

1984

The conversion of a recreational camp into a residential environment and educational learning center

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The conversion of a recreational camp into a residential environment and educational learning center

Abstract

Educational systems in our country have continually faced the challenge of providing educational opportunities for all our children. As well as maintaining a national goal of high educational standards, we have also encouraged an individualistic approach to meeting needs of students. Our educational systems must deal with an extremely wide range of personalities, beliefs, backgrounds, expectations, incomes and abilities. Teachers have a wealth of information available to help them determine students' individual needs and ways of meeting these needs. Students' needs can vary from cognitive-knowledge and moral-motivational needs to personal-emotional and physical needs. Curricula and programs generally attempt to insure that all these domains of a student's being are touched upon. One area of education that focuses on all these domains and incorporates means of meeting a wide variety of needs is that of environmental education.

The Conversion of a Recreational Camp into a
Residential Environmental and Educational Learning Center

A Research Paper

Presented to the

Department of Educational Psychology and Foundations

University of Northern Iowa

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Educational Psychology: Teaching

by

Ellen Wells Ernst

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Entitled: The Conversion of a Recreational Camp into a Residential Environment and Educational Learning Center

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CHAPTER 1

INTRODUCTION

Educational systems in our country have continually faced the challenge of providing educational opportunities for all our children. As well as maintaining a national goal of high educational standards, we have also encouraged an individualistic approach to meeting needs of students. Our educational systems must deal with an extremely wide range of personalities, beliefs, backgrounds, expectations, incomes and abilities. Teachers have a wealth of information available to help them determine students' individual needs and ways of meeting these needs. Students' needs can vary from cognitive-knowledge and moral-motivational needs to personal-emotional and physical needs. Curricula and programs generally attempt to insure that all these domains of a student's being are touched upon. One area of education that focuses on all these domains and incorporates means of meeting a wide variety of needs is that of environmental education.

The term "environmental education" means a variety of things to many people and nothing to some people. Throughout the years various terms, such as outdoor education, conservation education, and nature study have been used interchangeably with the term environmental education. For the purpose of this discussion, however, environmental education includes all the above mentioned terms, yet goes beyond the connotation of education that takes place only in the out-of-doors. The Environmental Education Advisory Council of The Iowa Department of Public Instruction

adopted the following definition in 1975:

Environmental Education means the lifelong education process dealing with people's relationship with each other and their natural and altered surroundings and includes the relation of population, pollution, resource allocation and depletion, conservation, transportation, technology, and planning to the total human environment. (Clausen & McCalley, 1979, p.1)

This means that the term environmental education is the educating of people to deal effectively with and in the wise use of their environment. The concept is meant to be broad and inclusive. Another view might be that environmental education is holistic, seeking to educate the whole person; understanding that each individual is a sum of his/her cognitive, moral, emotional and physical needs. Since one of the basic goals of teachers and school systems is to determine and meet the needs of each student, an environmental education program can be an effective means of accomplishing this goal.

With these ideas of environmental education in mind, one must look at places where education happens. The formal, traditional view involves teachers in a classroom teaching to children sitting at desks with their books and papers in front of them. The modern classrooms are much more varied than this traditional view. Students can be found in a variety of environments from a self-contained classroom to large open spaces within a school building. Some older students receive school credit for on-the-job training. Teachers use field trips to enhance certain parts of the curriculum. As most educators are aware, learning certainly is not limited to the formal school day schedule. Much of a person's learning is informal and may take place in the home, during social time

with friends, while alone on a walk, as well as in many more situations. All the environments in which a person finds him/herself contribute to the total education of the person.

Statement of Proposal

One of the places where environmental education could effectively take place is that of a recreational camp. Experiences of the writer with overnight educational sessions along with the findings from various studies indicate that there are many potential uses and benefits for recreational camps being converted into environmental and educational learning centers. (Childs, 1980; Clausen & McCalley, 1979; Howie, 1974; Kielsmeier, 1980; Millward, 1975; Swan, 1980; van der Smissen, 1975). Therefore, this writer is proposing the conversion of a recreational camp into an environmental and educational learning center.

Supporting Reasons

The purposes of converting a solely recreational camp into an environmental and educational learning center are many.

1. A recreational camp provides a different, unique setting from the traditional classroom. Many facilities are available in a variety of environments. There is the added benefit of the informal accepting atmosphere generated by being in a camp setting.

2. It would provide a year around center totally dedicated to educational pursuits. Not only would the center be available for formal educational groups, but also for community educational programs and experiences, and business educational programs.

3. By staffing the center with qualified instructors and administrators, center-designed programs could be made available for classroom teachers. This would alleviate the excessive teacher preparation time involved in planning an experience. Staffing at the center would also provide qualified leadership during the experience through the use of interns, thereby relieving the classroom teacher of the responsibility to find resource teachers or leaders. This provision of interns may be an encouragement to teachers who feel as though they lack the skills necessary to lead some activities. The liability responsibility could be legally incorporated into the center's structure which would answer many teachers' concerns. If this burden of planning and responsibility is taken by the center, then it seems reasonable to assume that more teachers will find the programs appealing. If the idea is presented to the schools and community, many teachers will be encouraged to take their students for experiences that can be very educational and enriching.

4. Programs could be designed to meet the special needs of individual groups using the center, such as the handicapped. If a school system wanted the same experience for a certain age group year after year, provisions could be made to meet these needs.

5. A permanent staff at such a center would provide continuity and stability for various educational research projects. The residential aspect of the center provides conditions for a group study in the social science areas of behavior, group dynamics, peer relationships, student/teacher relationships, styles of learning, developmental theories, and more. The center can also serve as a laboratory for any biological and

physical science study projects. These could be conducted by university students as degree requirements, or by professional scientists interested in furthering scientific knowledge.

6. Not only will schools benefit from the center's services by helping educate future decision-making citizens, but the communities surrounding the center will also be encouraged to use the facilities for any educational purposes. The idea of using a non-traditional setting for natural awareness programs, adult communication workshops, parent-child weekends and other educational pursuits suggested by various community groups enhances the appeal of the programs to many participants. The major emphasis is maintained - that of teaching individuals to deal effectively with their environment. Thus a residential educational and environmental learning center is certainly a viable and productive asset for the total community.

Limitations

As with any project or program development, there are certain limitations.

1. It is unrealistic to presume that this one aspect of education can enhance the entire teaching/learning system. However, it has been noted that many students take a renewed interest in learning as well as themselves from their experiences in the outdoors at a residential center. The more varied experiences provided, the more self image is expanded and the easier it becomes to relate to others in a variety of environments. Motivation and perceptions tend to be heightened when people experience new and varied events.

2. This discussion will not present all the possibilities for such a center. Since this topic is relatively devoid of research, the ideas presented are based on personal experience and discussions with other educators interested in this same concept. It should not be assumed that what is presented here are the only possibilities for such a facility. Part of the philosophy of such a center should include the maintenance of an open attitude toward differing ideas and concepts.

3. One of the largest limitations is that of money. Such a facility will definitely need some initial outside financial support. Many recreational camps are run by non-profit organizations. These agencies usually depend on donations for much of their operating budget (Rodney and Ford, 1971) and are having difficulty meeting all the expenses (Patterson, personal communication, March 13, 1984). Therefore, these organizations are finding that they must sell or find other means of financing their camps. The extra money from an environmental learning center might help finance the facility so two major goals will be accomplished. A non-traditional setting will be provided to carry on educational pursuits, and a tract of land will be preserved in a somewhat natural state which will allow people to enjoy and appreciate our natural heritage.

Definition of Terms

To facilitate this discussion, several terms need to be defined in addition to the term "environmental education" previously explained.

conservation education - activities that center around information concerning "the status and distribution of natural resources used by men, techniques of resources

management and the development of public policy regarding natural resource allocation" (Clausen and McCalley, 1979, p.3).

outdoor education - activities that deal with the recreational use of the out-of-doors. Methods have often been used in conservation education and nature study.

nature study - the study of the various parts of the natural environment; for instance the study of trees, flowers, animals, or forests.

residential center - a facility that provides for people staying overnight and longer. There typically are dorms or cabins available with baths or separate bath facilities. A large meeting room, dining room, and cooking facilities are also available.

formal education - programs dealing with a school system per se. The activities are structured for school groups of any age and usually have curricular guidelines.

non-formal education - programs geared toward imparting knowledge in a general way to community groups, or workshops designed for groups other than school groups such as business leaders or church groups.

interns - students who need practical experience or on-the-job training before receiving a degree in a university or higher education program.

