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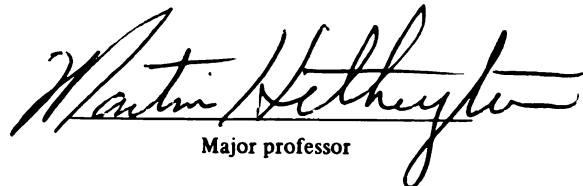
thesis entitled
THE DEVELOPMENT OF CRITERIA FOR THE
ASSESSMENT OF THE COMPREHENSIVENESS OF A
SCHOOL DISTRICT'S CONTINUING
OUTDOOR EDUCATION PROGRAM

presented by

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has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Dept. of Sec. Educ.
and Curriculum


Major professor

Date Nov 9, 1977

4-734

SEP 17 1964

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By

James C. Tisdale

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Secondary Education and Curriculum

1977

ABSTRACT

THE DEVELOPMENT OF CRITERIA FOR THE ASSESSMENT OF THE COMPREHENSIVENESS OF A SCHOOL DISTRICT'S CONTINUING OUTDOOR EDUCATION PROGRAM

By

James C. Tisdale

The purpose of this study was to develop criteria which could be used by educators to assess the comprehensiveness of a school district's ongoing outdoor education program. The criteria were designed to encompass all known facets of outdoor education, span all grades of formal education and yet be few in number for ready and easy use by any school district official regardless of his outdoor education background and/or experience.

After extensive review of the literature, it was revealed that no consensus of opinion about the essential characteristics for a school district's comprehensive outdoor education program exists. All the program descriptions seem to have been designed for either resident school camp outdoor education programs or some particular facet of outdoor education as it relates to the school curriculum.

According to educators knowledgeable about outdoor education, it has unique, valuable contributions to make to the growth and development of school youth. It would seem logical, then, that the formulation of a consensus of opinion should be developed which would provide guidance to outdoor educators and school district officials for assessing the comprehensiveness of their own outdoor education programs.

Pursuant to an extensive review of the literature, the following three criteria were established:

1. An outdoor education program should extend the classroom curriculum,
2. An outdoor education program should enrich the classroom curriculum,
3. An outdoor education program should create new curriculum dimensions.

These were determined by the author to embrace all aspects of outdoor education.

A questionnaire was submitted to a random sampling of the Outdoor Education Council of America (O.E.C.A.) and the Council of Outdoor Educators of Ontario (C.O.E.O.). Personal opinions about the three criteria proposed as essential by the author for assessing the comprehensiveness of a school district's continuing outdoor education program were solicited.

The complete data obtained from the survey of the two organizations (O.E.C.A. and C.O.E.O.) were analyzed according to the criteria developed in the study. Tables were constructed to support the validity of the construct. Percentage ratings of acceptance for all criteria or portions thereof were established.

The following are the conclusions of this study:

1. The literature reveals strong differences of opinion among educators as to what outdoor education is and of what it should be comprised.

2. At the present time, no evaluative instrument exists for the assessment of the comprehensiveness of a school district's ongoing outdoor education program. However, the construct developed in this study may provide the basis for such an instrument.

3. All three criteria which were designated as essential for assessing the comprehensiveness of a continuing outdoor education program were approved by a large majority of the respondents.

4. No major limitations to or a total rejection of the construct were observed, thus it seems to be appropriate for use in determining the comprehensiveness of an ongoing outdoor education program.

DEDICATION

With love to my wonderful wife Joyce and
my children, David, Lynn, Kathryn, Mark
and Stephen.

"ALL THINGS ARE POSSIBLE TO THOSE THAT
LOVE THE LORD."

ACKNOWLEDGEMENTS

My sincere thanks and appreciation to Dr. Martin Hetherington who served as my chairman. His patience, guidance and counsel were more than any student could reasonably expect.

I wish to acknowledge the advice and counsel of Dr. Jay Powell.

The assistance provided by the members of my committee - Dr. James Bristor, Dr. Robert Hinkle, and Dr. Fred Schuette is also greatly appreciated.

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CHAPTER I

THE PROBLEM

Introduction

Outdoor Education is one of those rarities in the school curriculum which began as a perceived need of teachers for their pupils rather than being a curriculum component identified as necessary by educational researchers or administrators. In this sense, it has developed as a "grass roots" movement among teachers in North America. Outdoor education probably had its origin in the United States in the early outdoor experiences of the Round Hill School of Massachusetts between 1823 and 1834 and the Gunnery School for Boys in 1861.

Bruce L. Bennett, writing in Quest magazine in 1965 says:

One significant aspect of life at Round Hill School has received little recognition. This was outdoor education, hiking and camping. Cogswell said they walked twelve to sixteen miles every Saturday afternoon... . All the boys went on annual trips by horse and wagon to see places and people of interest. Other activities included geological expeditions, fishing trips and the boys started their own village, constructing huts and spending many happy hours trapping rabbits and shooting with bows and arrows.¹

Eugene Lehmann, writing in Spalding's 1920 edition of Camps and Camping, quotes Mary Gunn Brinsmade. "Frederick William Gunn carried on a series of successful camps for boys from the summer of 1861 to that of 1869... . This camping was part of the school regime, and not an organized camp for the purpose of money making."²

Whatever the precise date of its origin in America, outdoor education, was, nevertheless, the offspring of outdoor camping. The late Dr. Julian W. Smith, himself a pioneer in outdoor education in the United States, said, in an address at Lorado Taft Field Campus in 1970, "It is certain that organized camping had an important influence on the beginnings of outdoor education...."³

Clinton Fitzpatrick in his study of the goals of outdoor education noted:

There has been a trace of the ideas of outdoor education for generations. However, the modern emphasis on outdoor education did not begin until the 1940's. Prior to this time any attempt to integrate outdoor learning experiences with the school curriculum resulted through the individual instructional efforts of teachers and leaders of summer camps sponsored by school systems.⁴

He further points out that the 1940's were experimental years in the development of outdoor education, for in those years many states enacted legislation to establish school camping and other outdoor learning experiences as legal educational endeavours.

School camping became the pattern for resident outdoor education, and experimental programs began to develop and expand. Interest in utilizing resources beyond the classroom gradually increased among educators during this period.⁵

Such nationally known programs as the resident outdoor schools at Battle Creek, Michigan, San Diego, California, Tyler, Texas and Cleveland Heights, Ohio became established during the years 1940-1950.

Donaldson and Goering have observed:

Outdoor education experienced a steady but slow growth from 1945 until the enactment of the Elementary and Secondary Education Act (E.S.E.A.) in 1965. Both Titles I and III of the Act were utilized by educators to fund programs which might reasonably fall under the umbrella-topic, "outdoor education."⁶

The establishment of the "Outdoor Education Project" in 1955 by the American Alliance of Health, Physical Education, Recreation, under the direction of Julian Smith, provided the leadership necessary to broadcast nationally, the concepts of outdoor education. The Elementary and Secondary Education Act of 1965 provided the federal funds necessary to translate those concepts into educational programs.

The rapid national growth of outdoor education within the last two decades is evidenced by the following statistics:

- 1) Resident outdoor schools: 1955 - 300 school districts in the United States; 1970 - over 2,000 school districts. More than 750,000 school children participate annually in such programs.

- 2) Three hundred twenty state and regional workshops and clinics in forty-four states attended by 26,500 school and college teachers.^{7,8}

Further evidence of this tremendous growth is found in the fact that more than 16,000 school districts participated under Title I of E.S.E.A., and the approximately 110 outdoor education projects in 40 states were funded under Title III of the same Act from 1965 to 1970.⁹

These years were not only a period of rapid growth and expansion but also of program diversification.

New programs of varying types were initiated in hundreds of schools and colleges; existing programs were improved and expanded; and additional resources including lands and facilities, became available. The greatest single achievement, however, has been the broadened concept of outdoor education which includes the use of the outdoors as a laboratory for learning and the acquisition of knowledge and skills necessary for wise and satisfying outdoor interests and pursuits.¹⁰

Outdoor education began because concerned teachers saw the need for providing outdoor experiences for their students and school camping was the means by which such experiences were obtained. Contemporary teachers still provide needed outdoor experiences for their students - but in many more diversified ways than their predecessors.

The Problem

Outdoor education's origin and continued identification with outdoor camping, combined with the

proliferation of a wide range of subjects, topics and activities in recent years has resulted in such a diversity of outdoor education programs, that evaluation of such programs has become very difficult.

In an article in the Journal of Health, Physical Education, Recreation, George and Alan Donaldson state, "Outdoor education, as a self-conscious movement in American education began as school camping... ." ¹⁰
This early identification with school camping has lasted through the years so that in many school districts today, the two terms are synonymous. In such districts, outdoor education still remains a one-week camping experience for pupils in grades 5 or 6 at a resident outdoor school or at a private camp rented for that purpose.

In the same article, the authors note that:

While school camping has grown apace, recent years have witnessed an even more rapid growth in non-resident activities.

Increased attention is being given to the use of the school site, proper, as a place where exciting teaching and learning can take place. ¹¹

This expansion away from an identification with school camping has led to a wide diversity of programs across the nation, and has come to span, not only the traditional curriculum subjects, but also all the grades from kindergarten through college. Variety in programming, while a distinct strength in outdoor education, is, at the same time, a major factor in the problem of evaluating on-going outdoor education programs in school districts.

In many school districts the outdoor education program consists of a one week resident school camping experience for pupils in grade six or seven. In others, outdoor education consists of day programs conducted by outdoor education consultants at local parks and/or nature centres. In some school districts, outdoor education is interpreted as being those activities conducted by classroom teachers in specific subject areas.

The problem is: do such programs provide all that outdoor education has to offer? Are they broad enough in scope to be construed as comprehensive in nature or should an effective comprehensive outdoor education program consist of a much wider range of activities and experiences?

Purpose of the Study

The purpose of this study is to examine the problem of what constitutes a comprehensive outdoor education program within a school district and, in so doing, prescribe a set of criteria which can determine that comprehensiveness.

Much has been written, especially in the last decade, concerning particular subjects, topics, activities and/or experiences which can be used in the out-of-doors, and philosophical bases and desired goals have been enunciated to show the importance of outdoor

education as an integral part of the school curriculum. It is the intent of this study to review and analyze these writings in order to develop a construct which can be used as a guide for educators to follow in evaluating their own school district's outdoor education program. This analysis will provide the criteria for determining the comprehensiveness of a school district's outdoor education program.

Significance of the Problem

The review of the literature has shown that several research projects have produced criteria for evaluating the effectiveness and comprehensiveness of resident school programs. No research has been conducted to evaluate a school district's on-going outdoor education program which is much broader in scope than a resident school program. District-wide outdoor education programs not only span all grades from elementary through secondary schools, but operate throughout the school year and encompass most subjects in the school curriculum. Resident school programs, however, are commonly restricted to one grade for one week, and are narrower in curriculum content. The same guidelines cannot be used to evaluate such divergent types of outdoor education programs. New criteria are needed for evaluating broad, continuing, multi-graded outdoor education programs.

The review of the literature has also shown the significant contributions which can be made to a student's education by an effective, comprehensive outdoor education program. These contributions are often of a unique nature which cannot be duplicated by other parts of the curriculum. It is important, then, that suitable criteria be made available by which educators can assess the outdoor education program within their school district. If outdoor education is to continue as a dynamic part of the school curriculum, such examinations will always be essential and criteria, such as have been developed in this study, can provide the guidelines by which accurate assessments can be made.

The evaluation criteria developed in this study should aid any school district in evaluating the comprehensiveness of its own outdoor education program as they have been designed to encompass all facets of outdoor education. Each criterion is essential to such an assessment as it focuses on a particular part of outdoor education not touched by the others. Together they form a clear, effective manner by which the inclusiveness of an outdoor education program can be examined.

The criteria were selected after an extensive review of the literature, analysis of some existing programs and from suggestions from outdoor educators.

There has been a deliberate attempt to reduce the number of criteria to as few as possible so that outdoor educators as well as school district officials not familiar with outdoor education would find them easy to use and satisfactory for the purpose for which they were intended.

Definition of Terms

Camping - a small group of students living and learning together in a natural setting under the direction of a teacher. Students live in tents, cabins, or a lodge for a short period of time (usually a day or a week) outside of regular school time.

School Camping - a class of students living and learning together in a natural setting under the direction of their teacher. Students live in tents, cabins, or a lodge for usually three to five days as part of their school program.

Resident Outdoor Education School or Resident School Camp - a class or classes of students of a particular grade level living and learning together in a natural setting under the direction of the resident school staff. Students live in cabins, or a lodge or the residential school for usually three to five days as part of their regular school program.

Conservation Education - a component of outdoor education concerned with the preservation of the natural environment.

Outdoor Recreation - a component of outdoor education concerned with the use, enjoyment and understanding of the outdoors and involving the wise use of leisure.

Nature Study - a component of outdoor education concerned with a study of the natural world.

Construct - a philosophical term meaning an idea held which is put forth in an organized manner on paper and which is developed for its explanatory value.

Limitations of the Study

The most serious limitation to a study of this type is the human limitation of the author. His personal orientation fosters a particular bias and can result in errors of omission and commission. The review of the literature is extensive in an attempt to minimize errors of the first type. A questionnaire utilizing the criteria developed through the study was sent to a sampling of the members of the Council of Outdoor Educators of Ontario (C.O.E.O.) and the Outdoor Education Council of America (O.E.C.A.) (an affiliate of the American Alliance for Health, Physical Education and Recreation, A.A.P.H.E.R.) in an attempt to limit errors of the second type. The two organizations were deemed to be representative of outdoor educators of North America as the latter group was composed of individuals in many different capacities within outdoor education, while the former consisted almost solely of outdoor educators in many roles within Ontario school systems.

Summary

In this chapter, the origins and growth of outdoor education from its beginnings in camping and school camping to its present status as an integral component

of school curricula offering a diversity of learning experiences in the out-of-doors, was related. The lack of clear understanding of the meaning of outdoor education has led to many interpretations as to what constitutes an effective outdoor education program for a school district. This, combined with its importance in the education of students, was indicated to show the significance of this study, the purpose of which is to develop evaluative criteria which will assist educators in determining the comprehensiveness of a school district's on-going outdoor education program.

FOOTNOTES: CHAPTER I

¹Bruce L. Bennett, "The Making of Round Hill School," Quest 4 (April 1965): 60-61.

²H. W. Gibson, "The History of Organized Camping: The Early Days," Outdoor Education: A Book of Readings, 2d. ed., edited by Donald Hammerman and William Hammerman (Minneapolis: Burgess 1973), p.64.

³Julian W. Smith, "Where We Have Been - What We Are - What We Will Become," Journal of Outdoor Education 2 (Winter 1968): 3-6.

⁴Clinton Fitzpatrick, "Philosophy and Goals for Outdoor Education" (Ed.D. dissertation, Colorado State College, 1968), p.6.

⁵Ibid., p.6.

⁶George W. Donaldson and Oswald H. Goering, Outdoor Education: A Synthesis (Arlington, Vi.: ERIC Document Reproduction Service, ED 037 286, March, 1970). p.1.

⁷Julian W. Smith, "A Review and Forward Look," Journal of Health, Physical Education, Recreation 41 (February 1970):45.

⁸Julian W. Smith, "A Decade of Progress in Outdoor Education," Journal of Outdoor Education 1 (Fall 1966): 3-5.

⁹Wilhelmina Hill and Roy Hill, "New Horizons for Environmental Education," The Journal of Environmental Education 1 (Fall 1969):46.

