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DOCUMENTATION AND ANALYSIS OF THE DEVELOPMENT OF THE CAMP
GREENOUGH ENVIRONMENTAL EDUCATION CENTER, AN ALTERNATIVE
PUBLIC SCHOOL AT YARMOUTH, MASSACHUSETTS

A Dissertation Presented

By

Thomas Francis Paquin

Submitted to the Graduate School of the
University of Massachusetts
in partial fulfillment of the requirements
for the degree of

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May 1973

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Documentation and Analysis of the Development of the Camp Greenough
Environmental Education Center, An Alternative Public School at
Yarmouth, Massachusetts

(May 1973)

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M. Ed., Salem State College

Directed by: Dr. David G. Coffing

ABSTRACT

The Boy Scouts of America agreed to make a 320 acre site, named Camp Greenough, and its equipment available to the National Alternative Schools Program of the School of Education at the University of Massachusetts, and the Dennis/Yarmouth Regional School District for the purpose of establishing an environmentally oriented Alternative High School located at Yarmouth, Cape Cod, Massachusetts.

This project dissertation details the development of that program.

The dissertation is divided into two parts. Part I of the dissertation documents the development of the program from conception through to the point of implementation and covers, chronologically, the procedure required for that development.

Part II of the dissertation analyzes the development and deals with the theoretical implications of the various aspects of the total program.

The program itself is divided into two parts and would be implemented in two phases.

Part I of the program is the Alternative High School. This will be comprised of fifteen students from grades 10-12 selected by lottery from volunteers attending nearby Dennis/Yarmouth Regional High School. The students selected will report to the Camp Greenough site rather than the high school.

The major goals of the program are to: improve student self concept, create an environmental literacy among the students and to train the students as quasi-naturalists who, as part of their own learning experience, would help facilitate a learning experience for elementary school students from the same district using the Camp site.

Part II of the program is the experiential teacher training component operated through the School of Education at the University of Massachusetts. This component will utilize the site to facilitate a learning experience for college students from member schools of the New England Consortium of Teachers Colleges.

A major goal of this component will be to impart an understanding of the natural environment as well as some strategies and techniques for using that environment in an inter-disciplinary way to facilitate learning for their future students.

Phase I of the program includes the first three years of operation which will be characterized by outside agency funding support for site development and operation.

Phase II of the program will be characterized by shifting from outside agency support to self support by establishment of the following fee sources: by opening the site to other school districts by supplying naturalists to other schools districts, by conducting workshops for in-service teachers, and by making the facilities available to schools of education from outside the consortium.

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P R E F A C E

During the latter part of July 1972 the idea to develop an environmentally oriented alternative education center and locate it somewhere on Cape Cod, Massachusetts was conceived. Within the next four to five months the goals for such a center were prioritized, a program was developed, a cooperating school system within the designated area (Cape Cod) was contacted, a site for the center was located and community resources were engaged. In addition professional, para-professional and lay persons were organized for staffing purposes and some funding sources were established.

Thus, a comprehensive development of an Environmentally Oriented Alternative School consisting of a teacher training component, an elementary level experience, and a community involvement element focused at the high school level was initiated and carried to the point of implementation.

That the program was not finally implemented provides, through an analysis of the problems faced, the basis for a worthwhile learning experience which, hopefully, will prove valuable to future readers interested in establishing programs of their own.

This document will be one of, perhaps, many documents that will be forthcoming from people involved with the alternative school movement in general, and with members of National Alternative Schools Program at the School of Education, University of Massachusetts, in particular. As with any

organizational process, the evolution of the Camp Greenough Alternative School consisted of elements that may be generalizable, and thus may be most useful to the developers of similar programs. Of course there were elements that were unique, arbitrary and/or whimsical and may have had specific relevance to Camp Greenough alone.

Part I is a documentation of the developmental process of the Camp Greenough Alternative School from its inception to a point immediately prior to the actual implementation of the program. This documentation is supported in many instances, by progress reports, written proposals, forms, etc., that may be found in the Appendix.

Part II is an analysis of the important dimensions of that development with suggestions for possible future application as it would relate to the initiation and operation of a similar program.

The conception of what an alternative school should look like that has been used as a basis for this study represents a synthesis of a broad range of reading, writing, talking and participatory observation over the past few years. The reading has included the efforts of George Dennison, John Holt, Jonathan Kozol, Paul Goodman, George Leonard, Ivan Illich and others in the radical vein of educational reform and the more moderate Charles Silberman along with the works of B. F. Skinner, Carl Rogers, A. S. Neill and Abraham Maslow, all of whose views of human nature have influenced my own behavior. In addition and because of the nature of the alternative school I felt obliged to

read extensively in the field of outdoor and environmental education and have familiarized myself with the work of Steve van Matre, Charles Roth, Don and Bill Hammerman, Malcom Swan and a variety of brochures, pamphlets and articles on the subject.

The writing has consisted primarily of critiques and of personal opinions as they relate to education in general and alternative schools in particular.

Participatory observation has involved visiting other alternative schools such as Shanti (Hartford), Bent Twig (Marion), Janis House (Falmouth), and environmentally oriented educational centers such as the New England Aquarium (Boston), the Audubon Society (Lincoln), National Seashore (Cape Cod), Glen Helen (Antioch College) and Project Adventure (Hamilton-Wenham).

Many of the ideas in this study are my own. At the same time they are unavoidably enmeshed with the ideas of dozens of other people with whom I have been in contact over the past year relative to this project. They range from camp directors to environmentalists to students to fund directors to college professors, and so forth.

INTRODUCTION

The primary purpose of this dissertation is to present a step by step model for implementing a similar environmental alternative school program elsewhere. The dissertation is divided into two parts.

Part I, which contains Chapters one through three, is basically a chronological report of the work required to prepare such a program for implementation. It traces the development of the program from conception, to a point just prior to implementation and deals with the physical and practical aspects of that development; Part I includes such things as: program definition, site selection, community relations, proposal writing, evaluation procedures and staffing.

Part II which contains Chapters four through eight, provides an analytical look at the various steps detailed in Part I and concerns itself with the more intellectual aspects of the program's development. Part II includes such things as: a justification of alternative schools, a rationale for the Camp Greenough program, some insights into the problems of alternative schools in general with clarification and/or analysis of such things as: evaluation procedures, community relations and future potential.

PART I

DOCUMENTATION OF THE DEVELOPMENT OF THE
CAMP GREENOUGH ALTERNATIVE SCHOOL

CHAPTER I
GROUNDWORK FOR AN ALTERNATIVE SCHOOL

Introduction

Recent commentary on the ills of American education such as Crisis in the Classroom, Deschooling Society, Teaching as a Subversive Activity, Death at an Early Age, etc., have focused widespread attention on the educational scene and a few educators have made noble efforts to improve our schools. They have devised new structures and organizational patterns (differentiated staffing, team teaching, alternative schools, integrated classrooms, community schools, etc.). They have encouraged the use of newly developed technology (closed circuit TV, slide projectors, overheads, dial retrieval systems, reading machines, etc.).

It may be true that structural change and technological developments in and of themselves do not improve what is happening in the schools, but if we can agree with Douglas McGregor's Theory Y assumptions about the nature of man, namely that:

1. Work is as natural as play, if the conditions are favorable.
2. Self control is often indispensable in achieving organizational goals.
3. The capacity for creativity in solving organizational problems is widespread in the population.

4. Motivation occurs at the social, esteem and self-actualization levels as well as the physiological and security levels.
5. People can be self directed and creative at work if properly motivated.¹

and develop individually appealing alternatives while utilizing structural changes and technological improvements then, I feel, we may see more commitment and increased improvement of potential by both students and educators.

The key word here is alternatives, because I believe, as does Mike Hickey, that alternatives within public education become the means or process by which public education evolves.²

Briefly, an "alternative school" is viewed, by this writer, as a learning environment comprehensively different from a "conventional school" in structure, curriculum, staffing arrangements, and most importantly, student orientation. I feel that piece-meal changes in conventional schools (e.g., flexible scheduling, team teaching, etc.), while effective in degrees, has not produced the significant behavioral changes in students or staff that allows them to respond more humanely and aggressively to the mounting crises in our society. Further, I feel that a total all-encompassing alternative form (program) of education within a public system, separated physically and with sufficient programmatic autonomy, ultimately will have both a more lasting impact as well as a far greater visibility as a precedent for institutional change in all conventional schools.

Conception

While serving as a public school administrator within the Collier County, Florida School System, a document crossed my desk that was to serve as the spark for the ensuing dissertation. The year was 1970 and the document was a Feasibility Study of the Resource-Use Outdoor Education Center, Taylor County, Florida. It was prepared by Masters Enterprises, from Athens, Georgia and made possible by a grant from the U. S. Office of Education.³

An account of the socio-economic conditions of the area was included in the report. The study provided data concerning in-service education for teachers, the education of school children, and the use of the Center by outside groups and private individuals.

The thought that struck me immediately was the ease with which such a program could be adapted to other geographic locations with, of course, slight modifications to suit specific situations (physical and otherwise). In my mind's eye I began to envision such a program being **established** at Cape Cod, Massachusetts, an area that I was most familiar with.

During the latter part of the 1970-71 school year I began making plans to enroll in the Doctoral Program at the University of Massachusetts, more specifically, the School of Education. When I arrived at Amherst one of the things I brought with me was the Masters Feasibility Study previously mentioned.

During the summer of 1972 I was able to form a working agreement with the National Alternative Schools Program at the University of Massachusetts after describing the idea for an environmentally oriented alternative school located within a school system somewhere on Cape Cod. The school would be located away from the conventional school and would involve, initially, secondary school students, from the district selected.

Development

Through several meetings with personnel from the National Alternative Schools Program, hereafter referred to as NASP, the following generalizations about the school's appearance were decided upon:

1. Attendance would be voluntary.
2. Students would be actively involved in the operation and direction.
3. Students would range from grades 9-12.
4. Parent and community participation would be encouraged.
5. The school itself would be a cooperative effort between the University of Massachusetts and a public school system.
6. Although the school would be based at a particular site for purposes of independence, flexibility, community identity (among students) and access to natural surroundings, the intent would be to use the entire Cape Cod area as the learning environment.
7. The environment created by the staff would encourage direct, honest and personal relationships with an emphasis upon learning as a human and sharing experience rather than as a purely objective and competitive activity.

8. Three environments would be dealt with: (a) the internal environment of the self, (b) the immediately external environment including peer relations and the physical community, and (c) relating local concerns to a global perspective.
9. Basic skills would be individualized.
10. Curriculum would be concerned with affective as well as the cognitive domains.

It was felt that an alternative school located in a camp type setting with an environmentally oriented curriculum would be considered a natural alternative to the conventional program rather than one that was contrived. After these early decisions it was up to me to find a school system that would be receptive to the idea of starting an environmental education center as a viable alternative to the existing programs and to find out all I could about environmental education as it is being practiced in the country today.

The first superintendent of schools to be contacted, Dr. John A. Murphy of the Dennis/Yarmouth Regional School District, Cape Cod, was enthusiastically receptive to the idea as I described it, and offered to support such a school within his district. This initial contact occurred during July 1972. After receiving the verbal commitments from Dr. Murphy I then set about seeking the advice of faculty members from the School of Education relative to reliable sources of information for environmental education information.

Although the feasibility study for the Florida plan previously described was the initial spark for the NASP project, it was felt that that concept of an outdoor education center was limited to programs of simply woodsy type

experiences. We hoped to broaden the focus of our program to deal with issues of a more expansive nature, issues that encompassed the total environment rather than only the natural surroundings of the woods, streams, beaches and salt water. We would certainly be paying attention to the out-of-doors, but hoped to go beyond a simplistic approach to environmental education.

Bill Marshall, a graduate student at the School of Education, became interested in the project and offered to help me in seeking information and in establishing some preliminary goals for the alternative school, as well as giving consideration to the total curriculum. Bill was a graduate of Dartmouth and had spent eight years as a teacher in New Hampshire and Vermont. He had extensive experience in outdoor education and was hoping to start an environmental education center at his one hundred acre farm located south of Stow, Vermont. Bill felt that the experience he would get in helping me get started would be beneficial to him when he began work on his own project.

One of the first names mentioned as a source of information for outdoor type programs was Sandy Sanborne, who is director of the High Trails Outdoor Education Center at Florissant, Colorado. Sandy was the host for the 1968 School of Education faculty retreat and offered assistance in the form of a copy of the High Trails teacher notebook, student handbook and study guide, as well as sending a letter of encouragement.

Several books were purchased and read from cover to cover in an earnest effort to familiarize ourselves with the area of environmental education.

Some of the books were: Teaching in the Outdoors by Hammerman and Hammerman, Open Education by Joseph D. Hassett and Arline Weisberg, Acclimatization by Steve van Matre, Yellow Pages of Learning Resources and several journals and reports relevant to the subject.

During the early part of August 1972, Roy Nichols, Director of NASP, and I made a visit to Cape Cod, Massachusetts in search of an adequate site upon which to establish the alternative school. It had been agreed upon that we would seek the use of a camp facility already established rather than trying to begin building a site from scratch. There were sound reasons for doing that, such as, saving money and time, which would free us to develop profitable relationships with local institutions and individuals. The first stop was the YMCA Camp at Sandwich, Massachusetts. This camp was staffed, primarily, by students from the Greenfield Community College Recreation Program. Although the Camp appeared to be adequate for our purposes, we decided to look for a site closer to the school district with which we had aligned ourselves.

Next we visited Camp Greenough, a site owned and operated by the Boy Scouts of America, and located only two miles from the Dennis/Yarmouth Regional High School, where we would extract our students for the program. Camp Greenough is a three hundred twenty (320) acre site that contains five permanent buildings, running water, a complete kitchen and dining hall, two ponds and much aquatic equipment as well as nature trails. In addition the Yarmouth Historical Society and Botanical Gardens consisting of fifty-five (55)

acres abutted the Greenough land making a total of three hundred seventy five (375) acres in all that would be useable for the alternative school students and staff. Added to this was the fact that the Atlantic Ocean was only two miles away. The site was physically ideal for our needs and the Camp Director seemed keenly interested in the plan as we described it to him. He was anxious to discuss it with the Scouting Directors to see if a commitment could be made.

Within a week the Camp Director, Mike Cooney, called to say that the Directors of the Scout Council were interested and would like to meet with me for person-to-person discussions of the plan. After the initial discussion the group agreed to make the site available to NASP and Dennis/Yarmouth for the purposes of establishing an alternative school, with no charge, for a period of three years, and an option to renew at that time. The stipulation being that NASP and/or Dennis/Yarmouth prepare the site for year-round use which would require heating and insulation of buildings and water supply and accepting responsibility for the cost of utilizies. (See Appendix for copy of the agreement.)

The advantages of having access to this particular site are numerous. In addition to the advantages already mentioned, such as convenience of location and physical size, there were the added advantages of having access to the wealth of equipment available. This included fifteen canoes, five small sailboats, a catamaran, two ocean suited whalers capable of carrying twenty people each, a workshop equipped with tools for woodworking and sheetmetal and

finally a couple of pickup trucks, old and battered but servicable, to be used around the site. Two glass boats were on order and in fact arrived before the summer was over. These last two boats would be especially valuable for observing aquatic life on the smaller of the two ponds located at the camp. This particular pond, called Little Greenough, was situated in a wooded area away from the main flow of activity, had no shore line and was rarely disturbed by humans. According to Mike Cooney, the Camp Director, the pond abounded in fish, algae and other various forms of aquatic life. More attributes of the camp will be discussed later as we describe its suitability for our program. One very important aspect of this property was that it was owned by the Boy Scouts of America and as such would provide a link, seen as important, with the community as a whole and some specific community leaders in particular.

In order to take advantage of the wealth of expertise in many disciplines to be found among the retirees, hobbyists and parents living on the Cape, it was decided to make specific appeal for input from this group. The first move after confirming authorization from the Scouts for the use of the Camp Greenough site, was to contact Dr. James Peace, Director of Community Affairs at the Cape Cod Community College, located at nearby Barnstable, Massachusetts. Dr. Peace was most encouraging and suggested that the Recreation Department at the College would probably be interested in using the Greenough site for field activities for undergraduate students in the Recreation Program, thereby introducing the dimension of site use by college undergraduates as a practice teaching opportunity.

In addition, Dr. Peace recommended that I contact members of the Science Department at Cape Cod Community College to determine their interest. A member of the department, Brenda Bolene, was already working with the Boy Scouts, as their "resident expert", so to speak, in the biological sciences during the summer and was very interested in continuing her involvement during the school year on a volunteer guest lecturer basis for the benefit of the alternative school students.

Dr. Peace appreciated the community involvement aspect of the program that I was trying to incorporate into the structure of the alternative school itself and provided me with a directory of the Mid-Cape Men's Club, an organization of retirees living within the general area of the Camp Greenough site. The directory contained the name, address, phone numbers and former occupation of each of the members. Dr. Peace also gave me permission to use his name as a source for introduction when I made contact with the members. In his role as Community Affairs Director at 4 C's, Dr. Peace worked very closely with that group and was well known to them.

I selected several members of the club and sent them a letter soliciting their input into the program. Included was a self addressed postcard on which they could indicate their response to the request. (A copy of the body of the letter may be found in the appendix.)

After laying this preliminary groundwork to determine the general interest of the various forces of the community and encountering what I

considered very enthusiastic support, it was then time to seek out an operational model for on site observation. Letters were written to the directors of four outdoor schools. They were:

1. Frederick County Outdoor School, Thurmont, Maryland.
2. Outdoor Education Center, Antioch College, Yellow Springs, Ohio.
3. Redwood Glen Outdoor School, Santa Cruz, California.
4. Rockford Outdoor School, Rockford, Illinois.

The names of these schools were found in the appendix of the book, Teaching in the Outdoors by Hammerman and Hammerman.⁴

Mr. Douglas Dickinson, Director of the program at Antioch College, Yellow Springs, Ohio was the first person to respond and his letter was so considerate and encouraging that I called to thank him personally. (A copy of the written correspondence is in the Appendix.) Mr. Dickinson was agreeable to the request that I be allowed to spend a week in residence at the camp to observe the operation first hand.

Mr. Ed York, Science Department Chairman at the Dennis/Yarmouth Regional High School was appointed by the Superintendent to act as liaison for the school district in the coordination of the program with NASP. Arrangements were made for him to accompany me to Ohio during the week of September 17, 1972 - September 23, for the purpose of observing the Antioch College Outdoor Education Program. The trip proved to be invaluable in the development of the Camp Greenough Alternative School. (A copy of the activity handbook may be found in the Appendix.)

No less than five new components were introduced as a result of the trip that were to eventually be incorporated into the funding proposal that was being considered for submission to the Department of Environmental Education and other private foundations. In fact the idea of soliciting funds was indirectly a result of the Antioch trip. In retrospect I would say that the trip to Antioch was the single most influential aspect of the total program as it finally stands. This influence will be discussed in detail in Part II of this paper.

The initial plan for an alternative school for fifteen high school students began to give way to the more elaborate concept of an environmental education center with a teacher training component, a resident component, a provision for involving elementary age students and a second phase which would provide the program with a self-supporting status after the first few years. The self support element seemed especially palatable to the superintendent and other tax payers to whom I spoke.

In the beginning (July 1972) it was my naive hope that the school would start at the beginning of the school year that September. While the development of the Alternative School program was my primary activity I failed to consider that the Superintendent, the school committee, members of the academic and lay communities and members of the Boy Scouts had other very pressing matters taking up their time. I mention this because, as I stated in the proposal for this dissertation, my hope is that it will serve as a compendium of important information for other individuals or groups who wish to develop a similar

program. It is necessary to be flexible when dealing with bureaucracies and in some cases it is difficult to adhere to time schedules. This fact should be kept in mind by anyone striking out on a similar venture of trying to initiate an alternative school. Quite possibly the same kinds of frustrations will be encountered in trying to work within other public systems.

The delay in implementing the program was not without its advantages. It permitted time for further community contact work and program refinement. Some of the public and private organizations and their contact people were:

1. Mr. Hugh Clark, Curator, Yarmouth Historical Society and Botanical Gardens.
2. Mr. Don Schwall, Director, Cape Cod Museum of Natural History, Brewster.
3. Mr. Richard Cunningham, Field Coordinator, Cape Cod National Seashore Reserve, Wellfleet.
4. Mr. Charles Roth, Director of Education, Massachusetts Audubon Society, Lincoln.
5. Dr. Warren Little, Director of Education, New England Aquarium, Boston.
6. Mr. Bill Hughes, Director, Nickerson State Park, Brewster.

In addition these people knew others who were connected in one way or another with environmental learning. This effort to meet a variety of people led to the acquisition of volumes of material and much positive publicity for the pending alternative school. In each instance we received positive encouragement from the individuals contacted and verbal commitments for assistance either by way

of materials from the Museum of Natural History, utilization of our students on work projects from the Historical Society, guest lecturers from the National Seashore Reserve, educational materials from the Audubon Society and the New England Aquarium and publicity for the program from the news media.

The delay also allowed a presentation during the Fall 1972 School of Education Marathon that consisted of a slide presentation of aerial and on site slides of Camp Greenough with a description of the intended program. As a result of that presentation seven students in attendance offered their services as interns for the following two semesters.

The program began to receive attention among the faculty and student body at the School of Education and many inquiries were made concerning the structure of the program the location of the site and the personnel who would be involved. It was during this time that Dr. Ed Clark from Loretto Heights College, Denver, Colorado contacted Assistant Dean Richard J. Clark of the School of Education by way of inquiry as to the availability of outdoor environmental education programs. Dean Clark turned the letter over to me and I contacted Dr. Clark in Denver. (Dean Clark and Dr. Clark are not related.) Dr. Clark was interested in associating himself with the School of Education as an outdoor teacher training expert and this was the nucleus for another component to the program. NASP paid Dr. Clark to visit the School of Education and the Camp Greenough facility. He was favorably impressed with the possibilities and indicated that he was interested and available to become

involved in the program. Because neither the School of Education nor the alternative school program had any funds available at that time to sustain Dr. Clark, it was agreed that NASP would finance his travel to several big cities in pursuit of foundation funds. This effort proved fruitless and Dr. Clark eventually returned to Colorado. The seed was sown, however, for the teacher training component to be included in the alternative school package.

It was time to conceptualize and document a detailed description of the total Environmental Education Center. Because of the eventual scope of the program it was advisable to do it in the form of a proposal for funding from either Federal or private sources. Dr. Ken Ertel, an experienced proposal reader and writer from the School of Education, was of invaluable assistance during this period. (A copy of the entire proposal may be found in the Appendix.)

CHAPTER I I

CAMP GREENOUGH AS A LEARNING ENVIRONMENT

Program Structure

As mentioned in Chapter One the Antioch trip was the single most influential part of the planning period, although it was by no means the sole influence. The program finally decided upon reflected the influence, either directly or indirectly of extensive readings and consultations concerning environmental education and alternative schools.

