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Outdoor Education: The Time is Ripe

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It's strange how a casual comment can sometimes influence our actions and feelings for years.

It was nearly three decades ago. The enthusiastic sixth grade teacher was leading his students back to the classroom after completing a lesson that utilized the outdoors. A colleague from down the hall smiled and said, "Must be nice to go outside and play instead of teach."

The comment was not said in anger, or with sarcasm. It was just light-hearted banter. That statement, however, continues to be a rallying cry for that former middle grade teacher turned professor.

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Looking at the comment now from the vantage point of the 21st century, I feel vindicated. Although the comment reflected the tone of its time, today a very different mindset exists concerning alternative venues for learning. Of course, there are many who still contend that "real learning" must be unpleasant, tough, and defined exclusively by four walls. Thankfully, however, many educators are embracing the growing body of research that clearly shows that experiential learning does make a difference.

This Green Paper has one major premise: that the educational community today is ready to embrace the concept of using the outdoors as an instructional tool. We have never been at a point in the evolution of educational theory that has been more welcoming to the concepts of outdoor education. To put it simply, the time is ripe for outdoor education.

Outdoor and Environmental Education

It is important to define a few terms. Outdoor education has been defined in a variety of ways over the years. The definition given in Julian Smith's classic work still seems to fit the best: "Outdoor education means learning *in* and *for* the outdoors. It is a means of curriculum extension and enrichment through outdoor experiences." (Smith et al., 1972, p.20)

This definition includes the concept of using the outdoors as an instructional tool (learning *in* the outdoors) as well as the concept of teaching the skills, attitudes, and appreciations necessary for the intelligent use of the outdoors – learning *for* the outdoors. (Smith et al., p.23)

In this paper, without apology, I use the term "outdoor education." Although many authors have dropped the term in favor of "environmental education," I feel that the two are not congruent.

Environmental education is defined as "a learning process that increases knowledge and awareness about the environment and develops skills that enable responsible decisions and actions that impact the environment." (U.S. EPA, 1998) That definition certainly fits with the concept of teaching "for" the outdoors. Outdoor education's concept of learning "in" the outdoors, however, implies a methodology that includes, but is not limited to, environmental education. Although certainly embracing the concept of environmental stewardship, outdoor education as a teaching tool includes content areas and topics that are not related to environmental impact.

The focus of this Green Paper is primarily on learning "in" the outdoors – the concept of using the outdoors as a magnificent

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audio-visual tool to facilitate learning in a wide range of content areas. Outdoor education is not tied to any specific discipline. It is appropriate for teaching a multitude of concepts from a wide range of curricular areas. The time truly is ripe for learning in the outdoors.

Does Outdoor Instruction Make a Difference?

A landmark study by Gerald Lieberman and Linda Hoody (1998) provides intriguing data that definitely support the use of the outdoors for instruction. Their study, completed in 1998, included forty schools from thirteen states, representing all grade levels (K-12). The outcomes indicate that students learn more within an environment-based context than within a traditional educational framework.

It is important to note that Lieberman and Hoody were not only focusing on environmental education. The expression "using the environment as an integrating context" refers to teachers utilizing "a school's surroundings and community as a framework within which students can construct their own learning, guided by teachers and administrators using proven educational practices." (Lieberman & Hoody, p.7) Their study analyzed the impact of using the outdoors as an instructional tool in eight areas:

- general educational benefits
- language arts
- math
- science
- social studies
- thinking skills
- interpersonal abilities; and,
- revitalized teaching

The study showed encouraging benefits associated with outdoor instruction:

- Better performance on standardized measures of academic achievement in reading, writing, math, science, and social studies.
- Reduced discipline and classroom management problems.
- Increased engagement and enthusiasm for learning.
- Greater pride and ownership in accomplishments. (Lieberman & Hoody, overview)

The Time is Ripe

Lieberman and Hoody's work could not have come at a better time. Although many studies have been conducted concerning the impact of outdoor instruction upon such variables as environmental awareness, attitudes concerning the outdoors, and stewardship concerns, very little research had been done about the effectiveness of outdoor instruction as a general instructional tool. The Lieberman and Hoody study analyzed outdoor instruction in the context of its effectiveness for teaching in a variety of content areas.