CHAPTER 2

REVIEW OF LITERATURE

Although at least one facility has been converted to an environmental learning center, nothing specific pertaining to this topic could be found in the literature. There are studies available that speak to various related aspects of the conversion of a recreational camp to a learning center and these studies will be discussed in this section. For organizational purposes, the studies have been grouped into the following categories:

1. Existing residential outdoor education programs.
2. The benefits and necessity of environmental education.
3. Environmental education programs in use.
4. The multiple uses for a residential environmental and education learning center.

All the above studies have a direct bearing on the conversion of a recreational camp into a residential environmental and educational learning center. Many of them present some of the foundations and ideas from which the total concept of the environmental learning center has been built.

Existing Residential Outdoor Education Programs

These programs fall into two general categories: those that are conducted at an existing recreational camp during the non-school time, and those that have been developed by a teacher to be used as part of an existing curriculum. The latter usually rent the facilities of a

recreational camp in the vicinity. Because the ideas discussed have been found to be similar for both categories, these two kinds of residential outdoor education programs will be discussed as one.

Some of these studies address the idea of establishing a philosophy for a program. This is imperative if a program is going to have any meaningful direction or a long, successful operation. Mason (1981), DeMay (1980), and van der Smissen (1975) all concluded that the philosophy of a residential environmental education program needs to be broad in scope and speak to the needs of the individuals involved in the programs. There is also the joy of learning and experiencing the outdoors which needs to be incorporated into a philosophy statement according to these three authors. Mason (1981) suggests that in order to build a purpose or philosophy, it is imperative to look at the present condition and needs of society to determine aspects of our culture that need to be strengthened. He also states that care must be taken to insure that the purposes don't get tied up solely in the measurable cognitive outcomes of programs, but also include the benefits to the affective domain of the individual.

The cognitive aspect of these existing programs was discussed by most of the authors. Activities or programs vary greatly in cognitive skills from those that are solely recreationally orientated to those dedicated to promoting the conceptualization of environmental values. DeMay (1980) advocated involving a minimum amount of equipment and expertise for the "camper". Gilfillan and Burgess (1982) insist that by showing students how nature works environmentally, then with some classroom processing, students will be able to apply these learned

principles to humans and the effect humans have on their environment.

Van der Smissen (1975) theorized that programs at residential environmental education centers need to incorporate some physical risk-taking activities to challenge adolescents and young adults. Dwyer (1971) lists several factors of resident environmental education that make the program particularly well suited for successful experiences.

1. The natural setting provides a laboratory for ecological study.
2. The student is immersed in the setting for an extended time period making possible a relatively comprehensive study of the environment.
3. Teaching strategies used in environmental education tend to be discovery-orientated with learners directly involved in activities.
4. Outdoor experience is usually fun and the enthusiasm aids in positive attitude formation.

Related studies by van der Smissen (1975), Millward (1975), Conrad (1980), Swan (1980), Mason (1981) and DeMay (1980) mentioned the desirability of determining the needs and abilities of the participants for any specific program.

A number of studies discuss development other than cognitive that is an important result of outdoor experiences. Crompton and Sellar (1981) indicated that positive student-teacher relationships develop during the residential outdoor educational experience. Hammerman and Hammerman (1973) suggest that students see, often for the first time, teachers as human beings due to the relaxed outdoor atmosphere. Many times the relationships were strong enough to change some attitudes of students concerning their teachers. Sharp (1973) states that much of the "stiffness" disappears

from the student-teacher relationship and this carries back to the classroom. Along with the attitudes of students changing, Hollenbeck (1958) concluded that the residential experience helped teachers identify specific needs of certain students that were not easily visible in the classroom.

The social behaviors of students in a residential setting have also been studied. Crompton and Sellar (1981) indicated that desirable social and democratic behavioral changes occur more rapidly in residential outdoor educational experiences than in the regular classroom. A study by Davis (1960) showed that students felt their classmates were more friendly after the camp experience and that new friendships were formulated due to the experience. Van der Smissen (1975) also reported that the social relationships that had been in effect before the camp experience were reinforced. She theorized that if the situations were structured, then changes in respect for some students could be affected. According to Childs (1980), positive self-concepts in students can be successfully developed through outdoor education programs. He also indicated this is an effective way of providing alternatives for delinquent youths. Along with Childs, studies by Beker (1960) and Davis (1960) indicated that because of a residential outdoor experience students had improved self-concepts and therefore tended to be more popular among their peers. Beker (1960) found that self-concept effects measured were not transient because they were evident after a lapse of more than ten weeks. The camp situation emulated a mini-community, providing experience in group dynamics and individual decision-making. Childs (1980)

found that these experiences may help in developing self-respect and self-confidence. Attitudes toward a variety of things - environmental values, peers, teachers, education, and self - can effectively be directed and sometimes changed in a camp setting according to Millward (1975) and Howie (1974). A study conducted by Swan (1980) which polled children, parents, teachers, and center staff indicated that building an interest in and an understanding of the environment was the top priority for these population groups. This study also indicated that improving self-concepts was a high priority for the majority.

Van der Smissen (1975) touched on the spiritual aspect of a camping experience. She indicated that providing reflective time for communication can result in some "peak" experiences for students. This type of activity would need to be structured carefully and appropriately so the intent would not be misunderstood.

In addition to specific skills and/or attitudes being expanded or enhanced, Clark (1973) listed the reasons an entire residential educational program involving all the sixth grade students in Billings, Montana has been continually successful. His list included the following factors:

1. The program is multidisciplinary, with a sound educational philosophy....
2. The program has a solid foundation of support from parents and the professional community of Billings.
3. The program directors worked with and within the school administrative structure to gain the respect, cooperation, and full support of the administration.
4. The program directors at the outset decided not to solicit federal or state funds...
5. The program grew slowly because it did not depend on federal grant money....It expanded gradually as its local support base and acceptance grew.
6. The program had the broad basic support of the college administration.
7. The program had the dedication of a few skilled college faculty members who have continually given their time and talent without compensation.

8. ... the program is basically sound, practical, and concrete and generally sells itself to creative and dynamic teachers and principals who see in it a way of making the educational process more valuable and more exciting to students.
(Clark, 1973, p.15)

Several authors reported on some aspects that may be stumbling blocks to a successful residential environmental education experience. Mason (1981) cautioned about following current fads in curriculum planning. He indicated that the tendency is great, but that fadism usually leads to a lessening of the basic philosophy of the center. Millward (1975), van der Smissen (1975) and Dwyer (1971) expressed a concern about relying on the experience itself to bring about desirable outcomes. They state that the program has to be carefully planned with certain goals and objectives in mind and staffed with competent personnel. A concern about the financial aspects of a center was important to Mason (1981). He stressed that if improperly financed, then the experiences could become too costly for some sectors of a society. Dwyer (1971) indicated the need for pre- and post-experience preparation in the classroom in order for the residential experience to be as meaningful as possible. To this writer, these cautions indicate a need to use all the developmental and motivational knowledge available in determining the programs for the center.

The Benefits and Necessity of Environmental Education

Benefits of environmental education have been expressed since the first of this century. "Nature study is not science. It is not knowledge. It is not facts. It is spirit. It is concerned with the child's outlook on the world" (Bailey, 1903, p.5). Fred Charles (1907, p.26) remarked, "We are teaching children, not subjects". He also suggested that the

product of nature study is not "systematic zoology" but "the pupil whose eyes are open, who is alert, self-dependent, awake to his environment, master of himself and his surroundings" (Charles, 1907, p.26) and again from Charles,

Successful nature-study will continue to deal with material within the experience and immediate environment of the child mind. The child will study this material rather than what some one has said about it; the material will be handled scientifically, in well-chosen units, but from the child viewpoint, not from the viewpoint of the trained scientist. (Charles, 1907, p.28)

More recently, various authors have echoed these philosophical benefits and at times have relied on research studies to confirm their beliefs. Rosenstein (1979) and Mason (1981) both stated that using outdoor educational activities in simple, uncomplicated settings can make the educational process meaningful and full of wonder and excitement. These experiences can also provide a way of rediscovering the sense and purpose of our lives and relationships to others and our environment. Brennan (1974) was somewhat emphatic in his statement,

Since man holds in his hands the power to control, manipulate, transform, preserve, or destroy his environment, an understanding of the environment and how it can be controlled, manipulated, transformed, preserved, or destroyed, together with the consequences of these actions, should necessarily be an essential element of human knowledge. (p.17)

Rosenstein (1979) went further to suggest that the beauty of nature can help to fulfill many of the aesthetic needs humans have. These needs refer to Maslow's hierarchy of needs through which all humans progress (Maslow, 1970). Rosenstein intimated that lower needs on the hierarchy are also met by environmental education activities. He provided a general philosophical idea of environmental education related to the 1980's,

Using the natural environment to relate to the man-made environment

of the home, the school, the community, and the students' daily life, results in more effective learning; provides a realistic education; develops environmental sensitivity; enhances life enrichments; contributes to better human relationships and most important, brings about self-realization of the individual. (Rosenstein, 1979, p.6)

Carlson (1980, p.x) states that "there is need for direct contact with the environment." He gives as a reason that "some learning is retained longer when a concept or an object is discovered, observed, sensed, and interpreted in the natural setting" (p.x).