As a result of this myriad of external influences a program was developed that in large part satisfied the goals set down by the Task Force on Educational Goals for Massachusetts 1971,⁵ and at the same time did not perpetuate the common problems facing the alternative school movement as described at a recent conference in Chicago that centered on "Decisionmaking in Alternative Schools."⁶ This conference will be dealt with in more detail in a later chapter.

The program was to have two distinct parts: Part I would be the alternative school pilot program, initially involving fifteen (15) students from the Dennis/Yarmouth Regional High School chosen by lottery from voluntary application of students with special needs. (These special needs relate to the

student's perception of himself and should not be confused with students having physical or emotional handicaps or school perceived or imposed needs.)

The idea was to provide a satisfying educational experience for students whose needs might best be satisfied within an environment external to the conventional classroom. They would attend this school for the entire school year and receive regular high school credit.

For the reader who may concern himself with the validity of the experience as perceived by the State Department of Education, I would assuage his concern by saying that my experience indicates that any program sanctioned by the local school committee may be accepted as legitimate by state personnel.

With regard to the acceptability placed on a now conventional program by some institutions of higher learning, it has been the agreement of well informed leaders in the field such as Chomsky,⁷ Holt,⁸ Silberman⁹ and others that informal and varied experiences at the secondary level tend to have a positive influence at this time, rather than the questionable negativism of only a few years past.

Although the program was based at Camp Greenough, located within the Dennis/Yarmouth School District in order to provide independence, flexibility, community identity, (among students) and access to natural surroundings, the intent was to use the entire Cape Cod area as the learning environment.

The program was to take advantage of all resources:

Human - by soliciting input from various parents, hobbyists and retiree groups located within the general area, such as the Yarmouth Historical Society, Mid-Cape Men's Club, etc. and members of the professional community as well as students from Cape Cod Community College, University of Massachusetts and elsewhere.

Natural - by studying the geology, plant and animal life and history of the area (ecology), and

Institutional - by utilizing the services of Cape Cod Community College, University of Massachusetts, the Boy Scouts of America, the Cape Cod National Seashore Society, **the** aquatic institutes at Woods Hole, the National Audubon Society, etc., in an attempt to provide a comprehensive educative atmosphere.

The aims of this particular component are:

1. To develop a sense of community among the students and the natural environment.
2. To train students as aides to teachers from local and out of district elementary schools who would be using Camp Greenough for nature study.
3. To promote increased awareness, among students and citizens, of the Dennis/Yarmouth community.
4. To develop a sense of individual student responsibility.
5. To develop and understanding of ecological systems and the interdependence of all organisms.
6. To use the outdoors for recreational purposes.

7. To relate the environmental problems of the local community to a global perspective.
8. To use the outdoors in the development of academic skills.

Some of the activities that were to be made available to students to facilitate the realization of the above aims were; a co-operative effort to winterize the existing facilities, develop and refurbish nature trails on the site, participation in values clarification workshops conducted by members of the School of Education staff from the University of Massachusetts; development of various community resource guides, use of student help with community environmental concerns, study of local community development (history); participation in the development of independent courses of study, maintaining a portfolio of personal activities, developing forms for self evaluation, initiating and completing self interest projects that are compatible with program objectives (example: building a weather station at home, building an aquarium), and taking leadership roles for group projects. (A more detailed description of the curriculum may be found in the Appendix.) Additionally, one very important aspect of the program is to train the alternative school students so that they may take the responsibility of facilitating a worthwhile learning experience for elementary school students who would visit the area on a one week basis.

Part II of the program was to be an experiential teacher training program affiliated with the School of Education at the University of Massa-

chusetts both pre-service and in-service with specific aims to:

1. Provide a learning experience with the out-of-doors as an environment which can be creatively used as a major learning process for the teaching of virtually any academic subject (math, science, social studies, language arts, humanities and art).
2. Provide resource persons in the various academic disciplines who are familiar with the out-of-doors and experienced in the teaching of others through the creative use of the environment as a vehicle for the teaching/learning process.
3. Develop a broad curriculum of outdoor and environmental education which could become the basis for an undergraduate or graduate major, or which could become an integral part of the teacher education program.
4. Provide opportunities for internship experiences for pre-service teachers.
5. Provide experiential workshops for in-service teachers.
6. Consider regionalization by providing on-site practicums using the potential of the New England Consortium of Higher Education.

Parts I and II were to be implemented in two phases. Phase 1 was to include the first three years of the program which will require some financial support from outside agencies for:

1. The winterization of existing camp facilities
2. The development of the program
3. Staff salaries
4. Buying and leasing of needed equipment

5. Supplementing operational costs

Phase 2 was to include the time after the third year when the program will become self supporting and the initial funding from outside sources will stop. Funds for the operation of this phase will come from:

1. Local school committee support.
2. Providing a one week field experience for schools out of the district and charging a fee.
3. Charging other school districts for conducting workshops for in-service teachers and charging a fee.
4. Providing "naturalists" from the center to other school districts to work at their sites for a fee.
5. Charging a nominal fee for use of the facilities by students from colleges other than the University of Massachusetts and the Cape Cod Community College. (A time schedule for the implementation of both phases and other aspects of the program may be found in the Appendix.)

Curriculum

As Charles E. Silberman indicates in his book Crisis in the Classroom, "The purpose of a program. . . should be to provide an environment that will focus on the individual - a climate where student responsibility is emphasized, where conformity is not imposed, where the learners solve problems important to them, where interest is high, and where there is an active commitment to discovery and learning."¹⁰

As has been alluded to in Chapter One, the kind of program developed for the Environmental Center meets Silberman's criteria. The curriculum is

divided into two parts, Part A deals with environmental and personal goals of the student and is for the most part very flexible and can be made very personalized. Again the reader should be aware that hard and fast rules do not apply to the curriculum any more than it did to staff function. The primary reason for prescribing a format is to eliminate the floundering looseness associated with many alternative schools and is in fact, as Moore suggests, 'a major cause of their failure.'¹¹ The objective of the curriculum prescribed here is to establish parameters for learning and to initiate the learning process as it relates to the Center. It is expected that within those parameters an extensive variety will exist.

The goals of Part A and some related activities are:

1. To develop a sense of community between the students and the natural environment through:
 - a. Co-operative effort of winterizing the existing facilities.
 - b. Co-operative effort in developing nature trails.
 - c. Participation in values clarification workshops conducted by members of the School of Education staff.
 - d. Participation in student team study projects such as determining "litter factor" of specified areas - feasibility of recycling projects - development of a special interests catalogue within or without the school system.
 - e. Sharing of decisions and responsibility regarding evaluation and direction of progress.
 - f. School meetings among the staff and students.

2. Increasing the student's awareness of the Dennis/Yarmouth Community by the:
 - a. Development of various community resource guides.
 - b. Use of parents, hobbyists, retirees with particular and relevant expertise as auxiliary resources.
 - c. Involvement of students with community environmental concerns.
 - d. Student internships within the community related to Center concerns (example: student working on a trash removal truck, landscaping experience).
 - e. Study of local community development (history).
3. Developing a sense of individual student responsibility through their:
 - a. Participation in developing a course of study.
 - b. Maintaining a portfolio of personal activities.
 - c. Serving as teacher aides for elementary students visiting the site.
 - d. Developing criteria for self evaluation.
 - e. Involvement in the decision making process at the school.
 - f. Initiating and completing self interest projects at home or away from the school site.
 - g. Taking leadership roles for various group projects.
4. Understanding of ecological systems. The recognition of the interdependence of all organisms will be facilitated by:
 - a. Lectures by knowledgeable people.
 - b. Films - with pertinent discussion before and after.

- c. In depth study of: salt water, fresh water, forests, swamps, marshes and bogs all of which are available within the immediate area for first hand scrutiny.
5. Increasing familiarity and appreciation of the out-doors by using it for recreational purposes through:
 - a. Hiking
 - b. Fishing
 - c. Backpacking
 - d. Foraging
 - e. Camping and boating
6. Relating the environmental problems of the local community to a global perspective through:
 - a. Field trips
 - b. Lectures
 - c. Assigned readings
 - d. Guest speakers

Part B has to do with the development of the more traditional academic skills such as communication, math, social studies, natural and earth sciences, as well as health and recreation. The description of this portion is quite specific and is designed to placate school committees and parents who feel that somehow the rotation of the earth and the ensuing sunrise is contingent on the ability of students to absorb the so-called "staples of education." As was stated previously though, there is room for flexibility within the entire curriculum.

Because of its specificity, Part B of the program may be found in its entirety in the Appendix of this work. In addition to the curriculum as we have developed it we also have access to the curriculums of other programs and will take what is applicable for our purposes.

The overall goal of this program is to produce self-motivated, environmentally aware, socially concerned students who are familiar with some principals of learning and have improved their self-concepts to the point that the chance of their success in the world at large has been enhanced, insofar as there is a relationship between self concept and success. While the curriculum as it is defined is influential in the attainment of that goal, it must be remembered that the people involved are the real key to success.

Staffing

To adequately discuss the staffing arrangements for the Camp Greenough Environmental Education Center it is necessary to consider all aspects of the program. It should be remembered that there are two parts to the total program and also two phases to the implementation of that total program.

The total number of, what could be considered, staff personnel may vary at any given time but the function of the staff members should remain relatively constant. The first person to be considered here is the

Program Director: It will be his responsibility to hire and assign the other staff members, initiate and help in the maintaining of favorable public relations by acting as general liaison between the Center and the community including news media, parent groups, other schools, etc., as well as taking the initiative in the coordination of interacting community resources. In addition the Program Director will be responsible for coordinating the activities of Part I (the alternative high school) and Part II (the teacher training program) as they relate to and overlap each other. As a final officially designated concern the Program Director will have the primary responsibility to direct, facilitate and oversee the evolution of the program from Phase 1 (the initial period) to Phase 2 (the following period when the program becomes self supporting). This will include such activities as contacting other school systems as a promotional venture for the Center in the attempt to convince them of the advantages of utilizing the Center as a beneficial field experience for members of their own elementary schools, as well as trying to "sell" on sight naturalists from the Center. With respect to this aspect of the Program Director's function he would actually be engaged in the process of promoting the Center to other institutions, the objective being that they would realize the benefits of using the Center's facilities to enhance their own programs and would be willing to pay for that use. Photographic slides have already been developed that show aerial views and on-site views of the Center to help facilitate this function for the Program Director.

The next consideration for staffing that we will discuss here is the role of the :

Naturalist (2): The primary responsibility that the naturalists would have would be to provide the expertise for the outdoor activities at primarily the high school level (some elementary). These activities would include plant and animal study, development of nature trails, land and water use, conservation of both the terrestrial and aquatic life, a sensory and conceptual approach to ecological involvement as described by Steve van Matre in his book Acclimatization,¹² (in essence what this suggests is the sensitizing of the individual to his environment through sensory experiences such as: mud baths, bog crawls, marsh wading, etc., at times blindfolded and/or with ears plugged and/or all senses in total operation - taste, smell, touch, sight and sound), development of a weather station and the study of weather investigate the causes and cures for various types of pollution and to aid in the total program development. The Naturalists would be hired as teachers by the Dennis/Yarmouth School System and meet the state requirements for teacher certification. In addition they would take primary responsibility for developing and training the high school students as quasi-naturalists who would in turn serve as aides to the Naturalists and teachers in working with the elementary level students.

The Teacher Training Supervisor: another member of the staff would, quite naturally, be primarily responsible for developing and implementing a teacher education program through the auspices of the School of Education at

the University of Massachusetts. He would be a School of Education faculty member either regular or adjunct status. There is a difference between the teacher training program and the internship program that should probably be clarified at this point. The teacher training program would be part of the pre-intern process similar in format to other undergraduate courses, the difference being that classroom for these people would be the Camp Greenough site. The internship program would be similar to the internship programs as we now know them, the primary difference being that the interns would serve their field experience either at or through the Environmental Center.

It is very possible that the two programs would overlap, in that the interns may have taken their training at the site and choose to stay on for the practicum. Another important function of the Teacher Training Supervisor would be to develop, coordinate and oversee workshops for in-service teachers using the Center as the site of operation and college and/or high school students as aides.

It is expected that a very important part of the total staffing arrangement will include Parents, Retirees and Hobbyists: on a volunteer basis. Their function will be to provide subject area expertise where applicable, aid in program development when and where qualified. An example of the potential within this group is evidenced through the returns to the letter of request (see Appendix) sent to members of the Mid-Cape Men's Club. One individual expressing an interest had been a high school science teacher for 35 years,

another a public school administrator for 30 years, another a wood shop teacher for 28 years, another taught auto-shop for 20 years, and so it goes. The wealth of expertise and the willingness of the community to participate make this area one of rich potential for staffing consideration. Naturally with this source of available input much coordination of the personnel will be required. This will be done by the full time staff members at the Center, including interns and alternative school students who will gain additional learning experiences through the process of coordination.

Interns: At the college and university level are another source of staffing that may be considered. At this time consideration will be given to Interns from the School of Education at the University of Massachusetts, the Cape Cod Community College or Interns from colleges making up the New England Consortium of Higher Education. The primary function of the Interns in a staff capacity will be to work with the Naturalists for the purpose of gaining field experience under the guidance of the teacher training supervisor. They will work with the alternative school students helping to facilitate learning experiences for that group and in addition will work at local elementary schools helping teachers there to utilize the school grounds as a means of enriching their courses. During Phase 2 of the program the Interns will work on-site at the Center helping the Center staff with visiting students and their teachers.

Finally, we come to the Alternative School Students themselves, who will be used in staff situations during certain circumstances as a critical part of their learning experience. Primarily they will serve as aides to the Naturalists and elementary teachers visiting the site in working with elementary level students.

While the distinction between the staff functions have been specified for the purposes of this paper it must be remembered that a primary precept of this program is the flexibility with which the concerned individuals are free to operate. Consequently, the reality may show more overlapping of function than would seem to be indicated by the "job" descriptions.

Evaluation

In dealing with the very important matter of evaluation two things should be considered: (1) the evaluation of the individual's performance as perceived by the individual, and the individual's performance as perceived by the staff, and (2) the evaluation of the program itself as determined by the students, staff and community.

It was the general consensus of each of us involved in the planning that the students attracted to this particular type of program would be the ones operating on the periphery of the conventional school society. The type of student, who if a sociogram was administered, would probably be placed some distance from the inner circle. Certainly members of the various extra curricular teams and organizations at the school would not likely predominate

in the list of volunteers trying to get into the alternative school. Past experiences with alternative schools as recorded in the various journals as well as our own intuition, have indicated that the type of student who would probably make up the alternative school would be the student who was seeking, in addition to a unique educational experience, a source of affiliation and a sense of community.

Because this type of student may have a lower feeling of self-esteem than members of the so-called "in-group," it was decided that one criteria for assessing the success of the total program would be the extent to which the student's feeling of self worth was enhanced as a result of having been exposed to the Camp Greenough Environmental Education Center's Alternative School.

After much study and deliberation, the "Inventory of Adjustment and Values" (IAV) by Bills, et. al., was selected as one instrument for administration to the beginning students in order to give the student some sense of placement on the self esteem ladder. Very briefly, the IAV self administered instrument consisting of forty-nine terms which the student must relate to himself deciding how he would scale himself on a continuum of one to five. The student takes each term separately and applies it to himself by completing in three categories the following sentence:

I AM A (AN) _____ PERSON.

The first word on the list is academic. So the student would substitute that term in the above sentence. It would read:

I AM AN ACADEMIC PERSON.

The student then decides how much of the time this statement is like him and rates himself on a scale of one to five according to the following key:

1. Seldom, is this like me.
2. Occasionally, this is like me.
3. About half the time, this is like me.
4. A good deal of the time, this is like me.
5. Most of the time, this is like me.

The student selects the number beside the phrase that tells how much of the time the statement is like him and inserts that number in column one.

Example: Beside the term academic, the number two is inserted to indicate that - occasionally, I am an academic person.

Column two of the answer sheet is used to describe, How the student FEELS about himself as described in column one according to the following key:

1. I very much dislike being as I am in this respect.
2. I dislike being as I am in this respect.
3. I neither like or dislike being as I am in this respect.
4. I like being as I am in this respect.
5. I like very much being as I am in this respect.

The student selects the number beside the statement that tells how he feels about the way he is and inserts that number in column two.

Example: In column 2 beside the term ACADEMIC, number 1 is inserted to indicate that the student dislikes very much being as he is in respect to the term, academic.

Finally the student goes to column 3; using the same term he completes the following sentence:

I WOULD LIKE TO BE A (AN) _____ PERSON.

The student then decides how much of the time he would like the trait to be a characteristic of himself and uses the following scale to rate his feelings:

1. Seldom, would I like this to be me.
2. Occasionally, I would like this to be me.
3. About half the time, I would like this to be me.
4. A good deal of the time, I would like this to be me.
5. Most of the time, I would like this to be me.

Example: In column 3 beside the term ACADEMIC, number 5 is inserted to indicate that most of the time, the student would like to be this kind of person.

Some other descriptions used are: acceptable, accurate, alert, confident, cruel, dependable, logical, reckless, responsible, useful and worthy. In addition to the Index for Adjustment and Values two other instruments were selected to serve as support items for the IAV. They were the Body-Cathexis and the Self-Cathexis, which are in a sense, inventories of more personal features of the individual.

The Body-Cathexis asks the student to consider such items as the hair, facial complexion, nose, ears, height and weight, voice, etc., and rate them according to the following scale:

1. Have strong feelings and wish a change could be made.
2. Don't like, but can put up with.
3. Have no particular feelings one way or another.
4. Am satisfied.
5. Consider myself fortunate.

The Self-Cathexis asks the student to consider such items as: his name, taste in clothes, morals, handwriting, athletic skills, love life, popularity, etc., and rate those things using the same scale as he used for the Body-Cathexis. (All three instruments may be found in the Appendix in complete form.) The degree of success of the total program would be to a large degree contingent on the improvement of the students self concept as indicated by comparing the answers to the three instruments from the pre-test and post-test period.

The individual progress of the students would be monitored through the student portfolio, self evaluation by the students and written and verbal reports from the staff members. The intent in setting up such a monitoring system would be twofold: (1) to eliminate grades, which we regard as dehumanizing, fostering competition, externalizing rewards, and in general, creating more losers than winners, and (2) to create a more descriptive record of student progress.

The effectiveness and quality of the portfolio system depends upon a commitment by both student and staff to make the process work. Whereas grading ordinarily occurs four times during the year, the use of portfolios is an ongoing process that requires continual attention. The portfolio will consist of project descriptions, activity recording and student self evaluations, as well as journal writing. It would, in short, be a record of the student's activities as a member of the alternative school with critical comments inserted where appropriate (as decided upon by the student and a staff member).

Since the goals of the Environmental Center may differ from the goals of the conventional school it can be expected that different measures of student achievement may be appropriate. For example: there will be heavy reliability on the subjective appraisals by staff, students and their parents. The improvement of self-concept, the assumption of greater responsibility, more involvement in decision making processes, the facilitating of learning for others all involve observable behavior changes. To attempt to devise a formal "objective" test of these factors even if it were possible, such a test seems to force these goals into the same realm of external expectations that students have always been asked to meet. As has been stated earlier, one of the criteria for a successful program is that it be an enjoyable experience for all concerned and an important product of this program would be happy students and staff members.

The real difficulty in the area of student evaluation will not lie in the evaluation per se but in describing, documenting and communicating the resulting information to parents, students and others requiring it. As regards to this particular school the use of subjective evaluation may be a more viable approach to observing the growth of students than objective measure because of the proposed lower student-teacher ratio.

CHAPTER I I I
COMMUNITY RELATIONS

Perceptions of the Community

When contemplating the establishment of any new educational program within a school or school district, community attitude may be important for the coordinator of that program to know. What may also be important is to understand what is meant by the terms liberal and innovative. I say the meanings of those words are relative to the context within which they are used. For instance; a modularized schedule that allows time for independent study by students within a non-graded format is not something unusual for people at the School of Education to contemplate, but those same three minor innovations to the traditional format may be considered "far out" by people from a little rural high school somewhere in the woods of Maine.

Even though, during the initial inquiries concerning the feasibility of an Environmental Education Center located within their community, citizens from both Dennis and Yarmouth expressed open enthusiasm, when the time came for the actual implementation of the program there were examples of reluctance and/or timidity at many levels.

It would appear logical that if a person is curious about the feelings of

a community toward his idea he should enter the community and make inquiries relative to that idea. That person should be sure to get a cross section of opinion and that may take a little more thought than one might initially expect. For instance if we made inquiries about the acceptability of an environmentally oriented alternative school to science teachers, ecologists, forest rangers, etc., they may say it was a great idea. The same question addressed to a group of telephone operators, truck drivers, airplane pilots or dentists may meet with indifference, while the same question posed to a group of parking lot owners, shopping mart proprietors or gas station attendants might meet with overt resistance.

I mention these possibilities because, in retrospect, it is apparent that I spent most of my time, at least initially, dealing with individuals and/or groups of similar philosophy and did not confront the diversity of the school committee until the presumed time of implementation was at hand. For instance, my contacts with people from the Boy Scouts, Audubon Society, National Seashore Reserve, Botanical Society, etc., provided a narrow dimension for my feedback.

The fact that there is a National Alternative Schools Program (NASP) within easy access at the School of Education, University of Massachusetts was a distinct advantage because included on the staff of the organization were individuals who had either developed their own alternative school or had worked very closely with others who had initiated alternative schools or had

done research on the status of the field.

In contacting almost all of the environmental or out-door oriented agencies on Cape Cod, and some from other parts of the country, and meeting with widespread acceptance of the idea, the next step was to contact the hobbyists and retirees from the community at large to develop a resource bank of volunteer instructors.

Dr. James Peace, Director of Community Services at Cape Cod Community College, himself supposedly retired but actually very involved in community affairs, made available to me a copy of the Mid-Cape Men's Club roster. From this document I was able to glean the names, addresses and former occupations of all the members (approximately 200 members).

I decided to contact twenty-two individuals who had in some way been connected with the field of education or science. A letter was sent to each of the twenty-two (copy of letter in Appendix) selected describing the program, very briefly. A self addressed postcard was included with the letter which could be filled out and returned stating whether the party was interested or not. Of the 22 letters sent, ten of fifteen respondents expressed a keen interest in the program and offered to make input.

At this point it appeared that "all systems were go" for implementation. The Boy Scouts and their various committees had agreed to the proposal (see Appendix A), the community had responded well, the school administration gave its approval (I thought), National Alternative Schools and the University

were excited over the prospects of the opening, and it was only October.

It had taken four months for the idea of an Environmental Education Center at Cape Cod, affiliated with a public school system and a state university, that would involve and/or service groups from ages five through sixty to be conceived, developed and made ready for implementation. As the various progress reports (see Appendix) disclose, the development of the program had continued to this point without any delays, major or minor.

Background

When the idea of establishing an environmental center was first conceived it was with the intention that Cape Cod would be the ideal place because of the great diversity in the topographical aspects of that region. Preliminary inquiries were directed to that region. It was learned that a former professional colleague and long time friend was presently holding the position of Superintendent of Schools for the Dennis/Yarmouth communities located at approximately mid-Cape.