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concepts that surround using the environment as an integrating concept for teaching. The highly classroom-centered conceptualization of teaching, popular several decades ago, has given way to a far more holistic view of teaching and learning. Many of our current views of "best practice" in schooling fit very nicely with the concept of using the outdoors as an instructional tool.

Fortuitous Signs of the Times

Constructivism

Current educational thought places great importance on the concept of constructivism – the idea that new knowledge depends upon, and builds upon, previous knowledge. We also know that learning is closely related to the situation or context in which it takes place. The experiential nature of outdoor

instruction does provide a powerful context in which to become involved with knowledge construction. (Knapp, 1992) The out-of-doors pulls at the senses, making learning more relevant. The high impact of outdoor experiences makes learning sequences more memorable and therefore easier to build upon in the future.

Block Scheduling

A large number of middle and high schools are experimenting with alternative approaches to the traditional schedule that usually includes a day filled with class periods that last less than an hour. Although block scheduling plans vary greatly, most of them provide for class periods of ninety minutes or more.

What an opportunity! In the past, most middle and high schools were unable to take students outdoors, even on their own grounds, because of legitimate time constraints. Block scheduling makes it possible to make extensive use of the school site, and to even plan excursions to local parks and nature centers without disrupting schedules for other teachers.

Hands-on Experiences and Performance-based Standards

Although hands-on experiences have been advocated in science teaching for many years, the concept of active student learning is moving into many other disciplines. The learner is no longer viewed as a passive receptacle. The effectiveness and practicality of using the outdoors as a vehicle for providing direct experiences is obvious.

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The area of student assessment is also changing. Increasingly curricula are including performance-based standards that require the student to demonstrate his/her learning. The concepts of "demonstrating" and "doing" are certainly compatible with the use of the outdoors as an instructional tool.

Multiple Intelligences

Probably one of the most significant contributors to educational thought in the past two decades has been Harvard's Howard Gardner. His research concerning the concept of multiple intelligences has provided a rich framework for instructional planning.

In 1996 Gardner added an eighth intelligence to his original list of seven – the naturalist intelligence. This intelligence has to do with observing, understanding, and organizing patterns in the natural environment. Gardner describes the naturalist as the person who "is able to recognize flora and fauna, to make other consequential distinctions in the natural world, and to use this ability productively" (as cited in Hoerr, 1997).

Gardner's identification of this intelligence is of tremendous importance to outdoor and environmental education. The inclusion of this intelligence on a listing of the forms of analysis that characterize human beings is extremely significant. Although traditionally schools have emphasized linguistic and mathematical intelligence, educators are now working to be sure that the other intelligences are incorporated into instruction. We need to be sure that the latest finding – the naturalist intelligence – is also included in curriculum planning.

How many students who have a proclivity for this intelligence are sitting in classrooms with little opportunity to utilize their talents? The time is now ripe to plan learning experiences to meet the needs of these students.

Concern About Excessive Media Exposure

Educators and parents alike frequently decry the heavy dose of TV and electronic media to which children are exposed. There is widespread concern that children are spending too much time in front of "the tube." Given this mindset, outdoor experiences are often viewed as a most welcome change of pace and place.

Cooperative Learning

The widespread interest in cooperative learning models also bodes well for outdoor education. Cooperative group activities lend themselves very well to outdoor activities. The designation of responsibilities within the group helps greatly to keep outdoor learning experiences on task and well organized.

Interdisciplinary Curriculum

The concept of interdisciplinary curriculum is firmly established today. Students are encouraged to see the interrelatedness of various content areas. Nature can be integrated into a wide variety of content areas. Science and mathematics are obvious "naturals," but areas such as visual art, music, and language arts (too name just a few) also can make the outdoors an interdisciplinary experience.

Once again the out-of-doors can provide a vehicle for accomplishing the task. How powerful to show students geometric patterns in nature, or to use dendrochronology to help students analyze the past.

Making the Best of a Good Situation

For the most part, the days of having to defend outdoor instruction are gone. There is a definite need, however, to take advantage of this favorable climate and work to make outdoor learning a regular part of the instructional repertoire.

