Outdoor education is an informal method of teaching and learning which offers opportunities for elementary school students, regardless of intellectual abilities, to learn about and appreciate their environment and acquire skills with which to enjoy a lifetime of creative, productive, and healthful living. Outdoor education can enrich, vitalize, and complement all content areas of school curriculum by means of first-hand observation and direct experience out-of-doors. School grounds, regardless of locale, can afford learning opportunities. This publication discusses the need for and focus of outdoor education, outlines six school ground activities adaptable to any elementary grade level, and provides specific language arts, social studies, science, health, mathematics, art, and music projects for each outdoor activity. The outdoor activities include: marking shadows at different time intervals; collecting insects and other animals; observing the flagpole; observing a partly cloudy sky; and observing birds near feeders or shrubs. Interdisciplinary activities suggested from a visit to the school parking lot include composing words from license plate letters, determining distances to capital cities of states represented by cars in the parking lot, suggesting parking lot safety rules, computing parking lot size, designing a car using basic shapes and colors, and composing a song or rhythmic reading. (NEC)
OUTDOOR EDUCATION ACTIVITIES FOR ELEMENTARY SCHOOL STUDENTS

By

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Why is there a need for outdoor education in elementary schools?
Outdoor education is an informal method of teaching and learning which offers opportunities for elementary school students to:
1) participate in direct laboratory experiences for the identification and resolution of real-life problems;
2) acquire skills with which to enjoy a lifetime of creative, productive, and healthful living;
3) attain insight into and appreciation for human and natural resources; and
4) bring children back in touch with those aspects of living where their roots were once firmly established. (Staley, 1979)

The purpose of outdoor education is to enrich, vitalize, and complement all content areas of school curriculum by means of first-hand observation and direct experience out-of-doors. (Sklar, 1974)

Outdoor education provides all students, regardless of intellectual abilities, with the opportunity to learn about and to appreciate their environment. They can also learn to protect and preserve it. Earth has many non-renewable resources. If children are taught to observe, classify, and explore these and other areas of the outdoors, they will develop a better understanding of these resources and be able to live in harmony with the environment.

Through outdoor education, then, students' perspective of the world as a big "out there" is altered to a view of the environment which values its pattern and organization as well as its beauty and function. (Williams, 1982)

What content areas can outdoor education cover?
Outdoor education can cover the whole spectrum of education from art to zoology. Teachers should not limit themselves to science experiences outdoors but should incorporate as many content areas as possible. Content areas may include language arts, social studies, science, health, math, art, or music. By integrating the outdoors into all areas of the curriculum, teachers have an opportunity to use natural teaching materials and to bring meaning to the outdoors.

Teachers have the paramount opportunity to incorporate the outdoors in numerous content areas and to use the school grounds regardless of their locale. All school yards can afford some learning opportunities. They provide first-hand experiences with natural phenomena while encouraging flexibility to incorporate all areas of learning to achieve the goals of education.

What do I do first in outdoor education?
Begin analyzing the room or building in which you are standing. Most materials that you work with as a teacher every day come from our environment's natural resources. Nature functions as an interdependent scheme of which human beings are merely a part. The history and development of the school itself provide an excellent study showing our participation in and dependence on the natural world around us. (Sklar, 1974)

What are some activities which can be adapted to any grade level and content area?
The following is a brief outline of a few suggested activities; the teacher and the students together may generate even more ideas.

Activity: On a sunny day, mark the shadows of different objects at 9:00 a.m., at noon, and at 3:00 p.m. Any open area with shadows on the school yard is a suitable location. This activity may be correlated to subject areas as follows:

Language Arts: Use your imagination to write a fantasy about shadows. Include a description of how a shadow changes with the season (e.g., winter shadows are longer than summer shadows).

Social Studies: Discuss sundials and calendars as used in early civilization. Are they still used today? Have you seen any?

Science: Discuss how the position of the sun affects the size of shadows. For example, note the difference in sizes of shadows and position of the sun at lunchtime and suppertime.

Health: Examine changes of the pupil of the eye in shade and sunlight. Discuss how the sun can affect skin pigment.

Mathematics: Calculate the height of a telephone pole or a tree by measuring its shadow. Using a watch, calculate how long it takes the shadow to move a foot in distance.

Art: Construct a sundial and see whether it works. Sketch an object and include its shadow. Do this at different times of the day and year.

Music: As an object or a shadow, do interpretive dances. Play shadow tag to music. (Green, 1980)

Activity: Collect a variety of insects, snails, worms and other animals. These may be found in early fall and late spring underneath and in bushes on landscaped areas of schoolgrounds, in open grassy fields when weather is warm and sunny, and underneath a board or log placed on a grassy area. This activity may be correlated to subject areas as follows:

Language Arts: Read Charlotte's Web. As a literary spider, write a plan for catching a fly.

Social Studies: Select an insect or animal you found and describe how it affects the lives of people. Easy ones are bees, worms, flies, and spiders.