¹⁰George W. Donaldson and Alan D. Donaldson, "Outdoor Education: Its Promising Future," Journal of Health, Physical Education, Recreation 43 (April 1972):

¹¹Ibid., p.23-28.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

In Chapter I, a very brief account of the historical evolution of outdoor education from its early beginning in outdoor camping was provided in order to show the direction which outdoor education followed for many years and which is, in some school districts, still following today. More complete and thorough treatments of the origins and early developments of outdoor education are provided in the doctoral studies of Martin Rogers (1955), Donald Hammerman (1961), Charles Lewis (1964), Morris Wiener (1965), Clinton Fitzpatrick (1968), and Stanley Ulanoff (1968). In addition, a short description of the development of outdoor education as an integral part of school curricula and the increased use of school and neighborhood sites was given to illustrate the rapid expansion of outdoor education within the last twenty-five years.

In Chapter II, an examination of the literature will be made to determine:

- 1) The meaning of outdoor education as interpreted by recognized authorities in the field, education experts, and educational researchers. This will include a

comparison of outdoor education and environmental education.

2) The subjects, investigations, studies, activities, and/or experiences which are common to outdoor education and the contributions which they make to the education of students.

3) Research which may reveal evaluative criteria already in existence for examining outdoor education programs.

Many interpretations of outdoor education will be examined. From these, a definition will be established which will provide the basis for designing the criteria used in this study.

Interpretations of Outdoor Education

Outdoor Education and "Nature"

A natural outgrowth of the association of school camping with outdoor education has been the emphasis placed upon that segment of the environment limited to "nature." This emphasis has resulted in the "natural," environment becoming not only the laboratory in which learning takes place but also as the focus for that learning.

One of the first definitions of outdoor education was provided by L. B. Sharp, a pioneer in the field. Writing in Camping Magazine in 1942, he stated:

Camping education is primarily an outdoor program, working with things. That which ought and can best be taught, and that which can best be learned in direct contact with life situations and materials should there be learned through experience.¹

In an article written a decade later, his association of outdoor education with school camping was deleted, but the relationship of outdoor education and nature was still evident when he wrote:

Outdoor education, in its simplest aspect, merely says: Don't try to bring the whole world into the school. Rather, take the children out to where the world is. Outdoor education begins just a step outside the door of the school.... The first step out of the school building takes you far enough to find some of the things in nature that are pictured and described in nature.²

Sharp's emphasis on the natural world as an integral component of outdoor education is evident in this passage from an article written in 1957 in which he stated:

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.³

This identification of the outdoors with nature is to be found in the writings of the following prominent outdoor educators. Julian W. Smith, in 1957, coined this now-famous phrase for outdoor education, "it is education in and for the outdoors".⁴ The first part of this phrase refers to, "the use of Nature's laboratory through the media of parks, camps, forests, farms and gardens and

other outdoor settings."⁵ The latter portion is concerned with the use of the outdoors, "for the teaching of skills necessary for wholesome outdoor pursuits."⁶

In most of his early writings Smith equated the out-of-doors with nature. The following examples will illustrate this point. "Learning outdoors is unique in that it makes use of the natural environment in the educative process."⁷ "The outdoors may be described, therefore, as a laboratory... of the natural environment in achieving the purposes of education."⁸ "For schools, who reach literally all of our people in some stage of their life, more emphasis needs to be placed on outdoor learning experiences which will deepen the perceptive powers of the learners concerning the natural environment."⁹ In a comparison of outdoor education to modern education systems, he stated, "The only major difference in outdoor education is in the learning environment. The distance 'to the woods' is longer...."¹⁰

George and Louise Donaldson also associated the outdoors with nature. In an article written in 1958 they suggested that outdoor education is, "in, about and for the outdoors,"¹¹ and although they did not specifically restrict "in" to being in the natural world, the illustrations they used do certainly convey that meaning. For example, when indicating the type of school ground activities for a kindergarten class, they stated, "They might look for signs of fall or spring.

They might investigate a simple plant community."¹²

Later, they made the point that for schools existing in population centres, outdoor education will have to take place some distance away from the school - indicating the necessity of travelling to a natural area.

In an article written for the Illinois Journal of Education, Wallace Wheeler and Donald Hammerman began this way, "The concept of extending the classroom to a natural environment setting...."¹³ Later, in the same article, they stated, "The importance of the outdoor educational setting.... lies mainly in its broad array of natural instructional materials."¹⁴ In their book Teaching in the Outdoors, Donald and William Hammerman reiterated the same concept of nature being an integral part of outdoor education. They wrote, ".... outdoor education in the schools is an integral part of the curriculum which involves an extension of the classroom to an outdoor laboratory; a series of direct experiences in any or all phases of the curriculum involving natural materials...."¹⁵

John Hug and Phyllis Wilson, co-authors of the book, Curriculum Enrichment Outdoors, defined outdoor education as, "The effective use of the natural environment both to teach those parts of the curriculum that can best be taught outdoors and to vitalize other parts through first hand experiences."¹⁶ Charles Mand also

identified the natural environment as the locale for outdoor education. In the preface of his book entitled, Outdoor Education, he stated, "Outdoor education is simply a method of teaching using the natural environment as a living laboratory."¹⁷

Similar interpretations are to be found in the early studies of Martin Rogers and Charles Lewis. As a result of his research, Rogers defined outdoor education as, "a method of approaching educational objectives through guided, direct, real-life experiences in the out-of-doors, utilizing as learning material the resources of the natural environment."¹⁸ Lewis defined it this way: "Outdoor education as a method and technique for learning experiences in the natural environment specifies that education which takes place in the out-of-doors during extended field trips, day camping, or resident programs."¹⁹

An interesting definition has been offered by Thomas Rillo. While retaining the need for the natural environment to be the setting for outdoor education, he discards it as the focus of outdoor education in favour of those subjects within the school curriculum. In the winter, 1970 volume of the Journal of Outdoor Education, he wrote:

Outdoor education programs should emanate from actual courses of study and instructional materials of the classroom. Every subject area should be examined in the light of those concepts

and learning situations which can be most effectively implemented through outdoor activities conducted in the natural environment.²⁰

Outdoor Education - An Expanded Interpretation

Dr. Charles Blackman, a curriculum specialist at Michigan State University, in an article prepared for the Journal of Outdoor Education, presented a unique interpretation of the term "natural" as applied to outdoor education. He stated:

In many ways schools provide a very artificial and contrived set of conditions for learning. School buildings isolate youngsters from the 'world outside' and from its sounds, its beauty, its unity. The quite artificial conditions for learning we create within schools are far removed many times from those existing outside in the natural environment.²¹

The contrast between the two is even more evident when he wrote about that type of learning,.... "which goes on in the contrived environment (the school) and that which goes on in the natural environment".²² In this sense the use of the word "natural," does not limit outdoor education to that segment of the environment identified as "nature," but would also include the man-made cultural portion of it. Dr. Blackman defined outdoor education thusly "It is education in the out-of-doors for educative purposes".²³

The doctoral research studies done by Clinton Fitzpatrick, Sandra Modisett, Helen Grilley and Morris Wiener all contain this expanded concept of outdoor

education. It is not restricted to nature--either as setting or focus.

Fitzpatrick stated, "Outdoor education is a method which utilizes resources beyond the classroom as a stimulus for learning and as a means of curriculum enrichment."²⁴ He expanded upon this concept in his identification of the significant goals of outdoor education which include:

Goal 3 - To develop awareness, appreciation, and understanding of the natural environment and man's relation to it.

Goal 7 - To help the individual become more civic-minded through the utilization of resources within the community, state, nation, and world.²⁵

This broader, more encompassing concept of outdoor education is evident in Sandra Modisett's doctoral study. As a basis for her study, she used this meaning for outdoor education:

An approach to teaching and a process through which learning experiences in all areas of the educational curriculum are provided. Natural, community and human resources beyond the traditional classroom are utilized as a motivation for learning and a means of broad curriculum enrichment and vitalization.²⁶

Helen Grilley used a similar meaning for her doctoral study. "Outdoor education....The experiences gained through the effective utilization of natural and community resources beyond the classroom to enrich and facilitate learning."²⁷ As a result of his study, Morris

Wiener defined it, "Outdoor education is best conceived as a process of utilizing the outdoors as an integral part of the school curriculum."²⁸

Some articles written by prominent educators also reflect this type of expanded interpretation of outdoor education - i.e., as being more general and encompassing than that which would limit it to the confines of the natural environment with its attendant knowledge and skills. In the Foreword to Outdoor Education-A Book of Readings, Reynold Carlson, an expert in outdoor recreation, wrote:

Outdoor education was first conceived as a means of acquainting children with the natural environment, enriching the school curricula, and teaching more effectively those outdoor-related subjects that were already a part of the curricula.Programs today are generally broader in scope than the pioneering efforts. They include studies of the man-made as well as the natural environment....²⁹

Helen Heffernan, a curriculum specialist, in an article written for the Journal of Outdoor Education, stated:

Outdoor education should not become a limited curricular item at any one maturity level but should, in appropriate form, permeate the entire curriculum of the public schools at all levels. The neighborhood, the wider community, and the natural environment reasonably accessible to the school should be the learning laboratory for children and youth.³⁰

A similar view was expressed by Emanuele Corso and Paul Nowak who at the time of their writing, were

both university professors. Corso stated:

The environment which is to be cared for is what is around them and not something 'over there' that some naturalist is concerned about. The ecosystem of a city slum is as much a part of the biosphere as Hell's Canyon in Idaho. And outdoor education has a great and obvious responsibility to the inner city child just as it does to the preservation of the Blue Heron.³¹

Nowak wrote:

Most areas of the curriculum can, under specific conditions, meaningfully use the out-of-doors as a teaching resource. It might be a sunlit meadow that is captured in a poem, it could be collecting the leaves of the trees on the school grounds as a science lesson, or it could be a survey of the traffic passing the corner of a busy city street counting those cars and trucks which are causing air pollution.³²

It is interesting to note that this more liberal interpretation of the term outdoor education is evident also in the later writings of some eminent outdoor educators. Among those whose earlier writings have already been noted, George Donaldson and Julian W. Smith appear to have modified their earlier stand. In an editorial in the Journal of Outdoor Education in which he bemoaned the proliferation of terms associated with education in the out-of-doors, Donaldson wrote:

Outdoor education is place, attitude, method; it is not subject. Outdoor education is no more conservation/environmental education exclusively than it is art, music, nature study, language arts, social studies or even science. We believe that our "art" has benefits for all.³³

A similar notion was expressed by Julian W. Smith in his newsletter, Outdoor Education. In one of his last editorials in which he stressed the role of outdoor education in curriculum development and in achieving educational objectives, he stated:

Beginning with "nature" and science oriented forays outside classroom walls, there has been a series of emphases of developments to achieve educational objectives which, over several decades, have made outdoor education an innovative force in improving and extending the learning experiences in the educational continuum.³⁴

It is not the intent of the author to imply that all educators have grown away from the notion that a nature setting is essential to outdoor education. Indeed, the late Earl C. Kelley, a highly respected educator, held this view about it. "By outdoor education I mean taking children to a camp-site in the country to live and learn together for a minimum of one week preferably longer."³⁵

The definitions presented are representative of the literature surveyed. They indicate that, although complete agreement as to what constitutes outdoor education, is not to be found in the literature, a pattern of expanded interpretation is evident. From the early years of school camping, the scope of outdoor education has been broadened to include many subjects and activities which were never conceived of by early outdoor

educators. Such terms as conservation education, nature study, outdoor recreation, school camping and outdoor residential school have all, at one time or another, either been associated with, or used synonymously for outdoor education.

The pattern of development is not linear in nature implying a deletion of the former position when progressing to the next, but, rather, one which is concentric. This implies an absorption of all or many of the aspects of the former position into the larger context.

Within this matrix, there are educators who hold to one point of view, while others tend toward a blend of two or more considerations. This is borne out in a study of the members of the A.A.H.P.E.R. Council on Outdoor Education and Camping done by Ray Horn who found that there were three prominent groups each with a distinct interpretation of outdoor education. These he labelled, "Environment-Oriented", "Conservation-Oriented", and "Outdoor Activity-Oriented."³⁶

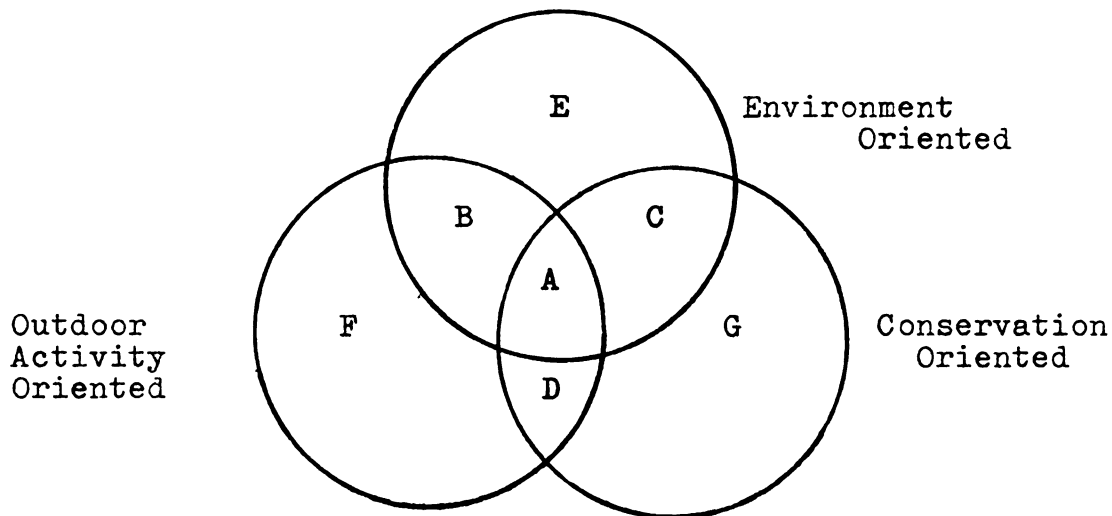
Those in the first group, "tended to view the use of the outdoors as a learning medium, as a vehicle of communication. At the same time, however, they did not want to exclude activities related to conservation education."³⁷ The members of the second group

"felt that outdoor education encompassed those activities that focus upon conservational ends. The group coalesced those who had partial interests in groups I and III but who clustered into a discernibly different group with predominantly wildlife, natural science and conservation education interests. Group III, was oriented toward the physical location of where an activity is conducted and felt that an interaction with a natural environment was not a necessary condition of outdoor education. They were mainly physical-education and recreation-education oriented and were primarily interested in activities conducted in an outdoor setting and education for outdoor recreation."³⁸

Horn represented the commonalities and disparities of the three attitudes by the following Venn diagram.

FIGURE I

ATTITUDES EXPRESSED TOWARD OUTDOOR EDUCATION



A - common to all groups.
 B, C, D - attitudes showed by an adjoining set.
 E, F, G - distinctive characteristics of a set.

The three groups were almost equal in size. Each group comprised about the same number of respondents to the questionnaire.

Outdoor Education and Environmental Education

In 1970, the term environmental education made its appearance in educational parlance. As part of a nation's response to its concern for the quality of the environment, the federal government passed the Environmental Education Act in 1970. This provided a sudden mandate (and federal fiscal assistance) to the educational community to provide for environmental education.

The advent of environmental education provides some interesting contrasts to outdoor education:

1) It was born on October 30, 1970, whereas the exact birthdate of outdoor education has never been determined.

2) Environmental education was imposed suddenly upon education from outside whereas outdoor education grew slowly and developed steadily from within.