The two communities extended from the shores of Cape Cod Bay on the North to Nantucket Sound on the South shore. They had decided to regionalize several years previous for the purpose of providing a comprehensive secondary program as efficiently as possible for students from both towns.

It appeared, at the time, a very logical procedure on my part to make initial inquiries concerning the feasibility of the idea to the superintendent of the Dennis/Yarmouth Regional School District.

These initial inquiries were met with positive response and without searching for other interested school districts to make comparisons with, it was decided to proceed on the basis of the Dennis/Yarmouth's Superintendent's approval of the idea.

The assumed correctness of this procedure was further enhanced by the availability of the Camp Greenough facilities and the accessibility of the camp from the Dennis/Yarmouth Regional High School. The topological variety within the parameters of the Dennis/Yarmouth communities, in general, and the Camp Greenough site, in particular, contributed to this feeling that the right choice had been made.

The rapid progress being made on the coordination of the project let most of us who were connected with it to expect an early opening for the school, although specific starting date had never been decided upon, or for that matter, even discussed.

One aspect that had been touched on only slightly was the matter of money. The school district, according to the NASP guidelines, was required to provide matching funds for program support. They were reluctant to do this. The process of the failure was, however, much more complicated than the apparent lack of money would seem to indicate. The following chronological details adhered to as closely as possible, should reveal that process.

After returning from the week long stay at Antioch College's Outdoor Education Center, Yellow Springs, Ohio, on September 25, 1972, a coordinated effort between the Dennis/Yarmouth Science Department and members of the National Alternative School Program staff at the University of Massachusetts developed a set of goals for the Environmental Center and the parameters of a curriculum to help students to achieve those goals. This process lasted for four weeks and was finished by mid-October. For all practical purposes the program was ready to be implemented as soon as a naturalist could be hired.

While the process of curriculum writing was going on, the Dennis/Yarmouth School District hired a Director of Secondary Education whose primary function was to serve as the high school principal in the place of the incumbent principal who was being replaced.

The new principal was considered to be a forward looking innovator very much interested in the potential of alternative schools. His primary concern regarding the environmental center focused on the placement of potential dropouts and severe discipline problem types within the program. This thinking was in direct conflict with the original concept of the program as conceived by this coordinator and further, it was in direct conflict with the federal guidelines of the National Alternative Schools Program, which state that any alternative school receiving NASP support will be open to any interested student and that enrollees will be selected through lottery from voluntary applications - one restriction is that the alternative school enrollment be

representative of the entire makeup of the school district in which the alternative school is being established.

This latter point became the first serious "snag" in the rapid progress that had been made so far, and it appeared that implementation would be delayed until the matter could be settled. When I pressed for a decision, the lack of money was introduced as another factor to be considered. It was explained that the district was operating in the "red" at that time and consideration of any further expenditures was, in reality, out of the question. The new budget was to be dealt with during the early part of January and implementation would be delayed until after that time which would coincide with the start of the second semester.

In reality this delay was not without its merits. It allowed time to research the community further and to refine the program goals and methodologies. In addition, it provided time to publicize the program at the School of Education, University of Massachusetts, which resulted in the acquisition of several potential student interns. Also the delay afforded the time to interact with the entire guidance department and many staff members from the Dennis/Yarmouth High School.

Regular contact was maintained with the Superintendent and the Director of Secondary Education. My understanding, at that time (December) was that the School Committee was aware of the proposal and had reacted

favorably to the idea. Arrangements were finally made for me to address the School Board at one of their bi-monthly meetings. As it turned out my presentation was poorly timed, coming one week after the final acceptance of the budget. Criticism was leveled by board members at the information concerning the proposal not being in their possession until the night before the meeting. The board treasurer indicated that since they had just finished finalizing a new eighteen month budget and the environmental center was never mentioned, he assumed that it was not being considered for implementation until, at least, eighteen months hence. The Director of Secondary Education contended that there was money for special programs and that he considered this a special program. The Superintendent remained non-committal at this point. Another board member expressed concern that the University of Massachusetts might try to take over the school system. Another member was insulted that the board as a whole had not been involved at an earlier date. Still another member suggested that just because the budget had been passed was no reason to believe that new and worthwhile programs were not to be considered and in fact implement for a year and a half until the next budget was passed.

After much discussion the proposal was tabled to a later date and it began to appear that the operationalization of the Camp Greenough Environmental Center Alternative School and Teacher Training Program was in jeopardy.

During individual conversations with the Superintendent and later with the Director of Secondary Education, each in essence blamed the other for the

board's reactions which amounted to a lack of support for the program. The Superintendent privately criticized the board and said that he would leave the decision of implementation up to the Director of Secondary Education. The Director of Secondary Education on the other hand said that the Superintendent's lack of vocal support at the board meeting and in private conversations indicated a lack of priority for the project.

As Director of Secondary Education for the district, he did not feel committed to accepting, on his own, a program that did not specifically focus on the delinquent or potential delinquent and dropout.

During this time of negotiations the beginning of the second semester was fast approaching and in fact the point of implementation passed. At this point why the program was not accepted is not really important. The aspect of "why" will be dealt with in Part Two of this dissertation. What is important is that the program's implementation was delayed until after the time when an honest evaluation would have been possible.

The school district's reluctance to invest matching funds may have been the cover for a more personal agenda. The entire matter will be dealt with in Part II.

PART I I

ANALYSIS OF THE DEVELOPMENT OF THE CAMP GREENOUGH
ALTERNATIVE SCHOOL

CHAPTER IV

JUSTIFICATION OF PUBLIC ALTERNATIVE SCHOOLS

Status of the Field

It is not ironical that in a planned society of controlled workers given compulsory assignments, where religious expression is repressed, the press controlled, and all media of communication censored, where a puppet government is encouraged but denied any real authority, where great attention is given to efficiency and character reports, and attendance at cultural assemblies is compulsory, where it is avowed that all will be administered to each according to his needs and performance required from each according to his abilities, and where those who flee are tracked down, returned, and punished for trying to escape - in short in the milieu of the typical large American secondary school - we attempt to teach 'the democratic system'?

-Royce Van Norman¹³

The interlocking nature of problems within our society and its institutions, such as the schools, demands a broad range of approaches. In education this means new learning environments that are allowed to operate outside the major constraints of conventional structure, curricular requirements, and staffing arrangements normally imposed upon a public school. Such programs at the least should provide formal education with a perspective on itself while creating new hope for a diverse and growing number of dissatisfied students and their parents. At best they will provide more realistic and positive educational

responses to a society increasingly unsure of itself in the midst of rapidly accelerating changes.

One type of new educational "form" that has begun to emerge is the public "alternative school." An Alternative School, as officially defined by the National Alternative Schools Program at the University of Massachusetts, is; any school within a system of schools that is characterized by voluntary attendance and has goals, objectives and rules of governance that are different from other schools in the system. Alternative schools are, basically, a collective response to the inadequacies and lack of realistic relevance of most of our educational structures of today.

. . . "the most deadly of all possible sins," Erik Erikson suggests, "is the mutilation of a child's spirit." It is not possible to spend any prolonged visiting of public school classrooms without being appalled by the mutilation visible everywhere, mutilation of spontaneity, of joy in learning, of pleasure in creating, of sense of self. . . Because adults take the schools so much for granted, they fail to appreciate what grim, joyless places most American schools are, how oppressive and petty are the rules by which they are governed, how intellectually sterile and esthetically barren the atmosphere, what an appalling lack of civility obtains on the part of teachers and principals, what contempt they unconsciously display for children as children.

Certainly the alternative school in and of itself can not be considered the panacea for today's educational ills. They are much too complex for any one strategy to cure, but as a reformist response to the inhumane, inadequate public educational institutions of today, the alternative school does provide a viable hope.

Actually, whether the alternative school can totally reform American education or not isn't the crucial issue of their development. What is critical in this stage of American public education is that alternative schools be allowed to exist - to reside in a public system as separate, parallel, optional and even "competing" programs. They must function as a symbol of a new openness to change in our society, and as a real response to the pluralism of our culture.

The number of alternative schools is currently increasing at a tremendous rate. As Don Moore puts it, "The alternative school has become education's hula hoop."¹⁵

Alternative schools have not been without their problems as discovered at a recent conference in Chicago cosponsored by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and by the center for New Schools in Chicago. The topic of the conference was "Decisionmaking in Alternative Schools." The conference brought together students, teachers, administrators and researchers involved in alternative schools from all parts of the country.

A few themes that came up again and again in the three days of discussions deserve special mention at this time because they were influential in establishing the parameters for planning the Camp Greenough Alternative School.

They were basically:

1. Most alternative schools are formed primarily as a reaction against the inhumanity of the conventional school. Many began with a faith that if they could

just escape the restrictions of the old school, a new learning community would evolve "organically."

This did not work and most schools, if they could start over, would now choose a very specific and well spelled out structure, rather than hope that one would emerge naturally.

2. The idea that a meaningful educational program will emerge from the spontaneous interests of the students was called into question. They questioned the values of the privileged students whose social position allowed them to downgrade the importance of learning basics such as reading, writing and how to make a living. They questioned the position that all learning (for everyone)* can be as natural as learning to walk and talk, re-affirming the necessity of making an overt effort in mastering many areas of study.
3. Even though most alternative school people feel that their problems are unique to them alone discussions at the conference indicated that the problems faced by alternative schools were pretty much the same everywhere. Certain areas of difficulty appear constantly:

*Parenthesis are mine.

decision making and decision implementation, communication of norms and of information within the school, teacher skill development and support services for the teachers, positive alternatives for the curriculum and classroom processes, working out the relationship between freedom and responsibility and strategies for transition from a conventional to an alternative school.

4. Alternative schools have placed an overemphasis on individual freedom without clarifying the individual responsibility, and commitment necessary to build an alternative learning community. The term "freedom" has often been used as a cover for a form of permissiveness and selfishness that has threatened the quality and survival of the school. It was felt by many at the conference, that rather than tell each teacher and student that they were now free to do their thing, very specific understandings had to be reached with an individual before he became a part of the school.

One key to the future of alternative schools may be their ability to learn from each other's mistakes without repeating them. To some this may mean a compromise of what the founders may consider a unique ideology which

can only be dealt with on an individual basis, but I think the findings of the conference show that this is not the case. Many of them are universal to the alternative school concept and an individual's acceptance of this fact may save needless aggravation.

In declaring the relevance of the affective domain Weinstein and Fantini state that "Concerns, wants, interests, fears, anxieties, joys and other emotions and reactions to the world contain the seeds of 'motivation'." 16

That thought, and taking into consideration the universality of some problems the alternative schools have had, provided the impetus for the development of the Camp Greenough Alternative School.

Relationship of Environmental Concerns

All of us are consumers to varying degrees. What we buy, from food to fun, puts demands upon some resources. The choice not to purchase also effects demand on specific resources. How infrequently many of us examine or question the ramifications of our purchases. We forget that we are tied together with everything else. Do we need each item that we buy? What are the tradeoffs? Does the purchase and use of an electric toothbrush contribute, through added pollution at a generating plant, to a worker losing a day's wages due to a respiratory illness? Does the purchase of a pair of genuine alligator shoes contribute to the destruction of the fabric of the irreplaceable Everglades through elimination of 'gator dug water holes during drought periods? Does the packaging on a convenience food contribute to destruction of wetlands that

govern our water supply by increasing the demand for dumping sites for solid wastes? Does our laundry detergent contribute to the destruction of waterways that we use for recreation?

Related to the environmental effects of consumerism is transportation preference. Walking and bicycling have little negative effect on the environment. Motorized transportation buys us time at the expense of air quality and loss of space for travel lanes and parking.

Then there are the other by-products such as fueling and servicing stations. All these provide jobs as well as problems. What are the alternatives? Can we balance our overall system of transportation to move people and materials quickly and efficiently at a minimum disruption of the natural and social environment?

We need to ask these and other related questions in order to vote properly. The candidates we elect must grapple with environmental issues. The programs they devise and propose must develop from their environmental literacy and we must be literate enough to support or oppose their programs.

Producers of goods and services use the raw materials of the environment. How they do it shapes the environment. Wastes from manufacturing can be environmental pollutants or raw materials for other activities.

Business generates a flow of paper waste which can be reused or junked.

Worker and management alike often buy time at a cost in resources with little thought to what the ultimate price is to the environment.

Family life influences the quality of the environment also. It is within the family that much of our value system is forged. Values may be transmitted non-verbally through the medium of posture, gesture, facial expression and actions. It is here that children and adults develop their attitudes about other people and living things. The disposal of trash from a car along the roadside; throwing rocks at or feeding park bears; drowning kittens rather than spaying the mother cat; snubbing racial and ethnic groups other than your own - all of these and many more speak eloquently to the child about acceptable environmental behavior. Positive actions speak with equal eloquence.

The number of children a family opts for affects the quality of the environment. More people create greater demands on the finite resources of the planet. Increased numbers also create increased interpersonal stress and tensions.

All of these things are illustrations of ways people are continually interacting with the environment for good or ill. Environmental literacy is needed to improve the chances that the man-environment interaction will be positive. Creating environmental literacy is akin to writing a survival insurance policy for man.

The aim of environmental education, with its resultant creation of environmental literacy, is not to produce experts in pollution control, population biology or resource management. If some of these result it is a bonus. The aim is the development of a citizen who lives all facets of his life in a manner

that is humanly successful yet ecologically sound.

Environmental education has two major components which appear in differing percentages in the final mix. One component is termed process education. It is education in the way one learns regardless of subject matter. It involves the learner in identifying aspects of his environment that challenge and concern him and helps the learner explore the interests and develop strategies for gathering data, analyzing the data, expressing information, values and ideas. This component of environmental education uses the learner's environment to instruct him. By environment here, is meant both physical and social.

The second component is the study of man-environment inter-relationships. This is the concept component. Both components are interlocking and inseparable in a good program of environmental education.

Camp Greenough's Place

The Camp Greenough Environmental Center Alternative School was conceived and developed for two reasons: (1) to meet the challenge of establishing sane environmental values and practices that will help keep the earth fit for life, human and otherwise, and (2) to provide a satisfying educational experience for students whose needs can best be satisfied within an environment external to the conventional classroom.

In developing the program considerable care has been given to minimizing the chance of failure as inferred from the February 1972 Conference of the Center for New Schools of Chicago (see pages 17-18). The school is not being formed as reaction against anything. It is being established as a supplement to the existing program. The structure is specific and spelled out. Provision is made for continued learning of the academic "basics" (reading, writing and arithmetic). A commitment will be made by staff and students to extend the effort necessary to have a worthwhile experience. Individual responsibility will be clarified. There will be extensive use of community resources; institutional, natural and personal.

In basing the school at a 320 acre Boy Scout camp the students will be exposed, at the outset, to a predominately natural environment rather than one that is contrived. Although the program will be based at Camp Greenough for the purposes of independence, flexibility, community identity (among students) and access to natural surroundings, the intent is to use the entire Cape Cod area as the learning environment.

The program aims are:

1. To develop a sense of community among the students and the natural environment.
2. To train students as aides to teachers from local and out of district elementary schools using Camp Greenough for nature study.
3. To promote increased awareness, among students and citizens, of the Dennis/Yarmouth community.

4. To develop a sense of individual student responsibility.
5. To develop an understanding of ecological systems and the interdependence of all organisms.
6. To use the outdoors for recreational purposes.
7. To relate the environmental problems of the local community to a global perspective.
8. To use the outdoors in the development of academic skills.

Phase two of the program provides for a residency type experience which will bring to the site students from areas away from the local community. In this way the concerns of environmental education will be carried beyond the boundaries of Cape Cod and, hopefully, so will some of the instructional expertise and relevant methodologies peculiar to environmental education.

In addition the "Camp Greenough" proposal in its entirety will provide for in-service and pre-service teacher training as well as community involvement by way of input from the retirees and hobbyists from the local area.

The availability of the site and its academic resources will also be available to members of the New England Consortium of Teachers Colleges to be used for teacher training and internship experience.

This great variety of possibilities for Greenough's use may have a mushrooming effect on the dispensation of information and/or the awakening of consciousness relative to environmental concerns at the very personal level.

CHAPTER V
DISTINCTIONS BETWEEN CAMP GREENOUGH AND THE
CONVENTIONAL SCHOOLS

"In general," according to Bob Mackin, "the problem plaguing educational reformers in the past has been getting a hold of a 'large enough piece' - in breaking the tight interlock between structure, staffing, and curriculum that has operated so effectively in stifling change within public schools."¹⁷ Consequently, much of the impetus for developing an alternative form of public education is based upon a need to create a structure that is compatible with the expressed purposes of the reformer - i.e., a "school" that can be free at the outset from structural, staffing and curricular impediments. The way that Camp Greenough responds to each of these three dimensions will be examined individually in order to simplify the analysis.

Structural Considerations

Physical environment may influence the physic environment of a school. The statement that "physical sterility breeds mental sterility"¹⁸ sounds logical. And if it is it makes sense to assume that aesthetically pleasing surroundings may help to nurture a sense of beauty and perhaps even creativity. At the very least, the physical arrangement of the school

can be used to enhance the general tone and style of learning. This is especially true in the case of a school dealing with environmental concerns and the out-of-doors as a medium for facilitating learning. Because one of the primary goals of the school is to develop a sense of community among the students they will, by design, be involved in the evolution of the site.

In addition to the day to day responsibility of caring for the site they will take part in the winterization of the existing facilities including estimating, purchasing and installing the insulation and panelling. Developing hiking trails and refurbishing and expanding existing nature trails will also be part of the learning experience as will operationalizing a weather station, camping/survival and recreation areas, etc.

In some ways, the hulking institutional shapes of many school buildings connote whole sets of norms and behaviors for both students and teachers. Because this will be a school seeking to develop, among other things, new norms and attitudes toward learning it will be to our advantage to be without those major structural restraints from the start.

By being located two miles from the Dennis/Yarmouth High School we will be able to avoid the disadvantage of "rubbing elbows" with that group but yet will be close enough to take advantage of some conveniences such as eating in their lunch room and using their libraries and media equipment.

Another goal of the program will be to improve the self-concept of the individual student and what better way to do that than to let students have

direct input into the development of the site itself. We are saying in essence "we value your judgment, you count, it won't get done without your help."

The scheduling of activities and experiences should reflect the tone and style of the learning environment. A standard lock-step schedule would certainly be inappropriate to a program seeking flexibility in curriculum and staffing arrangements and desiring greater self initiative on the part of the students. Somehow the spontaneity that often accompanies discovery and creative interests must not be stifled by rigid time factors. Thus one of the first questions often asked within an alternative school is whether a schedule should exist at all: "Why not truly commit the school to a sense of freedom, discovery, and self responsibility by allowing all activities to evolve on their own and schedule things as they develop and as they require specific time allotments?"

In reality, such an approach is unrealistic and has accounted for numerous conflicts and problems in other alternative schools. Spontaneity can cause conflicts and scheduling is now being viewed as essential both to maintaining continuity within certain experiences and preserving the peace of mind of hassled participants. In this respect, scheduling may be considered a facilitating mechanism, and not as a restraint. Rather than acting to repress physical movements and independent work efforts scheduling can, if used creatively, encourage a sense of freedom by minimizing chaotic movement.

The pervasive tone of discipline that is maintained, in some schools, through the authority of teachers and administrators, runs counter to the development of self-discipline in students. Students in some public schools have little or no decision making powers within the community. Their authorities are not elected by them, the rules are not made by them and in many cases they have not even chosen to be there in the first place. As Silberman contends,

. . . the entire way in which high schools are organized and run. . . (produces) the kind of alienation, the rejection of the whole notion of culture, of discipline and of learning with which we are now contending.¹⁹

Whereas a major goal of our schools is the democratizing of young citizens - the development of mature human beings capable of handling their freedom of choice responsibly - in fact, the schools produce the opposite.

Far from helping students to develop into mature self-reliant, self-motivated individuals, schools seem to do everything they can to keep youngsters in a state of chronic, almost infantile, dependency. The pervasive atmosphere of distrust, together with rules covering the most minute aspects of existence, teach students every day that they are not people of worth, and certainly not individuals capable of regulating their own behavior.²⁰

When finally implemented, the Camp Greenough Alternative School will undoubtedly face the same problems of deconditioning the trained docility of its students as many of the other alternative schools have. To expect responsible self-regulating behavior instantaneously upon creation of a freer

setting would be unrealistic. The excuse heard very often in some public schools of, "We gave them freedom and they abused it, so now we've cracked down again," arises from a blindness to the evolutionary nature of responsible behavior.

Without the experience of either governing their own personal affairs, much less those of a community, students will usually flounder anxiously when confronted with the responsibility of making rules and directing their own learning. To be meaningful, however, the rules, regulations and discipline must evolve out of community needs and the parameters of the 'Greenough' school provide for that type of behavior.

Staffing Considerations

Certainly staff composition is the most critical variable in the successful operation of any school. The most open structure, the best philosophical intents, the very exciting curriculum innovation may all be to no avail in the face of poor staffing. "Poor staffing" refers not only to unacceptable teaching methodologies but to inflexible, hostile teachers who aggressively negate change efforts. Within alternative schools, especially, unless the staff understands the philosophy and expectations involved, enters voluntarily, and is prepared to some extent for ambiguity and, hopefully, a minimum of chaos, the project is threatened from the outset.

The general characteristics of a staff member at Camp Greenough would be much the same as those at other alternative schools, with the exception that

a Greenough teacher would have to be versed in dealing with the outdoors as a learning environment. They should be similar to those traits that hopefully will develop in the students enrolled in the program.

The proposal requires that two 'naturalists' be hired as the professional staff. The Director need seek out the ones fitting the description already given of necessary characteristics. In a program such as the one proposed for Camp Greenough traditional teaching abilities are not especially appropriate. In such a program more of the "facilitator" type teaching roles are required. Such roles - demanding empathetic behavior, reinforcement abilities, insightful questioning, personal sensitivity and the like as well as "outdoor" expertise is more in keeping with the guidelines of the school itself.

A very important part of the instructional strength of the entire program lies with the availability of volunteers from the ranks of the hobbyists, retirees and parents of the community. Input from individuals from this group will be, expectedly, of the short duration type except in unusual circumstances. The performance of this group will be monitored by members of the professional staff including the Director. Guidelines for the operation of the program will be discussed with each volunteer prior to input from the person.

Roles should be, as nearly as possible, clearly defined. This is especially true during the beginning processes of the school. A rather common occurrence among alternative schools is the disorganization that pervades because of the non-directiveness of most leaders.

In the case of Camp Greenough the roles were clearly defined, but the understanding was that in special instances there may be overlap. For instance when one person is busy with his specific role and assistance is needed for one reason or another it is perfectly legitimate for a person from another role to assist.

Specific staff requirements with regard to roles are as follows:

Program Director - Responsibility to: hire and assign staff; coordinate interaction of community resources; initiate and maintain public relations; coordinate activities of Part I and Part II of the program; direct, facilitate and oversee the evolution of the program from Phase 1 to Phase 2.

Naturalists (2) - Responsibility to: provide expertise for outdoor activities at, primarily, the high school level (some elementary level) dealing with plant and animal studies; land and water use; conservation; pollution; ecology; weather; etc., and aid in total program development.