The idea that education need not be confined to the traditional classroom seems inherent in the definition of environmental education given in Chapter 1 of this discussion. Several educators have also spoken to this concept including Rosenstein (1979) who optimistically said that today teachers, administrators and parents are beginning to realize that education can take place in a variety of environments beyond the school building. He also issued somewhat of a challenge for teachers to discover all the realistic and exciting curricular aspects the outdoors had to offer to motivate students. Harold Howe II, the former United States Commissioner of Education said,

Education is not something that takes place only inside a building called a school. It takes place all the time through direct experience as well as through the vicarious experience of learning. School, therefore, must recognize as education the time young people spend outside of school, help them plan its best use, and give credit for it. Many youngsters will do better getting a larger proportion of their education outside the institution we have traditionally called a school. (cited in Rosenstein, 1979, p.6)

Recognizing that environmental education can take place in a variety of places leads to a related observation. Environmental education is not necessarily a separate curriculum. The definition indicates that it is more of a process which, because of being a process, is compatible

with existing programs in schools. It is not something else that has to be squeezed into the already full curriculum. Environmental education is a method of teaching fundamentals so that people can make intelligent decisions about their environment (Clausen & McCalley, 1979). Mason (1981) made the same observations when he was talking about current funding available for educational programs. Often programs in environmental education are written of or spoken of as a separate curricular program; then they are considered unnecessary and funding is dropped. We must re-evaluate our attitudes to include environmental education as a method using a wide variety of settings and activities to teach people about their relationships to the environment. We must include environmental education in terms of what it can contribute to major subject areas and in terms of how it can function within the existing school structure (Cummings, 1973). Informally, Mason (1981) has also made a plea for our educational programs today to be careful about drifting toward standardization, conformity, and routine methods. This creates a challenge to teachers who are beset by the stresses of the times and by living in a highly standardized society. Brennan (1974) stressed that if programs are going to be successful, they must be an integral part of the general educational curriculum. Expanding on the previous idea of environmental education being an integrated curriculum, Cummings (1973) listed five major themes prominent in most materials or environmental education programs. The themes include:

1. Environmental education not belonging to any discipline.
2. Cultural implications in environmental education spanning all ages and affecting individuals from all walks of life.

3. Concern for how much influence environmental education must have on the affective domain in order to have effect.

4. Materials being developed to contain activities centered around the student's surroundings.

5. Recognition that environmental education must be founded on actual experiences rather than on abstract exposures.

Other benefits from environmental education pertain to the affective skills of students. Rosenstein (1979) made a general observation that the outdoors can achieve goals of affective learning as well as contributing to the cognitive and psycho-motor skills of participants. He also went a step further to insist that educators have a responsibility to try to develop humanistic characteristics in students that will help them become worthwhile citizens in society, and he feels that outdoor educational experiences do facilitate positive moral development. Millward (1975) reported positive changes in attitudes following a resident experience; however, he emphasized that the activities and experiences must be carefully planned. The social environment of a resident setting was studied by Gilfillan and Burgess (1982) who stated that in such a setting an experience can provide opportunities for students to work, play, and study together. Because of this, Gilfillan and Burgess suggest that students learn how they stand with others as measured by their own attitudes and abilities. Carlson (1980, p.x) also expressed the moral and psychosocial benefits from a resident experience. "Students from many a classroom have returned from such experiences with a stronger sense of purpose, firmer loyalties, greater respect for one another, and improved relationships with their teacher".

The necessity of environmental education differs somewhat from benefits mostly in intensity and scope of effect. Benefits directly affect the participants of the program. Necessities can apply not only to the individual but also to society as a whole. The participants gain the benefits and knowledge which is seen as necessary to society by proponents of environmental education. Hopefully more people can be convinced of these necessities. Howie (1974) was concerned that we, as a society, have been alienated from the realization of our direct dependence on the environment by technological and medical developments. We must include in our educational activities some of the logic that the direct dependence on the environment taught us. He stated that this logic needs to be built from a cognitive-knowledge base that can come from environmental activities. Only from this knowledge base can students develop the values and attitudes that "are necessary if one is to preserve and improve his current environmental standard of living on the planet Earth" (Howie, 1974, p.36). According to Clausen and McCalley (1979), it is the educational system that is going to have to take the responsibility of imparting knowledge and information to people in order for them to be able to deal effectively with a changing environment. The Billings, Montana School District ("Report on," 1971, p.6) indicated that it is the role of the school system to help young people understand their total environment, to "help them learn (through investigations of problems on their level) how to find out about the essential ingredients of problems..." and also help them to develop attitudes and abilities that lead to responsible citizenship.

Clausen and McCalley (1979) stated the same idea but in more specific terms,

The future of our environment and our society will be determined by how well people, individually and collectively, use the environment safely within its capabilities. People must learn to anticipate their impact on others and on the future. People must learn to use natural laws and economic and political systems in cooperation with the environment. We can no longer tolerate the attitude that people are in conflict with their environment. (p.11)

Mason (1981) believes society and the individuals within a society must assume the responsibility for the care of the immediate environment. In order to accept this responsibility, a person must be educated in understanding the interrelations of the natural and human communities. The population growth and misuse of our natural resources was of concern to Gilfillan and Burgess (1982). They felt it is imperative that our future citizens be taught to use the land and all our natural resources wisely. In the same vein, Holtzer (1970) stated,

If we fail to instill an understanding and appreciation for the physical environment in these youngsters, starting in the earliest grades and sequentially through high school, then these young people will undoubtedly grow up with the same value system and the same attitudes which caused our adult population to create the present environmental crisis. (p. iv)

These people have all expressed a concern that, unless we educate our people to be able to deal effectively and wisely with the environment, then our future as a society on earth may be in jeopardy. This concern indeed reflects the necessity for environmental education.

Clausen and McCalley (1979) not only expressed their personal concerns about the necessity, but also cited various national and state policies that support environmental education. They indicated that federal law and state policies concerning local control are now emphasizing that the public

should and must participate in some of the environmental decisions that are being made locally and federally. In order to participate in this decision making, citizens must be well informed on environmental interrelationships. The National Education Association's (NEA'S) Representative Assembly passed resolution A-4, Environmental Education, in 1973, reaffirming it in 1974, 1975, 1976:

The National Education Association believes the nation's priorities must include the protection of our environment. It urges the development and improvement of federal legislation, programs, and appropriations that provide education: a.) for use, stewardship, and preservation of a viable environment; b.) to eliminate pollution; c.) to promote an understanding by students and the public of the effects of past, present, and future population growth patterns on world civilization and human survival; and d.) to promote establishment of federal Wilderness Areas.

The Association urges its affiliates to support environmental programs in school systems for grades K through adult. (cited in Clausen & McCalley, 1979, p.2)

The National Environmental Policy Act of 1969 includes a statement indicating that it is a matter of policy to urge conditions that promote the harmonious existence of man and nature as well as provide for the various requirements of the present and future generations (Clausen & McCalley, 1979). Lastly, the Code of Iowa included environmental awareness and conservation of natural resources as areas to be taught in grades 1-12 in Iowa Public Schools (Educational Standards, 1983). These directives from various sources indicate the depth of concern over our students becoming environmentally aware and active. They have to be exposed, through the methodology of environmental education, to concerns and problems in order to be able to apply knowledge and skills to the decision-making process.