3) Environmental education, from its inception, was clearly defined in the Act which gave it birth.

Environmental education means the educational process dealing with man's relationship with his natural and man-made surroundings, and includes the relation of population, pollution, resource allocation and depletion, conservation, transportation, technology, and urban and rural planning to the total human environment.³⁹

Outdoor education did not begin with such a clear understanding of what it was supposed to be.

The careful enunciation of the term "environmental education" in the Act, however, has not prevented it from being subject to a variety of interpretations. Like outdoor education, it too defies a universally accepted definition.

The impact of environmental education is reflected in the number of articles published in educational journals. Prior to 1969, articles listed in the Education Index were found under "Ecology." In 1969 and 1970, the topic heading "Environmental Studies" was used with two sections under it. The 1971 edition of the Index found "Environmental Education" being used for the first time as a topic heading. This was divided into fourteen sub-sections.

The following table indicates the growth in the number of articles published in this area.

TABLE 1

NUMBER OF ARTICLES UNDER HEADINGS OF OUTDOOR EDUCATION
AND ENVIRONMENTAL EDUCATION - EDUCATION INDEX 1964-75

Number of Listings by Topic Heading				
Education Index Volume and Year		Outdoor Education	Environmental Education	Ecology
Volume 15	1964-65	6	Not	5
16	65-66	12		6
17	66-67	15		6
18	67-68	23	Used	6
19	68-69	16	- - - - -	13
20	69-70	18	36 (Env. studies)	16
21	70-71	21	70 (Env. studies)	52
22	71-72	15	39 (Env. education)	54
23	72-73	14	73	33
24	73-74	15	62	16
25	74-75	20	89	26

If environmental education had been defined and accepted as something distinctly new in education, there would have been no conflict between it and outdoor education. However, the definition in the Environmental Education Act which determined its scope of concerns contained some topics which were already being pursued by teachers under the banner of outdoor education. Those portions identified as "man's relationship with his natural and man-made surroundings,"and, "conservation,"⁴⁰ had been part of outdoor education for many

years. This overlapping of topics has caused much confusion among educators as to what is truly the exclusive domain of each. In fact, in much of the literature, the term "environmental education" has replaced "outdoor education" as the designation for many of the activities once listed under the latter heading.

Many of the articles listed under "Environmental Education" in the Education Index indicate this overlap. Of the 46 articles reviewed under the 39 listings for the year 1971-72, 43 dealt with school curricula. Of these, 17 applied exclusively to environmental education and outdoor education, while 15 referred solely to outdoor education. The articles for the year 1971-72 were selected because that was the first year in which "Environmental Education" appeared as a heading in the Education Index. Another indication of the overlapping caused by the two terms is the fact that three of the fifteen articles listed under the heading "Outdoor Education" in the 1971-72 edition of the Education Index were also listed under "Environmental Education."

The author made the distinction that if an article referred to experiences which took place in the out-of-doors; it would be classified as "outdoor education." If it contained activities restricted solely to the classroom, it would be classified as

"environmental education," and, if it contained both types of events, it would be classified under both headings.

This distinction is based upon the meaning of outdoor education as derived from the literature. There might be classroom preparatory and follow-up sessions, but there must be a related experience in the out-of-doors for it to be considered to be "outdoor education."

The following examples will further illustrate how many of the educational experiences once considered to be "outdoor education" are now being classified as "environmental education." In an article entitled, "A Description and Evaluation of an Environmental Science Education Workshop for K-12 Teachers," the author, Marshall Parks, stated:

Several colleges and universities are now offering environmental education programs for teachers. The Science Teaching Centre at Indiana State University has responded to the need by presenting a three week science education outdoor workshop for prospective or inservice K-12 teachers during the summer.The workshop students complete science activities in the outdoors that can be readily adapted to their own instructional programs. ...

Outdoor education seminars were presented the Thursday and Friday of the second week. ... Several experts in outdoor education discussed their ideas and experiences on teaching science and other disciplines in the outdoors.⁴¹

All of the activities listed for the daily workshop were, without exception, outdoor education oriented.

The success of integrating an existing school

camping program more closely into the total school curriculum is the theme of an article by George Rhen in School Management entitled "Case History of an Environmental Program:"

The first requirement was to eliminate the program's isolation and build a real educational image for the camping experience. Specialists in ecology and other sciences were employed to relieve the regular teaching staff of duties in which they felt insecure. ...A well-known naturalist and wildlife writer was included to advise and work in the program, and a craft person from Boston and a botanist from Philadelphia were imported. ...

A second step also added educational credibility to the camping portion of the program. ... The sixth grade curriculum in science was reorganized to stress areas more valuable at the nature site. Units in pond life, space and earth science, outdoor math, annual and spring flowers, birds and field science became a full year's program for the sixth grade student.⁴²

The author, George Rhen, indicated that the popularity and success of the program could be measured by the 99 percent approval declared in written statements each year by the parents of the grade six pupils and by the acceptance of outdoor teaching by the other teachers on the staff. The latter was achieved in the following manner:

The camping director, now designated director of environmental education, a title more in vogue, became the key to the program. She was freed of classroom duties one day a week to demonstrate technique. She took a teacher and a class into the play area or nearby nature site. She demonstrated classes

in math, grammar, vocabulary, composition, social studies, economics, spelling and reading. ...

Today Gould's teachers, kindergarten through sixth grade, are self-committed to a minimum of one outdoor lesson a week.⁴³

In 1973, Robert Roth wrote an article for the Instructor which he called "Science Environmental Studies." He outlined techniques for conducting a community study which was comprised of activities once considered to be "outdoor education" in nature. In his "Conclusion" he wrote:

The school is an ideal setting in which to initiate a community study. It is a laboratory of real life and it provides daily lessons in ecology, sociology, science, and the ways in which man must interact with his environment to attain a rich and satisfying life.⁴⁴

A new phrase, "Environmental Ecological Education," was coined by Sophie Welisch as the title for an article in The Educational Forum. The author identified the concerns of environmental ecological education as:

...the study and control of such urban problems, as air and water pollution, crime, crowdings, noise, and poverty; it emphasizes the physical as well as the social environment in that environmental ecological education considers the way people live together and how they consume the resources around them; it is concerned with aesthetic appreciations, with mental health, with public law, with engineering, with philosophy, and indeed with the totality of life; it encompasses a program for change and social action as well as a body of knowledge about the environment.⁴⁵

This new term, like environmental education, involves new areas of investigation which are outside the accepted parameters of outdoor education. Such topics as crime, poverty, and public law are uniquely related to environmental ecological education. However, like many of the articles dealing with environmental education, this article often uses the term environmental ecological education interchangeably with outdoor education.

Environmental ecological education is not new. ... Updated to meet current needs, environmental education is now taught in schools around the country under a variety of names - outdoor education, nature study, field investigation, environmental arts. Implicit in most of these programs are the interdisciplinary and out-of-classroom approaches to learning, ...⁴⁶

In the same article she wrote:

Nor must an outdoor program be confined to a rural or suburban setting. ...Animal pests, garbage, air pollution and deterioration of the community are problems facing citizens that can best be examined out of the classroom. This program of outdoor education requires little preparation or equipment and gives the student an opportunity to see many aspects of the urban setting.⁴⁷

In an article entitled, "Motorsickles Did It!," by Claude Crowley, a classroom teacher, thirty-two activities to promote environmental concepts were identified under the heading, "32 Environmental Opportunities for Almost Any School Ground." The list is reproduced here in its entirety because it illustrates

very dramatically this confusion between outdoor education and environmental education. Every activity listed as an "environmental opportunity" is one which would have been thought of as being outdoor education before the advent of environmental education.

32 ENVIRONMENTAL OPPORTUNITIES FOR ALMOST ANY SCHOOL GROUND

To Identify or Find	To Build or Do
1. Hard packed soil.	1. Set up erosion control measures - check-dams, seed, sod, etc.
2. Erosion by wind or water.	2. Dig up a square foot of sod and inventory flora and fauna under the surface.
3. Good soil in protected place near building or fence.	3. Plant a garden.
4. Rotten wood or twigs, being recycled into topsoil.	4. Build a compost heap.
5. Little plants - clovers, grasses and weeds.	5. Take a bird census.
6. Landforms and drainage patterns, even on pavement.	6. Measure trees - circumference, diameter, height, etc.
7. Soil fauna - grubs, earthworms, spiders, ants, ant lions, etc.	7. Make a contour map.
8. Roots - legumes will be lumpy with nitrogen nodules.	8. Make a "guest register" out of soupy mud to record bird and animal tracks.
9. Gravel - some may include fossils.	9. Build a bird feeder.
10. Mosses, lichens and mushrooms.	10. Collect rocks and minerals.
11. Shrubs - the fruits of many ornamental shrubs attract birds: holly pyracantha, etc.	11. Make a rain gauge and weather vane.
12. Native plants.	12. Pick up and weigh litter from a measured distance around the school yard. Publicize results.
13. Trees.	13. Commemorate Earth Day.
14. Birds.	14. Draw or paint the school ground environment.
15. Animals.	15. Write songs or poems about it.
16. Climate.	16. Plan an outdoor classroom. ⁴⁸

Comparison of Outdoor Education and Environmental Education

Based upon a careful analysis of the literature, personal involvement in outdoor education, and discussions with outdoor educators, the author is convinced that there is a distinction to be made between outdoor education and environmental education - that, in spite of the overlapping of topics, there is a difference between the two.

The literature has revealed an ever-expanding concept of outdoor education so that today simpler, more general definitions are associated with it than was true in earlier days. The author has discovered none better than the following modification of the original definition of L.B. Sharp. Outdoor education is teaching in the outdoors those things which are best taught outdoors while leaving indoors those things best taught there. This same meaning, if not the exact words, is present in the writings of several outdoor educators. This definition reflects the expanded interpretation of outdoor education to be found in most contemporary literature.

This definition restricts outdoor education to the out-of-doors but does not limit what should there be taught. In this respect, such concerns as conservation education, outdoor recreation education, nature study, school camping and urban study, among

others, are part of outdoor education. As was noted earlier, there might be classroom preparatory and follow-up sessions, but there must be related experiences in the out-of-doors for effective learning.

If outdoor education is concerned with what can be learned in the outdoors, environmental education should be concerned with those aspects of the environment which can best be learned totally indoors. Topics such as population, energy and food, among others, with their attendant problems in politics and economics are natural components of environmental education as they do not require any study out-of-doors. The definition accepted earlier might better read: outdoor education is teaching in the outdoors those things which are best taught out-doors while leaving indoors for environmental education those aspects of the environment best taught there.

Outdoor Education Commonalities

In the first part of this chapter, a review of the literature was presented to indicate the complexity of the term outdoor education, the difficulty of arriving at a meaning acceptable to most outdoor educators and the pattern which has developed through the years toward a broader, more encompassing interpretation of the term. From the many definitions reviewed, and from his own personal experiences, the author was able to accept this definition of outdoor education: outdoor education is

teaching in the outdoors those things which are best taught outdoors while leaving indoors those things best taught there. This is compatible with his own views and suitable for this study.

This section of the chapter will be an analysis of the literature to derive those commonalities which bind a multitude of subjects, topics, activities and/or learning experiences together as outdoor education. These commonalities will provide the basis for establishing the criteria to be used in this study.

Use of the Outdoors

The first and most obvious common element is found right in the definition: "Outdoor education is teaching in the outdoors." Outdoor education activities are conducted in the out-of-doors. Although activities such as field trips may necessitate classroom preparation and follow-up if their primary objective is learning in the outdoors, they are, therefore, part of outdoor education.

Direct Learning Experiences

Although not as obvious, other commonalities are to be found in the writings of contemporary outdoor educators. One which is deemed to be very significant, is that of firsthand experience for the learner. The following quotations by Partridge and Masters, both

recognized outdoor educators, illustrate the relationship of direct learning experiences in a camping program:

It is now known on the basis of countless experiments and the study of child concepts at various age levels that it is practically impossible to convey to a child exact or adequate meanings in many areas except by actual experience. ...The Camp program can be run in such a way as to make every hour meaningful to the child by actual experiences.⁴⁹

School camping is based on sound educational concepts. It provides direct learning. There is an opportunity for active participation in planning, executing and evaluating activities. ...At camp there are many rich opportunities for learning. Most important there is a chance to use that learning. Facts are not stores for future use alone. Day by day camp living demands action and stimulates new learning in a very real situation.⁵⁰

L. B. Sharp was one of the first to extend this concept of learning to other areas of outdoor education. In 1952, he wrote:

Good textbook material and references are valuable in helping students and teachers understand about conservation of our natural resources; but reading alone will not insure genuine understanding. In many schools throughout the country, groups are learning through actual experience about protection of the soil ...studying planting and harvesting of crops and what is meant by contour farming.⁵¹

Reynold Carlson, another authority on outdoor education, had expressed a similar idea five years earlier:

Firsthand experiences in the out-of-doors can do much to vitalize and enrich the present school program. ...We enjoy the thrill of discovering things for ourselves. It is

better for the teacher to encourage discoveries by the students themselves than to give them too much information.⁵²

In outlining the principles of the conservation education program at Ann Arbor, Michigan, William Stapp, who is recognized as an expert in the field, wrote:

The program is handled in such a manner that the learner plays an active role in the learning process. The learner develops attitudes through personal experiences and thinking and not through the presentation of predigested conclusions.⁵³

In 1966, Paul Blackwood, of the staff of the United States Office of Education, wrote an article for the Journal of Outdoor Education entitled "Outdoor Education and the Discovery Approach to Learning." The article is an exposition of this approach to learning. Blackwood concluded his article with this observation:

The great value of the discovery approach, then, is that pupils have real experience in using the methods of scientists. The ideas gained about their environment will have more meaning when pupils have learned them through direct observation based on investigations of their own. But equally important, the ability to use the methods of discovery will remain as a powerful tool for further learning long after specific facts have been forgotten.⁵⁴

A similar article was written by Matthew Brennan for Science and Children. Entitled, "The Conceptual Field Trip," it also advocates the use of direct learning as opposed to vicarious experiences.

This type of field trip means a new role for the teacher - but it is an enjoyable one. All he has to do is direct his students to new experiences and help them explore unknown environments. Let them develop their own concepts of environment. Then every new experience they have in the environment in the future will reinforce their concept or cause it to be modified.⁵⁵

Although the title of the following article differs slightly from the one just mentioned, the message is the same. "Environmental Field Trips: The Broader Context," written by Rodney Allen, a high school biology teacher, appeared in The American Biology Teacher.

Learning someone else's conclusions and concepts as reality, when taken alone, may be destructive in very subtle ways. Such learning is narrowing. ...Successful environmental education should include various systems of making meaning and living life.⁵⁶

Authors of outdoor education texts have included direct learning as an essential ingredient of outdoor experiences. The following quotations are representative of this group.