Teacher Training Supervisor - Responsibility to: develop and implement teacher education program; provide relevant experiences for potential teachers either through technique development or field experiences or both; coordinate and oversee workshops for in-service teachers.

Retirees, parents and hobbyists (volunteer) - To work with naturalists and teacher training supervisor to provide subject area expertise and aid in program development, where appropriate, for high school and college students.

Interns - To work with the naturalists for the purpose of gaining field experience under guidance of teacher training supervisor; to work at local elementary schools.

Alternative School Students - To serve as aides to naturalists and teachers in working with elementary level students.

Quite obviously, it is the intent of the program to make maximum utility of all available personnel. The prevailing assumption of this, as well as of many other alternative schools, is that not all students learn in the same way at the same time, at the same rate and under the same circumstances.

In order to meet the needs of a wide range of students, individualization will be emphasized with the introduction of learning contracts and portfolios for monitoring student progress. Although most states have laws that require school children to be under the supervision of a "certified" person, a liberal interpretation of the law can serve as cover for the involvement of volunteers of many descriptions.

Curriculum

From the beginning there has been the determination to avoid the many pitfalls that have plagued most of the alternative schools as they struggled for survival. One of the primary areas of responsibility within which the alternative schools have, in many instances, failed has been the area of curriculum. In their zeal to counteract the structuredness of the traditional school, a typical approach has been the laissez faire syndrome. This encourages a disjointed helter-skelter hit or miss approach to study. The student is told to do his own thing, so to speak, follow his interest, there will be no restrictions placed on his progress.

The foregoing is an example of the unrealistic way in which "curriculum" has been approached in many schools of the alternative variety. This attitude has been directly causal for the failure of some alternative schools to succeed.

Because of this we attempted from the beginning to develop a well defined program of studies, a program with well defined parameters within which there would be the freedom for individualized progress.

In addition to stimulating an interest and concern for environmental problems and ecological relations, as well as the concern for the improvement of student self-concept, the curriculum is designed to show: a commitment to the development of basic communications and mathematics skills; a concern for aesthetic recognition and the environment; an emphasis upon student-centered-

ness; an experience oriented approach; the development of problem solving abilities; the importance of process; an emphasis upon locating and effectively using information and resources; and an approach to the whole affective, personal growth dimension.

Skills of observation are a natural part of any outdoor environmental program and the speaking and listening skills will be fostered by the "town meeting."

Because the curriculum has been spelled out in relative detail within the proposal itself I would refer the reader to the Appendix for a copy of that document.

The integration of the cognitive and affective domains is viewed as essential.

Today's curriculum cheats the students by splitting off their thought from action, mind from body, intellect from feeling. . . We do violence to the intellect by severing it from the world of our senses. We do violence to our thoughts by separating them from their consequences.²¹

The intent of the program goals is to reflect that view.

Other Alternative Schools

The National Alternative Schools Program (NASP) at the School of Education, University of Massachusetts is a government financed program and as such it is subject to certain guidelines which tend to influence certain aspects of the schools that are developed through its auspices. Alternative

schools sponsored by NASP must be open to all students within the eligible district. Students are selected by lottery from voluntary applications. The schools must be co-educational and they must reflect the ethnic ratio of the school district at large. Financial support from NASP is limited to salaries for the directors, consultants and/or staff personnel, and only on a matching fund basis with local districts.

To qualify as an alternative school a program is not limited to those guidelines. There are many alternative schools in the country today that do not adhere to the restrictions set down to govern NASP, however they are not eligible to receive financial support from the NASP either. Many of these schools function profitably on their own and although they do not have the same format, the one thing that most of them have in common is that they are student centered and they are a departure from whatever is the accepted norms of the regular schools in the district. They may be located within a separated area of the regular school or they may be located in completely separate facilities. The focus of any given alternative school is limited only to the imagination of the directing people.

Outdoor Education

Every so often there hovers on the educational horizon a curriculum development of such import that only the pedagogical prophet or visionary is fully aware of its implication. The curriculum innovation which today carries the label "outdoor education" has not been without its prophets and visionaries.

Over the years such educator-philosophers as Comenius, Rousseau, Pestalozzi, Herbart, Spencer, Dewey, James and Thorndike have pointed out the need for reinforcing abstract learning with concrete experience. The modern development of outdoor education is simply the current expression of this age-old educational axiom.

Outdoor education is an approach to more efficient and more effective learning. The purpose of outdoor education is to enrich, vitalize and compliment content areas of the school curriculum by means of firsthand observation and direct experience outside the classroom. Extending the classroom into the out-of-doors provides the setting for bringing deeper insight, greater understanding and more meaning to those areas of knowledge which, ordinarily, are read and discussed - seldom experienced.

To some people outdoor education is a somewhat vague and nebulous term. As a methodology or approach to more efficient and effective learning the term has been interpreted in various ways. It stands for a development in education that is difficult to pin down and may be interpreted in a variety of ways. The conservationist, for example, looks upon the term as relating primarily to the wise use of natural resources. His chief concern is that of educating the public to the values of soil, water, forest and wildlife resources and their wise management. The recreation leader on the other hand, views outdoor education mainly as a means for realizing the joys of recreational pursuits in the out-of-doors. His approach would be one of educating youth to

ways of camping, fishing, and hunting. The classroom teacher may consider outdoor education from still another point of view such as using the outdoors to enrich learning related to the school curriculum.

The ultimate in outdoor education is the resident experience in which a teacher and his pupils pack up and leave the school room to live in an outdoor setting while carrying out a program of learning activities related to the school curriculum. The resident aspect is an integral part of Phase 2 of the Camp Greenough Alternative School.

In discussing environmental education as it relates to Greenough we refer to the student's concern with his internal environment (self-concept) his immediately external environment (peer relations and community) and his awareness of the interrelatedness of these things to a global perspective. Richard Snow²² quoting from Egon Brunswick calls these areas the 'central', the 'proximal', and the 'distal' and sees them as interrelated.

While there are literally hundreds of alternative schools developing around the country and there are many outdoor education centers or camps, my research does not show an alternative school that has been established within a public school district that is based at an established camp site and attempts to utilize the naturalness of the out-of-doors as a facilitator for learning.

Certainly the teacher training component and the very comprehensive volunteer aspect makes this a truly unique alternative to the traditional public school.

CHAPTER VI

CHANGE STRATEGIES

Educational change of any duration is a complex business. In an attempt to simplify the analysis as it relates to Camp Greenough this chapter will view each of the following dimensions independently:

- Purpose (goals, objectives, rationale)
- Place (location of effort)
- Timing (initiation and duration)
- Program (implementation of, and internal program)
- People (change agents and others involved)
- Process (operation)

Since the elements of change are so intertwined it is impossible to separate the parts completely and therefore some overlap occurs.

Purpose (Rationale)

The starting place for most change efforts is the development of a strong justification for the intended program.

Together and left alone land, air, and water work well as an ecosystem to maintain the great chain of life and the delicate balance of nature, from ocean depth to mountain top.

But man, since he first rose up on two legs, has been tampering with this system. We can not help it. Everything we do alters our environment: the way we grow food and build shelter and create what we call "culture and civilization. "

Now, entering the last three decades of the 20th Century, we face the shocking realization that we have gone too far too fast and too headlessly - and now we are forced to cope with some of the consequences of our "progress" as a species.

For, increasingly, all over the world scientists and statesmen and specialists in every field are coming to agree on the pressing paradoxes of our modern age:

- that, as societies grow richer, their environments grow poorer.
- that, as the array of objects expands, the vigor of life declines.
- that, as we acquire more leisure to enjoy our surroundings, we find less around us to enjoy.

It is nobody's fault, and it is everybody's fault.

The real culprits are the three main currents of the 20th Century - Population, Industrialization and Urbanization.

Together, these three swift and mighty currents of history have acted to foul the air, contaminate the land, pollute the waters - and to accelerate our mounting loss of beauty and privacy, quiet and recreation.

Everything around us is tied together in a system of mutual interdependence. The plants help renew our air; the air helps purify our water; the water irrigates the plants. Man, as a part of nature, cannot "master" it; he must learn to work with it - and his fellows everywhere - to ensure that

we do not alter the environment so drastically that we perish before we can adjust to it.

President Nixon, in his "State of the Union" message said, "the great question of the seventies is: Shall we surrender to our surroundings or shall we make our peace with nature and begin to make reparations for the damage we have done to our air, to our land and to our water."

Camp Greenough evolved to meet the challenge of establishing sane environmental values and practices to keep the Earth fit for life, human and other by developing an environmental literacy among its students. (Environmental literacy is awareness of the basic principles that govern the man-environment inter-relationships and a possession of the skills that encourage life long learning about those inter-relationship), and because of the need for improved self-concept among students which is the underlying philosophy for the school.

Program

In a change effort, which Greenough is, where people have volunteered to participate with the intent of "innovating," the modus operandi is "do it." When an internal change is being considered, yes is the right answer. To the extent that people within the program decide that certain changes are required, the question becomes simply one of development and implementation.

Although it is only rarely that a public school will allow complete freedom without some constraints there are ways of dealing with the restraints

when encountered. One way is to simply ignore the restraints until an official representative from the district initiates a confrontation. In some cases the district may decide that whatever mundane rule is being broken is not worthy of the confrontation or it may be that the results prove satisfactory enough to deter the confrontation. Of course, this strategy is not fool proof and alternatives should be available.

One of the alternatives may be "reinterpretation." For example the Greenough interpretation of state certification laws allow for the participation of numerous community volunteers who would otherwise have been refused as teachers.

The outright challenging of restraints may be the most satisfying way to deal with them - question their necessity and suggest alternatives. This is a basic intent of the school in the first place. It may be discovered that there are very few restraints that have significance and in some cases were self imposed by teachers and administrators from the local district.

A community that is accepting an alternative school is probably expecting and possibly seeking variations to the local norms and in that respect resistance may be minimized. Satisfied students may be the best public relations element possible and since they are from the community could be an effective liaison for cutting "red tape" and minimizing restraints.

People

Structures, restraints, rules, curriculum, etc., are all the results of human decision. This indicates that the major variables in any educational change process are the people involved. Administrators, students, teachers, parents, school committee members, etc., are continually making decisions that may be subjective, whimsical and/or arbitrary. The need for diplomacy with the right people may turn the change process into a strategic political game once the program is implemented and becomes a serious consideration prior to implementation.

One of the important mistakes in attempting change in this situation was a failure to actively cultivate community and school committee support early in the developmental process. One reason for this was the personal friendship of the Superintendent and myself. Certain aspects of his procedure appeared questionable to me at various times but I refrained from serious questioning because of that friendship. In retrospect, I feel that circumventing the Superintendent and taking the case directly to the school committee and the community via the news media would have been in keeping with some heretofore mentioned change strategies.

Actually a change agent can not be successful if his plan for change never sees fruition, so that in that respect the Camp Greenough experiment can be considered a failure. However, since the program was never implemented, the hope remains of its potential for success.

Place and Timing

The strategy in locating a site for the school was to take a pre-developed product and locate a market for it. Although this may, at first, seem a little unorthodox it is an approach that has as its advantage a purity of form that might be missing if the product were subjected to the pressures and compromises that could accompany conceptualization within a school system. Once the program is developed the major pressures come in finding a site willing to accept the product.

Because, as mentioned earlier, the program was conceived with the idea that it would be located at Cape Cod, Massachusetts the problem of "site search" was decidedly minimized. Often times when such a change product is introduced into a school system from an outside source access is accorded through a personal contact and such was the situation in this case. My personal friendship with the Superintendent provided an easy access but, obviously, it did not guarantee success of implementation.

Camp Greenough was selected after visits to other sites for several reasons. Some of them being: (1) its proximity to the Dennis/Yarmouth school district it would serve, (2) the complete willingness of the Boy Scouts to share the facility, (3) the quantity and quality of the available equipment, (4) the proximity of the site to a wide variety of natural phenomenon such as swamps, bogs, salt water marshes, salt water and fresh water environments, and (5) the initial willingness of the school system administration to support the idea.

The timing, in the final analysis, was a crucial factor relative to the Greenough experiment, and I dare say timing is a factor to consider whenever implementation of an alternative school of any kind is being considered. In this particular situation the idea was conceived during July with the optimistic hope for implementation when school started in September. This proved to be unrealistic from a logistics point of view and the starting date was delayed until after the first marking period. It was again delayed by administrative decree (a new principal had been hired). It was further delayed until the second semester but when considered that time it was found to conflict with budgetary discussion of a sensitive nature and was tabled by the school committee to be discussed at a later date. Such a delay conflicted with my personal agenda, causing the program to be scrapped permanently.

Process

The actual change process as it relates to the Camp Greenough project is largely a synthesis of the preceding five factors. The interaction of the right people at the right place may have launched the Greenough Center on its evolutionary path. Such a school as has been proposed might well have been unique in its physical make-up and marked in its scope with an internal process that encouraged independence, initiative, improvement of self concept and an environmental literacy that would reach beyond the physical confines of the site itself.

CHAPTER VII

EVALUATION

At present, many individuals who are involved with alternative education programs are resistant to evaluation of their program, particularly by an outside person or group. This resistance is more than just paranoia, although there is some of that too. This resistance is probably based on an honest belief that evaluation is philosophically antithetical to the freedom and lack of overbearing structure upon which many alternatives are based.

Another factor contributory to this situation is that of the reactionary defensiveness of some individuals involved in some of the programs. This defensiveness, often characterized by a demand to be left alone, again is sometimes justified when one considers the tenuous existence of most alternative schools.

This defensiveness referred to above may stem in part from the abuse of evaluation through its application as a negative force, e. g. , "proving" that a program is not effective. There is never justification for such an approach, but that it does occur can be readily verified by scanning the brief literature of the alternative school movement. Tests were developed to measure, not to classify, however in use distortions of test purpose have occurred, aimed

at grouping, tracking, and categorizing children.

Much of the hostility toward evaluation has arisen from failure to understand what evaluation is all about. The blame for this failure rests equally with both sides: the evaluator for not clarifying what he is doing and why, and for imposing an evaluation design on the program; the program director for not requiring full explanation of the process and its underlying rationale and for not taking the initiative for developing, at least partially, the evaluation design.

The foregoing factors then - philosophical opposition, defensiveness, negative use of evaluation and failure to define or to understand the purpose of evaluation - all contribute at least partially to the current negative aura which pervades evaluation in alternative education today. All of these concerns are valid, but the answer lies in eliminating their basis, not in rejecting evaluation. For alternative education programs, at least those in public education, evaluation as currently conceived is part of today's reality, the price we pay for spending the public's money. Alternatives are compatible with evaluation, especially if we seize the initiative and develop ways of improving the process and using it for the purposes of alternative education. The public demands accountability for its education programs and accountability means, in part, evaluation.

Evaluation is essential in alternative education for at least four specific reasons. It can be assumed that any program in existence was developed to meet a need. Evaluation may provide some indication of the extent to which

that need is being met. To reject those indicators and settle for the aroma of success is an intellectual cop-out.

The first reason for evaluating an alternative program, and probably the most important, is the purpose of internal self improvement for the program, which in turn relates to the ongoing planning process (informal though it may be).

Second, as a basis for establishing the credibility of the alternative program, evaluation must meet the demands of a variety of "publics." Like it or not the regular program has established its credibility through the process of historical endurance during easier times. Alternative education must be prepared for attacks on its integrity because (a) it is a change, (b) it implies some weakness or lack in the regular program, and (c) it diverts funds from the regular program. The alternatives, for awhile at least, will continuously be called upon to defend their honor through what may be inappropriate evaluation strategies.

Third, a primary rationale for the existence of alternatives within public education is that they become the means of the process by which public education evolves. Realistically, some strategies for educational alternatives will not work. Evaluation can provide a base for identifying those that work and those that don't. From those that don't, needed changes in the alternative program can be made. From those that do work, lessons can be learned which will eventually change the regular system.

Finally, the evaluation of student progress is difficult without an adequate understanding of where the program itself stands.

Evaluation within alternative programs should not be separated from the planning process. It begins with an identification of needs and the establishment of goals and objectives based on those needs. By considering evaluation as part of the planning process, goals and objectives can be considered from the perspective of the ease with which they can be evaluated. This is meant to imply that some means of evaluation can be established for practically any program objective, particularly if the need for evaluative data is established early enough in the program so that appropriate measures can be built in.

The emphasis in evaluation, particularly in this era of behavioral objectives, has been on the product or outcome of the instructional process. Because many alternative programs emphasize the process by which learning takes place, new criteria for evaluation need to be developed which focus on that process, although the product should not be totally discounted.

A common fault of people not experienced in the evaluation of alternative programs is that they establish performance criteria on the basis of what the traditional programs are supposed to be doing, whether or not that is an emphasis of the alternative program. Most alternative programs were developed to fill a need that was not being met by the regular school program. It stands to reason, therefore, that alternative programs must be evaluated on the basis of what they were designed to do.

The intent of this section of Chapter VII is to emphasize the importance of goals, objectives and evaluation in any proposed alternative program without which the longevity and effectiveness of the school would be questionable.

Student Evaluation

Many of the references in the preceeding section have been adhered to in establishing the evaluation criteria for Camp Greenough at both the student and program levels.

Student evaluations consisting of portfolios, periodic written reports to parents, self evaluations and the frequent meetings between students, parents and instructional staff members have been described rather specifically in Chapter II.

The intent of setting up such a monitoring format is twofold: (1) to eliminate grades which are viewed as dehumanizing - fostering competition, externalizing rewards and creating more losers than winners, and (2) to create a more descriptive and meaningful record of student progress.

The effectiveness and quality of the portfolio depends upon a commitment by both the student and the staff to make the process work. Whereas the "grading" usually occurs four times yearly, the use of portfolios is an on-going process that demands frequent attention. A formalized process should be instituted from the beginning to reinforce the effectiveness of the system rather than leave it up to the informal student - staff arrangement.

A major component of the portfolio system is the students self evaluation. The essence of a student assuming responsibility for his learning must be his ability to self-evaluate critically. There are several ways in which self-evaluation skills may be developed. One is through journal writing, with students encouraged to comment upon personal progress with insights into the nature and quality of their involvements. This could be a valuable process for most students because of the built in need for staff interaction. Secondly, learning contracts and objectives sheets would allow students to establish personal objectives for themselves and work in consultation with a staff member to determine the success of attainment. Thirdly, many students would be asked to write periodic self evaluations in essay form or on evaluation sheets requiring rated responses to specific areas of growth. And fourth, staff members would meet in both large group and one to one sessions with students to discuss self-responsibility, the problems entailed in self direction, and ways to make the process more workable. Emphasis within these meetings would be upon honest self-appraisals by students and honest criticism by the staff. The impression here is that self-evaluation takes much practice as well as continuing feedback from other people. Students may accept this responsibility more comfortably if they realize that honest responses on their part will not provoke external reprimands.

Because the goals of Camp Greenough differ from the goals of the more conventional school it follows that new measures of student achievement

will be required. A heavier reliance upon the subjective appraisals by staff, students, parents and other school personnel appears a logical progression. The improvement of self-concept, the assumption of greater responsibility, more involvement in decision making, both at the school and within the community, all bear observable behavior changes, but to devise a formal objective test - if at all possible - for determining those changes somehow seems to force those goals into the same realm of external expectations that students have always been asked to meet.

In effect, the use of "subjective" evaluation may be a more viable approach to observing the growth of students than objective measures with the real difficulty lying, not in the evaluation per se, but in the describing, documenting and communicating the results to all the people requiring it.

Program Evaluation

Perhaps most important to the consideration of evaluating an alternative school is the question of whether it is possible at all, and if so how? John Dewey addressed this issue forty years ago when he said,

Even if it be true that everything which exists could be measured - if only we knew how - that which does not exist cannot be measured. And it is no paradox to say that the teacher is deeply concerned with what does not exist. For a progressive school is primarily concerned with growth, with a moving and changing process, with transforming existing capacities and experiences; what already exists by way of native endowment and past achievement is subordinate to what it may become. Possibilities are more important than what already exists, and knowledge of the latter counts only in its bearing upon possibilities.²³

As was stated earlier, evaluation is necessary if the alternative school movement is going to attain respectability and widespread acceptance. The society is too goal-oriented to allow a project to proceed for any length of time without demonstrating measurable results.

. . . Americans do seem to have a greater need to define themselves, so to speak, at any given moment - to know where they stand vis-a-vis others. In the case of schools, this means that parents want to know what their children are learning, relative to what others are learning; this puts pressure on schools to emphasize short-term goals, since these are much more easily measured than long-term goals.²⁴

Because one of the primary concerns of the Camp Greenough project was the improvement of self concept the use of the Inventory of Adjustment and Values by Bills, et. al., and the Body-Cathexis and Self-Cathexis Scale by Secord and Jourard were selected as the evaluating devices relative to program goals achievement. Measuring methodology for these instruments has been described in detail within Chapter II and a copy of them may be found in the Appendix.

The success of the individual student in accomplishing the purposes of the program was to be the barometer by which the overall success of the school was to be determined. The agreement was to make with the district to administer standardized tests at the end of the year to determine the track record of the program in that respect.

It may be expected that the most influential form of evaluation would have been the vocal and written commentary of the community in general and the parents of alternative school students in particular.

CHAPTER VIII

CONCLUSION

Summerhill and many free schools have operated on the assumption that joyful learning emanates from the opportunity to mill and dabble and experiment and ultimately to make personal choices - and that this process can't be prescribed in advance. For many establishmentarians running the public schools, however, the results of such a philosophy are neither quantitative enough nor predictable enough to allow for learning to evolve on its own for even small numbers of students. Therein lies the bind for many alternative schools. How do you convince a school committee that neatly wrapped educational packages don't fit all students.

The learning process cannot be predicted with 100% accuracy. What is right for one may be wrong for another. What may be right for one at one time may be wrong for the same person at some other time. How can we predict with any great degree of accuracy? I doubt that we can, but we can use the failures of the past to at least set the tone for the future.

The failures of the past that I refer to are the failures of our schools to stimulate, motivate, interest and retain, of their volition, many of the students entrusted to it. With a new form of educative approach, one that is fast becoming commonplace, the opportunity is here to provide appealing

directions for more students than ever before. The alternative school movement is here and its true effect may not be known for two or three generations until the products of the first alternative schools grow up to run their own version of that kind of program and their children become involved in the same process.

The present developers and directors of alternative schools are still too closely aligned with the past to be as truly innovative and free as they may like to be. One can reason that no one will ever be completely free from the influence of the past but it may be safe to say that the further one progresses into the future the less constricting are the binds of the past.

Would Camp Greenough have succeeded had it been implemented? One can only speculate. Certainly the place, (Cape Cod) with its great variety of terrestrial and aquatic environments provided an ideal location for such a center. The camp itself gave every outward indication that it would be a totally satisfactory home base. The people contacted were certainly enthusiastic about the possibilities of the program. The field was thoroughly researched with regard to both the environmental/outdoor aspect and the alternative school movement. The program was completely conceptualized and documented with explicit parameters to provide structure. Goals were clearly delineated, and a relatively comprehensive system for evaluation was developed.

