avoidance of hazards such as abandoned wells, crumbling walls, hidden rubbish, thin ice, unstable banks along creeks, and gullies, etc.

Creative Writing

Of observations made
Outgrowth of feelings aroused
Imaginative, stirred by experiences

Sketching and Painting

Of things observed
Of scenes around the camp
Imaginintime painting inspired by camp

Recreational skills

Utilize whatever the particular camp resources offer, such as archery, horsemanship, marksman-ship; and the normal games of volleyball, horseshoes, tetherball, etc.

Use of Maps

Specific content would be determined by the camp site and the time of the year. This instruction should come early in the camping period.

The alert staff should find almost no limit to these possibilities. Prose and poetry should both be encouraged while at camp and in the weeks following the camping experience.

Like writing, this activity offers unlimited possibilities, usually limited by time. A ready supply of all kinds of media should be available to the children. Displays of the better work might serve as motivators for new campers. Perhaps some work could be started at camp and finished upon return to the regular classroom.

The camp staff may find a need for physical outlets of energy. In-so-far as possible camp recreation should steer away from those standard activities found in the gym and on the playground. This is a time to expose children to broader horizons!

The study of the various kinds of maps of the camp site should
General layout maps
Specific maps, such as topographical charts, soil maps, watershed maps, etc.

develop many map skills. Preparing simple maps of portions of the camp site should be profitable for the more able pupil.

The Last Hours at Camp

Complete an evaluation of activities planned by the staff. These should be relatively short

Prepare personal belongings for the trip home

Police camp area and leave it in the proper condition for the next class.

Camp facilities should be planned and managed so that the minimum of policing is necessary. However, children can, and should be impressed with the need for leaving the site as good or better than they found it.
Another approach to the description of an outdoor education curriculum follows. As above, weather, camp site, time of year, and special children's interests will cause minor revisions by the alert staff.

MONDAY

2:00 Students arrive
   Orientation (dorms, textbooks, trailside facts and manners, table assignments, divide into 3 teams - groups #1, #2, and #3.

3:00 Exploratory Hike
   Purpose: to stimulate students into the better use of their senses; looking, smelling, hearing, and feeling - to learn what is around them. Groups #1, #2, and #3.

Meeting with classroom teachers
   Purpose: to organize the week; to find out what they want to emphasize; last minute details.

4:00 Organization meeting with students
   More orientation (camp rules, camp policies, kapers)

5:00 Tree time (visit bird feeding station)

5:25 Flag lowering

5:30 Supper

6:15 Group #1 - setup dining room
    Group #2 - weather reading
    Group #3 - construct two weather boards

7:15 Make beds in dorms

7:45 Log and evalution time (classroom teacher)

8:15 Recreation

8:45 Dismiss for bed

9:15 Taps

TUESDAY

7:15 Reveille
7:30 Weather Reading - Group #1  
Bird Watching - Group #2

7:55 Flag raising

8:00 Breakfast

8:40 Camp kapers

9:15 First Activity Period - Math hikes  
Each group would work:  
- practice with compasses  
- concept of areas  
- distances and heights

11:30 End Activities

11:45 Weather reading - Group #2  
Set up dining room - Group #3  
Fill bird feeder - Group #1

12:15 Dinner

1:15 Rest Period (write a letter home)

2:00 Second Activity Period - Forestry hikes  
Adopt a community study in 3 different areas

3:15 Horseback riding - Group #1  
Set up dining room - Group #2  
Bird watch - Group #3

4:15 Dorm clean-up

5:00 Formal inspection

5:25 Flag lowering

5:30 Supper

6:15 Weather reading - Group #3  
Set up dining room - Group #1  
Bird watching - Group #2

7:15 Astronomy (Observatory)  
Log and evaluation (classroom teacher)

8:45 Dismiss for bed

9:00 Taps

WEDNESDAY

7:15 Reveille
7:35  Weather reading - Group #3
      Bird Watching - Group #1

7:55  Flag raising

8:00  Breakfast

8:40  Camp kapers

9:15  First Activity Period - Math and Science
      Compass and identification hike
      (practice knowledge gained before
      by using compasses on a pre-planned
      compass hike. Students also use
      identification books)

11:30  End Activity

11:45  Weather reading - Group #1
       Set up dining room - Group #2
       Fill the bird feeders - Group #3

12:15  Dinner

1:15a  Rest Period

2:00  Second Activity Period - Math, Language Arts,
       Social Studies, Cemetery Hike