The purpose of outdoor education is to enrich, vitalize and complement content areas of the school curriculum by means of first-hand observation and direct experience outside the classroom.⁵⁷

It has been demonstrated that learning through direct experience - by actually using nature's materials instead of merely studying about them in books - speeds the learning process, lengthens retention, and, as a result, leads to greater appreciation and understanding.⁵⁸

Basically, the challenge facing elementary and junior high school teachers is to make the learning as meaningful and as close to firsthand experience as possible. ...Children must become involved with their own learning at the level where they do; where they handle, experience, operate, feel, smell, hear. ...Many firsthand experiences are needed to make verbal learning meaningful and real.⁵⁹

Outdoor education is based on an assumption that many things about the material environment are learned best in direct contact with that environment. Such learning makes the deepest impact and endures the longest.⁶⁰

It provides an opportunity for direct teaching involving a full sensory rather than abstract approach to subject matter. Children use their eyes, ears, nose and muscles in the outdoors and learn through the process.⁶¹

Because they involve learning by observing, thinking, and doing, school ground field trips can bridge the reading and language barriers in situations where these are hurdles to learning.⁶²

The people who hold the pursestrings and set educational policy are realizing that we do learn best by firsthand experiences. To learn by doing is educationally sound; and going outdoors provides the ideal setting where these objectives can be achieved.⁶³

All of these quotations emphasize the necessity of "learning by doing" in the out-of-doors. Firsthand experiences must be part of outdoor education.

Curriculum Extension, Enrichment and Integration

Outdoor educators are very emphatic that outdoor education, while extending and enriching the school curriculum, does not do so by becoming another

addition to that curriculum. It is perceived as being interdisciplinary, multidisciplinary and an integrating force within the curriculum. Sources already identified (Gabrielsen, Holtzer, Brehm, Mand and Russell) support this concept. These are quotations from outdoor educators who also support this idea.

Outdoor education forces the issue of integration in the curriculum, to study and experience things in their total relationships - one thing to another. ...The experience of living in the out-of-doors together as a regular part of the school program is not a fad, frill or extra. Indeed, it is a must for the modern school.⁶⁴

Furthermore, the learning is nonsegmental just as life itself is nonsegmental. There is a natural correlation of subject matter fields. For the scientific at camp cannot be divorced from the social, the verbal or the quantitative. It is all of a piece.⁶⁵

This extension of the classroom is designed to provide an environment for the development of concepts through direct experience, and for the application of skills learned in school. Arithmetic, science, language arts, social studies and fine arts are all centered around a core problem.⁶⁶

...outdoor education should be an integral part of the curriculum. Likewise, outdoor learning activities should be closely related to the ongoing, indoor instructional program of the schools. ...Outdoor education should complement the ongoing instructional program of the school.⁶⁷

Extending the classroom to the natural environment, from time to time, can provide a methodological pipeline for enriching "in-school" curriculum contents with "outdoor school" concrete experience.⁶⁸

The outdoor experience should extend and reinforce the classroom experience. In other words there must be careful planning to ensure relationship between the indoor and the outdoor program.

The outdoor program should be planned to include the kinds of activities that cannot be done equally well indoors.⁶⁹

It is interdisciplinary in its approach and cuts across all curriculum areas. It should not be considered a separate subject, department or curriculum area. The philosophy, techniques, skills, and program content relate to learning which takes place in the out-of-doors, and which is designed to become an integral part of each subject matter area and education as a whole.⁷⁰

... outdoor education is not a discipline; it claims no subject matter. (Incidentally, it also wishes not to be claimed by any single one.) Outdoor education is place, attitude, method; it is not subject. Outdoor education is no more conservation/environmental education exclusively than it is art, music, nature study, language arts, social studies or even science. We believe that our "art" has benefits for all.⁷¹

Outdoor education should not become a limited curricular item at any one maturity level, but should, in appropriate form, permeate the entire curriculum of the public schools at all levels. ...The proposed areas of experience designated in the school curriculum for each grade level should be carefully analyzed to see what activities, experience, and concepts can be incorporated into this curriculum content so that outdoor education and the scientific methods of observation, experimentation and problem-solving may permeate the educational program at all levels.⁷²

Outdoor education has been defined as the utilization of the out-of-doors to facilitate and enrich learning related to the school curriculum. This interpretation implies that outdoor education in the schools is an integral part of the curriculum that involves an extension of the classroom to an outdoor laboratory beyond the school building.⁷³

Every classroom has its potential extensions into the community in search of people, places and events that constitute community resources: resources for learning. ...Your community can be a vital place for students and their teachers to learn; where abstractions from textbooks become reality; where words and pictures in books come to life; where learners can interact with the real and observable events of the community... .⁷⁴

Outdoor education has become a development in curriculum - an emphasis in education - designed to both enrich and extend the program of school and agencies.⁷⁵

The preceding quotations identify outdoor education as being a unifying curriculum agent while helping to extend and enrich the school program.

Individual and Social Growth and Development

Thus far the analysis of the literature has been restricted to those aspects of outdoor education related to curriculum methodology and content. The literature has revealed that outdoor education has a significant contribution to make to learning in schools by extending and enriching the classroom curriculum and by requiring firsthand experiences on the part of learners in the out-of-doors.

As valuable as these contributions are to the cognitive development of students, they cannot overshadow the unique contributions which the outdoors makes in the affective and social development of individuals. It is in these areas that outdoor education often has

the greatest influence on young people.

The impact of the resident school camp, with its built-in mechanisms for promoting these desired goals, is expounded in the following quotations. In an article written to show how camping is perceived by modern educators, Kilpatrick noted:

While preserving proper restraints, the camp can and does, almost inevitably, give young people the chance to live together on terms that normally make for the desired emotional security and maturity. In camp each youth has the chance to live as a personality among his peers, with a minimum of adult domination. ...The camp is free to be a place of real living and therefore a real educational institution as most schools are not. The camp can sincerely build itself on living, on honest worthy living, and nothing else.⁷⁶

Pike, in writing about the Long Beach School Camp, stated that their program emphasized the interpersonal relations needed for co-operative living.

The entire camp program is developed around the democratic processes of group discussion, planning, individual participation and sharing of responsibilities. It is assumed that the best way to teach co-operation, understanding, and respect for the rights and personalities of others is to be thrown into a situation where those qualities pay a premium in harmony and enjoyment. The camp situation is ideal for learning to get along well with others.⁷⁷

In an article entitled, "Values of School Camping," Hugh Masters wrote about the contributions of a camping experience in realistic life-like situations to the development of a student's appreciation for the rights of others.

In the area of social living, the school camp offers unexcelled opportunities for the camper to assume some responsibility for the operation and control of the camp. Without realizing it, he acquires desirable attitudes toward public and private property. The community problems that arise in a normal and natural way in a school camp promote constructive attitudes toward cooperative action.⁷⁸

Marion Sack expressed similar ideas in her article about the camping programs of the Wayne Grammar School, Pennsylvania.

The camping experience is always a fruitful place to study human relations. The children are together during the entire twenty-four hours of the day. The teacher sees them in work and play combinations and group situations that would never occur any place except at camp. ...Nothing else in the usual school program - not committee work, nor club groups, nor even square dancing - permits such disclosures of group structure and the individual's relation to it.⁷⁹

Such values in human relations are given the highest priority as objectives for some school camp programs as evidenced by this article by Gerald De Fries about his Aspen, Colorado, Middle School program.

The primary objective of our program is to develop a respect for human dignity. Through close personal experiences, under outdoor conditions, the students learn to live and understand each other and themselves better. We try to develop within our students the ability to get along with each other and their adults.⁸⁰

The values of individual dignity and respect for others which have thus far been limited to the outdoor residential school setting are looked upon by the

following educators as being significant in other outdoor education experiences as well. In their article in the Illinois Journal of Education, Wheeler and Hammerman stated:

Teachers and pupils who establish general and specific objectives, and plan procedures and evaluate measures associated with utilizing the outdoor setting for instruction, find that this experience affords a rich assortment of opportunities for arriving at decisions through group deliberation and consensus which is the backbone process of political democracy. ...

The outdoor environment provides countless opportunities for learning experiences designed to help elicit a strong appreciation for good human relations. Good human relations involve the development of understandings of one's self and consideration of other human beings.⁸¹

Charles Mortensen, in his article, "More Than A Forest," indicates the factual knowledge learned about the forest is of secondary importance to the attitudes and skills acquired while studying it. He wrote:

Last, but by no means least, the Madison School Forest provides a place for all to live, play, and learn together. Perhaps today, with our often super-fast life, the crowded cities with their inherent tensions, and the widening gap between material affluence and poverty, we need this experience more than ever. A setting which places all in similar living surroundings with a successful experience resting on near total participation is, of itself, useful and rewarding.⁸²

Problem-Solving

Problem-solving is often incorporated as a natural part of the "living" experience of outdoor

education while at other times it is considered to be a teaching strategy which analyzes real problems in context. Those references which have already been identified as viewing the camping experience as a vital living experience for youth (Roossinck, Kilpatrick, Pike, Masters, Sack), also view problems as something which must be solved as a consequence of group endeavours.

Others already cited (Stapp, Blackwood, De Fries, Wheeler and Hammerman), would classify problem-solving as a deliberate strategy employed by teachers to promote learning and understanding. There are other educators who also see problem-solving as a specific teaching technique appropos to outdoor education.

John Brainerd emphasized problem-solving when he wrote:

Practical playground problems will incite some to take a career-interest in the problems of environmental modification by Man, an animal too often considering himself master of nature. ... Use of schoolgrounds for environmental studies also can help many more students become wise followers.⁸³

The same approach is advocated by Donaldson and Donaldson in their article, "Outdoor Education: Its Promising Future."

If outdoor education has a secret, it must be the demonstrated fact that active learners who experience real problems in context are impelled to do something about the problems.⁸⁴

In an article appearing in The Education Digest, teacher Bob Gillette says of his program, "Operation Turn On,"

The main concept is allowing students to confront reality and problems head on, to make mistakes, and to learn from them. We don't shelter them at all. If they mess up planning for a trip or carrying out their responsibilities, they are reprimanded by the rest of the group.⁸⁵

Leisure Skills

Many educators, witnessing the increasing amount of leisure time becoming available to adults, have advocated an expansion and strengthening of this part of the school curriculum so as to provide a basis for constructive lifetime hobbies and pursuits. They are finding that outdoor education has long been in the forefront in promoting life-time leisure skills. Authors' works already reviewed, (Carlson, Gabrielson and Holtzer, Brehm, Mand, Wheeler and Hammerman, Heffernan, Brainerd), all stressed this component of outdoor education and the following quotes reiterate its importance.

Another role expectation of physical education in an outdoor education program is its contribution to education for leisure. This can be accomplished incidentally or purposefully. The former assumes that if an individual enjoys a required activity enough to engage in it during his own free time, then it becomes a leisure activity. Leisure time activities to be found in an outdoor education setting are the kinds that may last for a lifetime.⁸⁶

A second phase of a good outdoor education program is the development of the skills, knowledge, and sensitivity which

make outdoor experience satisfying. ... Skills in outdoor activity must be learned, but it is of utmost importance that they be learned pleasantly. To help students learn the necessary skills without killing interest, or better, to learn them well and yet in such a way that each difficult learning contributes to the joy of whole achievement; such is a secret of great teaching at any level.⁸⁷

Leisure and leisure-time recreational activity is no longer a luxury. Relaxation through recreation is essential to compensate for the wear and tear on a person's physical and mental strength. People, too, are an important resource, and outdoor recreation can contribute much to their happiness, mental improvement and physical well-being.⁸⁸

Leisure enrichment through increased understanding of man's relation to nature has long motivated the (Municipal Recreation) Division's staff to include farming appreciation in its outdoor education goals. ...Time spent at the farm provides opportunity for participation in planting, doing the chores, and enjoying a picnic or fishing at the farm pond, a romp in the haystack, and an old-fashioned hayride.⁸⁹

Concepts, Objectives and Goals Not Previously Identified

The study of Rogers contains twenty-one objectives for outdoor education of which only the following are construed by this author to be different from those already identified in this study yet which are common elements in outdoor education:

2. To provide experiences shared in common by pupils and teachers to serve as a basis for mutual understanding and rapport between pupils and teachers.
6. To develop health knowledge and habits of safety and health protection.
9. To develop a practicable understanding of economics.

18. To promote spiritual development.
21. To provide a program in which school-community co-operation is inherent and essential to success.⁹⁰

In the study done by Lewis, seventeen concepts of outdoor education are enumerated. This author considers the following to be outside the range of those described earlier in this chapter but which do contain common threads in outdoor education.

Concept 5

Through outdoor education, learning becomes a mutual process and experience for both pupils and teachers.

Concept 10

Outdoor education provides a setting that can make teaching more creative; several teaching methods and processes can be planned, executed, and evaluated in a relatively short time.

Concept 11

Outdoor education provides for total community planning and the use of resources and leadership found therein.

Concept 17

Of importance to the growth and development of outdoor education is the proper orientation and training of teachers and administrators to the techniques of outdoor education.⁹¹

Fitzpatrick's study lists nine highly significant goals of outdoor education. Of these, the following goals have not been previously recognized but are ones which help to provide unity of purpose to outdoor education.

Goal 7 -- To help the individual become more civic-minded through the utilization of resources within the community, state, nation, and world.

Goal 8 -- To contribute to the vocational efficiency of the individual by providing purposeful work experiences beyond the classroom.

Goal 9 -- To permit an atmosphere conducive to the aesthetic development of the individual.⁹²

In the sources used to develop the commonalities in outdoor education, the name of one prominent educator is missing. The omission has been deliberate for it is the opinion of the author that outdoor education is bound together not only by common concepts, values and objectives but more so by people. In this respect, Dr. Julian W. Smith was truly a leader. In his capacity as editor of the Outdoor Education Project newsletter, his vision, perception and ideas spanned more than two decades and had a profound influence on the development of outdoor education in the United States and Canada.

The chronologically-sequenced quotations which follow are from his editorial column, "As We See It," which appeared in each issue of the newsletter. Not every newsletter has been used, for almost every editorial written by Dr. Smith contains some statement about the meaning of outdoor education and many were used to reinforce previously-stated positions. From an original list of thirty-seven newsletters containing

his thoughts about outdoor education, the author reduced it to the following twenty.

The outdoors is a laboratory -- a climate for learning. ...Outdoor Education is more conducive to direct experience and lends itself to a maximum amount of co-operative planning. ...

Considering the cardinal objectives of education, many activities in camping and Outdoor Education are pertinent to a command of the fundamental processes, citizenship, health, worthy use of leisure time, vacations, human relationships, economic efficiency, and civic responsibility are readily discernible in good outdoor programs.⁹³

There is little doubt that the quality of the outdoor experiences would have been much richer if those participating had had some educational experiences that developed greater skills, appreciations and attitudes for an intelligent use of the out-of-doors. There would have been better camping, more care of property and concern for natural resources, and fewer accidents if there had been more outdoor education.⁹⁴

Like the outdoors, itself, outdoor education is an adventure experimental in nature and not circumscribed by tradition. The activities that can take place outdoors are varied and whether labelled "educational" or "recreational," can fulfill individual needs and desires.⁹⁵

...outdoor education activities are designed to accomplish the objectives of education that can be achieved best in an outdoor setting. These activities are part of general education and are integral parts of a curriculum that serves modern day needs of children, youth, and adults. Using the outdoors as a laboratory, many school subjects are enriched and enhanced -- learning is adventuresome, direct and real.⁹⁶

Outdoor Education, as we conceive it, is education in and for the outdoors. The first part of this definition relates to the use of Nature's laboratory through the media of parks, camps, forests, farms and gardens, museums and other outdoor settings. All of these patterns may be a part of elementary classroom experiences or a variety of high school and college subjects and activities.