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I want to emphasize that I am not advocating for outdoor instruction to be the primary instructional mode used by teachers. Outdoor instruction is simply one of many powerful teaching techniques that need to be considered in designing instruction.

As L.B. Sharp, an early pioneer in experiential education, noted decades ago:
"That which can best be learned inside the classroom should be learned there. That which can best be learned in the out-of-doors through direct experience, dealing with native materials and life situations, should there be learned." (Smith et al., p 22)

To maximize this favorable climate for working with children outside, there are several needs that must be addressed.

Staff Development

Although outdoor education fits very well with contemporary educational thought, teachers understandably need help in developing meaningful outdoor activities that enhance the existing curriculum. Simply handing a teacher a notebook of activities is not enough. Outdoor instructional techniques need to be consciously incorporated into staff development programming.

Research

The Lieberman and Hoody research cited earlier is a tremendous milestone. Their research efforts need to be replicated and expanded, however. Some future questions for research might include:

- To what extent is outdoor instruction currently being utilized ?
- What specific topics within a content area are especially adaptable to an outdoor setting?
- What professional development models yield the greatest increase in quality of outdoor instruction?

Relationship of Outdoor Instruction to Proficiency Testing

The majority of states now have proficiency testing requirements of some type firmly in place. Without a doubt, many administrators, teachers, parents, and the community take performance on those tests very seriously.

The Lieberman and Hoody research has clearly indicated that using the outdoors for instruction can increase content area learning. There is a definite need now to carefully research and document those proficiency test outcomes that can be most effectively taught using the outdoors as an instructional vehicle.

Networking and Professional Organizations

It is essential that persons interested in utilizing the outdoors for instruction join professional organizations like EECO, in order to network with other people and projects related to outdoor/environmental education. Since there is not an abundance of formal outdoor education material available (there are many resources, but few called "outdoor education") it is especially important to link with other educators who share your interest.

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The most powerful way to influence others to use outdoor instruction is to "just do it!" The enthusiasm and enhanced learning that can occur from a change of pace and place naturally encourage other teachers to take a closer look.

Thankfully we have come a long way from the mentality of several decades ago that equated the outdoors with only playing, not learning. It is critical, however, that we utilize the opportunities inherent in today's educational climate, and work to foster outdoor education as a valued part of instructional planning. There truly is no better time than now to take students outside.

References

Hoerr, Thomas (1997). The naturalist intelligence. Retrieved January 5, 2000 from the World Wide Web: http://www.newhorizons.org/trm_hoerrmi.html

Knapp, Clifford E. (1992). Thinking in outdoor inquiry. Charleston, WV, ERIC Clearinghouse on Rural Education and Small Schools. (ERIC digest No. ED348198)

Lieberman, Gerald A. and Hoody, Linda L. (1998). Closing the achievement gap: Using the environment as an integrating context for learning. San Diego, California: State Education and Environment Roundtable.

Smith, Julian W., Carlson, Reynold E, Masters, Hugh B., and Donaldson, George W. (1972). Outdoor education (2nd ed.). Englewood Cliffs, New Jersey: Prentice Hall.

United States Environmental Protection Agency, Office of Communications, Educational and Media Resources. (1998). Environmental education advances quality education (U.S. EPA Publication No. EPA-171-F-98-016). Washington, D.C.

About this Green Paper...

This Green Paper is published by the Environmental Education Council of Ohio (EECO). EECO is a statewide professional organization dedicated to promoting environmental education.

About EECO...

EECO is predicated on the belief that...

- We are all learners interacting with others in a lifelong process
- Education is vital for individuals to reach their full potential as members of our global community
- A healthy and sustainable environment is essential to the survival of the planet
- It is the mission of EECO to lead in facilitating and promoting environmental education that nurtures knowledge, attitudes, and behaviors that foster global stewardship.

Teachers, naturalists, camp staff, youth leaders, students, agency personnel, and others become EECO members to meet other environmental educators, and to share ideas, materials and other resources, and teaching techniques. To join or find out more, contact:

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Herb received EECO's Exemplary Outdoor Educator Award in 1986 and the Findlay-Johnson Award for career service in environmental education in 1995.

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