Science: Collect and identify the different stages of the life cycle of specific insects. Try to identify the life stage of each insect that you collect.

Health: Identify local specimens which could be classified as dangerous to human health and explain how they might be dangerous. List things that insects do which are of benefit to people.

Mathematics: Weigh each specimen collected and count the number of legs; calculate which specimen carries the most weight per leg. Trace insect movement on paper, and measure distance traveled and rate of travel; identify the speediest insect and the slowest insect.

Art: Discuss the colors, lines, shapes, textures, and designs seen in the insects, worms, snails, and other animals collected. Use these as ideas for drawing and painting.

Music: Create a sound composition imitating as many insect sounds as you can. (Green, 1980)

Activity: During any season, focus attention on the flagpole for first-hand observation and direct experience out-of-doors. (Green, 1980)

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Language Arts: Examine the Pledge of Allegiance carefully. Determine an appropriate synonym for each word; rewrite the Pledge using the synonyms you like best.

Social Studies: Investigate the history of the American flag. Who created the design? When was it first used?

Science: Has the flagpole been affected by the weather? Explain why or why not.

Mathematics: Estimate and then measure the height of the flagpole. Guess and then measure the circumference of the flagpole. Make sundial marks on the school grounds using the shadow of the flagpole at different times of the day. For a challenge, calculate the volume of the flagpole.

Art: Investigate the design transitions of the American flag. What major designs were considered?

Music: Learn to sing the "Star Spangled Banner." Discover the history of our national anthem. (Green, 1980).

Activity: The school parking lot offers a potpourri of learning activities which may be correlated with subject areas as follows:

Language Arts: Choose five license plates on cars in the parking lot. Write down all the letters in each license plate and see how many words you can compose using only those letters.

Social Studies: Which states are represented by cars in the parking lot? Using an atlas, find how many miles, by car, it would be to that state's capital city from your school. Discuss different kinds of parking structures — car elevators, ramps, etc.

Health: Make up safety rules for the parking lot. Explain the ways in which insufficient parking space tends to affect the behavior of people. Pick up litter in the parking lot. Use the litter to determine facts about those who park there (i.e., what they eat or read, etc).

Mathematics: Estimate in feet the length and width of the parking lot; use measuring tapes or sticks to determine its length and width. Compare the results. What is the number of square feet in the parking lot?

Art: Observe automobiles passing the school building or parked by the building. Determine the most common color of automobile observed. Design a car using basic shapes and different colors.

Music: Compose and/or perform a song or rhythmic reading on a day in a parking lot's "life." (Green, 1980)

Activity: During fall or spring, lie on your back in an open, grassy area and watch the sky on a partially cloudy day. Correlate this activity with subject areas as follows:

Language Arts: Think of as many adjectives as you can which relate to clouds, and write a descriptive paragraph about clouds.

Social Studies: What effects of the clouds can you see around you? Discuss the effects of clouds on areas of your state and on the people living in these areas.

Science: Spot and identify different types of clouds. Predict weather changes from clouds and their speed of movement. An excellent cloud chart for weather forecasting may be obtained from Downeaster Manufacturing Company, Inc., 574 Route 6A, Box 925, Dennis, Massachusetts 02638. Order model WFC, $3.00 each.

Health: Discuss the effects of cloudy versus sunny days on your moods. Discuss how different types of weather affect your work performance.

Mathematics: Estimate the size and speed of clouds by comparing with stationary objects on earth or by measuring the "-- it takes for the edge of a cloud shadow to pass two points in your school yard.

Art: Sketch a cloud whose shape you particularly like. Did the clouds change their shape while you were sketching?

Music: While you watch the clouds, listen to a cassette tape recording of portions of the Grand Canyon Suite. Does any part of the music match the clouds you see? (Green, 1980).

Activity: From a position near bird feeders or shrubs and bushes, observe the movements of birds for 10 minutes. This activity may be correlated with subject areas as follows:

Language Arts: Use library resources to discover which birds in your area migrate. Where do they go? How long does it take them to get there? Learn about bird banding. Describe the birds you saw, using as many descriptive words as possible.

Social Studies: Describe some activities of birds that are similar to human activities. Are birds helpful to people in any way?

Science: Identify and classify the birds you observed.

Health: What foods do birds eat that we eat also? Which birds do we eat? Which of the four food groups do birds belong to?

Mathematics: Make bird food for the feeders. Have the class do comparison shopping for ingredients. Learn how to measure ingredients for recipes. As a further challenge, convert the recipe measurements to the metric system.

Art: Make a kite shaped like a specified kind of bird (one that glides) and see if you can get it to fly.

Music: Listen to the sounds and songs of the birds you observed, and try to distinguish the different sounds they make. For further information listen to a record about bird calls. (Green, 1980).

By pursuing these and similar outdoor educational activities with their elementary school students, teachers not only educate but also provide a life-long appreciation of and respect for the natural environment, both esthetically and practically.

References


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