Education for the outdoors includes the opportunities and attitudes necessary for maximum participation in outdoor pursuit.⁹⁷

In days of stress and complex living, outdoor education, in the broadest sense, offers relaxation and simplicity.⁹⁸

What constitutes a good program in outdoor education in grades kindergarten to twelve? ...One answer often given is -- "By using all the available outdoor interests and resources in the community in the appropriate areas of the school curriculum."⁹⁹

Education in and for the outdoors is essentially a development in curriculum and has implications for learnings in science, conservation, social studies, physical education, recreation and other subjects and activities.¹⁰⁰

The use of the outdoors for effective learning and for good living is generally accepted as the function and substance of outdoor education. As applied to schools and colleges, it is interdisciplinary and interdepartmental in nature. Many have hoped that outdoor education would not in any way be regarded as another "kind" of education or become separated from subject matter areas and other curriculum activities.¹⁰¹

The task of educating increasing millions of children, youth, and adults to love, appreciate, understand and wisely use the out-of-doors and all of its resources is a stupendous one. ...For schools, who reach literally all of our people in some stage of their life, more emphasis needs to be placed on outdoor learning experiences which will deepen the perceptive powers of the learners concerning the natural environment.¹⁰²

There are always new and fascinating learning opportunities in the outdoors and thus outdoor education should never become sterile and boring.¹⁰³

Outdoor education is the individual's means, wherever he can find them, of attaining a mature personal ethic by regaining direct involvement with the natural world based on enjoyment and respect and reverence.¹⁰⁴

... each activity and each program should be designed to meet the needs of the classroom or group involved. ... outdoor education is an extension of the community's educational system -- means to improve and enrich the learning opportunities through the outdoors. If this be true, outdoor education is a part of the "warp and weft" of the curriculum and not an appendage or separate entity. The same principles followed in the conduct of modern education systems apply to outdoor education -- administration and supervision, health services, instructional practices, personnel, transportation, evaluation and others.¹⁰⁵

Its value and major contribution is due to the fact that outdoor education is consistent with what is known about the nature of learning and thus is simply good education.¹⁰⁶

The next four quotations reveal what he thought about the role of outdoor education when the quality of the environment became public issue:

An emphasis on problems relating to the natural environment in all of the appropriate learning activities is the best way to create an awareness of the problems and to affect behavior in their solutions.

Outdoor education is a natural and effective approach to direct learning and problem solving through the use of the outdoor laboratory. ...Outdoor education as a part of an experiential curriculum can contribute to two of today's greatest needs -- learning to live in harmony with mankind as well as in harmony with the physical universe.¹⁰⁷

It should be at least reassuring to leaders in outdoor education that their programs were designed and developed to help achieve many broad educational objectives, including a good environment -- most of them long before the advent of the current term, "environmental education." ...Furthermore, one of the outdoor education's unique contributions is in the affective domain of education, which helps change attitudes and behavior in doing something about the improvement of the outdoor environment.¹⁰⁸

Learning in the affective and psychomotor domains, supported by the cognitive, is essential in improving the quality of living. The order of priority is - first, human beings, and second, a better environment, part of which is the physical world. This is and has been the ultimate mission of outdoor education.¹⁰⁹

The environmental and energy crises are giving outdoor education a greater mission and are providing countless "teachable moments." Equipped with knowledge, skills and appreciations, this and succeeding generations can find much challenge, adventure, health, and pleasure in less wasteful and sophisticated modes of living, much of it related to the outdoors.¹¹⁰

His second to last editorial provided, in capsule form, the growth and development of outdoor education:

Beginning with "nature" and science oriented forays outside classroom walls, there has been a series of emphases of developments to achieve educational objectives which, over several decades, have made outdoor education an innovative force in improving and extending the learning experiences in the educational continuum.

Among the broadening of concepts and of the scope of outdoor education over a period of years, the following can be observed: direct learning experiences through field trips, often science related; resident outdoor education with implications for many learning areas and activities; teaching for

environmental quality; outdoor adventure programs; the development of social and interpersonal relationships; and the application of social studies through pioneer living and the bonds with the land.¹¹¹

The last editorial penned by Julian Smith not only provides, in succinct terms, his concept of outdoor education, but is also a fitting epitaph to his role as an outstanding educator.

The symbol of a summit or mountain top experience for gaining perspectives and for viewing frontiers has special meaning for outdoor education - for, from the land we came and on the land we live. The focus of outdoor education is on the improvement of living for human beings through the wise and maximum use of the outdoor resources, which constitute the physical foundation for living.

Outdoor education needs its summits - where leaders may identify its past and current strengths and contributions - and to look ahead to things to come. Now is a strategic time to provide "summits" for present and future leaders at all levels - local, state and national. They might be in the form of special conferences, workshops, retreats and idea sessions.¹¹²

To these "summits" the author would add one more - educational leaders with vision and dedication - such as Dr. Julian W. Smith.

Research Related to Outdoor Education Programs

There is no research related specifically to evaluating the total outdoor education program within a school district. In Research in Outdoor Education,¹¹³ eighty studies identified some aspect of outdoor education programs in grades K-12. Of these, fifty-two

were about school camps or camping.

The first part of the title of Mabel Pulliam's study - "An Analysis of Selected Outdoor Education Programs...",¹¹⁴ suggested that it would be relevant for this research. However, upon examination, it was found to deal with the curriculum of resident outdoor education schools. Pulliam advocated a curriculum based upon subject content in science, social studies, language arts, and outdoor skills. She suggested particular activities for each area.¹¹⁵

Helen Grilley developed an instrument for evaluating resident outdoor education school programs. It contained seven sections, one of which dealt with curriculum. Her course of study for resident schools was very similar to that of Pulliam. Grilley proposed a curriculum based upon arithmetic, language arts, social studies, health safety and physical activities, art, music and science.¹¹⁶

The other eighteen studies in Research in Outdoor Education which dealt with curriculum, were concerned with a specific subject within a program. Such subjects as conservation, arithmetic, social studies and biology were the focus of those investigations.

Summary

None of the studies done to this date duplicates the type of evaluative criteria which the

author wished to establish. Outdoor education, as portrayed in the literature, is a multi-disciplinary, non-graded, integrating force within the school curriculum for all grades from kindergarten through high school and college. Its values have been lauded by many educators and its contribution to the development of students has been solidified and expanded by a quarter century of curriculum development.

The author set out to determine those criteria which would encompass all of the many and varied components of outdoor education and reflect the significant contribution which it makes to individual growth and development. From the books and articles reviewed, and from his own personal experience in outdoor education, the author designed three criteria for determining the comprehensiveness of a school district's outdoor education program. These three criteria reflect what this author considers to be the three basic principles of outdoor education. First, outdoor education is not a separate discipline, but, rather, is an integral part of existing curriculum components. Second, it consists of first-hand experiences. Third, outdoor education has unique contributions to make to the growth and development of individual students.

The first two principles provided the basis for the first two criteria - that of extending and enriching

already existing classroom curricula to the out-of-doors. From the third principle, the author established the third criteria of outdoor education creating new curriculum dimensions. This is because outdoor education can provide experiences not usually associated with traditional curriculum disciplines but which can aid immeasurably in personal growth and development.

The criteria are few in number for ready and easy use by school administrators with little or no background in outdoor education; they are general enough to include all goals and objectives of outdoor education; and they measure the comprehensiveness of a total ongoing outdoor education program carried out within a school district by classroom teachers with assistance, where possible, or by outdoor education consultants or by the staff of a residential school.

The three criteria are:

- 1) An outdoor education program should extend the classroom curriculum.
- 2) An outdoor education program should enrich the classroom curriculum.
- 3) An outdoor education program should create new curriculum dimensions.

A more detailed explanation of these criteria is provided in chapter III.

FOOTNOTES: CHAPTER II

¹Lloyd B. Sharp, "The Role of Camping and Out American Heritage," Camping Magazine, March 1943, pp. 6-8.

²Lloyd B. Sharp, "What is Outdoor Education?" School Executive 71 (August 1952): 21-22.

³Lloyd B. Sharp, Introduction to Outdoor Education for American Youth (Washington: American Association for Health, Physical Education, Recreation, 1957), quoted in Julian Smith et al., Outdoor Education 2d ed. (Englewood Cliffs: Prentice-Hall, 1972), p.22.

⁴Julian W. Smith, editorial, Outdoor Education 4 (August 1957): 1.

⁵Ibid., p.2.

⁶Ibid.

⁷Julian Smith et al, Outdoor Education, 2d ed. (Englewood Cliffs: Prentice-Hall, 1972), p.20.

⁸Ibid.

⁹Smith, editorial, Outdoor Education 9 (Fall 1963): 1.

¹⁰Smith, editorial, Outdoor Education 12 (Spring 1967): 1.

¹¹George W. Donaldson and Louise E. Donaldson "Outdoor Education-A Definition," Journal of Health, Physical Education, Recreation 29 (May 1958):17.

¹²Ibid.

¹³Wallace Wheeler and Donald Hammerman, "What is the Education Potential in the Outdoor Setting?" Illinois Journal of Education 55 (December 1965):2.

¹⁴Ibid.

¹⁵Donald R. Hammerman and William M. Hammerman, Teaching in the Outdoors (Minneapolis: Burgess, 1964), p.8.

¹⁶John Hug and Phyllis Wilson, Curriculum Enrichment Outdoors (New York:Harper & Row, 1965), p.1.

¹⁷Charles L. Mand, Outdoor Education (Columbus: Charles E. Merrill, 1967), p.vi.

¹⁸Martin Rogers, "Principles and Functions of Outdoor Education," (Ed.D. dissertation, Syracuse University, 1955), p.39.

¹⁹Charles Lewis, "Factors Influencing the Development of Outdoor Education," (Ph.D. dissertation, New York University, 1968), p.250.

²⁰Thomas J. Rillo, "The Role of Physical Education in Outdoor Education Programs," Journal of Outdoor Education 4 (Winter 1970): 13.

²¹Charles A. Blackman, "Perspectives: A Curriculum Specialist Looks at Outdoor Education," article prepared for Journal of Outdoor Education (January 1969).

²²Ibid.

²³Ibid.

²⁴Clinton N. Fitzpatrick, "Philosophy and Goals for Outdoor Education," (Ed.D. dissertation, Colorado State College, 1968), p.49.

²⁵Ibid.

²⁶Sandra Ann Modisett, "A Pattern of Curricular Experiences in Outdoor Education," (Ed.D. dissertation, University of Northern Colorado. 1971), p.7.

²⁷Helen E. Grilley, "Development of an Instrument for Evaluating Outdoor Education Laboratory School Programs," (Ed.D. dissertation, Colorado State College. 1966), p.4.

²⁸Morris Wiener, "Developing a Rationale for Outdoor Education," (Ed.D. dissertation, Michigan State University. 1965), p.265.

²⁹Reynold E. Carlson, Foreword to Outdoor Education, A Book of Readings, 2d ed. Donald R. Hammerman and William M. Hammerman eds. (Minneapolis: Burgess, 1973), pp.VII-VIII.

³⁰Helen Heffernan, "They Grow Nine Feet Tall," Childhood Education 44 (October 1967):74-78.

³¹Emanuele Corso, "Outdoor Education's Challenge: Don't 'Play It Again Sam,'" Journal of Outdoor Education 5 (Spring 1971):4-5.

³²Paul Nowak, "Education In and About Our Environment," Outdoor Teacher 7 (October 1970):3.

³³George Donaldson, "Come On, You Guys!!!," Journal of Outdoor Education 4 (Winter 1970):12.

³⁴Julian W. Smith, editorial, Outdoor Education 19 (Winter/Spring 1974, 75):1.

³⁵Earl C. Kelley, "Reasons for Outdoor Education," in Perspectives on Outdoor Education-Readings, eds. George W. Donaldson and Oswald Goering (Dubuque: Wm. C. Brown, 1972), p.3.

³⁶B. Ray Horn, "Report on Research - A Factor Analysis of Attitudes Toward the Term 'Outdoor Education,'" Journal of Education 4 (Fall 1969):15-17.

³⁷Ibid.

³⁸Ibid.

³⁹Environmental Education Act. Statutes at Large, vol. 84 Part 1 sec. 3, (a) (2) (1970).

⁴⁰Ibid.

⁴¹Marshall Parks, "A Description and Evaluation of an Environmental Science Education Workshop for K-12

Teachers," School Science and Mathematics 71 (December 1971): 775-777.

⁴²George Rhen, "Case History of an Environmental Program," School Management 15 (April 1971):22.

⁴³Ibid.

⁴⁴Robert Roth, "Science Environmental Studies," Instructor 82 (October 1973):69.

⁴⁵Sophie Welisch, "Environmental Ecological Education," Educational Forum 38 (January 1974):153.

⁴⁶Ibid., p.154.

⁴⁷Ibid., p.155.

⁴⁸Claude Crowley, "Motorsickles Did It," Teacher 92 (May 1955):84.

⁴⁹E. De Alton Partridge, "Some Psychological Backgrounds of Camping," Camping Magazine, March 1943 pp.6-8.

⁵⁰Hugh B. Masters, "Values of School Camping," Journal of Health, Physical Education, Recreation 22 (January 1951):14-15.

⁵¹Sharp, "What is Outdoor Education?" pp.21-22.

⁵²Reynold E. Carlson, "Enriching the School Curriculum by Using the Immediate Environment," Bulletin of the National Association of Secondary School Principals 31 (May 1947):83-86.

⁵³William B. Stapp, "Integrating Conservation Education into the Existing Curriculum of the Ann Arbor Public School System (K-12)," Science Education 48 (December 1964):419-424.

⁵⁴Paul E. Blackwood, "Outdoor Education and the Discovery Approach to Learning," Journal of Outdoor Education 1 (Fall 1966):6-8.

⁵⁵Matthew J. Brennan, "The Conceptual Field Trip," Science and Children 7 (March 1970):34-35.

⁵⁶Rodney F. Allen, "Environmental Field Trips: The Broader Contest," American Biology Teacher 37 (February 1975):98.

⁵⁷Hammerman and Hammerman, Teaching Outdoors, p.1.

⁵⁸M. Alexander Gabrielsen and Charles Holtzer, The Role of Outdoor Education (New York: Center for Applied Research in Education, 1965), p.2.

⁵⁹Shirley A. Brehm, A Teacher's Handbook for Study Outside the Classroom (Columbus: Charles E. Merrill, 1969), pp.2,4.

⁶⁰Smith et al., Outdoor Education, p.4.

⁶¹Charles L. Mand, Outdoor Education (Columbus: Charles E. Merrill, 1967), p.VI.

⁶²Helen Ross Russell, Ten-Minute Field Trips (Chicago: J. G. Ferguson, 1973) p.5.

⁶³E. Eugene Leyh, "Look-See-Experience," Science and Children 12 (October 1974):27.

⁶⁴Lloyd B. Sharp, "What is Outdoor Education?" pp.19-22.

⁶⁵Jerry Beker, "Extending Science Education Through Elementary School Camping," Science Education 44 (March 1960):138-42.

⁶⁶Esther P. Roossinck, "Arithmetic in the School Camp," Arithmetic Teacher 7 (January 1960):22-25.

⁶⁷Donald R. Hammerman, "A Case for Outdoor Education," Clearing House 38 (September 1963): 54-6.

⁶⁸Wheeler and Hammerman, "Education Potential in Outdoor Setting?" p.4.

⁶⁹Glenn O. Blough, "Science and Outdoor Education of 'Nobody Can Really Know How I Feel'," Journal of Outdoor Education Pilot Issue (Spring 1966):9.

⁷⁰Rillo, "Physical Education in Outdoor Education," p.14.

⁷¹George W. Donaldson, "Come on, You Guys!!!" Journal of Outdoor Education 4 (Winter 1970):12.

⁷²Heffernan, "Nine Feet Tall," pp.74-78.