3:00  Third Activity Period - Science
      Collection Hike
      (gather items in the woods for
      microscope study)

4:30  Horseback riding - Group #2
       Set up dining room - Group #3

5:25  Flag lowering

5:30  Supper

6:15  Weather reading - Group #2
       Set up dining room - Group #1
       Bird watching - Group #3

7:15  Evening Activity
      Log and evaluation (classroom teacher)

8:30  Dismiss for bed

9:00  Taps
THURSDAY

7:15   Reveille

7:35   Weather reading - Group #2
Bird watching - Group #3

7:55   Flag raising

8:00   Breakfast

8:40   Camp kapers

9:15   First Activity Period - Social studies, Science
Conservation, Geography of creekbed hike

11:30  End Activity

11:45  Weather reading - Group #3
Set up dining room - Group #1
Fill bird feeders - Group #2

12:15  Dinner (Cook-out)

1:15   Rest Period

2:00   Second Activity Period - Art, creative art
and crafts

3:00   Third Activity Period - Conservation, Science,
Math - simple conservation project

4:30   Horseback riding - Group #3
Set up dining room - Group #2
Bird watching - Group #1

5:25   Flag lowering

5:30   Supper

6:15   Weather reading - Group #1
Bird watching - Group #2

7:15   Evening program
Log and evaluation (classroom teacher)

8:30   Dismiss for bed

9:30   Taps

FRIDAY

7:15   Reveille
7:30 Weather reading - Group #1  
   Bird watching - Group #3  

7:55 Flag raising  

8:00 Breakfast  

8:40 Camp kapers  

9:15 First Activity Period - Science  
   Scavenger hunt  
   (students are given a list of items learned that week to find)  

10:30 Second Activity Period  
   Completion of work as needed  

11:30 End Activity  

12:15 Dinner  

1:15 Closing campfire  

2:00 Final clean-up and leave for home  

Following is an outline which shows how the above schedule of outdoor education activities contributes to the school curriculum.  

OUTDOOR EDUCATION GOALS AND OBJECTIVES AND RELATED CURRICULUM AREAS  

SCIENCE  

1. Weather (read instruments - elementary weather signs)  
2. Elementary identification of plant life - trees, insects, wildlife, rocks  
3. Elementary ecology  
4. Astronomy  

MATHEMATICS  

1. Use of compass  
2. Concept of measuring areas  
3. Estimation distances and heights  
4. Using elementary forestry measuring devices  

SOCIAL STUDIES  

1. History of the area - county, township, etc.  
2. Geography of the area  
3. Problems of pioneer life  
4. Democratic living lesson
LANGUAGE ARTS

1. Appreciation of nature - listening and watching
2. Creative writing
3. Letter writing - thank you notes
4. Keeping a daily log

CONSERVATION

1. Soil, water, and wildlife
2. Simple projects
3. Desire to know and to practice basic conservation methods
4. Develop desire to support conservation legislation

GENERAL

1. Freer appreciation of expression through music and art
2. Self-discipline is easier when students are not confined in a small space
CHAPTER FOUR
EVALUATION

The continued success of an outdoor education program is dependent upon, among other things, a systematic, workable, and continuous evaluative effort by the camp staff. Such a procedure will enable the staff to keep in close touch with the needs of successive classes and will bring about a refinement, based upon experience.

Evaluation should measure the degree to which the basic purposes of outdoor education are being met, and it should include the observations of the permanent camp staff, the pupils, the classroom teachers, the administrators of the schools being served, and the parents of the children who participate.

The observations should be reported immediately after the period at camp and at some later date, such as six months later, to give a truer picture of the value of the experience to the child. Appropriate questionnaires seem to be the most practical means of securing large amounts of subjective data, but personal conversations among affected parties and direct observations by classroom teachers, school administrators, and the camp staff will add much knowledge of the effectiveness of the total program of outdoor education. Objective data about the program can be secured from the "statistics" of participation and objective observation of pupil attitudes and behavior before and after the camping experience.

In the appendix of this report are five sample instruments for securing evaluative information about a program of outdoor education. These, or similar instruments should be used with each class, and the information gained from them should be reviewed carefully by the
permanent staff. In this way, the staff can be kept informed as to the effectiveness of its efforts.

"A Camp Director's Log," appendix A, is a form for recording the observable responses to and suggestions for the improvement of each camp experience or lesson. This form should be completed at the close of each "lesson" period by the camp staff member "in charge." This evaluative instrument is given this title to distinguish it from a log kept by pupils.