Why the Program was NOT Implemented

Because one of the reasons for writing this particular dissertation is to provide a source of information for prospective founders of similar programs, the reason(s) relative to why the program was, at this writing, never implemented will be discussed. Should the reader find any generalizable situations within the discussion he would do well to retain them for consideration when contemplating his own program.

The progress from conception of the idea during July 1972, through the point of tabling the program during January 1973 was rapid and uninterrupted with very few exceptions. Time after time written reports of program development indicated that all systems were go. The many details of what transpired between the Superintendent and the School of Education have already been documented within Chapter III and at this point an attempt will be made to analyze some of those details.

One very key factor, as I see it, was my personal friendship with the Superintendent of Schools. Certain actions, or rather, lack of decisive action at crucial times, was certainly contributory to the problem. I was discouraged, because of our mutual friendship and my own personal reaction to that friendship, from making direct statements concerning that inaction. For example, during October 1972 I requested to be placed on the agenda to discuss the program with the school committee. The Superintendent put me off by saying

that he would handle it in due time because it was, he felt, a little premature. Because I was striving for an early opening of the school I did not feel that the request was premature. Had we not been personal friends I would have pressed the issue. As it was I deferred to his judgment.

When I finally made the presentation to the school board, it was at a time when they had just recently completed negotiations for a new eighteen month budget. The treasurer became surly and said that it couldn't be considered for at least a year and a half, at which point the Principal became heatedly involved saying that the school needed alternative programs because the present programs were inadequate to serve the needs of all the students at the schools. After more discussion one member suggested that the plan be tabled until another time. During this entire presentation the Superintendent was silent. His vocal support at that time could have caused the board to reconsider and give permission to start the program at the beginning of second semester. (It was then mid-January.)

The Principal, in spite of his vocal confrontation with the treasurer, had not supported the program during earlier discussions with me. His primary interest was to find a place for his discipline problems and potential dropouts and because the NASP guidelines would not permit this, his enthusiasm for the program was far from being great.

Later discussions with the Superintendent indicated that the Camp Greenough program was not, in fact, a priority with him, but he was reluctant

to admit that to me for fear of causing ill will.

Judging from his disclosure and my feelings, our friendship had gotten in the way. Had we not been friends he would have felt free to indicate that the Camp Greenough program was not a priority and I would have looked elsewhere for a school system to accept the program. Had we not been friends I would not have allowed myself to be put off by his excuses but would have precipitated a showdown at the beginning and required some sort of verification of his intent.

Histories of various alternative schools indicate that they still have to overcome many obstacles, even with administrative support. However, without the Principal or Superintendent as support persons the chances for implementation are not good.

Future Potential

"The primary basis for evaluating a school should be whether the students and teachers find it a satisfying place to be."²⁵ I for one agree with that statement by Christopher Jencks and because of that I am optimistic about the future of the alternative school movement. The rationale for alternative schools is predicated on the belief that freedom and responsibility are necessary ingredients of a worthwhile learning experience. To a degree at least, anything worthwhile has an element of satisfaction to it.

As suggested by the President in his state of the union message, environmental education is a concern whose time has come. The visibility given the subject by the media and the interest shown by both public and private funding agencies indicate the national and international regard in this direction.

Some enlightened educators are beginning to see the validity of mixing age groups for learning purposes and the idea of volunteer expertise is becoming more valuable as costs soar. Consortia type alliances are becoming more and more predominant because of the efficiency and economical feasibility they provide.

All of these aspects were brought to bear within the design of the Camp Greenough Environmental Education Alternative School and Teacher Training Center within the Dennis/Yarmouth Regional School District, Cape Cod, Massachusetts. Whether the program will be implemented as it was originally intended is questionable. Two school districts within the area of Dennis/Yarmouth have expressed more than a passing interest in the idea, several foundations have offered various amounts of support and at least four headmaster/superintendent/principal type administrators have requested copies of the proposal. All of these things would seem to indicate that the "idea" is alive and well and living in the minds of some interested people. Thus the program may yet reach fruition.

Finale

The frustration caused by the fact that the program seemed so on the verge of implementation so many times can be likened to the feeling a potential championship football team might have, after working very hard during pre-season drills to "get it together," only to find, on opening day, that all of the games had been cancelled.

Yet the endeavor was not a total personal loss for I met many interesting people, shared many interesting ideas, saw many interesting programs, read some very provocative literature, and have developed a fair amount of environmental literacy. My primary regret is feeling so certain that it would have been the right kind of experience for some of the people who might have been involved, but alas they and we may never know.

APPENDIX

Proposal to Schools:

The National Alternative Schools Program at the University of Massachusetts in cooperation with the Barnstable/Yarmouth Regional School District wishes to use the Camp Greenough Boy Scout Reserve at Yarmouth, Massachusetts, as base camp for an environmental education center within the following parameters:

1. Primarily as a day camp with limited exceptions--at least for the 1st year.
2. Primarily as a resident camp after 1st year as a means of financial support for the program.
3. To be occupied for a period of at least 3 years unless otherwise decided by mutual consent of BSA and MASS-B/Y.
4. Dining Hall, Messet Lodge, and trading post to be insulated for winter use along with burying of appropriate water pipes in lieu of rental fees until such time as the program becomes self supporting. Payment of utilities to be made by school program.
5. Any change in the camp environment must receive the approval of the BSA before realization.
6. Any conflict regarding the scheduled use of the Camp Greenough facilities will defer to the wishes of the BSA.
7. BSA will be absolved of any liability concerning program enrollment.
8. Duration of program to coincide with the regular school year. Any extension of this time must receive approval of BSA.
9. Use of any and all facilities and/or equipment belonging to BSA must have prior approval from BSA.

Letter to Selected Community Members:

Dear _____:

The National Alternative Service Program at the University of Massachusetts in conjunction with the Massachusetts South Regional High School, intends to establish an Environmental Education Center to complement the existing school offerings. The Center will be based at Camp Greenough in Yarmouth.

It is one of the wealth of expertise that exists among parents, residents, and lobbyists within the Mid-Cape region. One of our primary intentions is to utilize these resources wherever and whenever possible.

In discussing these intentions with Dr. James Ferra of the Cape Cod Community College, he suggested your name as a possible source of input for our program.

If you are interested and willing to become a part of what should be an exciting and unique program for the mid-cape area, please check the appropriate box on the enclosed self-addressed card and return it. I will contact you within the very near future to define more clearly the program and your possible role in it.

If, by chance, you are not interested, please indicate that fact and we will refrain from further contact.

Sincerely,

NEP Coordinator

WMI Assistant

GLEN HELEN*Antioch College, Yellow Springs, Ohio*

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A LIVING MEMORIAL OF ONE THOUSAND ACRES FOR OUTDOOR APPRECIATION, EDUCATION, AND RESEARCH

July 25, 1972

Mr. Thomas F. Paquin
 School of Education
 University of Massachusetts
 Amherst, Mass. 01002

Dear Tom:

I envy you the opportunity that you have. There is nothing quite like starting a new program in outdoor education.

I have asked the secretary to bundle up what materials we do have in hopes that they may represent some assistance.

Presently an Ohio committee is assembling materials for our State Director of Outdoor Education, to culminate in a set of guidelines for Ohio schools wishing to establish outdoor education centers. This booklet should be in print by late September, and I would recommend that you write for a copy. Write to: Mr. Gene Knight, Supervisor
 Environmental-Conservation Education
 Ohio Departments Building
 Columbus, Ohio 43215

Our specialty here at Glen Helen is training staff to work with children out-of-doors. If we can help in this way, please call or write.

Sincerely,



J. Douglas Dickinson

JDD:jcd


Dear Doug,

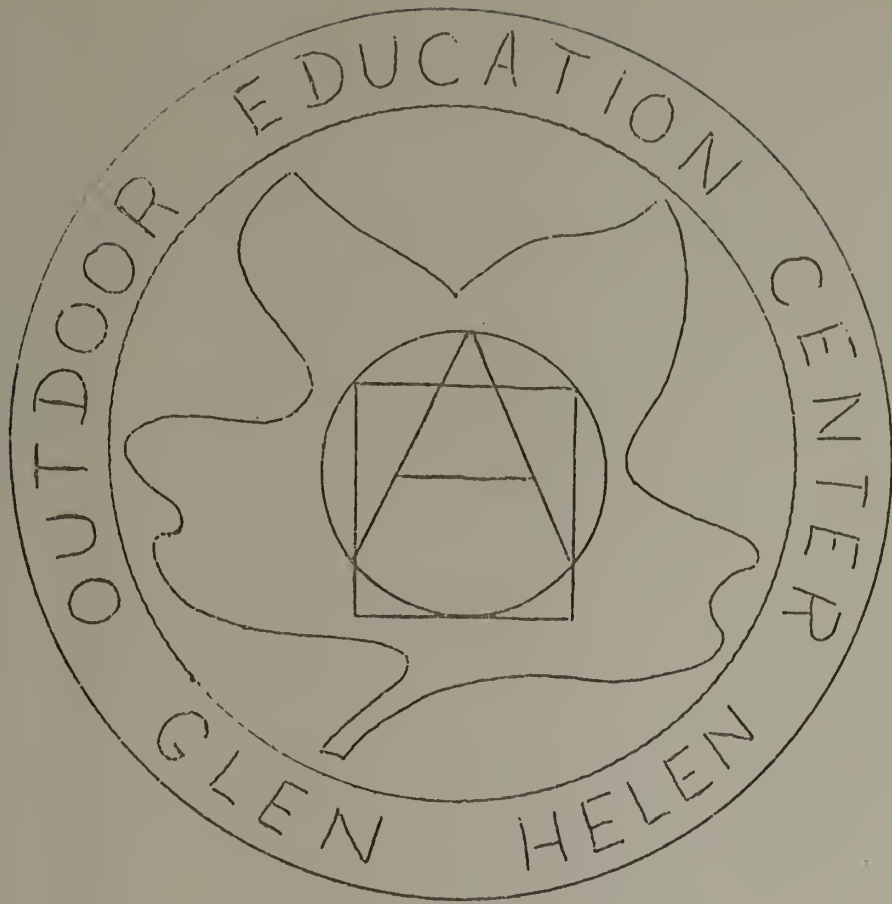
Starting an outdoor center is, as you said, quite exciting, but you didn't emphasize how much hard work it would be, also. It certainly has been that, but I can see the light at the end of the tunnel and anyhow I've met so many nice people along the way (including the Antioch bunch) that it is certainly a worthwhile effort.

I expect to be in a position to hire, at least one and quite possibly two naturalists by January. This time, as I recall, coincides with the termination date of some of your people. If any of them are interested in coming to Cape Cod they should send a resume' of their experiences and background to me sometime in the near future. I will then contact them in acknowledgement on an individual basis. The people selected, whether from Antioch or elsewhere, will have the opportunity to pretty much develop the program, with help from UMASS and schoolsystem personnel. Its preferable that they be interested in spending at least 18 months on the job. There is also the possibility of doing this through the doctoral program here, but those are things that can be worked out later.

Dick P. was going to send me some samples of the aerial pictures he took when I was there. Would you remind him that I'm still interested.

You would be amazed at the number of people who are aware aware of your program. Thanks again for all of your help. I hope all is going well at the Glen.





ACTIVITY HANDBOOK

FORWARD

The decision as to which of the variety of worthwhile values, skills, understandings and attitudes to emphasize in the learning experience is perhaps the most critical problem in curriculum building. School camping is no different, and there are perhaps as many educational opportunities as there are teachers and children who participate in such a program.

For a new teacher contemplating a venture into school camping, then, the task of selecting and organizing the desired learning experiences is indeed challenging. Just as challenging is the exploration into the depth and breadth of this learning potential by a camp experienced teacher.

For those teachers who are determined to capitalize on the momentum, the excitement, being generated by the prospective campers as that date approaches, we offer the following ideas and materials to enrich pre-camp preparation.

I. PRE-CAMP SLIDE TALK

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Especially helpful for schools entering this program for the first time, this colorful presentation by one of our Center Directors answers questions commonly asked by hesitant parents and children. Possibly most effective when used to stimulate parents and youngsters 6 to 8 weeks prior to the resident experience, this one hour show can be geared toward youthful audiences, adults or mixed groups. A question-answer period is always included. Slide talks are given at your school during the day, or during the evening hours if thirty or more parents can be assembled.

II. PRE-CAMP TEACHER PARENT WORKSHOP

Designed to help that eager (but green) teacher become familiar with the facilities, the program and the staff at Glen Helen. Also a time for veteran teachers to present program ideas they would like to see incorporated into the four-day experience. Beginning September 13th and thereafter the first Monday of each month, these Workshops will be held from 3:30 to 5:30 P.M. You are also invited to bring any parents who will be assisting with the outdoor education experience. Please call the Outdoor Education Center Office and let us know if you are planning to attend. (513-767-7648)

III. ECOLOGICAL CONCEPTS

Enclosed you will find a five page booklet of basic concepts which every elementary school child should study. A thorough review of this material will prepare your young ecologists for terms and concepts commonly expressed by our staff of naturalists.

IV. MATERIALS AND EQUIPMENT PREPARATION

Students become excited about using equipment which they themselves have acquired or even constructed. We include a suggestive list of items which would likely be used in our program.

	<u>Quantity for 65 Children</u>
Tea strainers (nets)	20 - 65
Collection jars (baby food jars)	30
Pond scopes	15 - 20
Tree diameter tapes	15 - 20
Journals (log books)	65
Biltmore sticks	15 - 20
Food for birds (seed, suet, ear corn)	-
Home-made bird feeders	20 maximum

Collection jars and bird seed would likely remain at the Center, while other items should return to the school. Please call or write for helpful construction hints or additional information.

V. ON-GOING PROGRAMS

What is going on in your classrooms? We would like to try to enforce and tie-in with our outdoor experiences some of your "three R's" which you will be covering prior to, or just following the Glen Helen experience. Example: We learn that math classes are exploring circumference and diameter and we make an effort to enforce this in our unit on trees with the aid of diameter tapes. Science classes are soon to study the compass, so we offer to use this wonderful instrument on one or more of our hikes.

If you will try this "enforcement approach" with us, we will need your information the week prior to your group's arrival.

We would be interested in science, math, social studies, English, art, music and health. Please include a brief description of unit and key vocabulary associated with it.

VI. POSSIBILITIES WITHIN CURRICULUM DISCIPLINES

1. Science

- (a) Have the class devise their own food chains (See Ecological Booklet).
- (b) Have class collect and study ecology articles from current newspapers and periodicals. Report these to class or bring to camp to discuss and report on there.
- (c) Review weather forecasting techniques (preparing to use our weather station).
- (d) Have some children prepared to relate mythology related to stars and constellations currently in the night sky (in preparation for our astronomy session).

2. Social Studies

- (a) Review the history of Indian Civilizations in the Miami Valley.
- (b) Review the history and principle of the magnetic compass.
- (c) Develop an understanding of ECOLOGY. Why might it be considered the "modern conservation"?

3. Mathematics

- (a) Start a camp savings plan for your students.
- (b) Have the students estimate distances by pacing and using parts of their body as measuring devices.
- (c) Organize and run a rummage (or other) sale to provide scholarship funds for needy students.

4. Art

- (a) Design creative name tags.
- (b) Design ecology posters to display at camp.
- (c) Introduce sketching techniques for use at camp (art teacher might give an "assignment" of at least one sketch done at camp)

5. Reading

- (a) Have a committee choose stories which might be read in dorms aloud at bedtime.
- (b) Encourage nature-oriented selections for reading class.
- (c) Collect and study ecology articles from current newspapers and periodicals. Each child bring a different article to camp for purposes of discussion and brief oral report.

6. Language Arts

- (a) Teach techniques for cross-word puzzle construction. Have students design various ones, using ecology and nature words - bring them to camp to test on the staff. (A surprise quiz?)
- (b) Each child learn 10 new vocabulary words relating to nature study or ecology.
- (c) Have a student committee (rather than the teacher) invite a Glen Helen staff member to your school to help in planning for your resident experience. Write or call 513-767-7648.
- (d) Make a bulletin board of conservation articles and have students summarize them for the class.
- (e) Plan and develop a camp fire program for use at Glen Helen. Encourage student talent and consider using parents who are musical.

GLEN HELEN OUTDOOR EDUCATION CENTER

Antioch College
Yellow Springs, Ohio

ECOLOGICAL CONCEPTS

There are several major ecological concepts which will be emphasized during your visit to the Glen Helen Outdoor Education Center. Ecology is the study of the interrelationships between plants, animals and their environments. You will find a brief review of the ecological concepts listed below. We encourage discussions and activities relating to these subjects for the students will then have a better background for their outdoor education experience. Field explorations at the Center will emphasize these concepts with actual observations and individual discoveries.

THE COMMUNITY CONCEPT

The majority of the field trips at the Outdoor Education Center will be oriented to visit biological communities. Examples of the different communities include the meadow community, the shrub and thicket community, the freshwater pond community, the marsh community, and the deciduous forest and pine forest communities.

Field trips to these communities will emphasize the interrelations that exist between the plants, animals and their environments. Each habitat has characteristic plants and animals that are most commonly found there. The adaptations of these organisms and the various behaviors of the animals will be subjects for investigation.

THE NICHE CONCEPT

Every plant and animal within a community has a specific role. The community as a whole is able to function when all of the various roles are occupied. If vacancies occur, then chaos will result and the so-called "balance of nature" will be upset.

The specific role of an animal is referred to as its niche. The concept of niches is best explained by comparing a natural community such as a forest with a human community. Within a city there are teachers, doctors, lawyers, housewives, grocers and garbage collectors. There are also various jobs (niches) which exist in natural communities. Following is a brief review of some of the important niches; think of people within your community that perform similar jobs.

1. Food Producers

The basic source of energy within a community is the green plant. Green plants are the only organisms on earth that are capable of capturing the sun's energy and converting it into food. If a plant is green, photosynthesis (food production)

2. Plant-eaters (herbivores)

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Herbivores are animals which eat plants. They vary greatly in size from small insects, hundreds of which can live on a single plant stem, to much larger animals such as deer. They may be specific in their appetite, as certain caterpillars that feed only on one species of plant, or they may be more generalized feeders such as rabbits.

3. Primary Meat-eaters (carnivores)

Primary carnivores are animals which prey on herbivores. They are generally more solitary than herbivores and larger and stronger than their prey. Ladybird beetles feed on aphids which are herbivores, so they are primary carnivores.

4. Secondary Meat-eaters (carnivores)

Secondary carnivores are animals which feed on primary carnivores and are even larger than the primary carnivores on which they prey. Warblers and other small, insect-eating birds feed on ladybird beetles and are examples of secondary carnivores.

5. Parasites

Parasites derive their energy by living on or within other organisms without killing them. Almost every individual plant or animal within nature may be parasitized. Parasitism is a natural condition within every community, not a disease or an abnormality.

6. Scavengers

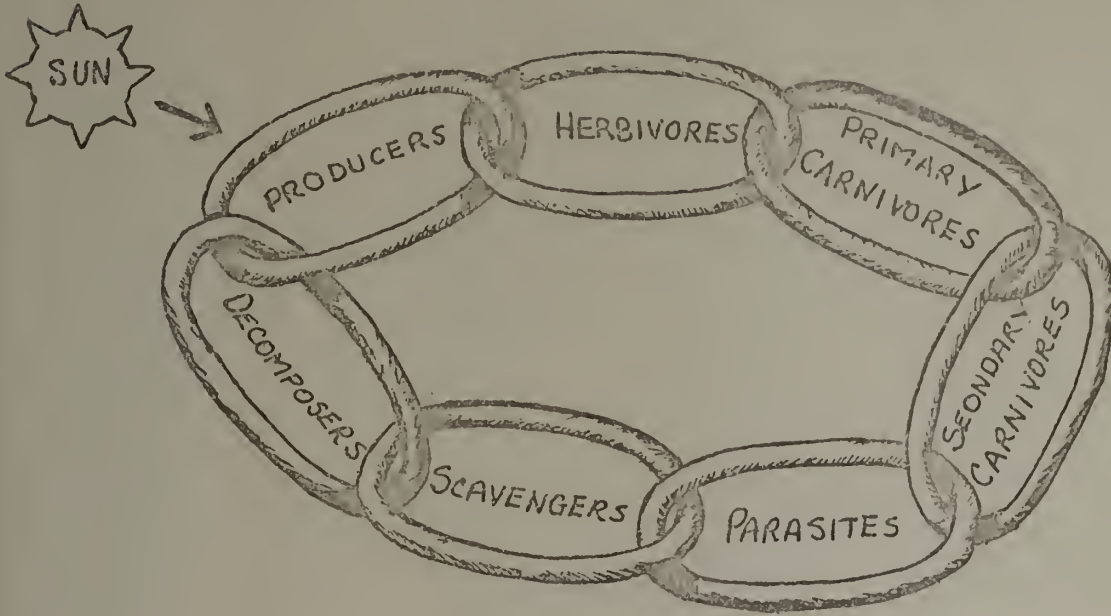
Scavengers are animals which eat dead plants and animals. Earthworms are considered scavengers, for they eat dead plant matter in the soil. Termites are also important scavengers, for they eat dead branches and wood from fallen trees. Vultures and crows are conspicuous examples of animals which feed on dead animals.

7. Decomposers

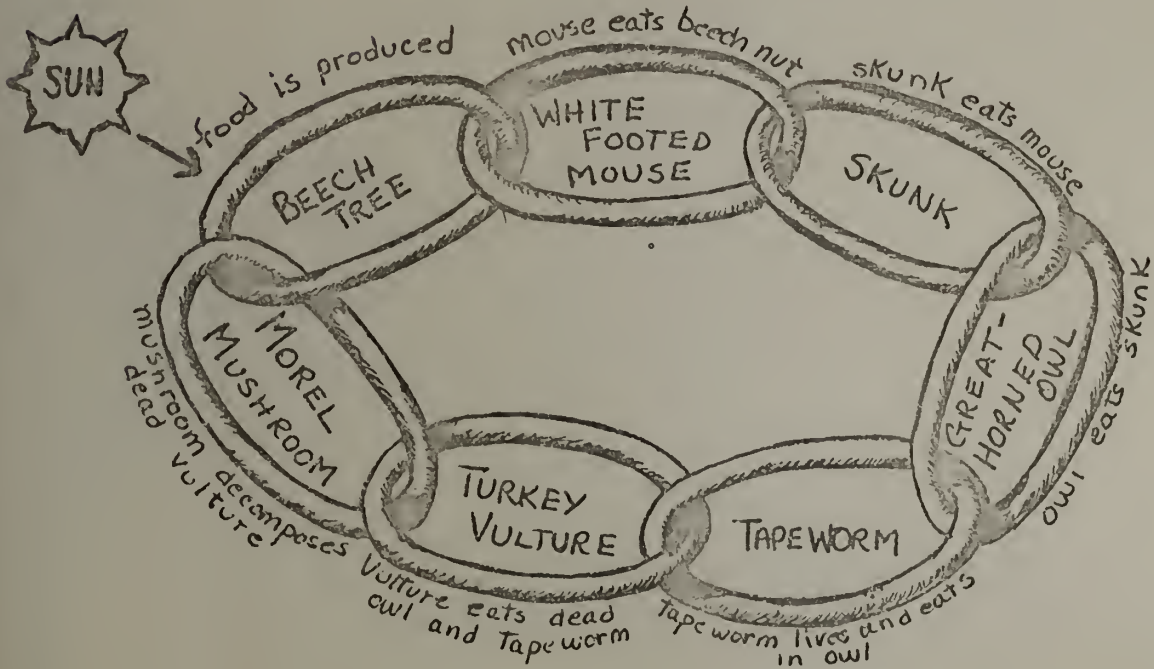
Decomposers are mainly smaller organisms such as bacteria, yeasts, molds and fungi. They are essential to the perpetuation of a community, for they break down plant and animal tissues and excretia into simpler compounds which can be used by plants. All the various types of mushrooms and fungi are decomposers.