⁷³Donald R. Hammerman and William M. Hammerman, eds., Outdoor Education, A Book of Readings, 2d ed., (Minneapolis: Burgess 1973), p.113.

⁷⁴Mary Hurlbut Cordior, "The Community: An Extension of the Classroom," Science and Children 10 (May 1973):28-29.

⁷⁵Fred Schuette, "Outdoor Education," Michigan Earth Scientist 12 (Winter 1976):5.

⁷⁶W. H. Kilpatrick, "The Role of Camping in Education Today," Camping Magazine, February 1942, pp. 14-17.

⁷⁷Kenneth V. Pike, "The Long Beach Public School Camp," National Elementary School Principal 28 (February 1949):24-28.

⁷⁸Hugh B. Masters, "Values of School Camping," Journal of Health, Physical Education, Recreation 22 (January 1951): 14-15.

⁷⁹Marion J. Sack, "School Camping - A Potent Factor in Guidance," Education 73 (April 1953):502.

⁸⁰Gerald De Fries, "Will I Ever Catch Another Butterfly?" Journal of Health, Physical Education, Recreation 41 (November-December 1970):41.

⁸¹Wheeler and Hammerman, "Education Potential In Outdoor Setting?" pp.2-4.

⁸²Charles O. Mortenson, "More Than a Forest," Science Teacher 37 (April 1970):69-71.

⁸³John W. Brainerd, "Schoolgrounds for Teaching Man's Relationship to Nature," School Science and Mathematics 64 (May 1964):28-34.

⁸⁴George W. Donaldson and Alan D. Donaldson, "Outdoor Education: Its Promising Future," Journal of Health, Physical Education, Recreation 43 (April 1972): 23-28.

⁸⁵_____, "The Hundred Thousand Dollar Teacher," Education Digest 38 (December 1972):54.

⁸⁶Rillo, "Physical Education in Outdoor Education," p.16.

⁸⁷Earl V. Pullias, "Woods, Streams, and Unobstructed Sky," A Search for Understanding, (Dubuque: Wm. C. Brown, 1965), p.108.

⁸⁸Arnold O. Haugen, "Conservation of Outdoor Resources for Education," Journal of Outdoor Education, quoted in George W. Donaldson and Oswald Goering, eds., Perspectives on Outdoor Education (Dubuque: Wm. C. Brown 1972), p.150-53.

⁸⁹George T. Wilson, "Balanced Programming: Diversity in a City," Leisure Today: Selected Readings (Washington: American Alliance for Health, Physical Education, and Recreation, 1975), p.120.

⁹⁰Rogers, "Principles Outdoor Education," pp. 153-4.

⁹¹Lewis, "Outdoor Education Development," pp. 34-39.

⁹²Clinton N. Fitzpatrick, "Philosophy and Goals for Outdoor Education," (Ed.D. dissertation, Colorado State College, 1968), pp.49-50.

⁹³Julian W. Smith, editorial, Outdoor Education 2 (September 1954): 1,2.

⁹⁴Julian W. Smith, editorial, Outdoor Education
2 (January 1955): 1.

⁹⁵Julian W. Smith, editorial, Outdoor Education
3 (September 1955): 1.

⁹⁶Julian W. Smith, editorial, Outdoor Education
4 (September 1956): 1.

⁹⁷Julian W. Smith, editorial, Outdoor Education
4 (August 1957): 1.

⁹⁸Julian W. Smith, editorial, Outdoor Education
4 (January 1958): 1.

⁹⁹Julian W. Smith, editorial, Outdoor Education
5 (February 1959): 1.

¹⁰⁰Julian W. Smith, editorial, Outdoor Education
5 (Fall 1959): 1.

¹⁰¹Julian W. Smith, editorial, Outdoor Education
6 (Fall 1960): 1.

¹⁰²Julian W. Smith, editorial, Outdoor Education
9 (Fall 1963): 1.

¹⁰³Julian W. Smith, editorial, Outdoor Education
9 (Spring 1964): 11.

¹⁰⁴Julian W. Smith, editorial, Outdoor Education
12 (Fall 1966): 1.

¹⁰⁵Julian W. Smith, editorial, Outdoor Education
12 (Spring 1967): 1.

¹⁰⁶Julian W. Smith, editorial, Outdoor Education
14 (Spring 1969): 1.

¹⁰⁷Julian W. Smith, editorial, Outdoor Education
15 (Spring 1970): 11.

¹⁰⁸Julian W. Smith, editorial, Outdoor Education
16 (Winter 1971): 1.

¹⁰⁹Julian W. Smith, editorial, Outdoor Education
17 (Spring/Summer 1972): 11.

¹¹⁰Julian W. Smith, editorial, Outdoor Education
19 (Spring/Summer 1974): 11.

¹¹¹Julian W. Smith, editorial, Outdoor Education
19 (Winter/Spring 1974/75): 11.

¹¹²Julian W. Smith, editorial, Outdoor Education
19 (Summer 1975): 1.

¹¹³Donald R. Hammerman, William D. Stark, and
Malcolm D. Swan, Research in Outdoor Education (Washington:
American Association for Health, Physical Education, and
Recreation, 1973).

¹¹⁴Mabel Gertrude Pulliam, "An Analysis of
Selected Outdoor Education Programs and Recommendations
for Curriculum and In-Service Education for the Outdoor
Education Program of the Jefferson County, Colorado,
Public Schools," (Ed.D. dissertation, Colorado State
College. 1963).

¹¹⁵Ibid. pp.57-60.

¹¹⁶Grilley, "Evaluating Outdoor Education
Laboratory School Programs," pp.107-109.

CHAPTER III

PROCEDURES USED IN THIS STUDY

Introduction

The purpose of this dissertation is to develop a hypothetical construct consisting of three criteria and to survey appropriate educators to determine whether they agree that this construct forms a necessary and sufficient description of a comprehensive ongoing outdoor education program. After extensive research of the literature, it was revealed that, at the present time, no clear consensus seems to exist, regarding what constitutes a comprehensive outdoor education program. All of the program descriptions seem to be designed for either resident school camp programs or a particular segment of the school curriculum as it relates to outdoor education.

According to educators knowledgeable about outdoor education, this dimension of schooling has unique and valuable contributions to make to the growth and development of students in all grades of elementary and secondary schools. It would seem logical, then, that the formulation of a consensus position should be

developed whereby administrators and other education leaders within school districts can assess the comprehensiveness of their continuing outdoor education programs.

Validity of the Construct

The following three criteria which comprise the construct used in this study are designed to include any and all activities in a school curriculum which might be considered to be part of outdoor education.

1. An outdoor education program should extend the classroom curriculum.

The classroom is extended to the out-of-doors so that it becomes a laboratory in which individual or integrated school subjects are explored. In this sense, the outdoors provides the setting in which first-hand experiences are constructed so that the learner can apply the knowledge and/or skills acquired in the classroom. Although such experiences could be carried out within the classroom, they are not as effective as when conducted outside.

Examples:

a) Linear metric measurements can be learned more effectively when children are given the opportunity of estimating and measuring many objects, distances and heights in their school environment after having been introduced to the topic in the classroom.

b) Language arts takes on a new dimension when skills of poetry and prose writing can be practised in a natural setting outside the school.

c) Children gain inspiration for developing their creative art talents from the out-of-doors after the teacher has laid the necessary foundations in the classroom.

2. An outdoor education program should enrich the classroom curriculum.

Outdoor education can provide experiences for students in individual or integrated school subjects which cannot be duplicated within the classroom. Activities of this type ensure that the learning of particular knowledge and/or skills in school subjects will occur and that appreciations and interests will develop.

Examples:

a) Skills associated with taking population counts can best be acquired and developed where living organisms naturally occur, be it the school lawn, vacant lot, neighborhood park or some other unspoiled area.

b) The understanding of and appreciation for the intricate network and delicate balance of life that occurs within and between biotic communities can only be achieved by studying them in their natural state.

c) The mathematical precision necessary for the

drawing of accurate maps is best promoted when pupils have the opportunity of practising their skills in a variety of outdoor situations.

d) School gardens can teach, in a very practical way, the orderliness of nature, man's role in managing nature, and the benefits he derives from working in harmony with nature.

3. An outdoor education program should create new dimensions within the school curriculum.

Experiences not usually associated with traditional school subjects can be provided by outdoor education. These experiences can have a significant influence upon the affective and social development of students as well as expanding their cognitive and psychomotor domains. This type of experience does not have its origin within accepted school subjects but rather is the outgrowth of perceived needs of children within an outdoor setting.

Examples:

a) Sensory awareness activities help to develop a pupil's enjoyment of nature by heightening his seldom-used senses and making him more aware of his environment.

b) Acclimatization experiences are teaching children to perceive the environment from different points of view, which, in turn, helps to nurture within them feelings of empathy and trust.

c) Outdoor recreation experiences generally

associated with outdoor camping and living can prove very valuable in developing interpersonal relations, creating proper attitudes toward the natural environment, and producing those practical skills necessary for students to enjoy living in the out-of-doors.

Summary

1. An outdoor education program should extend the classroom curriculum.
2. An outdoor education program should enrich the classroom curriculum.
3. An outdoor education program should create new curriculum dimensions.

Each of the three criteria is designed so that it provides unique experiences in the out-of-doors which cannot be duplicated by the others. Each criterion fulfills an educational need which makes it an integral part of a well-rounded outdoor education program. Therefore, for an outdoor education program for a school district to be considered comprehensive, activities from all components must be included. It is not the purpose of this study to dictate what particular activities should be included in a complete outdoor education program. The purpose of this study is to develop satisfactory criteria for assessing such programs and to sample the opinions of expert practitioners to determine whether or not a consensus definition for a comprehensive

continuing outdoor education program can be obtained as an operational construct.

The three criteria established are broad in scope to include all facets of outdoor education, and few in number for ready and easy use by any educator, regardless of his expertise in outdoor education. By providing respondents with the opportunity of accepting all, some, or none of the criteria considered essential by the author it will be possible to support the validity of this construct. The validity of the construct will be supported if a large majority of the respondents accept all three criteria to be necessary and a very small portion of those who reply reject the entire group of criteria.

The Questionnaire

Upon completion of the survey instrument which would determine the views of expert practitioners concerning the nature of the essential characteristics for a comprehensive ongoing outdoor education program, two courses of action were open to the author. One, the instrument could be submitted to a panel of experts for their opinions. Second, it could be sent to a representative sampling of outdoor educators who function in a variety of roles and who would view outdoor education from a variety of perspectives.

The second alternative was selected as the more appropriate as it was determined that such a sample would provide a better analysis of the criteria than could be obtained from a panel of experts with their more limited perspectives.

In order to be able to identify the various positions held by outdoor educators with their possible variant attendant points-of-view, respondents were asked to identify their primary role in outdoor education in one of the following seven categories:

1. Classroom teacher (the grade taught was asked for).
2. Outdoor education residential school camp staff.
3. Nature centre staff.
4. College or university staff.
5. Outdoor education co-ordinator for a school district.
6. Administrator for a school district.
7. Other (specific position was requested).

The questionnaire was constructed so that respondents could accept or reject any or all of the criteria presented and could add any of their own which they deemed significant (see Appendix C).

Nature of the Validating Sampling

The 1975-76 mailing lists of two organizations were used as the source of prospective respondents. The

Outdoor Education Council of America (O.E.C.A.) is an affiliate of the American Alliance for Health, Physical Education, and Recreation (A.A.P.H.E.R.). Its membership list contained 840 names. Many of its members are found outside the school systems in the United States. The second list, that of the Council of Outdoor Educators of Ontario (C.O.E.O.), consisted of 384 members - most of whom are educators within school systems in Ontario, Canada.

It was anticipated that respondents from these two lists would provide a good cross-section of the opinions held by those who are involved in outdoor education in any capacity. In order to obtain an adequate random sampling of the population represented by the two mailing lists, every fourth name on each alphabetical list was selected as a prospective respondent. (See Table 2).

TABLE 2

SELECTION OF RESPONDENTS

Organization	Membership	Factor	Number of Recipients
O.E.C.A.	840	÷ 4	210
C.O.E.O.	384	÷ 4	96
Total	1,224		306

Collecting the Data

An introductory letter (Appendix A), an explanatory note outlining the purpose and format of the questionnaire (Appendix B), and a copy of the questionnaire (Appendix C) were sent to this random sampling of 306 members of the two outdoor education organizations, O.E.C.A. and C.O.E.O. A self-addressed, stamped envelope was included with the material to facilitate a prompt return of the questionnaire. After a three week interval, a second letter (Appendix D), together with another sample of the material listed above was sent to those from whom no answer had been received.

Summary

In this chapter, the procedures used to provide the data for the study have been examined. The efforts to make the study psychologically valid have been presented.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

In Chapter III, the rationale for the procedures used in this study was explained and the actual procedures employed were outlined. As well, the efforts made to achieve validity of the construct were shown.

In this chapter, the results of the study will be examined.

Response to the Questionnaire

Table 3 below shows that of 210 questionnaires sent to members of O.E.C.A., 43 were returned unanswered. Five members wrote that they had not answered the questionnaire as they felt unqualified to do so. Thirty-eight letters were returned to the author by the postal authorities because the persons to whom they had been addressed could not be reached. The 43 questionnaires which were returned unanswered were deducted from the original total, leaving 167 possible respondents in the O.E.C.A. membership. This total represents 20 percent of the total membership - a quantity well within accepted parameters of statistical validity. The total number of

members within the C.O.E.O. organization considered for this study represented 25 percent of the total membership.

TABLE 3

QUESTIONNAIRE RESPONSE

Organ- ization	No. Sent	Ret'd. (address unknown)	Ret'd. (Unqual- ified)	Possible Respond- ents	No. of Replies	Percent Rec- eived
O.E.C.A.	210	38	5	167	124	74.3%
C.O.E.O.	96	0	0	96	71	74.0%

The high percentage of returns (74.1 percent) would indicate that there is considerable interest in this topic, and it provides an excellent sampling of outdoor educators within the two organizations surveyed.

Table 4 on page 81 shows the results of the survey.

Interpretation of the Data

In comparing the results obtained from Ontario with those of the United States, it is evident that a high percentage from each group agreed that all three criteria (1, 2, 3 in Table 4) are required when assessing the comprehensiveness of a school district's outdoor education program. The percentages are 80 percent for Ontario and 81 percent for the United States.

TABLE 4
RESULTS OF SURVEY

CLASSIFICATION	CRITERIA FROM QUESTIONNAIRE ACCEPTED AS ESSENTIAL																			
	1,2,3		1 & 2		2 & 3		1 & 3		1 only		2 only		3 only		None		Totals			
	U.S.	Ont.	U.S.	Ont.	U.S.	Ont.	U.S.	Ont.	U.S.	Ont.	U.S.	Ont.	U.S.	Ont.	U.S.	Ont.	U.S.	Ont.		
Classroom Teacher	29	12	1	2	1	2		1	1	1	1		2	1	1	1	36	20		
Outdoor Education Residential School Staff	2	10			1												3	10		
Nature Centre Staff	2	1														1	2	2		
College or University Faculty	41	1	1		2		1		2		2		1	1	1	1	51	3		
School District Outdoor Education Coordinator	7	13								1							7	14		
School District Administrator	5	5	2				1	1		1			1				9	7		
Other	15	15											1				16	15		
Totals	101	57	4	2	4	2	2	2	3	3	3	0	5	2	2	3	124	71		

$$\text{The formula } Z = \frac{P_1 - P_2}{\sqrt{pq \left[\frac{1}{N_1} + \frac{1}{N_2} \right]}} \quad 1$$

is applied to determine if there is a meaningful difference between the results obtained from each sample.