As in the previous section in this review of literature, there are cautions about the benefits and necessity of environmental education that need to be addressed. Nichols (1982) and Mason (1981) cautioned educators to remember that as with any subject this is a discipline that needs to be thoroughly developed and structured before environmental activities can be effective. We need to be careful about following all the current fads without first investigating how the approach fits into our basic educational structure. Too many faddy gimmicks will create a hodge-podge of activities that lead nowhere but merely provide diversion for a class period. Hendee (1972) mentioned that environmental education programs must have their objectives well defined, as well as an overall plan for the application of these objectives. This would help to prioritize the programs. Millward (1975) and van der Smissen (1975) insisted that the setting does have tremendous potential for learning and motivation, but there needs to be solid educational goals in order to use the setting to the best of this potential. Van der Smissen (1975) went on to say that most studies show that learning does take place during an outdoor experience; however, few of these studies indicate that the extent of learning is any greater than the learning that takes place in the traditional classroom. Studies by Howie (1974) indicated that students will learn and retain environmental concepts both in an outdoor setting and in the classroom. What is important is the way the material to be learned is presented. Howie also stated that even though cognitive knowledge could be obtained equally well inside or outside, the affective skills are better enhanced in a resident outdoor setting. Agne and

Nash (1974) believed that,

E² programs will have both short- and long-range effectiveness only when they raise a student's personal and political consciousness and only when they provide him with the personal and professional skills and knowledge to transform his life. Any curricular purpose less than this is vulnerable to the charge of fraudulence. (p. 315)

The literature concerning existing resident outdoor educational programs and the benefits and necessity of environmental education has just been explained. The next category deals with environmental educational programs currently operating.

Environmental Education Programs Already in Existence

Because this topic is only in relation to the major idea of this entire discussion, the writer limited the information to be included here to a study done by Conrad in 1980 on Iowa schools and a few general comments. There are many individual projects dealing with outdoor/environmental education throughout the nation. Most of these projects are individual attempts at providing some outdoor experiences for a class of students. There are also commercial curricular materials published pertaining to environmental education in general and not specifically to residential programs. There are very few school systems that have developed any kind of a commitment to environmental education; hence, there are very few school-wide programs actually in operation. Dwyer (1971, p.75) agreed, "school camping programs which offer superb opportunities for outdoor education in the real environment have yet to achieve widespread acceptance in the schools of the nation". Most activity is carried on by individual teachers who themselves have made a commitment. There are some schools

which provide an experience for all students in a certain grade level. Gilfillan and Burgess (1982) reported on a program called "Outdoor School" that provides an experience of several days and nights for all the sixth graders in the district. The purpose of this experience is to teach the students how nature functions in an environment. Then, hopefully, these students will be able to apply their knowledge to understand how man affects the environment. An admonition was issued by van der Smissen (1975). She warned that future programs need to move beyond the low level of cognitive development skills that she had found in the programs she reviewed. Environmental education programs need to challenge the capabilities of participants.

Clausen and McCalley (1979) found that going into the 1970's, the Iowa schools were generally not well prepared to meet the responsibilities that the legislature assigned to them. There were some districts and some teachers who were doing good jobs, but in general, there seemed to be a lack of preparation. Conrad (1980) completed a survey of Iowa schools and found that of the 1169 cases interviewed, 1072 used the outdoors for instruction. This use was most frequently by the class period rather than full day. Of the 1072 respondents using the outdoors, only 47.4% evaluated their programs and only 31.1% generated any printed material. Conrad suggested that these data indicates a need for some evaluation and documentation of methodology procedures because if any other schools will be enticed to try residential environmental education programs, then benefits must be clearly illustrated. She also found that if one school in a district participated in a resident program, then it seemed

easier for other schools in the same district to attempt some program. Her study also indicated that when resident facilities are easily available more schools take advantage of resident programs. The lack of organized or published data on the status of Iowa's environmental education programs suggest a need to do some researching on this topic.

Multiple Uses of a Residential Environmental and Educational Learning Center

Again, relatively few articles could be found that pertained entirely to multiple uses for a center. The major use for an environmental and educational learning center would probably be related to formal educational group usage. The reason most of these groups would choose a camp facility would be related to environmental education. There are other uses for which such a facility would be well suited without losing sight of the center's basic philosophy. A study done by Howie in 1974 was primarily concerned with methods of teaching cognitive knowledge and the retention of the material. In the discussion he made some recommendations concerning the preparation of teachers. He suggested that possibly the in-service preparation of teachers in environmental education may provide the greatest potential for motivating students in environmental education (Howie, 1974). He said that perhaps the competency of the classroom teacher is correlated to the benefits the students receive from outdoor education programs. He felt that if teachers were better prepared the quality of the environmental experience would increase. Clausen and McCalley (1979) also advocated that teachers and administrators should be encouraged to participate in environmental education workshops

and university courses which go beyond the awareness stages of cognitive development. These courses and workshops need to teach teachers how to bring students to the point of environmental decision-making. There is a Summer Science Camp program in North Carolina that uses preservice teachers to work with primary students on science activities. This gives these preservice teachers a chance to apply some science methods they have recently learned in university classes, plus provides the camp with quality leadership (Rice, 1980). The older children at this summer camp are taught by in-service teachers who are enrolled in graduate courses (Rice, 1980). Not only do these in-service teachers work with the children who come to summer camp, they also attend pre-camp and after-camp sessions on methods and theories taught by qualified university personnel. This camp is run with the cooperation of a nearby college (Rice, 1980). Clark (1973) from Eastern Montana College involved college students as teachers and counselors in the Billings schools' sixth grade residential experiences. The college students received college credit for their work, plus the experience in various aspects of education. The college has developed several courses to accommodate the elementary school program including a course where college students spend one entire month at the residential facility. Clark also provided training for the classroom teachers in environmental education.

As well as teacher in-service possibilities there is the potential for developing workshops in which programs and curriculum are designed. The scope of these programs and curriculum could be regional or national and deal with all disciplines in education, according to Brennan (1974). There are school systems that re-evaluate or redesign

their existing curriculum, and these summer committees could benefit from the atmosphere of a center and the expertise of the permanent staff. Brennan also mentioned the following uses:

1. Conferences for national and international leaders in education and conservation to discuss policies.
2. A library devoted to environmental science and education in conservation.
3. A center for dissemination of the results of the conferences, workshops, research, and school groups.

A report from the Educational Facilities Labs (1971) listed several uses, similar to Brennan, to consider when developing a resident environmental education center.

1. The facility should become a self-contained society for the residency period stay.
2. The facility can evolve into the focal point for environmental management efforts in its area.
3. The facility should lend itself to directing, coordinating, and interrelating a vast array of study opportunities available throughout its operating area.
4. The facility should serve citizens, teachers, leaders, and students as a training center where they can become involved in the problem-solving process as it relates to environmental education concerns.
5. The facility should have devices for monitoring the conditions of the immediate environment and provide students with current information on the quality of the environment.

6. The facility should serve as an information bank, allowing data collected by groups in the regional service area to be analyzed, stored and shared with each other and with other regional centers for comparative study purposes.

A camp situation presents an almost ideal atmosphere and setting for research especially on social behavior (Feldman, 1975; van der Smissen, 1975). Feldman stated that "camps represent one of the few types of American communities where near-total control can be exercised over constituents" (p.90). He also indicated that generalizing of findings to larger communities may be more valid due to the populations being relatively normal in many factors even though the age groups would be atypical. Brennan (1974) mentioned the idea of resident scholars, meaning scholars who would spend time at the center developing papers that would be the basis for a philosophy, practice, or research project.

Evidently, according to van der Smissen (1975), there has been very little research done concerning leadership or administration in a camp situation. There has been some work done in the area of counselor characteristics but nothing definitive in the administration area. This type of research could provide some direction for educational centers as well as recreational centers. There is also still some research needed on the characteristics necessary in young people in order for them to be effective leaders (van der Smissen, 1975).

Hendee (1972) emphatically stated that studies are needed that compare attitudes of all age groups about the environment with other influences

such as parents and home, personal attributes, and extracurricular activities. He also proposed studies concerning the best methods and techniques of exposing various elements of the population to environmental concepts, and how to make environmental education personally relevant to all people. His arguments express concern that only people who have a genuine predisposition to environmental issues will study or expose their students to environmental activities.