THE FOOD CHAIN CONCEPT

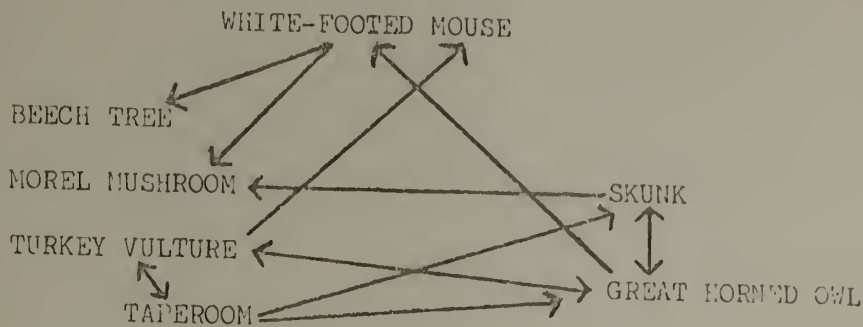
The food chain concept is a means of describing the food inter-relationships of animals living in a community. The first link of the chain contains producers, while the other links cont in the remaining niches as listed below. Each community has different species filling the various links, but the order of the niches is constant.



A SAMPLE FOOD CHAIN FOR THE FOREST COMMUNITY:



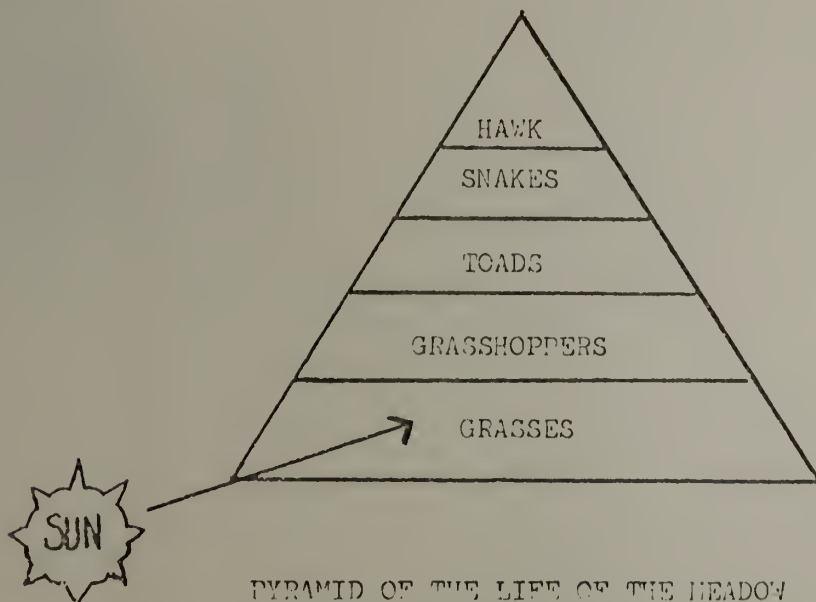
The food interrelationships within a community are very complex. White-footed mice do not limit their diet to just beeches, or just plants. They are primarily herbivores, but will occasionally sample an insect or worm when the opportunity arises. Skunks have an even greater diversity in their food habits. They commonly feed on beech nuts, mice and mushrooms. They might even sample turkey vulture eggs if opportunity permitted. These complex relationships can best be described by a FOOD WEB.



SAMPLE FOOD WEB FOR THE FOREST

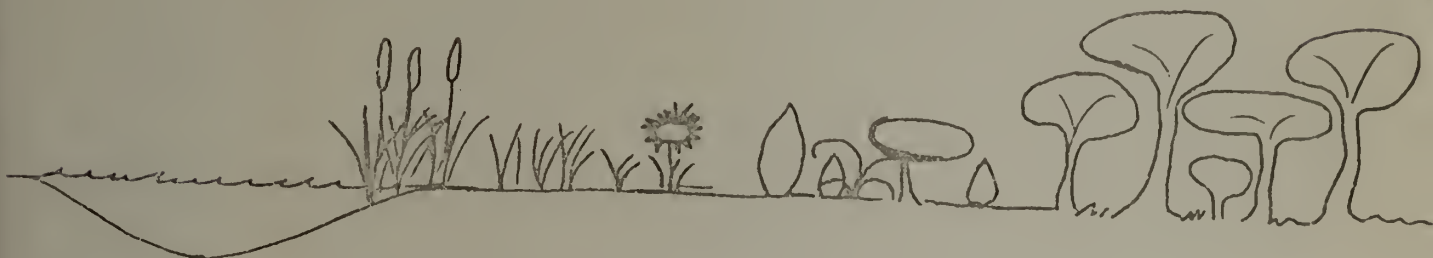
PYRAMID OF LIFE CONCEPT

Another way of describing the food interrelationships within a community is to place the different niches into a pyramid - shaped structure. This organization emphasizes the numbers of animals within each niche. It should be noted that there is a great amount of energy loss between the layers of the pyramid, and that the rate of energy loss increases toward the top of the pyramid.



PYRAMID OF THE LIFE OF THE MEADOW

Biotic communities are not static. They are forever changing in both composition of plants and characteristic animals. Meadows do not stay meadows forever. With time they eventually change to thickets and in time turn to forest. Likewise ponds fill in to form marshes and as the accumulation of decaying plant matter increases, the marsh becomes still dryer until meadow plants become dominant. Succession eventually leads to a stable community that is able to perpetuate itself under the conditions it creates. This stable association is called a Climax and is named for the dominant (most common) plants in the community. The climax for Glen Helen is Beech - Maple forest.



POND → changes to MARSH → changes to MEADOW → changes to THICKET → changes to FOREST

THE BIOME CONCEPT (a world - wide view of plant communities)

The world has been divided into several ecological sections referred to as biomes. A biome is a climax association that is limited by definite geographic and climatic restrictions. Ohio is within the deciduous (broadleaf) forest biome. The coniferous (cone bearing tree) biome begins further north into Canada.

Biomes (ecological sections of the earth) are consistent with the latitudes around the world. For example: if one were to start at the equator and proceed north to the pole, he would encounter biomes in the following order - tropical forest, grassland, desert, deciduous forest, coniferous forest, tundra, and ice and snow. A similar repetition of biomes also exists on the mountains. Tropical mountains may contain samples of all biomes, starting at their base with tropical jungles and are often topped with ice and snow. These mountains may provide habitat for animals that otherwise would be hundreds of miles out of their normal distribution.

UNIVERSITY OF MASSACHUSETTS * DENNIS/ YARMOUTH ENVIRONMENTAL
EDUCATION CENTER

RATIONALE

Together, and left alone, land, air, and water work well as an "eco-system" to maintain the great chain of life, and the delicate balance of nature, from ocean depth to mountain top.

But man, since he first rose up on two legs, has been tampering with this system. We can not help it. Everything we do alters our environment: the way we grow food and build shelter and create what we call "culture" and "civilization".

Now, entering the last three decades of the 20th Century, we face the shocking realization that we have gone too far too fast and too headlessly - and now we are forced to cope with some of the consequences of our "progress" as a species.

For, increasingly, all over the world scientists and statesmen and specialists in every field are coming to agree on the pressing paradoxes of our modern age:

- that, as societies grow richer, their environments grow poorer.
- that, as the array of objects expands, the vigor of life declines.
- that, as we acquire more leisure to enjoy our surroundings, we find less around us to enjoy.

It is nobody's fault, and it is everybody's fault.

The real culprits are the three main currents of the 20th Century - Population, Industrialization and Urbanization.

Together, these three swift and mighty currents of history have acted to foul the air, contaminate the land, pollute the waters - and to accelerate our mounting loss of beauty and privacy, quiet and recreation.

Everything around us is tied together in a system of mutual inter-dependence. The plants help renew our air; the air helps purify our water; the water irrigates the plants. Man, as a part of nature, cannot "master" it; he must learn to work with it - and his fellows everywhere - to ensure that we do not alter the environment so drastically that we perish before we can adjust to it.

President Nixon, in his "State of the Union" message said, "The great question of the seventies is: Shall we surrender to our surroundings or shall we make our peace with nature and begin to make reparations for the damage we have done to our air, to our land and to our water."

There is a need for the type of program that this paper suggests.

PURPOSES

The School of Education at the University of Massachusetts in conjunction with the Dennis/Yarmouth Regional School District at Cape Cod, Massachusetts proposes to develop a combined program of environmental orientation involving grades K - 12 and including a teacher preparation program at both the pre-service and in-service levels.

The program will have two parts:

PART I: THE ENVIRONMENTAL ALTERNATIVE HIGH SCHOOL

An alternative school pilot program, initially involving 15 students from the Dennis/ Yarmouth Regional High School chosen by lottery from voluntary application of students with special needs. (see appendix A for description of curriculum and organization.)

The idea is to provide a satisfying educational experience for students whose needs can best be satisfied within an outdoor environment, rather than a conventional classroom. This will be their school for the year and they will get regular high school credit for attending.

The Boy Scouts of America have agreed to make their 320 acre Camp Greenough facilities and equipment available to serve as home base for the project for a period of three years, with option to renew at that time. Although the program will be based at Camp Greenough, located within the Dennis/ Yarmouth school district in order to provide independence, flexibility, community identity (among students) and access to natural surroundings, the intent is to use the entire Cape Cod area as the learning environment.

We intend to take advantage of all resources:

Human - by soliciting input from various parents, hobbyists and retiree groups (Yarmouth Historical Society, Mid-Cape Men's Club etc.) located in the area as well as professional teaching staff from the area.

Natural * by studying the geology, plant and animal life and history of the area (ecology).

and Institutional - by utilizing the services of Cape Cod Community College, University of Massachusetts, Boy Scouts of America, Cape Cod National Seashore, the aquatic institutes at Woods Hole, Audubon Society etc. to provide a comprehensive educative atmosphere.

The aims of this component are:

1. To develop a sense of community among the students and the natural environment.
2. To train students as aides to teachers from local and out of district elementary schools using Camp Greenough for nature study.
3. To promote increased awareness, among students and citizens, of the Dennis/ Yarmouth community.
4. To develop a sense of individual student responsibility.
5. To develop an understanding of ecological systems and the interdependence of all organisms.
6. To use the outdoors for recreational purposes.
7. To relate the environmental problems of the local community to a global perspective.
8. To use the outdoors in the development of academic skills.

PART II: THE ENVIRONMENTAL TEACHER TRAINING COMPONENT

An experiential teacher training program affiliated with the School of Education at the University of Massachusetts both pre-service and in-service with specific aims to:

1. Provide a learning experience with the out-of-doors as

an environment which can be creatively used as a major learning process for the teaching of virtually any academic subject (math, science, social studies, language arts, humanities and art).

2. Provide resource persons in the various academic disciplines who are familiar with the out-of-doors and experienced in the teaching of others through the creative use of the environment as a vehicle for the teaching/learning process.
3. Develop a broad curriculum of outdoor and environmental education which could become the basis for an undergraduate or graduate major, or which could become an integral part of the teacher education program.
4. Provide opportunities for internship experiences for pre-service teachers.
5. Provide experiential workshops for in-service teachers.
6. Consider regionalization by providing on-site practicums using potential of the New England Consortium of Higher Education.

The program will be implemented in two phases:

PHASE I

This will include years one through three when the program will need some financial support from outside sources for:

1. Winterizing existing camp facilities
2. Development of program

3. Staff salaries
4. Leasing of needed equipment
5. Supplement operational costs

PHASE II

This will include years three plus when the program will become self supporting by: (See appendix C)

1. Local school committee support
2. Providing a one week field experience for schools out of the district and charging a fee.
3. Charging other school districts a fee for conducting workshops for in-service teachers.
4. Providing "naturalists" from the center to other school districts to work at their sites, for a fee.
5. Charging a nominal fee for use of the facilities by students from colleges other than the University of Massachusetts.

STAFFING (see appendix B)

- Program Director - Responsibility to: hire and assign staff; coordinate interaction of community resources; initiate and maintain public relations; coordinate activities of Part I and Part II of the program; direct, facilitate and oversee the evolution of the program from Phase I to Phase II.
- Naturalists (2) - Responsibility to: provide expertise for outdoor activities at, primarily, the high school level (some elementary level) dealing with plant and animal studies; land and water use; conservation; pollution; ecology; weather; etc. and aid in total program development.
- Teacher Training Supervisor - Responsibility to: develop and implement teacher education program; provide relevant experiences for potential teachers either through technique development or field experiences or both; coordinate and oversee workshops for in-service teachers.
- Retirees, parents and hobbyists (volunteer) - To work with naturalists and teacher training supervisor to provide subject area expertise and aid in program development, where appropriate, for high school and college students.
- Interns - To work with the naturalists for the purpose of gaining field experience under guidance of teacher training supervisor; to work at local elementary schools.
- Alternative School Students - To serve as aides to naturalists and teachers in working with elementary level students.

OPERATIONAL BUDGET

116

Program Director	\$ 20,000
Naturalists 2 @ \$ 9,000	18,000
Teacher Training Supervisor	15,000
Secretary	6,000
Maintenance	7,000
Utilities	2,500
Telephone	1,000
Equipment and Materials	2,000
Office operation	500
Food	8,000
Travel	2,500
Insurance	<u>1,000</u>
	\$ 81,500

Total cost of operation
per year

\$ 65,200 funding 1st year - \$ 16,300 from local sources = 20%
 48,900 funding 2nd year - 32,600 from local sources = 40%
32,600 funding 3rd year - 48,900 from local sources = 60%

\$ 146,700 funding for 3 years - \$ 97,800 from local sources

\$ 244,500 total for three year operation

15 Alternative School Students

15-20 Teacher trainees

30-40 Elementary School students

70 students per day average on site (some with resident status)

Average cost per student per year approximately \$ 1,180

SITE PREPARATION BUDGET

117

Building #	Dimension	Bath	Ceiling	Heat	Carpentry	Total
1	48'x84'	\$500	\$450	\$1280	\$800	\$3030
Includes Dining Hall (classroom), kitchen + construction of #2 bathroom						
2	18'x 28'	900	150	496	450	1996
Includes construction of bath and shower facility						
3	18'x 28'	*	*	496	*	496
4	22'x 28'	500	150	496	300	1446
5	24'x 32'	*	*	670	*	670
Winterization of water supply						<u>2000</u>
						\$9638

These figures represent cost estimates submitted by local tradesmen to the Boy Scouts of America for the winterization of the five buildings at Camp Greenough

* Already installed

CURRICULUM

Part I - Environmental Goals

118

- I. To develop a sense of community between the students and the natural environment through:
 - a. Co-operative effort of winterizing the existing facilities
 - b. Co-operative effort in developing nature trails
 - c. Participation in values clarification workshops put on by members of the UMASS staff
 - d. Student team study projects such as determining "litter factor" of specified areas - feasibility of recycling projects.- develop special interests catalogue
 - e. Sharing of decisions and responsibility
 - f. School meetings among the staff and students
- II. Increasing student awareness of the Dennis/ Yarmouth Community by the:
 - a. Development of various community resource guides
 - b. use of parents, hobbyists, retirees with particular and relevant expertise, as auxiliary staff
 - c. Use of student help (volunteer or paid) with community environmental concerns
 - d. Use of student internships within the community related to Center concerns(example; student working on trash removal truck)
 - e. Study of local community development (history)
- III. Developing a sense of individual student responsibility through their:

- a. Participation in developing a course of study
 - b. Maintaining a portfolio of personal activities
 - c. Serving as teacher aides for elementary students visiting the site (see appendix B for description of Elementary School program)
 - d. Development of forms for self evaluation
 - e. Involvement in the decision making process at the school
 - f. Initiating and completing self interest projects that are compatible with program objectives (example: building a weather station at home, building an aquarium)
 - g. Taking leadership role for group projects
- IV. Understanding of ecological systems. The recognition of the interdependence of all organisms will be facilitated by:
- a. Lectures by knowledgeable people in specific areas
 - b. Films - with pertinent discussion before and after
 - c. In depth study of : salt water, fresh water, forests, swamps, marshes and bogs all of which are available within the immediate area for first hand scrutiny
- V. Increasing familiarity and appreciation of the outdoors by using it for recreational purposes by:
- a. Hiking
 - b. Fishing
 - c. Backpacking
 - d. Developing a sense of woodsmanship
 - e. Foraging
 - f. Camping and boating

VI. Relating the environmental problems of the local community to a global perspective through:

- a. Field trips
- b. Lectures
- c. Assigned readings
- d. Guest speakers

Part II - Academic Skill Development

I. Communication

General Objectives

- a. To write creatively
- b. To improve techniques of written and verbal expression
- c. To improve interpretative skills in reading
- d. To select compile and edit data
- e. To relate reading materials to the local situation
- f. To develop skill in the use of media equipment
- g. To learn to use media as a means of expression

Things to do

Writing of poems, diaries, logs, stories and songs that center around personal experiences
Study and write historical reports with possible use of audio and video equipment for emphasis
Maintain portfolios of personal progress
Produce multi-media project reports
Develop multi-media biography of environmental center
Gathering and editing scientific and social data
Reading and discussing selected readings
Develop photographic essays about relevant concerns
Produce slide tapes of various projects

II. Math

General Objectives

- a. To use standard measuring instruments correctly (compass, ruler, tape, gallon etc.)
- b. To understand the relationship of math to everyday living

- c. To develop the capacity to estimate
- d. Application of arithmetic skills to first hand experiences in the outdoors and everyday living

Things to Do

- Measuring - A board foot, age of tree through ring count, circumference and diameter of trees, surface area for map making, scale drawings or models, dimensions of camp buildings, percent of slopes, distances between buildings, trees etc.
- Estimating - Height of a hill, time of day, distance walked, distance away of lightning, width of river etc.
- Averaging - Temperature readings, barometric readings etc.
- Compass hiking, planning amounts and costs of meals, winnizing facilities, planning field trips, construction of feeders, shelters, weather station (construction and operation) etc.

III. Social Studies

General Objectives

- a. To create an interest in and an understanding of local history
- b. To develop an understanding of democratic procedures and group processes
- c. To create an understanding of the relationship between man and his environment
- d. To develop an understanding of some of the socio-emotional needs of man
- e. To develop an understanding of how a local government functions

Things to do

Make a community resource study, visit local spots of historical interest, make craft items out of natural materials, map and model making, participating in school governance and related activities, volunteer involvement in community activities, community service internships

IV. Natural Sciences

General objectives

- a. To be able to recognize some of the common plants and animals in the local area
- b. To understand some of the interrelationships of plant and animal life in different environments of the local area
- c. To know various methods of seed dissemination
- d. To be aware of the various uses of different plants and animals
- e. To understand the need for the conservation of plant and animal life

Things to do

Making clue charts for identifying trees, flowers, birds and animals and fish
Collecting and pressing leaves and other available plant specimens
Collecting and mounting seeds and insects
Studying animal tracks and making clay molds
Sketching - Using microscope and hand lens for closer study
Building shelters and feeder stations
Observing animals and keeping field notes on their habits
Collecting old birds nests and studying their construction
Taking nature hikes and boat trips
Develop nature trails
Build terrariums and/or aquariums

V. Earth Sciences

General Objectives

- a. To understand some general characteristics of rock strata in the local area as they relate to plants, animals and water
- b. To understand the relationship of the surface terrain to underlying rock strata

- c. To understand the cause and effects and ways to control erosion
- d. To understand the forces of weather
- e. To be able to recognize some major constellations and their relationship to earth motions
- f. To understand and be aware of the differences between the Cape Cod Bay water environment and the Nantucket Sound Water environment

Things to do

- Collect and study various specimens of local aquatic environments
- Visit construction sites
- Walk up gullies and visit tidal basins to study the effects of erosion
- Breaking up rocks and soil for microscopic study
- Keeping field notes on areas before and after rain
- Taking a rain hike or sail
- Night study of major constellations - Look at moon through telescope - Relate moon phases to tides
- Build weather station - Making weather observations and reports
- Visit game, forest and oceanographic institutes

VI. Health and Recreation

General Objectives

- a. To develop wholesome mental attitudes and habits
- b. To practice good health habits
- c. To plan and practice wholesome use of leisure time
- d. To keep physically fit
- e. To develop an awareness of safe practices in the outdoors
- f. To integrate health and physical education with other subject matter areas

Things to do

Planning healthy meals - care of fire on cook outs
How to carry and use tools
Use of the bow and arrow
Dancing (pioneer, square, round, Indian, folk)
Developing outpost sites - cutting firewood
Setting tables - making beds - keeping buildings clean
Clearing land tracts
participate in outdoor sports

ORGANIZATION

Staff: 2 teacher naturalists

College Interns - UMASS, Cape Cod Community College etc.

Volunteer - Parents, Retirees, Hobbyists, Local school
faculty

Framework: (A) Individualized independent study coordinated through high school classroom teachers, or (B) Program objectives mutually developed on site on individual basis, or (C) Program derived, in part, from curriculum developed for other environmental education programs.

Evaluation: A. Student portfolio - to include a record of each experience and activity

B. Individual profile by instructional staff

C. Student self evaluation

STAFFING

Program Director - Thomas F. Paquin - B. A. Florida State Univ.
 M. Ed. Salem State College - English teacher Jr. High School
 level - Principal, High School level - Director, Summer Work-
 shop Program, University of Massachusetts, School of Educa-
 tion - Director, Marathon Week, UMASS, School of Education -
 Director, Community School Program - Curriculum Coordinator-
 Doctoral Candidate, Center for Leadership and Administration,
 Ford Leadership Fellow, School of Education, University of
 Massachusetts.

Naturalist - #1 - Madeline L. Fograshy - B. S. Old Dominion Uni-
 versity - Major Biology - Emphasis in marine biology with
 courses in Marine and Estuarine Plankton, Oceanography,
 Natural History, Terrestrial Ecology, Taxonomy of Vascular
 Plants - Participated in oceanographic training program
 sponsored by Duke Univ. - Biology lab Assistant, Old Domin-
 ion - Counting and recording Herbarium specimens - Teacher
 Cape Cod Museum of Natural History.