Three representative cells in table 4 will be used to compare the results from each respondent group. Table 5 shows these results.

TABLE 5

Z-SCORES OF SIGNIFICANT CELLS

Table 4 Cell	Number of Respondents		Z Scores	Score of Meaningful Difference at .05 Level
	U.S.	Ont.		
1, 2, 3	101	57	.21	1.96
3 only	5	2	.43	1.96
2 only	3	0	1.09	1.96

The first cell is that wherein the respondents accepted all three criteria as being essential. For this cell which contains the greatest number of responses from each sample, Z has a value of .21 - well below that of 1.96, the point at which the differences in the responses of different groups becomes meaningful at the .05 level.

Other than the cell just identified, the largest number of respondents is found in that cell wherein only the third criterion was accepted as essential. For this cell, Z has a value of .43.

The cell containing the smallest number of respondents is that wherein the second criterion alone was accepted by the respondents as being essential. For this cell, Z has a value of 1.09.

Each of these Z values is far below that of 1.96, beyond which point differences become significant at the .05 level. All other cells listed in table 4 must also be below the range of meaningful difference as they fall between the limits of the cells just analyzed.

Since there is no statistically significant difference between the proportions of the two respondent groups (O.E.C.A., and C.O.E.O.), in any of the eight possible cells, it would seem that the North American population of outdoor educators is in substantial agreement. This observation supports the validity of the construct involving the three criteria.

The statistics also reveal that there is a high degree of support for all three criteria which the author has proposed as being collectively essential for outdoor education program assessment, even though opportunities for partial acceptance or total rejection

were provided in the questionnaire. Table 6 shows the breakdown of criteria acceptance.

TABLE 6

ACCEPTANCE OF CRITERIA

Cells	1, 2, 3	1 & 2	2 & 3	1 & 3	1 Only	2 Only	3 Only	None	Totals
Number	158	6	6	4	6	3	7	5	195
Percent -age	81.03	3.08	3.08	2.04	3.08	1.54	3.59	2.56	100%

The eight cells represent all the categories identifiable for this three-part construct. Although all eight categories contain at least a small percentage of the respondents, the greatest percentage (81.03 percent) supported the three criteria deemed essential by this author for determining the comprehensiveness of a school district's outdoor education program. This fact, combined with the small percentage (2.56 percent) which rejected all of the criteria, reinforces the validity of the construct i.e. that the original idea of all three criteria being essential, validly forms a necessary and sufficient set of criteria for this construct.

An analysis of the number of responses tabulated for each individual criterion reveals that none was considered to be more important than the others

(table 7). This would indicate that the respondents considered each criterion to be equally important for assessing outdoor education programs.

TABLE 7

ACCEPTANCE OF INDIVIDUAL CRITERIA

Criterion	Number of Respondents	Possible Total	Percent Acceptance
1	174	195	89.23
2	173	195	88.71
3	175	195	89.74

Table 8 presents a more detailed statistical analysis of the eight possible combinations of answers found in the questionnaire. This analysis also supports the validity of the construct of the survey. In table 8, the number of respondents in each cell (frequency) is compared to zero; i.e., as though no respondents had answered in that manner.

The formula $Z = \frac{P}{\sqrt{\frac{pq}{N}}}$

2

is used to determine if any cell contains a significant number of respondents.

TABLE 8
FREQUENCY OF CELLS

Cells	1, 2, 3	1 & 2	2 & 3	1 & 3	1 Only	2 Only	3 Only	None
Number of Respond -ents	158	6	6	4	6	3	7	5
Z-Score	28.93	2.58	2.58	2.10	2.58	1.67	2.76	2.50

The smallest frequency (3 for criteria 2 only) is approaching significance ($A = 1.67$) where the level of significance is 1.96 at the .05 level. All other cells contain a meaningful number of respondents. The actual number of respondents is small in every cell but one, but are, nevertheless, statistically significant. The fact that 7 of the 8 cells contain statistically meaningful numbers of respondents indicates that the survey has validated the construct. By attracting meaningful numbers to most of the cells, the differences of opinion implied by the construct are being discriminated and give further support for the validity of the construct.

Respondents were asked to identify their roles within outdoor education. Seven classifications were suggested on the questionnaire (Appendix C). Table 9

offers an analysis of the responses, by classification, of those who did not accept all three criteria as being essential to assess the comprehensiveness of an ongoing outdoor education program.

The same formula,

$$Z \sqrt{\frac{\frac{P}{pq}}{N}}$$

that was used to determine the significance of each cell in table 8, was also used to determine the significance of each classification in table 9. (See page 88 for table 9.)

There are meaningful numbers of respondents in three classifications, namely classroom teacher, university or college faculty, and school district administrator. The Z-scores for these three categories are all above 1.96 which is the level of significance at the .05 level. The fact that each of these three groups contains a small but significant proportion of respondents indicates that they do not support the three criteria. The Z-scores for the other four classifications are well below the level of significance indicating that the respondents in those categories do support the three criteria. Included in this latter group is the classification labelled "Other" which includes private and community camp directors, a hospital program director, a delinquent youth counsellor, YMCA-YWCA physical program

TABLE 9
FREQUENCY OF CLASSIFICATIONS

CLASSIFICATION							
	Classroom Teacher	Residential School Staff	Nature Centre Staff	Univ. or College Faculty	Coordinator School Outdoor Education	School District Administrator	Other
Number of Respondents	56	13	4	54	21	16	31
Number not accepting all criteria	15	1	1	12	1	6	2
Z-Score	4.54	1.04	1.15	3.89	1.02	3.10	.18

directors and a Special Olympics director.

This data can be interpreted to mean that those directly involved in outdoor education full-time or most of the time, support the construct, while those whose participation in it is more limited do not support it. The opinions of regular school personnel tend to differ from those of camp oriented and other personnel. It would seem that the more applied oriented the group is, the greater is the support for the construct.

Summary

The analysis of the data obtained from the survey of outdoor education practitioners revealed that a high percentage of all respondents agreed with the author that all three criteria represent a fair measure of what constitutes a comprehensive outdoor educative program. It was also shown that each criterion was considered to be equally important by the respondents.

FOOTNOTES: CHAPTER IV

¹George A. Ferguson, Statistical Analysis in Psychology and Education, 2d. ed. (New York: McGraw Hill, 1966), p. 177.

²Ibid. p. 146.

CHAPTER V

CONCLUSIONS

Summary

Outdoor education, from its inception over one hundred years ago as a purely camping experience, has evolved into a hybrid educational curriculum component which today includes, among others, camping, recreation and leisure activities and the study of natural and man-made environments. A review of literature reveals that this concept of its evolution to this present status is not universally accepted by contemporary educators. There are those who purport that outdoor education is comprised exclusively of only one of the elements identified above. Others hold a more generous interpretation. They accept the premise that outdoor education is any worthwhile educational experience which takes place in the out-of-doors. It is this latter concept of outdoor education which was accepted for this study.

Although the boundaries and range of outdoor education may give rise to a variety of opinions, there are certain aspects about it which are held in general agreement by all outdoor educators. The literature shows

that outdoor education is thought of as a means of learning as opposed to being another school subject. It is a laboratory for learning similar to the way in which classrooms are and it emphasizes first-hand experiences rather than vicarious ones. On these points, outdoor educators tend to hold similar views.

The purpose of this study was to develop a hypothetical construct consisting of three criteria and to survey expert practitioners to determine whether they agreed that this construct formed a necessary and sufficient description of a comprehensive ongoing outdoor education program. The three criteria considered by the author to be essential for a comprehensive program are:

- 1) An outdoor education program should extend the classroom curriculum.
- 2) An outdoor education program should enrich the classroom curriculum.
- 3) An outdoor education program should create new curriculum dimensions.

The literature is replete with essays and articles about the unique contributions which outdoor education can make to the physical, social, mental and personal growth and development of school youth. Other writings offer practical suggestions for carrying out specific outdoor education activities. Many studies have been conducted to determine the value of various

individual elements of outdoor education in the education of students. It was the intent of this study to review, analyze and summarize all the available material into a working guide for school district officials to follow in evaluating their own ongoing outdoor education programs.

In this study, it was hypothesized that the three evaluative criteria, as developed for this study, involve all aspects of outdoor education contained within the broad concept of it being any worthwhile educational activity which takes place out-of-doors. The criteria selected were kept to a minimum for easy use, yet they were designed to be all-inclusive in their scope - to be truly comprehensive in nature so that they would reflect the broadest of programs possible.

The findings, conclusions and recommendations will be developed in the light of the purposes of the study. The issue is not "Should outdoor education be an integral part of the curriculum?", or "Which aspect of outdoor education is more significant than others?". This study assumes that outdoor education has a valuable role to play in the education of students and that each subject, topic, and theme related to it has its own unique indispensable contribution to make to their growth and development.

Procedures

Through a review of literature, the three criteria used in this study were developed and synthesized into an opinion survey. A questionnaire was constructed, which, together with an introductory letter and an explanatory note about it, was sent to a representative random sampling of the Outdoor Education Council of America (O.E.C.A.) and the Council of Outdoor Educators of Ontario (C.O.E.O.).

Findings

The response to the questionnaire was excellent. Seventy-four percent of the potential respondents replied to the request.

Eighty-one percent of the respondents accepted all three criteria as being essential for assessing the comprehensiveness of a school district's ongoing outdoor education program. When analyzed individually, each criterion rated equally high in the opinion of the respondents.

Conclusions

1. The literature reveals strong differences of opinion among educators as to what outdoor education is and of what it should be comprised.

2. At the present time, no evaluative instrument exists for the assessment of the comprehensiveness of a school district's ongoing outdoor education program. However, the construct developed in this study may provide the basis for such an instrument.

3. All three criteria which were designated as essential for assessing the comprehensiveness of a continuing outdoor education program were approved by a large majority of the respondents.

4. No major additions to or a total rejection of the construct were observed, thus it seems to be appropriate for use in determining the comprehensiveness of an ongoing outdoor education program.

Recommendations

The purpose of this study was to develop criteria for determining the comprehensiveness of a school district's ongoing outdoor education program. These criteria were designed to encompass all phases of outdoor education, yet would be few in number so that they could be used by any educator regardless of his outdoor education background and/or experience. A large majority of the respondents agreed that the purposes of this study had been fulfilled and they accepted the author's premise that all three criteria are essential for the assessment of an outdoor education program. In

light of this fact, the following recommendations are made:

1. It is recommended that this construct be used as a basis for creating an instrument for evaluating ongoing outdoor education programs in school districts. Because it is designed to determine the comprehensiveness of such a program, it can indicate those aspects of the program that are deficient and need strengthening and also those parts which are being overemphasized to the detriment or exclusion of other equally important parts.
2. It is recommended that this construct be used as a guide by school district officials for the development of comprehensive inter-disciplinary outdoor education programs.
3. It is recommended that classroom teachers use the construct as a basis for evaluating their own outdoor education programs. Such evaluation can lead to the development of more comprehensive programs.
4. It is recommended that further study be done to determine those factors which influence the breadth and scope of outdoor education programs in school districts.
5. It is recommended that further study be done to ascertain more precisely the attitudes of various groups of outdoor educators toward outdoor education.

Reflections

As I reflect on all that I have read and experienced in the area of outdoor education, I have mixed emotions about the way in which the concept of outdoor education has been integrated and subsequently translated into curriculum programming.

On the negative side, it is my opinion that the interpretation of outdoor education directly influences the way in which it is integrated into a school system's curriculum. Often one particular aspect of outdoor education is stressed to the downplaying or exclusion of other equally valuable parts. If it is under the aegis of a particular department in high school, outdoor education becomes associated solely with that subject area. At the elementary school level, many school districts still equate their outdoor education program with one week camping or residential school experience at the grade six level.

Although I firmly believe that outdoor education is interdisciplinary, and multi-graded with valuable experiences for students of all grades, it was decided to restrict the explanatory note accompanying the questionnaire to grades four through eight as those are the grades most often identified with outdoor education at the district level in education. Only four

respondents took exception to this narrow grade spread and felt that it was too restrictive.

The confusion which exists today regarding the meaning of the terms "environmental education" and "outdoor education" has, in my opinion, prevented the collaboration between educators in each area which is necessary to produce the very best possible program for students. The free exchange of ideas between each group could produce unique, dynamic learning experiences for students which could not be duplicated by any other parts or combinations of parts of the school curriculum.

On the positive side, as has been indicated in chapter two, contemporary journals give testimony to the continuing concern which teachers have for their students and for the environment. This concern is made manifest in the form of innovative and creative experiences, studies and curricula designed by teachers for their students.

Another healthy sign is the emerging cooperation being evidenced between environmental education and outdoor education groups at the state level. Hopefully, the future will see such cooperation continue to develop, expand and filter down to school districts.

Outdoor education has proved its value to education over a period of several decades. Environmental education has shown its value over the past decade. It

may well be the future of the country will depend upon how successfully outdoor-environmental education can influence the youth in schools today and tomorrow.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. BOOKS

- American Alliance for Health, Physical Education, and Recreation. Leisure Today: Selected Readings. Washington: American Alliance for Health, Physical Education and Recreation, 1975.
- Brehm, Shirley A. A Teacher's Handbook for Study Outside the Classroom. Columbus: Charles E. Merrill, 1969.
- Donaldson, George E., and Goering, Oswald., eds., Perspectives on Outdoor Education. Dubuque: Wm. C. Brown, 1972.
- Ferguson, George. A. Statistical Analysis In Psychology and Education. New York: McGraw-Hill, 1966.
- Gabrielson, Alexander M., and Holtzer, Charles. The Role of Outdoor Education. New York: Center for Applied Research in Education, 1965.
- Hammerman, Donald R., and Hammerman, William M. Teaching in the Outdoors. Minneapolis:Burgess, 1964.
- _____, Stark, William D., and Swann, Malcolm D. Research in Outdoor Education. Washington: American Association for Health, Physical Education, and Recreation, 1973.
- _____, and Hammerman, William M., eds., Outdoor Education: A Book of Readings. 2d ed. Minneapolis:Burgess, 1973.
- Hug, John, and Wilson, Phyllis. Curriculum Enrichment Outdoors. New York:Harper & Row, 1965.
- Mand, Charles L. Outdoor Education. Columbus:Charles E. Merrill, 1967.
- Pullias, Earl V. A Search for Understanding. Dubuque: Wm. C. Brown, 1965.

Russell, Helen R. Ten-Minute Field Trips. Chicago:
J. G. Ferguson, 1973.

Smith, Julian W., Carlson, Reynold E., Donaldson, George
W., and Masters, Hugh B.
Outdoor Education. 2d ed. Englewood Cliffs:
Prentice-Hall, 1972.

B. PERIODICALS

Allen, Rodney F. "Environmental Field Trips: The Broader
Context." American Biology Teacher 37
(February 1975):98.

Becker, Jerry. "Extending Science Education Through
Elementary School Camping." Science
Education 44 (March 1960):138-42.

Bennett, Bruce L. "The Making of Round Hill School."
Quest 4 (April 1965):60-61.

Blackman, Charles A. "Perspectives: A Curriculum
Specialist Looks at Outdoor Education."
article prepared for Journal of Outdoor
Education (January 1969).

Blackwood, Paul E. "Outdoor Education and the Discovery
Approach to Learning." Journal of Outdoor
Education 1 (Fall 1966):6-8.