Business corporations are beginning to make use of the camp setting to experiment with methods for developing leadership and self-confidence in management personnel (Childs, 1980). These corporations are using adventure programs according to Childs. Kielsmeier (1980) also reported that adventure programs using a camp setting have been developed for business executives, state educators, or emergent women over 30. These programs emphasize a personal renewal. The application of the program to the individual's life is left primarily to the participant. This is an area that could be developed more extensively.

The National Leadership Conference uses a camp setting for its programs which emphasize individual growth as well as corporate growth and development. These programs are developed by the Conference and the model can be used by whomever is interested (Kielsmeier, 1980).

Van der Smissen (1975) touched on another area of growth that might present optional program objectives for a center. She commented that there is very little research in the area of the spiritual meaning of an outdoor experience despite the abundance of literature attesting to the feeling encountered. In a similar vein, the center's philosophy would

have to determine to what extent the center would be involved with religious groups. It is a possible use that may be explored.

There are community type seminars dealing with all areas of concerns including parenting, youth leaders, and marriage relationships. These are considered non-formal educational groups, and as long as they meet the philosophy of the camp they can be considered as possible users (Pearson, 1979).

The above mentioned uses are those found in the literature and serve as a beginning to the possible uses. Some of these as well as other uses will be explored in Chapter 4.

CHAPTER 3

PLANNING

There are many factors to consider when planning the conversion of a recreational camp into an environmental and educational learning center. Determining personnel for the facility and conducting a site analysis must be done prior to any physical remodeling or program planning. When decisions about personnel and physical facilities have been made, a master plan is formulated. This plan assures an organized and efficient conversion and operation. The following discussion will deal with the three topics of personnel, site analysis, and the master plan.

Personnel

There are two general groups of people involved with a residential environmental and educational learning center. One group concerns potential users of such a center, and the other group concerns the staff necessary for successful operation of the facility. In each instance the possibilities discussed in this section are not the only options available. Due to creative and innovative ideas being continually generated in the field of education, one could always initiate new ideas or uses for a learning center.

Potential Users

The general philosophy of a residential environmental and educational learning center will dictate the center's potential users. Since this center will be totally dedicated to educational and environmental

pursuits, the users will be involved in educational and environmental concerns. The term "educational" is not confined to the formal educational institutions, but includes non-formal educational activities as well. For ease, the following information will be categorized into three sections based on the orientation of the groups: K-12 school groups, higher education groups, and non-formal educational groups.

K-12 groups. The first group includes all students in the formal school setting of grades K-12. One of the major purposes of the center would be to provide the opportunities for teachers and/or school systems to bring their classes for residential environmental experiences at the center. Because the needs and skills of teachers vary, the center would provide flexible planning options for these school groups, ranging from the teacher doing all the planning for the class to the opposite extreme of the center staff doing all the planning for the class experience. The center should mandate teacher involvement, but the extent will have to be based on the center's philosophy and the teacher's skills. One of the general goals would be to help teachers understand that these out-of-classroom experiences are beneficial and necessary for students' development. The experiences provided for students can vary depending on the teacher's and school's philosophies. In some districts the program may have to be based on the existing school curriculum. Other schools may decide to include more risk-taking or survival problem-solving experiences. Hopefully, all schools will see the need to increase students' knowledge and help to define their attitudes about their environments, both natural and man-made. The center will be able to

provide professional assistance to teachers in planning programs that will meet the needs of students, teachers, and school systems. As well as using the center for student/teacher groups, the public schools could use the center for in-service sessions before school begins. Teachers would have a chance to prepare for the school year and spend time developing closer relationships with their peers in a relaxed environment.

Higher education groups. The second category of formal education users comes from higher education -- university, college, vocational personnel. Teachers of specific courses (i.e. human relations) could provide a residential experience for a class of students. The extended time frame could facilitate some in depth discussions that are too often curtailed by the time factor in the classroom. Workshops on various topics could be offered for students pursuing certain career goals. The workshop format offers a change from the regular class routine, thereby encouraging participation. There would be possibilities of the center being used as a laboratory for certain disciplines; for example, biology courses where students would research by spending several days in the field. The university could use the center as part of the teacher training experience by having the students participate and help with the K-12 classes using the center. A mutual arrangement could be formulated where teacher trainees have to serve an "in residence" internship at the center. The trainee could teach some of the concepts, work as a counselor, or attend seminars discussing trainee observations of classes at the center. Participation in the actual writing of some of the curricula for the K-12 classes would also benefit the trainee.

Being with the children in this setting would accomplish several goals:

1. Trainees would realize that seeing students in a variety of settings is beneficial.
2. They would feel more comfortable about taking their future classes for such experiences.
3. They could follow the participating class back into its traditional class setting.

Another facet for university use of the learning center involves the in-service function of the university toward the larger area it serves. The center would provide an excellent setting for workshops and intense mini-courses for in-servicing teachers and other professionals. Combining course work with some recreational activity has proved an effective alternative to the traditional summer school or in-service classes (McCalley, 1984, unpublished raw data). The center staff could provide various types of assistance depending on the workshop topic. The university could also use the center for seminars or retreats for its own personnel. It may prove beneficial for each department to take a concentrated weekend of planning during the year.

The learning center will be a meeting place, but another type of function such a place can provide is research. Research is often an area relegated to laboratories or libraries; however, an environmental and educational learning center should include in its philosophy a dedication to research. Since there are wide varieties of students using the center, the choice of subjects would be great. As mentioned in the previous chapter, some people have already used the center concept in research.

Sociological and psychological studies would be easily incorporated. Studies dealing with the natural environment would also be feasible. If research is to be encouraged, however, the permanent staff must be receptive and flexible to innovative ideas while maintaining the general flow of activities.

Non-formal educational groups. Just as the opportunities afforded the formal educational organizations were quite varied; so, too, are the opportunities for non-formal educational groups. Since the center's philosophy insists on the activities being environmentally and/or educationally orientated, any group using the center must have some environmental or educational program goal as its focus. The professional center staff will be able to collaborate with the leaders of various community groups to insure that these goals are so orientated. Businesses in the surrounding communities should be encouraged to have management and human relations seminars at the center. There are effective leadership management programs commercially developed which would be enhanced by the relaxed and informal setting of the learning center. The various local and state agencies that deal with managing the natural environment, such as the county conservation commissions, could be involved with the center staff in developing and presenting programs for public education. These programs might range from an awareness of the natural environment to resource management. The center facilities could also be used for public forums or discussions on environmental issues concerning the local area as well as state or national interests. Educational issues could be presented to the public at the center with public input

encouraged. Through use by community groups, the opportunities to show the public how the schools are benefiting from the center experiences will arise. The chance may be there to increase community understanding and support of education as well as environmental issues. The increased awareness could well lead to more active participation and involvement of the public in these two important areas.

All groups. Some direct uses of the center have been touched upon. The physical environment of this center also offers to people the opportunities to experience the aesthetic qualities of nature. People who are involved in center activities should be encouraged to explore their own attitudes and appreciations of beauty. Maslow's hierarchy of needs is well known, and part of the center's philosophy should deal with providing opportunities to encourage participants searching and experiencing the fulfillment of aesthetic needs.

Operational Personnel

The literature indicates that the administration of this type of facility can vary from facility to facility (Henderson, 1982d; Rodney & Ford, 1971; Wilkinson, 1981). Much of what has been written refers to recreational camps, and much of the actual operation of a center would be very similar to a recreational camp. The discussion that follows will present views on the administration of a camp facility. The adaptations will be reserved for the section dealing with a prototype of an environmental and educational center.

Ownership and executive powers. The organization of the administration will depend on the basic financial arrangements. Often the facilities

that are owned by nonprofit organizations have an executive board of directors who provide overall direction and guidance of the facility. The board, usually with the directors, develops the philosophy and policies of the facility (Rodney and Ford, 1971). The board, thereafter, is the ultimate authority and any program, personnel, or policy changes would need its approval. If the facility is privately owned, the owner usually develops philosophy and policies. Facilities supported by state or federal tax monies are generally under the guidelines of the state or federal government. The philosophy and policies are then developed by agencies designated by the governing organization and are under the jurisdiction of the state or federal regulations (Rodney and Ford, 1971). Regardless of ownership, all residential facilities of this type are subject to some local, state, and federal regulations, usually those concerning health and safety standards (Wilkinson, 1981).