2 -

Teacher Training Supervisor - Edward T. Clark - B. A. Univer-
 sity of Richmond - B. D. Andover Newton Theological School-
 S. T. M. Eden Theological Seminary - Ph.D. St. Louis Univer-
 sity - Associate Dean, Webster College - Instructor, Eden
 Seminary - Administrator, Loretto Heights College - Camp
 Director(8 years) - Group Leader and Therapist, Pastoral
 Counseling Institute.

Retirees, Parents, and Hobbyists (volunteer) - Commitments have been made by members of the Yarmouth Historical Society and South Yarmouth Botanical Garden Club (hobbyists) - Members of the Mid-Cape Men's Club (retirees) - A Yellow Pages of Parental Resources will be developed by Alternative School students (see appendix A)

Interns - Commitments have been made by undergraduates from the School of Education at the University of Massachusetts to spend period of practice teaching requirement at The Alternative School site.- Several graduate students (UMASS) applied to serve in teaching practicum at the site - Antioch College has expressed interest in possible exchange program for practice teachers.

Alternative School Students - An important part of program is to develop teacher aides from the members of the alternative school component student body (see appendix A)

PHASE II

TIME SCHEDULE

PHASE I

Sept 73 ←	→ Sept 75	← June 76	→ Sept 76
Alternative School - 15 students			
Alternative School - 20 students			
Alternative School - 25 students			
Teacher training UMASS - 10-20 students			
Elementary Schools (local) 30-40 students			
Elementary Schools (out of district) 30-40 students part time			
Teacher Training - New England Consortium 1-10 students part time			
In-service Teacher Workshops			
Naturalists to off site schools			
Total Self (local) Support			

APPENDIX F

CURRICULUM

Part I - Program Goals

1. To develop a sense of community among the students and to improve student self concept through:
 - a. Co-operative effort of winterizing the existing facilities
 - b. Co-operative effort in developing nature trails
 - *c. Participation in values clarification workshops put on by members of the UMASS staff
 - d. Student team study projects such as determining "litter factor" of specified areas - feasibility of recycling projects - develop special interests catalogue
 - e. Sharing of decisions and responsibility
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 - a. Development of various community resource guides
 - b. Use of parents, hobbyists, retirees with particular and relevant expertise, as auxiliary staff
 - c. Use of student help (volunteer or paid) with community environmental concerns
 - d. Use of student internships within the community related to Center concerns (example; student working on trash removal truck)
 - e. Study of local community development (history)

* Members of Humanistic Center at UMASS have agreed to assist interns, naturalists and H.S. students in groups or individually to improve self images.

III. Developing a sense of individual student responsibility through their:

- a. Participation in developing a course of study
- b. Maintaining a portfolio of personal activities
- c. Serving as teacher aides for elementary students visiting the site (
- d. Development of forms for self evaluation
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Things to do

Measuring - A board foot, age of tree through ring count, circumference and diameter of trees, surface area for map making, scale drawings or models, dimensions of camp buildings, percent of slopes, distances between buildings, trees etc.

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- f. To understand and be aware of the differences between the Cape Cod Bay Water environment and the Nantucket Sound Water environment

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Framework: (A) Individualized independent study coordinated through high school classroom teachers, or (B) Program derived, in part, from curriculum developed for other environmental education programs.

Evaluation: A. Student portfolio - to include a record of each experience and activity

B. Individual profile by instruction staff

C. Student self evaluation

D. Performance on the index of attitudes and values (IAV) bills, etc.

SEE APPENDIX B.

PHASE II

TIME SCHEDULE

PHASE I

Sept 73 ← → Sept 75 ← → June 76 → Sept 76 →

Alternative School - 15 students

Alternative School - 20 students

Alternative School - 25 students

Teacher training UMASS - 10-20 students

Elementary Schools (local) 30-40 students

Elementary Schools (out of district) 30-40 students
part time

Teacher Training - New England Consortium 1-10 students
part time

In-service Teacher Workshops

Naturalists to off site schools

Total Self (local) Support

SELF INSTRUCTIONS FOR IAV

There is a need for each of us to know more about ourselves, but we seldom do have an opportunity to look at ourselves as we are or as we would like to be. On the following page is a list of terms that to a certain degree describe people. Take each term separately and apply it to yourself by completing the following sentence:

I AM A (AN) _____ PERSON.

The first word in the list is academic. So you would substitute this term in the above sentence. It would read--I am an academic person.

Then decide HOW MUCH OF THE TIME this statement is like you, i.e., is typical or characteristic of you as an individual, and rate yourself on a scale from one to five according to the following key:

1. Seldom, is this like me.
2. Occasionally, this is like me.
3. About half the time, this is like me.
4. A good deal of the time, this is like me.
5. Most of the time, this is like me.

Select the number beside the phrase that tells how much of the time the statement is like you and insert in Column I on the next page.

EXAMPLE: Beside the term ACADEMIC, number two is inserted to indicate that--occasionally, I am an academic person.

Now go to Column II. Use one of the statements given below to tell HOW YOU FEEL about yourself as described in Column I.

1. I very much dislike being as I am in this respect.
2. I dislike being as I am in this respect.
3. I neither dislike being as I am nor dislike being as I am in this respect.
4. I like being as I am in this respect.
5. I like very much being as I am in this respect.

You will select the number beside the statement that tells how you feel about the way you are and insert the number in Column II.

EXAMPLE: In Column II beside the term ACADEMIC, number one is inserted to indicate that I dislike very much being as I am in respect to the term, academic. Note that being as I am refers to the way you describe yourself in Column I.

Finally, go to Column III; using the same term, complete the following sentence:

I WOULD LIKE TO BE A (AN) _____ PERSON.

Then decide HOW MUCH OF THE TIME you would like this trait to be a characteristic of you and rate yourself on the following five point scale.

1. Seldom, would I like this to be me.
2. Occasionally, I would like this to be me.
3. About half the time, I would like this to be me.
4. A good deal of the time, I would like this to be me.
5. Most of the time, I would like this to be me.

ou will select the number beside the phrase that tells how much of the time
ou would like to be this kind of a person and insert the number in Column
II.

EXAMPLE: In Column III beside the term ACADEMIC, number five is inserted
o indicate that most of the time, I would like to be this kind of person.

start with the word ACCEPTABLE and fill in Column I, II, III before going
n to the next word. There is no time limit. Be honest with yourself so
hat your description will be a true measure of how you look at yourself.

	J	II	III
a. academic	_____	_____	_____
1. acceptable	_____	_____	_____
2. accurate	_____	_____	_____
3. alert	_____	_____	_____
4. ambitious	_____	_____	_____
5. annoying	_____	_____	_____
6. busy	_____	_____	_____
7. calm	_____	_____	_____
8. charming	_____	_____	_____
9. clever	_____	_____	_____
10. competent	_____	_____	_____
11. confident	_____	_____	_____
12. considerate	_____	_____	_____
13. cruel	_____	_____	_____
14. democratic	_____	_____	_____
15. dependable	_____	_____	_____
16. economical	_____	_____	_____
17. efficient	_____	_____	_____
18. fearful	_____	_____	_____
19. friendly	_____	_____	_____
20. fashionable	_____	_____	_____
21. helpful	_____	_____	_____
22. intellectual	_____	_____	_____
23. kind	_____	_____	_____
24. logical	_____	_____	_____

	I	II	III
25. meddling	_____	_____	_____
26. merry	_____	_____	_____
27. mature	_____	_____	_____
28. nervous	_____	_____	_____
29. normal	_____	_____	_____
30. optimistic	_____	_____	_____
31. poised	_____	_____	_____
32. purposeful	_____	_____	_____
33. reasonable	_____	_____	_____
34. reckless	_____	_____	_____
35. responsible	_____	_____	_____
36. sarcastic	_____	_____	_____
37. sincere	_____	_____	_____
38. stable	_____	_____	_____
39. studious	_____	_____	_____
40. successful	_____	_____	_____
41. stubborn	_____	_____	_____
42. tactful	_____	_____	_____
43. teachable	_____	_____	_____
44. useful	_____	_____	_____
45. worthy	_____	_____	_____
46. broad-minded	_____	_____	_____
47. businesslike	_____	_____	_____
48. competitive	_____	_____	_____
49. fault-finding	_____	_____	_____

INSTRUCTIONS AND ITEMS

On the following pages are listed a number of things characteristic of yourself or related to you. You are asked to indicate which things you are satisfied with exactly as they are, which things you worry about and would like to change if it were possible, and which things you have no feeling about one way or the other.

Consider each item listed below and encircle the number which best represents your feelings according to the following scale:

1. Have strong feelings and wish change could somehow be made.
2. Don't like, but can put up with.
3. Have no particular feelings one way or the other.
4. Am satisfied.
5. Consider myself fortunate.

Body-Cathexis Items Used in BC Scale

hair	width of shoulders
facial complexion	arms
appetite	chest
hands	eyes
distribution of hair over body	digestion
nose	hips
fingers	skin texture
elimination	lips
wrists	legs
waist	teeth
energy level	forehead
back	feet
ears	sleep
chin	voice
exercise	health
ankles	sex activities
neck	knees
shape of head	posture
body build	face
profile	weight
—height	sex (male or female)
age	back view of head
	trunk

Self-Cathexis Items Used in SC Scale

first name
morals
ability to express self
taste in clothes
sense of duty
sophistication
self-understanding
life-goals
artistic talents
tolerance
moods
general knowledge
popularity
imagination
self-confidence

sensitivity to opinions of others
ability to lead
last name
impulses
manners
handwriting
intelligence level
athletic skills
happiness
creativity
love life
strength of conviction
conscience
skill with hands

MEMORANDUM

From T. F. Paquin, Coordirector, D/Y NASP Date October 4, 1972

To Roy D. Nichols, Jr., Director, NASP

Subject Chronological Progress Report on D/Y NASP

1. May-June 1972: Idea conceived and developed to establish Outdoor Education Center within a public school system of the Mid-Cape area at Cape Cod. (See attached outline and description.)
2. July 10, 1972: Contact with Superintendent of the Dennis/Yarmouth Regional School District. Presentation of plan given preliminary approval by Superintendent.
3. July 12, 1972: Idea introduced to Director of Alternative Schools Program at University of Massachusetts. Discussion led to commitment by NASP to lend support to project.
4. July 27, 1972: D/Y NASP Coordinator and NASP Director go to Mid-Cape area in search of appropriate site.
The first site visited within the D/Y district is considered favorable--320 acres, two ponds, several permanent buildings, close proximity to salt marshes, sand dunes, ocean, swamps, boggs, and other favorable terrains. Area is called Camp Greenough and belongs to Boy Scouts of America. Initial discussion with camp director meets with enthusiastic reception. Date set to meet members of Scout Executive Committee.
5. August 5, 1972: Meeting with Science Coordinator of D/Y School system discussion of goals and overview of school.
6. August 6, 1972: Luncheon at Camp. Meeting with Chairmand of Scout Executive Committee and District Director along with Administrators from Cape Cod Community College also interested in potential of project. Date set to meet with Scout Council.
7. August 14, 1972: Meeting of D/Y NASP Coordinator, D/Y High School Science Department Chairmand, and Scout Council. Approval given to utilize Camp Greenough facility for alternative school base of operation.
Chairman of Scout Camping Committee named to head group of three council members to serve as investigating committee concerned that alternative school program will not interfere with Scouting concept.
8. August 18, 1972: Aerial photographs and ground level pictures of site are taken for purposes of developing slide presentation for publicizing project and general information.
9. August 15-September 10, 1972: Materials relating to Outdoor Education Program researched. Individuals in the field contacted. Outline for school (attached) developed.
10. September 11, 1972: Contact made with Dr. E. Clark of Denver interested in dovetailing Outdoor Teacher Training Center with Alternative School. Dr. Clark needs funding for salary purposes.
1. September 15, 1972: Dr. E. Clark, D/Y NASP Project Coordinator, D/Y Superintendent, D/Y Science Coordinator and Boy Scout Council Executive Committee meet to discuss future of program.

October 4, 1972

12. September 19-22, 1972: NASP Coordinator and D/Y Science Department Chairman spend week at Antioch College's Outdoor Education Center, Yellow Springs, Ohio, to have personal involvement in an ongoing successful, time-tested program. Antioch program is very similar to projected D/Y Alternative School Concepts.
13. September 27-29, 1972: D/Y NASP Coordinator at D/Y Cape area to establish contacts with local hobbyist, retirees, and members of academic community. (Museum of Natural History, Brewster, Cape Cod Community College, Barnstable, Yarmouth Botanical and Historical society. Set date--Oct 11, 72--to address D/Y faculty and students, Oct 12, 1972, concerning new NASP project.)
14. October 1-3, 1972: Delineate aspects of the program (goals, objectives, processes.) Discuss role of possible assistant. With other NASP personnel--all systems "GO" at this point.

This paper

This paper constitutes a progress report to date. Future reports will be sequential starting with Number 15 and be at least Bi-weekly in frequency.

Interim inquiries should be directed to: Thomas F. Paquin, Coordinator
NASP Office (413/545-0941) or
Home: 413/253-7504

It is our belief that in order for a learning experience to be effective it should be satisfying for all individuals involved.

An Environmental Education Center within the Dennis/Yarmouth School District will be established with this belief as its primary motivational force.

Through the medium of a complimentary learning experience, we hope to appeal to those students whose educational needs can best be satisfied within an environment other than the conventional classroom.

The National Alternative Schools Program at the University of Massachusetts in conjunction with the Dennis/Yarmouth Regional School District intends to establish such an environmental center based at the Boy Scout's Camp Greenough in Yarmouth.

This will be a pilot program, initially involving no more than 15 high school students chosen by lottery from voluntary applications.

Although the program will be based at Camp Greenough, in order to provide independence, flexibility, community identity, development of individual responsibility and access to natural ecology, the intent is to utilize the entire Cape Cod area as the learning environment. We intend to take advantage of all resources: human, natural and institutional to provide a comprehensive educative atmosphere. Activities may include:

1. Training students as aides to teachers from other schools using Camp Greenough for nature study.
2. The development of natural sites including nature trails, primitive areas and wildlife observation places.
3. Construct and operationalize a weather station.
4. Understanding local ecological systems.
5. Volunteer community service.
6. Field trips.
7. Internships (study related off-site activities)
8. Some overnight activities.

Staff: 1-2 full-time state certified instructors, college interns (UMass, Cape Cod CC, etc.), interested parents, retirees, hobbyists, D/Y faculty

Framework:

- a. individualized independent study coordinated through classroom teachers, or
- b. program objectives mutually developed on-site on individual basis, or
- c. program derived from curriculum developed for other outdoor educational programs.

Evaluation:

- a. student portfolio: to include a record of each experience and activity.
- b. individual student profile by instructional staff.
- c. Student self-evaluation.

Cost:

- a. Site is donated by Boy Scouts of America.
- b. Initial staff financed by UMass.
- c. There will be no mandatory fees, any additional costs incurred will be satisfied through student projects.
- d. Program to become self supporting after first year.

Students selected will be interviewed/counseled individually to determine the appropriateness of the Environmental Education Center to their personal aspirations.

I. Make Up of School:

- 1-2 Full-time instructors
- 12-15 Volunteer students selected by lottery
 - 5-6 Seniors
 - 4-5 Juniors
 - 3-4 Sophomores
 - 5-7 Girls
 - 6-9 Boys

II. Greenough to serve as home base.

- Dining Hall as on-site classroom
- Two other permanent buildings available for over-nights or other uses
- Entire Cape to serve as learning environments:
 - (1) Community Businesses
 - (2) Historical Societies
 - (3) Wildlife Sanctuaries
 - (4) Nature Trails
 - (5) Sea Shores
 - (6) Ponds
 - (7) Museums
 - (8) Swamps, bogs
 - (9) Services (Public Works, Forestry)

III. Staff:

- 1-2 Full-time Instructors
- 1-15 Alternative School students
- 1-10 Cape Cod Community College interns and volunteers
- 1-5 Parents/Retirees/Hobbyists/UMass personnell/other college interns
- 1-2 Classroom Teachers and/or Chaperones of visiting groups
- 1-? Work-Study personnel

IV. Program:

- (1) Alternative School students to serve 2-4 weeks period of orientation to prepare them for staff/aide positions.
- (2) 1-15 involved at a time as staff/aide persons
- (3) Academic program:

- (a) individualized independent study coordinated through class teachers, or
- (b) program objectives mutually developed on-site on individual basis, or
- (c) program derived from curriculum developed for other outdoor educational programs, or
- (d) any combination of the three.

V. Financing/costs: School to become self supporting within first year.

- (1) Site rental to be delayed until program is self supporting--prerequisite is providing insulation and panelling to winterize 3 buildings. Cost estimating and work to be done by students as learning experience.
- (2) Only other charge: utilities and (insurance.)
- (3) Food from the High School Cafeteria or self supplied
- (4) Fee charged to other school districts on per student basis
- (5) Fee charged to other groups for use as "retreat" site
- (6) Fund raising functions.

VI. Public Relations: to encourage participation of other school districts

- (1) Develop slide presentation
- (2) Develop information brochures
- (3) Develop mailing list of area superintendents
- (4) Visit school districts
- (5) Advertise in professional magazine
- (6) Address teachers
- (7) Address civic groups
- (8) Address school boards
- (9) Open House at site

Note: (6)-(9), to be used as local promotion, also

PLEASE NOTE:

**Pages 146-154 are not original
copy with very light and indistinct
type. Best available copy. Filmed as
received.**

UNIVERSITY MICROFILMS.

Letter to Subject of Study of ...

Date: _____

The National Association of Schools ... the ... of ...
 ... in ... of ... school, ... to ...
 ... the ... of ...
 ... in ...

It is all ... of ...
 ... within ...
 ... as ...
 ...

In discussing these ... with Dr. ... of the
 ... College, he suggested you ... as a possible
 source of input for our program.

If you are interested and willing to become a part of this
 should be an exciting and unique program for the mid-1970s ...
 please check the appropriate box on the enclosed self-addressed
 card and return it. I will contact you within the very near future
 to define more clearly the program and your possible role in it.

If, by chance, you are not interested, please indicate this
 back and I will refrain from further contact.

Sincerely,

VEK Coordinator

IM Assistant

Proposal to Senate:

The National Administrative Schools Program at the University of Massachusetts in cooperation with the District Council Regional School District wishes to use the Camp Greenough Boy Scout facility at Yarmouth, Massachusetts, at least once for an environmental education center within the following parameters:

1. Primarily as a day camp with limited accommodations--at least for six days a week.
2. Primarily as a resident camp after 1st year as a source of financial support for the program.
3. To be occupied for a period of at least 3 years unless otherwise decided by mutual consent of BSA and MASS-D/E.
4. Dining Hall, Mosaic Lodge, and trading post to be insulated for winter use along with burying of appropriate water pipes in lieu of rental fees until such time as the program becomes self supporting. Payment of utilities to be made by school program.
5. Any change in the camp environment must receive the approval of the BSA before initiation.
6. Any conflict regarding the scheduled use of the Camp Greenough facilities will defer to the wishes of the BSA.
7. BSA will be absolved of any liability concerning program enrollees.
8. Duration of program to coincide with the regular school year. Any extension of this time must receive approval of BSA.
9. Use of any and all facilities and/or equipment belonging to BSA must have prior approval from BSA.

October 13, 1972
Luis R. Torres, Director, Office of
Education, P.O. Box 100, San Juan, P.R.
San Juan, P.R. 00901

20. November 15, 1972: Mr. [Name] of the [Organization] advised that [Name] of [Organization] had been [Action] on [Date].

21. November 21, 1972: Mr. [Name] of the [Organization] advised that [Name] of [Organization] had been [Action] on [Date].

- 22. November 2 - 10, 1972: At [Location]
 - A. Mr. [Name] of the [Organization] advised that [Name] of [Organization] had been [Action] on [Date].
 - B. Mr. [Name] of the [Organization] advised that [Name] of [Organization] had been [Action] on [Date].
 - C. Mr. [Name] of the [Organization] advised that [Name] of [Organization] had been [Action] on [Date].
 - D. Mr. [Name] of the [Organization] advised that [Name] of [Organization] had been [Action] on [Date].
 - E. Mr. [Name] of the [Organization] advised that [Name] of [Organization] had been [Action] on [Date].

23. November 11, 1972: Letter sent to Director of Office of Education, Office of San Juan regarding that [Name] of [Organization] had been [Action] on [Date].

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- November 11, 1972: Met with Art Roberts from Longport's Boy Man and His Boyfriends. Results pending.
- November 2-22, 1972: NYC attracted Ford Foundation and Educational Facilities Lab about possible funding. Both pending at this time.
- November 19, 1972: Met with Don Kosselchick about site as possibility for development. Approved.
- November 30, 1972: Call from 1 grad student and 1 undergrad student. Both want to do graduate teaching assistance for Spring 1973 semester. So far there are four undergraduates and two graduate students interested in working on site.
- December 1, 1972: Met with David Jackman, State Title III Director, talked about project. Results pending.
- December 2, 1972: Went to Cape and left copies of proposal with principal to be passed out at Tuesday, December 5, school committee meeting to get final clearance to start project next semester, February 4.
- Answers coming back from letters of inquiry sent to retirees and hobbyists from the old-Cape area. They indicate much interest from that group.
- December 4, 1972: Letters and/or proposals sent to Harold H. Ceres, President Educational Facilities Lab; David Jackman, Title III Director; Zelphe Sciwaren, Title I Director; Warren Little, Director of Education, N.E. Aquarium; Charles Roth, Mass. Audubon.

December 13, 1972

Mr. Ed Meade
Education
Ford Foundation
Last 43rd Street
New York, New York

Dear Ed:

First let me thank you for, what we all considered, a very informative session last Tuesday the 12th.

I mentioned to you after the meeting that I had developed a proposal which many of us (UMASS Fords) feel is worthy of consideration and support.

While the project has financial support from several sources, the scope of the program makes it necessary to seek additional funds. Agencies already involved in the financing include the U.S. Office of Education's National Alternative Schools Program in the form of planning funds (including material and travel); the Boy Scouts of America in the form of site and facilities availability; The Ford Foundation is already paying my salary for the year; the Dennis/Yarmouth School District in the form of professional personnel and financial support; and finally, the University of Massachusetts School of Education in the form of planning resources and consultants.

Upon reading the proposal you will become aware of the fact that pains were taken to avoid the pitfalls of many other alternative schools i.e. this one is not being established as a reaction against the existing high school but rather as a complimentary alternative and the program has structure and direction rather than leaving it to chance. There will be extensive use of community resources; institutional, natural and personal, and individual responsibility will be clarified.

I might add that I am prepared to conduct the program in part without further funding (the alternative school and college internship portions) and intend to proceed with that starting in January 1973.

The optimum package as represented by the proposal is scheduled for implementation by September 1973 and as I explained earlier must have additional financial support to be successful.

I will appreciate your consideration and response, and will be available for personal consultation at any convenient time.