Appendixes B and C are self explanatory. These will give some immediate responses from the participants, but a more valid evaluation may be obtained by appendixes D and E. Student and teacher responses of a later date will tend to be more objective and will not likely be affected by the emotional overtones of the camp experience.

A valuable source of information can be the casual visitor to camp. To tap this source appendix F is suggested. The use of this form must remain optional with the visitor, and the camp director must, as in the case of all questionnaires, interpret the comments with a good deal of careful judgment.
CHAPTER FIVE
RECOMMENDATIONS

The recommendations listed below are based upon the requirements set forth by the proposed curriculum for an outdoor education program and upon the combined experience of members of the sub-committee on curriculum.

I. It is recommended that the resident camping experience in outdoor education be only a highpoint in each school's outdoor education program. Outdoor education can and should begin in the earliest grades and continue until graduation to the extent that school facilities and teacher abilities permit.

School grounds, parks, wooded areas, and even indoor planters can be available to any school, and these facilities can provide many experiences in direct observation.

All teachers should be aware of the "camp" experience of children and the permanent camp staff should be knowledgeable of precamp and postcamp experiences of the regular classroom.

II. It is recommended that the resident camp program begin after lunch on Monday and end after lunch on Friday. This will enable orientation to occur during daylight hours on the first day and children to arrive home before the family dinner hour on the last day.

III. It is recommended that children be scheduled for the resident camp experience at the sixth grade level. At this age, children are sufficiently mature to benefit by and to adjust to the period away from home but are not so mature that boy-girl problems become overly important.

At this age level, camp experiences can become the bases for creative expressions with art and writing, for a better understanding of the natural sciences, and deeper concepts of social studies in the junior high school.

Outdoor education is easier to administer while the children are in self-contained classrooms that are typical of the sixth grade organization.

IV. It is recommended that the "home" school provide transportation and supervision to and from the camp site.
V. It is recommended that the permanent certified camp staff have tested plans ready for the children from the moment they arrive until they depart from the camp site at the "end of the week."

These plans must be flexible enough to cope with weather changes and discoveries of special interests among the children, but there should be no time when children must await staff decisions!

VI. It is recommended that the classroom teacher accompany his or her children to camp and assist in the execution of the plans prepared by the permanent certified camp staff.

VII. It is recommended that boards of education make attendance at camp, barring illness or family hardship, a regular responsibility of all sixth grade teachers. In the case of illness or personal hardship temporary exchange of teaching assignments could be permitted.

VIII. It is recommended that the permanent certified camp staff assume the major responsibility for disciplining children when needed. Camp staff members can be more impersonal and effective in handling deviations from acceptable behavior by children. Also, this policy frees the classroom teacher from a role that is a deterrent to the growth of rapport between child and teacher, one of the major objectives of this program.

IX. It is recommended that one member of the permanent camp staff spend at least one-half day with parents, pupils, and teachers prior to their camping experience for the purpose of information giving and preplanning with the classroom teacher.

Since two school systems may be scheduled each week--for good reasons--the precamp orientation visits to the school may require two half-days each week.

X. It is recommended that four, properly certified, permanent staff members be employed. Twenty-four hour supervision, leadership in all activities, orientation, and preplanning efforts require this number. See Appendix G.

XI. It is recommended that direct dormitory supervision be provided by college students employed through Ashland College. One man, for the boys, and one woman, for the girls, would be in the dormitories when the children were present.
XII. It is recommended that a member of the permanent certified staff be at the camp at all times when children are present. This person will be "in charge" and will handle all non-routine matters.

XIII. It is recommended that the camp director meet regularly with the curriculum planners of the several schools, at the camp, to coordinate the camp program of outdoor education with the total school program and to evaluate the effect of the outdoor education program upon the pupils attending.

XIV. It is recommended that the four certified members of the permanent camp staff meet weekly, probably Monday morning, to finalize their plans for that particular week and that particular group of pupils.

XV. It is recommended that the camp director supervise all evaluative procedures and analyze the information received from all sources.

XVI. It is recommended that the permanent certified camp staff be appointed in January, or before, prior to the opening of camp in September.