Director. Under the executive board is the position of director or team of directors. This position is responsible for the day-to-day administration of the camp and is extremely important. In a small, privately-owned facility, the director may well be the owner. Most often in a resident facility, the director or team is employed by the owner, executive board, or governing organization. Because the director(s) must possess certain skills and knowledge about the routine administration of the resident facility, it is beneficial for the board to consult with them when developing philosophies and policies. The feasibility, ease of administration, and problem areas might be more easily recognized by someone with experience and expertise in the business. Whether a facility has one director or a

team of directors, there are certain basic responsibilities and characteristics of this position. The director(s) must:

1. Help develop, interpret, and defend the philosophy of the facility.
2. Break these philosophies down into goals and objectives.
3. Put these goals and objectives into actual operation.
4. Possess technical and conceptual skills and knowledge.
5. Possess skills in planning, organizing, staffing and resourcing,

directing, coordinating, controlling, and evaluating.

6. Be able to relate effectively to the entire staff as well as the directors (Rodney & Ford, 1971; Wilkinson, 1981).

Support staff. The work of planning and operating a facility is the responsibility of the director and the staff under his/her authority.

In the case of a team, the senior director and the subordinate directors share authority while restricting operational areas. These people provide the leadership necessary for successful facility operation including program planning, scheduling, budgeting, maintaining and providing for basic needs of the users. The number of staff depends on the size of the facility. In many recreational camps the typical staff leadership consists of the following possible positions and descriptions:

1. program director
 - a. formulate program objectives
 - b. help select program content
 - c. coordinate program, personnel, and facilities
 - d. provide material resources
 - e. supervise program
 - f. provide in-service training of program staff
 - g. evaluate program regularly

2. food service director
 - a. plan nutritious, attractive meals
 - b. enforce federal or state laws relating to food preparation, disease control and cleanliness
 - c. order, store and prepare food
 - d. serve meals
 - e. supervise cleanup
 - f. supervise and help hire food service staff
 - g. maintain accurate inventory
3. health director
 - a. know and adhere to state and federal health and safety standards
 - b. know risks and hazards inherent to camp environment
 - c. supervise and help hire health staff
 - d. establish procedure for obtaining and storing health histories, exams, and records
 - e. train staff in first aid procedures
 - f. develop and train staff in emergency procedures
 - g. order and maintain equipment and supplies
 - h. establish relationship with local physicians and hospital or clinic
 - i. dispense medication
4. maintenance supervisor
 - a. establish preventive maintenance program and routine
 - b. maintain vehicles
 - c. provide for upkeep of facilities and equipment

- d. supervise and assist in hiring maintenance staff
 - e. protect camp properties
 - f. establish community relations with neighboring property owners
 - g. inventory all equipment
 - h. plan effective work schedule
5. business manager
- a. manage finances and business involvements
 - b. judiciously use limited revenue
 - c. know workmen's compensation regulations
 - d. prepare budget
 - e. investigate investment possibilities
 - f. initiate and maintain insurance coverage
 - g. oversee long-range planning of facilities
 - h. order camp supplies and equipment
 - i. supervise and assist in hiring business staff
 - j. coordinate public relations
 - k. supervise transportation arrangements
 - l. coordinate legal aspects

(Henderson, 1982a,b,c,d; Rodney & Ford, 1971; Wilkinson, 1981).

If the facility is very large, these basic divisions can be subdivided with equal authority, or if the facility is small, the divisions can be grouped and one person can direct two or three areas. These directors are then responsible for meeting the goals and objectives of the facility in their various areas. There is a need for clear and constant communication in order for these divisions to operate smoothly and cooperatively and to

adhere to the basic philosophy of the facility. The directors are also responsible for any staff under their supervision and have a responsibility to be versed in sound administrative and organizational techniques.

Educational staff. The above mentioned staff positions are representative of the average size recreational camp. There is much that can be incorporated from the recreational management system. However, the educational aspect is only one duty in the program director's position, and this is unacceptable for a facility with its primary emphasis on education and the environment. Gilfillan and Burgess (1982) and Donaldson (1972) both insist on a strong educational plan with either teachers or resident staff responsible for this plan and its execution. This would require establishing a position of education director that is equal in authority to the other directors. The education director would be responsible for two areas of education at the center -- the development of programs for users and the actual direction of the instructional programs. These two areas could be headed by a staff member who was directly responsible to the education director. The qualifications and job descriptions of these three positions might include the following:

1. educational director
 - a. qualifications:
 - 1) a master's degree in education or environmental studies desirable
 - 2) teaching experience
 - 3) working knowledge of a wide variety of educational and environmental programs

- 4) ability to communicate effectively with educators, center staff, and the general public
 - 5) organizational skills
 - 6) leadership qualities
 - 7) ability to evaluate staff
- b. job description:
- 1) supervise and coordinate the educational planning and instruction
 - 2) recommend persons to be hired as subordinate educational staff
 - 3) supervise and evaluate staff
 - 4) maintain the records
 - 5) supervise development and implementation of staff training sessions
 - 6) maintain current knowledge concerning the educational and environmental methods and theories
 - 7) develop and operate community public relations
 - 8) arrange the business aspects with the user groups
 - 9) serve as a liaison between this department and the other departments at the center
 - 10) encourage and initiate research studies at the center
2. educational program development staff
- a. qualifications
- 1) master's degree in education
 - 2) current teaching certificate

- 3) teaching experience
 - 4) knowledge in environmental studies
 - 5) knowledge in a wide variety of educational methods and theories
 - 6) ability to communicate effectively with educators
 - 7) organizational skills
 - 8) skills in program and/or curriculum development
 - 9) ability to develop goals, objectives, and programs while maintaining adherence to the center philosophy
- b. job description
- 1) design and develop programs for groups wanting to use the center
 - 2) schedule groups
 - 3) provide materials necessary for each program
 - 4) inform the other departments of the schedule
 - 5) evaluate each program
 - 6) conduct a follow-up report on each user group
3. educational instruction staff
- a. qualifications:
- 1) current teaching certificate
 - 2) a master's degree in education desirable
 - 3) teaching experience
 - 4) knowledge in a wide variety of educational methods and theories
 - 5) working knowledge in environmental studies and a variety of curricular areas
 - 6) ability to act as a supervising teacher for interns

b. job description:

- 1) interview, hire, supervise, and evaluate interns
- 2) work with the educational program director in assigning interns to groups
- 3) provide interns with a wide variety of experiences and situations
- 4) communicate with the institution sending the interns
- 5) communicate effectively with classroom teachers and students

The position of intern was mentioned in the previous discussion. This staff position could be crucial to the development of an environmental and educational learning center. An intern is a person who is still in the process of being educated as a teacher, recreational leader or youth worker. These people will be staffed at the center temporarily for a certain prescribed length of time. They will receive academic credit for their work. These people are the ones who will actually provide the instruction for the groups using the center. Interns will work closely and be supervised by the educational instruction staff as well as the teachers and students, or group members. Their qualifications and job description are as follows:

4. intern

a. qualifications:

- 1) currently enrolled in a college or university course pertaining to education and/or environmental studies

- 2) junior class standing
 - 3) live at the center
- b. job description:
- 1) communicate effectively with supervisors, teachers, and students
 - 2) provide small group instruction
 - 3) prepare for the instructional group
 - 4) attend the planning sessions of the group to which assigned
 - 5) adhere to the center's philosophies and principles

This entire education department would have to communicate and effectively work with all other departments in order to insure an exciting and rewarding center experience.

Site Analysis

Authorities in the development of recreational camps such as Rodney and Ford (1971), Henderson (1982a,b,c,d), Wilkinson (1981), Loheed (1979) and Johnson (1976) have stressed the importance of conducting a detailed site analysis prior to any site acquisition. Johnson (1976, p.E9) states that, "A careful, sensitive site analysis will identify assets and liabilities to discover its individuality". These authorities also feel it's very important to develop and adhere to a basic land philosophy before attempting the analysis and subsequently the development. Rodney and Ford (1971) seem to sum up the attitudes of these authorities,

Land and its companion resources of animals, plants, water, etc. cannot be exploited without destroying.... This then requires in the minds of those seeking property an attitude of purchasing a commodity to which the organization has a moral and ethical responsibility for land preservation, conservation, and a stewardship for perpetuity... (pp. 85-86)

Development of the center program goals and land philosophy prior to site analysis will dictate how the site will be used to accomplish goals while adhering to the basic philosophy. These preliminary guidelines have a stabilizing effect on the entire development. The analysis and development can proceed in an organized direction. Hopefully this will result in an environmental and educational learning center that can focus on the innovative and creative programs, secure in knowing that a thorough assessment has given realistic guidelines for development.