Blough, Glenn O. "Science and Outdoor Education or
'Nobody Can Know How I Feel'." Journal of
Outdoor Education Pilot Issue (Spring

Brainerd, John W. "Schoolgrounds for Teaching Man's
Relationship to Nature." School Science and
Mathematics 64 (May 1964):28-34.

Brennan, Matthew J. "The Conceptual Field Trip."
Science and Children 7 (March 1970):34-35.

Carlson, Reynold E. "Enriching the School Curriculum by
Using the Immediate Environment," Bulletin
of the National Association of Secondary
School Principals 31 (May 1974):83-86.

- Cordin, Mary H. "The Community: An Extension of the Classroom." Science and Children 10 (May 1973): 28-29.
- Corso, Emanuele. "Outdoor Education's Challenge: 'Don't Play It Again Sam'." Journal of Outdoor Education 5 (Spring 1971):4-5.
- Crowley, Claude. "Motorsickles Did It." Teacher 92 (May 1955):84.
- De Fries, Gerald. "Will I Ever Catch Another Butterfly?." Journal of Health, Physical Education, Recreation 41 (November - December 1970):41.
- Donaldson, George W. "Come On, Youg Guys!!!." Journal of Outdoor Education 4 (Winter 1970):12.
- _____, and Donaldson, Alan D. "Outdoor Education: Its Promising Future." Journal of Health, Physical Education, Recreation 43 (April 1972): 23-28.
- _____, and Donaldson, Louise E. "Outdoor Education - A Definition." Journal of Health, Physical Education, Recreation 29 (May 1958):17.
- Education Digest 38 (December 1972):54 "The Hundred Thousand Dollar Teacher."
- Hammerman, Donald R. "A Case for Outdoor Education." Clearing House 38 (September 1963):54-6.
- Heffernan, Helen. "They Grow Nine Feet Tall." Childhood Education 44 (October 1967):74-8.
- Hill, Wilhelmina, and Hill, Roy. "New Horizons for Environmental Education." The Journal of Environmental Education 1 (Fall 1969):46.
- Horn, Ray B. "Report of Research - A Factor Analysis of Attitudes Toward the Term 'Outdoor Education'." Journal of Education 4 (Fall 1969):15-17.
- Kilpatrick, W. H. "The Role of Camping in Education Today." Camping Magazine, February 1942, pp. 14-17.
- Leyh, Eugene E. "Look-See-Experience." Science and Children 12 (October 1974):27.

- Mortenson, Charles O. "More Than a Forest." Science Teacher 37 (April 1970):69-71.
- Masters, Hugh B. "Values of School Camping." Journal of Health, Physical Education, Recreation 22 (January 1951):14-15.
- Nowak, Paul. "Education In and About Our Environment." Outdoor Teacher 19 (Winter/Spring 1974-75):1.
- Parks, Marshall, "A Description and Evaluation of An Environmental Science Education Workshop for K-12 Teachers." School Science and Mathematics 71 (December 1971):775-777.
- Partridge, De Alton E. "Some Psychological Backgrounds of Camping." Camping Magazine, March 1943, pp.16-18.
- Pike, Kenneth V. "The Long Beach Public School Camp." National Elementary School Principal 28 (February 1949):24-28.
- Rhen, George. "Case History of an Environmental Program." School Management 15 (April 1971):22-23.
- Rillo, Thomas J. "The Role of Physical Education in Outdoor Education Programs." Journal of Outdoor Education 4 (Winter 1970):13-14.
- Roossinck, Esther P. "Arithmetic in the School Camp." Arithmetic Teacher 7 (January 1960):22-25.
- Roth, Robert. "Science Environmental Studies." Instructor 82 (October 1973):69.
- Sack, Marion J. "School Camping - A Potent Factor in Guidance." Education 73 (April 1953):502.
- Schuette, Fred. "Outdoor Education." Michigan Earth Scientist 12 (Winter 1976):5.
- Sharp, Lloyd B. "The Role of Camping and Our American Heritage." Camping Magazine, March 1943, pp.6-8.
- _____. "What is Outdoor Education?" School Executive 71 (August 1952):21-22.

Smith, Julian W. "Where We Have Been - What We Are - What We Will Become." Journal of Outdoor Education 2 (Winter 1968):3-6.

_____. "A Review and Forward Look." Journal of Health, Physical Education, Recreation 41 (February 1970):45.

_____. "A Decade of Progress in Outdoor Education." Journal of Outdoor Education 1 (Fall 1966):3-5.

_____. editorial. Outdoor Education 12 (Fall 1966):1.

_____. editorial. Outdoor Education 12 (Spring 1967):1.

_____. editorial. Outdoor Education 14 (Spring 1969):1.

_____. editorial. Outdoor Education 15 (Spring 1970):1.

_____. editorial. Outdoor Education 16 (Winter 1971):1.

_____. editorial. Outdoor Education 17 (Spring/Summer 1972):1.

_____. editorial. Outdoor Education 19 (Spring/Summer 1974):1.

_____. editorial. Outdoor Education 19 (Winter/Spring 1974/75):1.

_____. editorial. Outdoor Education 19 (Summer 1975):1.

Stapp, William B. "Integrating Conservation Education Into the Existing Curriculum of the Ann Arbor Public School System (K-12)." Science Education 48 (December 1964):419-424.

Welisch, Sophie. "Environmental Ecological Education." Educational Forum 38 (January 1974):153-155.

Wheeler, Wallace, and Hammerman, Donald. "What is the Education Potential in the Outdoor Setting?" Illinois Journal of Education 55 (December 1965):2-4.

C. UNPUBLISHED MATERIALS

- Donaldson, George W., and Goering, Oswald H. Outdoor Education: A Synthesis. Arlington, Vi.: ERIC Document Reproduction Service, ED 037 286, March 1970.
- Fitzpatrick, Clinton N. "Philosophy and Goals for Outdoor Education." Ed.D. dissertation, Colorado State College, 1968.
- Grilley, Helen E. "Development of an Instrument for Evaluating Outdoor Education Laboratory School Programs." Ed.D. dissertation, Colorado State College, 1966.
- Lewis, Charles A. Jr. "Factors Influencing the Development of Outdoor Education." Ph.D. dissertation, New York University, 1968.
- Modisett, Sandra Ann. "A Pattern of Curricular Experiences in Outdoor Education." Ed.D. dissertation, University of Northern Colorado, 1971.
- Pulliam, Mabel G. "An Analysis of Selected Outdoor Education Programs and Recommendations for Curriculum and In-Service Education for the Outdoor Education Program of the Jefferson County, Colorado, Public Schools." Ed.D. dissertation, Colorado State College, 1963.
- Rogers, Martin H. "Principles and Functions of Outdoor Education." Ed.D. dissertation, Syracuse University, 1955.
- Smith, Julian W. editorial, Outdoor Education 2 September 1954. (mimeographed)
- _____. editorial, Outdoor Education 2 January 1955. (mimeographed)
- _____. editorial, Outdoor Education 3 September 1955. (mimeographed)
- _____. editorial, Outdoor Education 4 September 1956. (mimeographed)
- _____. editorial, Outdoor Education 4 August 1957. (mimeographed)
- _____. editorial, Outdoor Education 4 January 1958. (mimeographed).

_____. editorial, Outdoor Education 5 February 1959.
(mimeographed)

_____. editorial, Outdoor Education 5 Fall 1959.
(mimeographed)

_____. editorial, Outdoor Education 6 Fall 1960.
(mimeographed)

_____. editorial, Outdoor Education 9 Fall 1963.
(mimeographed)

_____. editorial, Outdoor Education 9 Spring 1964.
(mimeographed)

Wiener, Morris. "Developing a Rationale for Outdoor Education." Ed.D. dissertation, Michigan State University, 1965.

D. GOVERNMENT DOCUMENTS

Statutes at Large. Vol 84 Part 1 Sec 3, (a) (2) 1970.
"Environmental Education Act."

APPENDICES

APPENDIX A

INTRODUCTORY LETTER SENT TO RESPONDENTS



UNIVERSITY OF WINDSOR

WINDSOR, ONTARIO N9B 3P4

TELEPHONE: AREA CODE 519
253-4232

FACULTY OF EDUCATION

February 17, 1976

We are attempting to formulate a set of criteria by which to judge the comprehensiveness of a school district's outdoor education program. Enclosed is an explanatory note followed by three such criteria. Would you be kind enough to read the material and then answer the short questionnaire which follows it.

Please return the completed questionnaire to us by Wednesday, February 25, 1976. A stamped, self-addressed envelope is enclosed for your convenience.

Results of the questionnaire will be forwarded to you if you so desire.

Thank you very much.

Sincerely

JT:vcl
Encls.

James Tisdale
Associate Professor
University of Windsor

Martin Hetherington
Associate Professor
Michigan State University

APPENDIX B

PURPOSE AND FORMAT
OF
QUESTIONNAIRE

A METHOD OF EXAMINING A SCHOOL DISTRICT'S OUTDOOR EDUCATION PROGRAM IN GRADES 4 TO 8

Outdoor educators tend to hold the same views as to what outdoor education is. That it is a means of learning as opposed to being another school subject, that it is a laboratory for learning similar to the way in which classrooms are, and that it emphasizes first-hand experiences rather than vicarious ones, are all major concerns upon which they agree.

Differences of opinion arise however, as to what particular activities, experiences and/or subjects are necessary in an outdoor education program. Which ones are essential for a school district to conduct a comprehensive program. Would such a program be complete if such subjects as mathematics, nature study, agriculture, natural science, conservation, outdoor recreation and camping were included? Are such aspects of outdoor education as acclimatization, sensory awareness, interpersonal relations, problem solving, nature centre trips and residential school camps part of those subjects or are they separate entities? How many, and which ones constitute a full program? Are there others which should be considered?

The questions are of course, hypothetical. Each of us would attempt to answer them in the light of our own experience and background. However, they do point out the confusion which does exist when outdoor education programs are examined from the viewpoint of "content". If such programs were to be considered from the standpoint of the individual child and what should be the essential experiences in which he should be participating, the following criteria may provide an easier yet more effective means of determining the comprehensiveness of the outdoor education programs of school districts. It is hoped that they can provide a means by which administrators within school districts, who have little or no familiarity with outdoor education, as well as outdoor educators themselves can judge more objectively the completeness of their programs.

As an educator who is involved with and concerned for outdoor education, would you please read the following statements and then answer the questions which follow them.

Please note that the three criteria are designed solely as an indicator of the comprehensiveness of a school district's outdoor education program. No attempt has been made to suggest the content or methodology in such programs.

CRITERIA FOR EXAMINING THE COMPREHENSIVENESS
OF A SCHOOL DISTRICT'S OUTDOOR EDUCATION PROGRAM
GRADES 4 - 8

For a school district's outdoor education program for grades 4 - 8 to be considered comprehensive, each pupil should have activities and/or experiences in each of the following:

I The outdoor education program should extend the classroom so that the out-of-doors is used as a laboratory in which individual or integrated school subjects are explored. In this sense the outdoors provides the setting in which first-hand experiences are constructed so that the learner can apply the knowledge or skills acquired in the classroom. Although such experiences could be carried out within the classroom they are not as effective as when conducted outside.

EXAMPLES

1. Linear metric measurements can be learned more effectively when children are given the opportunity of estimating and measuring many objects, distances and heights in their school environment after having been introduced to the topic in the classroom.
2. Language arts takes on a new dimension when skills of poetry and prose writing can be practised in a natural setting outside the school. Haiku poetry writing requires a natural setting for its inspiration.
3. Children gain inspiration for developing their creative art talents from the out-of-doors after the teacher has laid the necessary foundations in the classroom.

II An outdoor education program should enrich the existing classroom curriculum by providing those experiences which cannot be duplicated within the classroom. Activities of this type are necessary to ensure that the learning of particular knowledge and/or skills within school subject areas will occur and that appreciation and interests will develop.

EXAMPLES

1. Skills associated with taking population counts can best be acquired and developed where living organisms naturally occur, be it the school lawn, vacant lot, neighbourhood park or some more unspoiled area.

2. The understanding of and appreciation for the intricate network and delicate balance of life that occurs within and between biotic communities can only be achieved by studying them in their natural state.

3. The mathematical precision necessary for the drawing of accurate maps is best promoted when pupils have the opportunity of practising their skills in a variety of outdoor situations.

4. School gardens can teach, in a very practical way, the orderliness of nature, man's role in managing nature, and the benefits he derives from working in harmony with nature.

III An outdoor education program should create new dimensions within the school curriculum by providing experiences not usually associated with traditional school curricula. These experiences can have a significant influence upon the affective and social development of students as well as expanding their cognitive and psycho-motor domains. This type of experience does not have its origin within accepted school subjects but rather is the outgrowth of perceived needs of children within an outdoor setting.

EXAMPLES

1. Sensory awareness activities help to develop a pupil's enjoyment of nature by heightening his seldom-used senses and making him more aware of his environment.

2. Acclimatization experiences are teaching children to perceive the environment from different points of view which in turn helps to nurture within them feelings of empathy and trust.

3. Outdoor recreation experiences generally associated with outdoor camping and living can prove very valuable in developing interpersonal relations, creating proper attitudes toward the natural environment, and producing those practical skills necessary for pupils to enjoy living in the out-of-doors.

SUMMARY

1. An outdoor education program should extend the classroom curriculum.
2. An outdoor education program should enrich the classroom curriculum.
3. An outdoor education program should create new curriculum dimensions.

APPENDIX C

QUESTIONNAIRE

QUESTIONNAIRE TO DETERMINE THOSE CRITERIA WHICH ARE
ESSENTIAL TO ASSESS THE COMPREHENSIVENESS OF A SCHOOL
DISTRICT'S OUTDOOR EDUCATION PROGRAM

Will you please identify your primary role in outdoor
education by checking off the position you now hold.

- ☐ 1. Classroom teacher (please indicate grade
level _____).
- ☐ 2. Outdoor education residential school staff.
- ☐ 3. Nature centre staff.
- ☐ 4. College or university faculty.
- ☐ 5. Outdoor education coordinator for a school
district.
- ☐ 6. Administrator for a school district.
- ☐ 7. Other (please specify _____).

1. In your opinion is each of the three criteria
necessary to determine the comprehensiveness of
a school district's outdoor education program?

Please check those which are:

- ☐ 1. extension of curriculum
- ☐ 2. enrichment of curriculum
- ☐ 3. new dimensions in curriculum

2. Please indicate other criteria which you would
consider to also be essential in examining out-
door education programs

- 4. _____

- 5. _____

- 6. _____

If you would like to know the results of this survey,
please complete the following:

NAME: _____

ADDRESS: _____

Once more, thank you very much for your assistance.

Sincerely

Jim Tisdale

APPENDIX D

SECOND LETTER SENT TO
OVERDUE RESPONDENTS



UNIVERSITY OF WINDSOR

WINDSOR, ONTARIO N9B 3P4

TELEPHONE: AREA CODE 519
253-4232

FACULTY OF EDUCATION

March 5, 1976.

The mail muncher has struck again!

Early in February, we sent you a letter containing a questionnaire related to outdoor education, and, as yet, we haven't received your reply. Recognizing the unreliability of the postal service, we have included another copy of the material and a self-addressed, stamped envelope.

The purpose of the questionnaire is to help us formulate a set of criteria by which to judge the comprehensiveness of a school district's outdoor education program.

We would appreciate receiving your completed questionnaire by Monday, March 15, 1976.

Thank you very much.

Sincerely

JT:vcl
Encls.

James Tisdale
Associate Professor
University of Windsor

Martin Hetherington
Associate Professor
Michigan State University

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