__________, Programs in Outdoor Education. Minneapolis: Burgess Publishing Company, 1963


<table>
<thead>
<tr>
<th>Time</th>
<th>Experience</th>
<th>Observed Response</th>
<th>Suggestions of Improvement</th>
</tr>
</thead>
</table>
PUPIL QUESTIONNAIRE (TO BE COMPLETED BEFORE LEAVING THE OUTDOOR SCHOOL)

TRIBE NAME

SCHOOL __________________________ DATE __________________________

Boy _______ Girl _______

1. Of all the classes I had this week, I liked ______________ the most.

2. Of all the classes I had this week, I liked ______________ the least.

3. Of all the classes I had this week, I believe ______________ was the most valuable.

4. Of all the classes I had this week, I believe ______________ was the least valuable.

5. Outside of classes, the most enjoyable part of the Outdoor School was ______________

6. Outside of classes, the least enjoyable part of the Outdoor School was ______________

7. I wanted to go home (Monday evening, Tuesday evening, Wednesday evening, Thursday evening, none of these). Circle the best answer.

8. The food was (excellent, good, fair, poor). Circle the best answer.

9. The sleeping rooms were (very good, fair, poor). Circle the best answer.

10. The Outdoor School site is (attractive, like home, unattractive). Circle the best answer.

11. I (would, would not) like to come back next year if given a chance.

12. In a few sentences, tell what you think and feel about the Outdoor School experience. ____________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________

_________________________________________________________________________
APPENDIX C

CLASSROOM TEACHER QUESTIONNAIRE (TO BE COMPLETED BEFORE LEAVING CAMP)

NAME___________________________________ DATE__________________

The most valuable part of the camp experience seemed to be__________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

The least valuable part of the camp experience seemed to be__________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

For future classes, I suggest__________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
PUPIL QUESTIONNAIRE (TO BE COMPLETED ABOUT THREE MONTHS AFTER CAMP)

SCHOOL ___________________________ DATE _______________________

Boy____   Girl____   Date attended camp____________________

If you could, would you want to go back to camp? __________

The thing that I enjoyed most about camp was ______________________

The thing that I liked least about camp was ______________________

Check the appropriate line below:

Since returning from camp, I have used my camp experience

_____ very much in writing for my teacher.

_____ some in writing for my teacher.

_____ very little in writing for my teacher.

_____ very much in talking to friends.

_____ some in talking to friends.

_____ very little in talking to friends.

The most valuable things I learned at camp are ______________________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

The things taught at camp which seem to have little value now are________

_________________________________________________________________

_________________________________________________________________

_________________________________________________________________

Write a short paragraph or two on how the camp experience might be improved.

Use the back of this paper.
APPENDIX E

CLASSROOM TEACHER REPORT (TO BE COMPLETED ABOUT THREE MONTHS AFTER CAMP)

NAME __________________________ SCHOOL __________________________ DATE ______

Date attended camp ________________

Since the children have returned from camp, I have observed the effects noted upon:

writing content __________________________

subject matter concepts __________________________

manners and courtesy __________________________

attitudes towards learning __________________________

attitudes towards others __________________________

List any classroom project or activity growing out of the camp experience:

________________________________________________________________________

At this time, I have the following thoughts about outdoor education:

________________________________________________________________________
APPENDIX F

VISITOR'S REPORT

(The visitor's comments are welcome, but he or she is in no way obligated to complete and return this questionnaire.)

NAME ___________________________ SCHOOL ___________________________ DATE ____________

Activities observed:

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

In my judgment (maximum, some, little) use was being made of camp resources during my visit. Remarks ____________________________________________________________

____________________________________________________________________________________
____________________________________________________________________________________

Reports reaching me suggest that the camp experiences could be improved by _______________________

____________________________________________________________________________________
____________________________________________________________________________________

Other comments ____________________________________________________________

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
APPENDIX G

SAMPLE STAFF SCHEDULE

Key: Staff members are A; B; C; and D.

Monday

A -- 11:00 -- overnight
B -- 11:00 -- 7:30
C -- 11:00 -- 7:30
D -- 11:00 -- 7:30

Tuesday

A -- 7:00 -- 1:30
B -- 8:00 -- 3:30
C -- 9:00 -- 4:30
D -- 1:00 -- overnight

Wednesday

D -- 7:00 -- 1:30
A -- 8:00 -- 3:30
B -- 9:00 -- 4:30
C -- 1:00 -- overnight

Thursday

C -- 7:30 -- 1:30
D -- 8:00 -- 3:30
A -- 9:00 -- 4:30
B -- 1:00 -- overnight

Friday

B -- 7:00 -- 3:00
C -- 8:00 -- 3:00
D -- 9:00 -- 3:00
A -- 11:00 -- 3:00

Classroom teachers would be present the entire program.
Student teachers would be present the entire program.
During the school day, one staff member will be involved in orientation and preplanning activities one-half to one day each week.