When conducting a site analysis there are several general things to consider as well as the basic land philosophy including:

1. Present and projected needs in program and groups to be served.
2. Financial resources.
3. Seasonal or year-around use.
4. Effect on the environment of any developmental or expansion

changes in the facility.

5. Future acquisition needs.

The development of the facility's philosophy and goals prior to the site analysis will guide the assessors, thereby insuring that the analysis will accurately determine the feasibility of the site under consideration. This systematic thinking and planning will produce a design and facility that has purpose, direction, and will be sensitive to the environment.

The following sections will look at the composition of the committee who will conduct the site analysis and make recommendations and will discuss some of the detailed factors involved in the analysis including the physical site survey, the facility survey, and the factual survey. Appendix A, p.109, contains an exhaustive system of facility criteria reported by E. A. Beckett at Southern Illinois University. Once again, it seems necessary to remind the reader that this information is taken mostly from research done on development of recreational camps. However, the ideas are easily transferred and the same factors apply to any residential facility dedicated to people involved with their environment.

Site Analysis Committee

The selection and analysis of a site is quite an important decision, and because of this, a committee is more capable of looking at all aspects than one person. Agency or organizational camps usually appoint or elect a committee that is responsible for the selection, acquisition, and development of the site (Wilkinson, 1981). This committee has several characteristics and responsibilities.

1. It should be small, from 3 to 8 members. Too large a committee becomes unwieldy, and since they must meet regularly, setting a meeting time is easier with fewer members.

2. It should be encouraged to seek outside consultation from experts in various professions such as construction, land use, and other technical fields. The committee should contain members who have some familiarity with large construction projects.

3. The members should all realize that a project such as a site analysis is going to take an extensive commitment of time and effort.

4. The committee should have a good understanding of the facility's philosophy and goals.

5. It should also have a good idea of the clientele to be served, the facility capacity, and the operating season.

6. It must be cooperative when dealing with other staff members.

7. It must include the facility director, not necessarily as a designated member, but as a consultant.

8. The committee must remember to keep the depth and quality of the evaluation proportional to the importance of the decision being made.

9. It should be encouraged to draw up a check list before attempting a site analysis. This list should be based on center philosophy and program goals.

10. The committee should spend time on each site being considered. They should walk the boundaries. Individuals can take responsibility for different sections of the analysis. The individual reports should then be discussed as a group and any area that needs clarification can be revisited (Donaldson, 1972; Loheed, 1979; Mitchell, 1981; Rodney & Ford, 1971; Wilkinson, 1981).

This task of site analysis takes time and should not be rushed. A proper site is extremely important to the total success of the center. Mitchell (1981) and Wilkinson (1981) estimate that the site analysis committee can accomplish the task in 6 months; however, it can also take as long as 1-1/2 years depending on the necessity of an Environmental

Impact Statement or if there were any public hearings involved. After the analysis is completed, the committee will present its comprehensive report with final recommendations to the executive board. A lawyer should be consulted to deal with the actual acquisition plans.

Wilkinson (1981) recommends that the site analysis committee also draw up the master plan for the development of the facility once the purchase is negotiated.

Physical Site Survey

A large part of the entire site analysis will be concerned with the analysis of the physical features of the area. To begin the analysis the committee should obtain maps and photographs of the entire site. Political and topographical maps should be consulted. Topographical maps are generally available from the soil or county conservation offices in the area. As well as land photographs, an aerial photograph of the site may prove very helpful in revealing physical features that may not be listed on deeds and records. These documents will begin the comprehensive files of the physical features of the site (Rodney and Ford, 1971). After references to the general area are obtained, the committee can begin to develop the check list of analysis criteria based on the facility philosophy and program goals. This physical analysis can be divided into three categories: aesthetic, functional, and factual.

Aesthetic features. The aesthetic appearance of any place influences people's attitudes and behavior. The safety needs in Maslow's hierarchy speak to the aesthetics of an area. If people are to feel

secure and relaxed, then their surroundings must be non-threatening and sensuously pleasing (Maslow, 1970). These features cannot be a substitute for a program, but they can definitely enhance any activity attempted; therefore, it is necessary to make an analysis of the aesthetic qualities to determine their present as well as potential uses. Any future developmental plans should also be considered in terms of how they would change any existing features. The following factors should be considered in the analysis:

1. topographical features
 - a. spaciousness
 - b. provide privacy and solitude
 - c. adaptable to natural circulation of people
2. vegetation
 - a. contrast between sun and shade
 - b. contrast in heights and sizes of various trees, shrubs, etc.
 - c. contrast between dense foliage and open spaces
 - d. variety of understory and undercover plants
 - e. overall healthy vegetation
3. water
 - a. surface water must have attractive color
 - b. clear enough to give sense of purity and freshness
 - c. presence of flowing water
 - d. size of any body of water
 - e. variety of water forms (springs, ponds, lakes, etc.)

4. regional and historical context
 - a. features or ruins around which to build programs
 - b. historical happenings on the site
5. wildlife
 - a. variety available to encourage habitation on the site
 - b. presence of dangerous or endangered species
6. general environmental character
 - a. vistas from which to view sunrise and sunset, clouds, etc.
 - b. presence or absence of wind
 - c. general climate
 - d. insect problems
7. buildings
 - a. construction materials fit environment
 - b. size kept in proportion to natural surrounding

The committee members should be encouraged to use all their senses when they are doing the assessment (Donaldson, 1972; Johnson, 1976; Loheed, 1979; Rodney & Ford, 1971).

Functional features. These features have to do with the more practical aspect of site selection. Program goals must play a great part in this analysis. The aesthetic features must be pleasing to the senses, but the site must be functional, easily maintained, and the resources properly managed. It must be able to promote the philosophy and goals of the facility; therefore this section must be detailed and practical. The functional features include items like the following:

(* these features should be assessed by a technical expert)

1. topography (land forms which dramatically direct program activities and facility development)
 - a. variety in elevations
 - 1) hills for climbing
 - 2) trail variety
 - 3) winter uses
 - b. level spaces (quantity and size to handle program needs and living areas)
 - c. variety of sun exposures (all or partial)
 - d. land suitable for a variety of programs
 - 1) swamps
 - 2) meadows
 - 3) forests
 - e. buffer zones between neighbors and program areas
2. vegetation
 - a. adequate for control of dust, erosion, and heat
 - b. supply for protective wildlife habitat
 - c. sufficient abundance and variety for study
 - d. adaptable to any developmental changes
 - e. amount and location of hazardous plants
- * 3. water
 - a. program uses
 - 1) adequate, safe, usable waterfront area
 - 2) adequate size of present or potential area for swimming, boating trips, etc.

- 3) purity for swimming
 - 4) future watershed pollution considerations
 - 5) presence of man-made lakes, dammed streams or rivers
(to be avoided)
 - 6) adequate supply for seasonal program needs
 - b. supply for drinking, cooking, sanitation, firefighting
 - 1) adequate supply for capacity number of users (recommended
30 - 50 gallons per person per day)
 - 2) state regulations for usage
 - 3) purity of drinking water (susceptibility to contamination)
 - 4) adequate pumping system for capacity usage
 - 5) adequate supply for firefighting (easily accessible)
- * 4. soil
- a. tested for ability to sustain plants
 - b. surface drainage
 - 1) susceptibility to erosion
 - 2) compaction
 - 3) buildings in relation to drainage
 - c. trails studied
 - 1) erosion problems
 - 2) compaction
5. location
- a. distance to
 - 1) major population areas (no more than 75 miles for
school groups)

- 2) air, rail, or bus lines
- 3) necessary supplies
- 4) emergency help (medical, fire, police)
- 5) neighbors
- b. access to utility services
- c. potential development of surrounding areas
- d. proximity of any nuisance factors (dump, amusement park, race tracks, airfields, military reservations, etc.)
6. accessibility
 - a. site approachable by well-surfaced highway and maintained secondary or tertiary roads
 - b. passability of all roads in various weather conditions
 - c. roads well maintained on site for service and/or emergency vehicles
 - d. access for supply vehicles without disrupting program areas
 - e. accessibility of all program areas within site
 - f. visibility of site within a community (depending on program)
7. expansion and developmental features
 - a. size of site
 - 1) recommended 1 acre of program land per user
 - 2) acres for development and/or expansion available
 - b. adaptability for new trails, roads, bridges
 - 1) expense involved
 - 2) destruction to present environment minimal

c. adaptability for special program areas

- 1) campfires
- 2) amphitheaters
- 3) chapel

(Donaldson, 1972; Johnson, 1976; Rodney & Ford, 1971; Wilkinson, 1981).