Sincerely,

Thomas F. Paquin
Center for Leadership and Administration
School of Education
University of Massachusetts
Amherst, Massachusetts

TTP:lap

DIVISION OF
EDUCATION AND RESEARCH
PUBLIC EDUCATION

January 23, 1973

Mr. Thomas F. Paquin
Center for Leadership and Administration
School of Education
University of Massachusetts
Amherst, Massachusetts 01002

Dear Mr. Paquin:

Thanks for sending along your proposal which I have passed to the staff for its review. I would like to let you know the results of that review now.

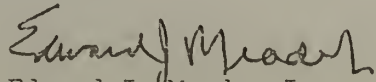
Your proposal was well thought out and as you state in your covering letter it goes a long way to avoid the pitfalls of other alternative schools. It is readily apparent that you are not attempting to establish a competitive alternative to the existing high school.

The Foundation has had an interest in alternative schools for the past four years. Its interest is best illustrated by our grants for support to the Parkway Program in Philadelphia, the Berkeley, California public schools, the experimental schools of the Commonwealth of Massachusetts, the Federation of Boston Community Schools, the Harlem Preparatory School, and at least three experimental schools within the New York City public schools. As you can see the list is rather extensive and we feel that we have helped to demonstrate that alternative schools can be successfully established both in the public sector and the non-public sector. Accordingly, as we begin to move our attention towards other areas of interest we find that our best course of action would be to continue with some of the programs which we have funded in the past, at least in a minimal way in order to insure their stability. Having adopted this approach, we find that we are simply unable any longer to support the development of new alternative schools.

I realize that this is disappointing news for you, however please do not consider it to be a reflection upon the merit of the ideas which you set forth in your proposal. Rather this is a reflection of a conscious effort on our part to outline priorities for a rather limited budget.

May I wish you every success in your quest for funds from other sources.

Cordially,


Edward J. Meade, Jr.
Program Officer in Charge

December 4, 1972

Ms. Zelpha Schwarn
Title I Office
State Department of Education
Boston, Massachusetts.

Dear Ms. Schwarn,

I am writing this letter at the suggestion of Art Eve.

The National Alternative Schools Program at the University of Massachusetts, in cooperation with the Dennis/Yarmouth Regional High School, is planning an Environmental Education Center at Cape Cod. The Boy Scouts of America have volunteered the use of their 320-acre Camp Greenough facility, located in Yarmouth, for a period of three years with an option to renew at that time.

While the project currently has financial support from several sources, the scope of the program makes it necessary to seek additional funds. Agencies already involved in the financing include the U.S. Office of Education's National Alternative Schools Program in the form of planning funds (including material and travel); the Boy Scouts of America in the form of site and facilities availability; the Ford Foundation in the form of personnel (including the coordinator's salary and advisory expertise); the Dennis/Yarmouth School District in the form of professional personnel and financial support; and finally, the University of Massachusetts School of Education in the form of planning resources and consultants.

Dean Dwight Allen, a nationally recognized leader in the field of innovative education, has supported the project from its inception, and feels it will be an asset not only to the Commonwealth, but to the training component of the School of Education in Amherst.

I will appreciate your consideration and response, including suggestions for additional sources of funding, and will be available for personal consultation at any convenient time. The complete proposal is enclosed.

Sincerely,

Thomas F. Paquin
School of Education

TFP/jpg

Encl:



The Commonwealth of Massachusetts

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Board of Higher Education

Fourteenth Floor

182 Tremont Street,

Boston, 02111

January 24, 1973

Mr. Thomas F. Pacquin
School of Education
University of Massachusetts
Amherst, MA 01002

Dear Mr. Pacquin:

I apologize for such a delay in responding to your request for comments on the proposal you submitted. As I explained by phone, since the proposal arrived well past the announced date for receipt of applications for Title I funds, I have spent my time to date on items more pressing for me.

The goal of your program is such that one can easily understand why you are seeking multiple funding sources for support. I personally applaud the approach and agree with the underlying concepts. Title I, in accordance with the governing Regulations, is concerned with the "unique educational needs of the adult population who have either completed or interrupted their formal training." This would disallow use of Title I funds for the first part, or that concerned directly with K-12 population.

But as I understand it, your need is not for help with this part, but rather phase I of part 2. This is teacher training which Massachusetts Title I has never become involved in for two reasons. First, the Education Professions Development Act has been in the foreground of assistance in this area and second, the specific target population in Massachusetts has never included teachers per se, including the current Amendment provisions.

Since the FY 1974 Annual Amendment is only in the embryonic stage at this time, there is no way of predicting whether or not teacher training programs will be eligible for Title I funds during that period. That will depend on the direction and priorities of that Amendment. I would recommend, however, that you review the Amendment which should be mailed publicly in mid-August to make your own determination or perhaps contact the Board of Higher Education as to their reaction at that time.

As for my suggestions of other funding sources, I feel the most efficient use of both your time and mine might be to refer you to the best overall source I know of which is the Annual Register of Grant Support 1972, Jean L. Aroeste, Ed.,

Thomas F. Pacquin

Page 2

January 24, 1973

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Academia Media, Division of D.A.T.A., Inc. Orange, NJ, 1972. The university surely has a copy but if not perhaps you might try a local library. A new edition for 1973 should be available in the near future if not already in print.

I regret that I've been of so little help but do feel free to call me if you have any further questions.

Sincerely,

Zelpha G. Schworm

Zelpha G. Schworm

Title I State Administrator

ZGS:lsh

January 16, 1973

Elza Kelley Foundation
Box 580
Diyannis, Massachusetts

Dear Sir:

The National Alternative Schools Program at the University of Massachusetts, in cooperation with the Dennis/Yarmouth Regional School District, is planning an Environmental Education Center at Cape Cod. The Boy Scouts of America have volunteered the use of their 320 acre Camp Greenough facility, located in Yarmouth, for a period of three years with an option to renew at that time.

While the project currently has financial support from several sources, the scope of the program makes it necessary to seek additional funds. Agencies already involved in the financing include the U. S. Office of Education's National Alternative Schools Program in the form of planning funds (including material and travel); the Boy Scouts of America in the form of site and facilities availability; the Ford Foundation in the form of personnel (including the coordinator's salary and advisory expertise); the Dennis/Yarmouth School District in the form of professional personnel and financial support; Educational Facilities Laboratory in the form of monies for nationally recognized consultants; and finally the University of Massachusetts School of Education in the form of planning resources and consultants.

Dean, Dwight Allen, a nationally recognized leader in the field of innovative education, has supported the project from its inception, and feels it will be an asset not only to the Cape Cod community, but to the training component of the School of Education in Amherst.

The Barnstable County School System has also expressed an interest in the project and seeks involvement.

I will appreciate your consideration and response, including suggestions for additional sources of funding, and will be available for personal consultation at any convenient time. The complete proposal is enclosed.

Sincerely,

Thomas P. Paquin
School of Education, UMASS

EDWARD BANGS KELLEY AND ELZA KELLEY FOUNDATION, INC.

To PROMOTE THE HEALTH AND WELFARE OF THE INHABITANTS
OF BARNSTABLE COUNTY, MASSACHUSETTS
239 MAIN STREET, HYANNIS, MASSACHUSETTS 02601
TELEPHONE - 775-3117

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MARY SUSICH

January 22, 1973

Mr. Thomas F. Paquin
School of Education
University of Massachusetts
Amherst, Massachusetts 01002

Dear Mr. Paquin:

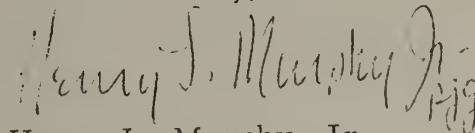
In accordance with your request, enclosed herewith please find an application for financial assistance from the Kelley Foundation.

Kindly fill out and file the application with this office as soon as possible. It will be necessary for you to file the original and six copies of the application with this office.

As soon as I have received the original and the six copies, I will forward a copy to each member of the Executive Committee and the same will be brought before the next Executive Committee meeting.

We will notify you as to the results after such a meeting.

Most sincerely,



Henry L. Murphy, Jr.
Administrative Manager

HLMjr/pjg
Enclosure

December 15, 1972

Mr. Ray Hanipel
National Science Foundation
1800 G St. S. W.
Washington D. C.

Dear Mr. Hanipel,

The National Alternative Schools Program at the University of Massachusetts, in cooperation with the Dennis/Yarmouth Regional High School, is planning an Environmental Education Center at Cape Cod. The Boy Scouts of America have volunteered the use of their 320 acre Camp Greenough facility, located in Yarmouth, for a period of three years with an option to renew at that time.

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Dean Dwight W. Allen, a nationally recognized leader in the field of innovative education, has supported the project from its inception, and feels it will be an asset not only to the Commonwealth, but to the training component of the School of Education in Amherst.

I will appreciate your consideration and response, including suggestions for additional sources of funding, and will be available for personal consultation at any convenient time. The complete proposal is enclosed.

Sincerely

Thomas F. Paquin
Center for Leadership and Administration
School of Education
University of Massachusetts
Amherst

January 5, 1972

Mr. George B. Hartzog, Jr.,
Director
National Park Service
U.S. Department of the Interior
Washington D.C. 20240

Dear Mr. Hartzog,

The National Alternative Schools Program at the University of Massachusetts, in cooperation with the Dennis/Yarmouth Regional High School, is planning an Environmental Education Center at Cape Cod. The Boy Scouts of America have volunteered the use of their 320-acre Camp Greenough facility, located in Yarmouth, for a period of three years with an option to renew at that time.

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Dean Dwight Allen, a nationally recognized leader in the field of innovative education, has supported the project from its inception, and feels it will be an asset not only to the Commonwealth, but to the training component of the School of Education in Amherst.

I will appreciate your consideration and response, including suggestions for additional sources of funding, and will be available for personal consultation at any convenient time. The complete proposal is enclosed.

Sincerely,

Thomas F. Paquin
School of Education
Tel: 413-253-7405

December 4, 1972

Mr. David Jackman
11 Tetlow Street
Boston, Massachusetts 02115

Dear David,

I am writing this letter as a follow-up to our very brief meeting at the UMass Campus Center on Friday, December 1st, and hope to bring you up to date concerning what I am about.

The National Alternative Schools Program at the University of Massachusetts, in cooperation with the Dennis/Yarmouth Regional High School, is planning an Environmental Education Center at Cape Cod. The Boy Scouts of America have volunteered the use of their 320-acre Camp Greenough facility, located in Yarmouth, for a period of three years with an option to renew at that time.

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I will appreciate your consideration and response, including suggestions for additional sources of funding, and will be available for personal consultation at any convenient time. The complete proposal is enclosed.

Sincerely,

Thomas F. Paquin
School of Education

TFP/jps
Encl:

December 4, 1972

Harold B. Gores, President
Educational Facilities Laboratories
477 Madison Avenue
New York, N. Y.

Dear Mr. Gores,

I am writing this letter as a follow-up to our phone conversation of November 29th concerning the University of Massachusetts - Dennis/Yarmouth School District proposal I left with Peter Green November 21st.

While the project currently has financial support from several sources, the scope of the program makes it necessary to seek additional funds. Agencies already involved in the financing include the U. S. Office of Education's National Alternative Schools Program in the form of planning funds (including material and travel); the Boy Scouts of America in the form of site and facilities availability; the Ford Foundation in the form of personnel (including the coordinator's salary and advisory expertise); the Dennis/Yarmouth School District in the form of professional personnel and financial support; and finally, the University of Massachusetts School of Education in the form of planning resources and consultants.

Dean Dwight Allen has supported the project from its inception, and feels it will be an asset not only to the Commonwealth, but to the training component of the School of Education in Amherst.

John Murphy, Superintendent of the Dennis/Yarmouth Schools, supports the project also and recognizes the value of the community involvement aspects.

I will appreciate your consideration and response, including suggestions for additional sources of funding, and will be available for personal consultation at any convenient time.

Sincerely,

Thomas P. Paquin
School of Education
University of Massachusetts
Amherst

New England Aquarium

September 8, 1972

Mr. Tom Paquin
School of Education
University of Massachusetts
Amherst, Massachusetts 01002

Dear Tom:

Your letter of July 20, 1972 just caught up with me, as Mass. Audubon held it until I attended a recent meeting there, rather than forwarding it as they should have. Sorry to be late in replying.

I find it rather hard to offer suggestions in a letter, and would much prefer to meet with you personally at our mutual convenience. Will you be in the vicinity of the Aquarium in the near future?

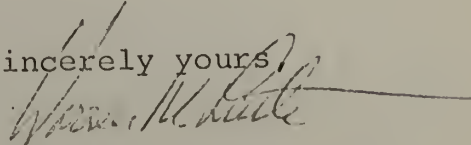
I might also suggest taking a look at my thesis in the School of Education library. Although it deals with the development of auxiliary school personnel in environmental education, the last chapter has an operation plan for setting up an environmental aide course which might be a program to consider carrying out when you have an operating center.

A further suggestion would be to visit the Cape Cod Museum of Natural History in Brewster and talk with their Director, Don Schall and Educational Assistant, Bob Lucas. The Museum has an excellent environmental education program which might provide you with a model already adapted to that area.

Your project sounds exciting and I do hope we can discuss it further. If you're in the area, do stop by.

My best to Art.

Sincerely yours,


Warren M. Little
Director, Education

Dear Student and Parent--

It is our belief that in order for a learning experience to be effective, it should be satisfying for all individuals involved.

An Environmental Education Center within the Dennis/Yarmouth School District will be established with this belief as its primary motivational force.

Through the medium of a complementary learning experience, we hope to appeal to those students whose educational needs can best be satisfied within an environment other than the conventional classroom.

The National Alternative Schools Program at the University of Massachusetts, in conjunction with the Dennis/Yarmouth Regional School District, intends to establish such an environmental center based at the Boy Scout's Camp Greenough, in Yarmouth. This will be their school for the year and they will receive regular high school credit for attending.

It will be a pilot program, initially involving no more than 15 high school students chosen by lottery from voluntary applications.

Although the program will be based at Camp Greenough in order to provide independence, flexibility, community identity, development of individual responsibility and access to natural ecology, the intent is to utilize the entire Cape Cod area as the learning environment. We intend to take advantage of all resources -- human, natural and institutional-- to provide a comprehensive educative atmosphere.

Activities may include:

1. Training students as aides to teachers from local elementary schools using Camp Greenough for nature study.
2. The development of natural sites including nature trails, primitive areas and wildlife observation places.
3. Construct and operationalize a weather station.
4. A study of local ecological systems.
5. Volunteer community service.
6. Field trips. To gain familiarity with local environment.
7. Internships (to study related off-site activities)
8. Some overnight camping experiences at Greenough.

Staff:

10 full time state certified instructor
College interns - UMass, Cape Cod CC, etc.
Interested - Parents - Retirees - Hobbyists - D/Y faculty

Framework:

- a. individualized independent study coordinated through classroom teachers, or
- b. program objectives mutually developed on-site on individual basis, or
- c. program derived from curriculum developed for other outdoor educational programs.

Evaluation:

- a. Student portfolio - to include a record of each experience and activity.
- b. Individual student profile by instructional staff.
- c. Student self evaluation.

Cost:

- a. Site is donated by Boy Scouts of America.
- b. Initial staff financed by UMass.
- c. There will be no mandatory fees; any additional costs incurred will be satisfied through student projects.
- d. Program to become self supporting after first year.

Students selected will be interviewed/counseled individually to determine the appropriateness of the Environmental Education Center to their personal aspirations.

Further inquiry is encouraged. Parents and/or students should feel free to contact the program coordinator through the Dennis/Yarmouth High School office.

Thomas F. Paquin, Program Coordinator

Voluntary Application Form for

Environmental Education Center - Dennis/Yarmouth Regional School District

Student name _____ Class _____ Age _____

Home address _____ Phone _____

Student signature _____

The above named student has my permission to make voluntary application for enrollment in the Dennis/Yarmouth Environmental Education Center Alternative School Program.

Parent/guardian signature _____



The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01002

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SCHOOL OF EDUCATION

APPENDIX L

February 7, 1973

Dear :

Plans for the Environmental Education Center at Camp Greenough, originally proposed as a joint effort between the University of Massachusetts and the Dennis/Yarmouth Regional School, have been scrapped.

I appreciate your interest in the program and thank you for responding to my letter of some months past and I apologize for any inconvenience that may have been caused to you.

If you have any questions concerning the cancellation of the program, I will be happy to answer them.

Sincerely,

Thomas F. Paquin
School of Education
University of Massachusetts

TFP:saw

FOOTNOTES

FOOTNOTES

1. Douglas McGregor, The Human Side of Enterprise, McGraw-Hill Book Co., New York, 1960.
2. Mike Hickey, "Evaluating Alternative Schools," A position paper prepared for the National Consortium on Educational Alternatives, April 1972, Racine Wisconsin.
3. "Feasibility Study of Resource-Use Outdoor Education Center Taylor County, Florida," Prepared by Masters Enterprises, Athens, Georgia, December, 1966.
4. Donald R. Hammerman and William M. Hammerman, Teaching in the Outdoors, Burgess Publishing Co., Minneapolis, Minn., 1969, p. 120.
5. Report of the Task Forces on Educational Goals for Massachusetts, The Commonwealth of Massachusetts Board of Education, September 1971.
6. Don Moore, "Changing Schools," An Occasional Newsletter on Alternative Schools, Number 003, p. 9.
7. Noam Chomsky, Language and Mind, Harcourt, Brace and World, New York, 1968.
8. John Holt, How Children Fail, Pitman Publishing Corp., New York, 1964.
9. Charles E. Silberman, Crisis in the Classroom, Vintage Books, Inc., New York, 1970.
10. Silberman, p. 74
11. Moore, p. 9.
12. Steve Van Matre, Acclimatization, American Camping Association, Martinsville, Indiana, 1972.
13. Royce Van Norman, "School Administration: Thoughts on Organization and Purpose," Phi Delta Kappan, 47:315-16, February, 1966.
14. Erik H. Erikson, "Youth: Fidelity and Diversity," in Erikson (ed.), The Challenge of Youth, Doubleday Anchor Books, Garden City, New York, 1963.

15. Moore, p. 10.
16. Gerald Weinstein and Mario Fantini, Toward Humanistic Education: A Curriculum of Affect, Praeger Publishers, New York, p. 28.
17. Robert A. Mackin, The Bent Twig: An Alternative School, A project dissertation, School of Education, University of Massachusetts, 1971, p. 129.
18. Ibid., p. 134.
19. Silberman, p. 336.
20. Ibid., p. 134.
21. George B. Leonard, "A Bold Plan for Peace," Look, June 10, 1968, p. 78.
22. Richard E. Snow, "Brunswickian Approaches to Research in Learning," American Educational Research Journal, Vol. 5, No. 4, Nov. 1968, p. 477.
23. John Dewey, "Progressive Education and the Science of Education," Reprinted in the Martin S. Dworkin, (ed.), Dewey on Education, Teachers College Press (Classics in Education No. 3), 1959.
24. Silberman, p. 281.
25. Christopher Jencks and Mary Jo Bane, "The Schools and Equal Opportunity," Saturday Review of Education, September 16, 1972, p. 42.

Filmed as received

without page(s) 172.

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BIBLIOGRAPHY

BIBLIOGRAPHY

- Bass, Bernard M. Leadership, Psychology, and Organizational Behavior. New York: Harper and Bros., 1960.
- Chomsky, Noam. Language and Mind. New York: Harcourt, Brace and World, 1968.
- Dewey, John. "Progressive Education and the Science of Education." Reprinted in the Martin S. Dworkin (ed.), Dewey on Education. New York: Teachers College Press (Classics in Education No. 3), 1959.
- Dickey, Miriam E. and Charles E. Roth. Beyond the Classroom. The Massachusetts Audubon Society, 1971.
- Erickson, Erik H. "Youth: Fidelity and Diversity." In Erikson (ed.). The Challenge of Youth. New York: Doubleday Anchor Books, 1963.
- "Environmental Education/Facility Resources." A report from Educational Facilities Laboratories in cooperation with the National Education Association and the National Park Service, 1972.
- "Feasibility Study of Resource-Use Outdoor Education Center Taylor County, Florida." Prepared by Masters Enterprises, Athens, Georgia, December, 1966.
- Hammerman, Donald R. and William M. Hammerman. Teaching in the Outdoors. Minneapolis, Minn.: Burgess Publishing Co., 1969.
- Hersey, Paul and Kenneth H. Blanchard. Management of Organizational Behavior. Second Edition. Englewood Cliffs, New Jersey: Prentice Hall, 1972.
- Hickey, Mike. "Evaluating Alternative Schools." A position paper prepared for the National Consortium on Educational Alternatives, Racine, Wisconsin, April, 1972.
- Holt, John. How Children Fail. New York: Pitman Publishing Corp., 1964.
- Jencks, Christopher and Mary Jo Bane. "The Schools and Equal Opportunity." Saturday Review of Education, September 16, 1972, 42.
- Kozol, Jonathan. Free Schools. Boston: Houghton-Mifflin Co., 1972.

- Leonard, George B. "A Bold Plan for Peace." Look, June 10, 1968, 8.
- Mackin, Robert A. The Bent Twig: An Alternative School. A project dissertation, School of Education, University of Massachusetts, 1971.
- McGowan, Alan. "Environmental Education - A Must for the '70's." TREND A journal of Educational Thought and Action, Vol. 6, No. 2, Winter, 1970.
- McGregor, Douglas. The Human Side of Enterprise. New York: McGraw Hill Book Co., 1960.
- Moore, Don. "Changing Schools." An occasional Newsletter on Alternative Schools, Number 003,
- Nichols, Roy D. "Change and the Educational System." An unpublished position paper for comprehensive examination, School of Education, University of Massachusetts, 1972.
- Phillips, John L. The Origins of Intellect: Piaget's Theory. San Francisco: W. H. Freeman & Co., 1968.
- Report of the Task Forces on Educational Goals for Massachusetts. The Commonwealth of Massachusetts Board of Education, September 1971.
- Robinson, John P. and Phillip R. Shaver. Measures of Social Psychological Attitudes. Institute of Social Research, University of Michigan, Ann Arbor, Michigan, 1969.
- Schein, Edgar H. Organizational Psychology. Englewood Cliffs, New Jersey: Prentice Hall, 1965.
- Silberman, Charles E. Crisis in the Classroom. New York: Vintage Books, 1970.
- Simon, Sidney B., et al., Values Clarification. New York: Hart Publishing Co., 1972.
- Snow, Richard E. "Brunswickian Approaches to Research in Learning." American Educational Research Journal, Vol. 5, No. 4., Nov. 1968, 477.
- Swan, Malcolm D. Tips and Tricks in Outdoor Education. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1970.

Trump, J. Lloyd and Delmas F. Miller. Secondary School Curriculum Improvement. Boston: Allyn and Bacon, 1968.

Van Matre, Steve. Acclimatization. Martinsville, Indiana: American Camping Association, 1970.

Van Norman, Royce. "School Administration: Thoughts on Organization and Purpose." Phi Delta Kappan, 47:315-16, February 1966.

Weinstein, Gerald and Mario Fantini. Toward Humanistic Education: A Curriculum of Affect. New York: Praeger Press, 1971.

Wurman, Richard S. Yellow Pages of Learning Resources. Cambridge, Mass.: The MIT Press, 1972.