Facility Survey

Since the topic of this research deals with the conversion of an already existing recreational camp, it is necessary to assess the condition of the existing facilities as well as the potential for changes and/or necessary expansions. In general all the existing structures should be checked for compliance with state and local building codes. This survey is a continuation of the previously discussed physical survey and includes the following additional factors:

(* these features should be assessed by a technical expert)

1. layout of facility
 - a. evaluation of circulation patterns
 - 1) identify any conflicts
 - 2) dysfunction in terms of program operation
 - b. access to all buildings by trail or road
 - c. trails in planned pattern
2. sleeping units
 - a. type (feasibility for program needs)
 - b. location in relation to rest of facilities
3. program facilities
 - a. large, multipurpose structures for group meetings and

- use in inclement weather or evenings
- b. secluded place for camp fires
- 4. water facilities
 - a. waterfront (piers, beach, etc.)
 - b. safety of existing facilities
 - c. separate swimming and boating areas
 - d. maintenance ease of area
 - e. apparent seasonal changes
 - f. operational ease of swimming area
- 5. administrative facilities
 - a. available office space
 - 1) business
 - 2) director
 - 3) program
 - b. equipment storage
 - 1) business
 - 2) program
 - c. location
 - 1) close to parking lot
 - 2) central
- *6. health facilities
 - a. centrally located and easily accessible by emergency vehicles
 - b. kitchen and bath facilities
 - c. separate sleeping rooms for isolation
 - d. supply storage

- *7. food facilities
 - a. within walking distance of all sleeping facilities
 - b. easy access for delivery and service vehicles
 - c. good natural lighting and ventilation
 - d. thoroughly screened
 - e. rodent proof
 - f. recommended floor space
 - 1) 10-15 sq. ft. per person for dining hall
 - 2) 2.5-4 sq. ft. per person for kitchen
- 8. bathing facilities
 - a. recommended ration is 1 shower head or tub to 20 people
 - b. located conveniently to sleeping facilities
 - c. located in sunny, open area
 - d. adequacy of sewage disposal system
- 9. staff living quarters
 - a. provide some privacy for permanent staff
 - b. facility for permanent staff relaxing away from users
- 10. maintenance area
 - a. living quarters for permanent custodian and family
 - b. location
 - 1) away from main program and administration areas
 - 2) close to camp entrance (provides protection)
 - c. enclosed maintenance yard for vehicle storage
 - d. workshop area operational year around

*11. utilities

a. water

- 1) regularly scheduled water tests for taste and looks
- 2) source
 - a) drilled wells (this source is preferred)
 - b) spring
 - c) lake
 - d) stream
 - e) town system
 - f) shallow wells
- 3) system for water storage
- 4) water system usable in winter

b. waste disposal system

- 1) meet codes
- 2) toilet (1 seat for every 10 people)
- 3) handwashing close to toilet
- 4) disposal of waste water from showers and dishwashers
- 5) removal of rubbish (burned or hauled)

c. electricity

- 1) conforms to National Electrical Code
- 2) use of natural lighting whenever possible

d. communications

- 1) telephone to outside community
- 2) intercom service between buildings

12. chapel or reflective area

After the existing facilities have been assessed, the future developmental potential should be considered as it would involve rehabilitation or removal and redevelopment of existing areas. (Henderson, 1982d; Loheed, 1979; Wilkinson, 1981).

All recreational camps will not necessarily have all the above mentioned facilities in existence. The center philosophy and program goals will dictate what facilities on the above list will be necessary and which could be eliminated. It may also be necessary to develop some type of facility not mentioned. Henderson (1982d) reminds us to keep in mind that the facility should present some feeling of a unified whole with all buildings blending together and into the natural environment.

Factual Survey

The factual survey consists of some of the legal aspects and statistics pertaining to the existing facility and future development plans. Much of this survey can be completed away from the site and by one person. A list needs to be compiled of all the facts and figures needed in order to have a complete picture of the facility. The following list gives a basic start; again, program goals may necessitate additions or deletions to this list:

1. legal status of property
 - a. deed
 - b. records
 - c. liens
 - d. property lines (survey records and maps should show permanent property corner markers installed)
2. determine exact number of acres

3. data on environmental conditions
 - a. weather
 - 1) mean rainfall per month
 - 2) wind velocity
 - 3) mean temperature per month
 - b. mineral deposits
 - c. soil classification
4. investigate future development plans
 - a. adjacent lands
 - b. proposed highways or roads in area
 - c. public utility company concerning water, sewage, and electricity
 - d. local, state, and federal agencies concerning airlines, railways, subdivisions, land uses, etc.
5. present and prospective tax rates
6. water, mineral, and timber rights
7. regulatory agencies for licensing or rezoning restrictions
8. various local, state, and federal agencies for codes
 - a. watershed board
 - b. pollution control agency
 - c. environmental quality council
 - d. state board of health
 - e. state natural resources board
 - f. property owner's association

(Rodney & Ford, 1971; Wilkinson, 1981).

By the time these assessments are finished, the committee should have a complete and accurate picture of the proposed site and existing facilities. The information needs to be documented and filed for comparisons with other proposed sites. When the committee has completed its investigations, it should use the assessments to prepare a recommendation report to present to the executive board or whomever will decide on the actual acquisition. A thorough report should include:

1. The philosophy of the center and examples of ways the property will contribute to or enhance the development and adherence to this philosophy.

2. Ways in which the property contributes to the program goals. Any present or projected needs should be included.

3. The financial picture should be clear.

4. A basic land use philosophy should be stated which includes ways to provide the services intended while maintaining a stewardship ethic toward the land.

5. The actual site analysis reports should also be included.

It should also be remembered that the selling or trading of a camp property can be a very sensitive issue. Care should be taken to involve the present constituents in all aspects of the analysis and recommendations. Some provisions can be made for the present owner to have limited use or access to the area (Loheed, 1979). Before the actual acquisition, it would be advisable to have an attorney review all the information as well as the proposed contract. There are a variety of ways the land may be acquired including:

1. Actual purchase.
2. Lease agreements.
3. Gifts or donations.
4. Bequests.

The terms of the acquisition will vary according to the individual situation.

Master Plan

Once the decision to undertake the conversion has been made, it is necessary to develop a master plan for the development of the site.

Wilkinson (1981) lists several purposes for the establishment and use of a master plan. Henderson (1982d) restates these same purposes:

1. It provides a prioritized list of future needs.
2. It emphasizes the natural features of the site and provides for the best utilization of the available space.
3. It protects the natural landscape and the aesthetic qualities of the site by providing a well researched plan of site development.
4. It provides consistency in the development plans in event the board and/or committees change membership.
5. It best guarantees that the funds are wisely spent. It also serves as a basis for any capital fund raising campaign.

The master plan will be unique to each situation as basic needs and sites will vary. The necessity is apparent from the previous reasons; however, it should also be stressed that a plan should not be rushed. By taking time to explore all options and possible problem areas, a much more thorough plan will result with fewer major revisions in the future.

The final draft should be kept on file with the rest of the documents that will accumulate.

Steps in the Master Plan

The remainder of this section will discuss each of the following steps in the master plan:

1. Elect or appoint executive board.
2. Select the senior director.
3. Develop philosophy and goals of the center.
4. Determine preliminary budget.
5. Develop basic program outlines.
6. Prioritize the needs and services of the center.
7. Appoint a site analysis committee and complete site analysis.
8. Determine necessary staff and hiring procedures.
9. Prepare final budget.
10. Formulate and present recommendations.
11. Prioritize needs and set operational date goal.

These steps are basically sequential, but it will become apparent that some planning will go on simultaneously. Care should be taken to ensure that the necessary preliminary plans for each step have been completed.

Elect or appoint executive board. The owner(s) will have the responsibility for establishing the executive board. Personal attributes of these board members were alluded to in a previous section. It will be necessary for the owner(s) to expend some time and effort in the selection of these

executive board members. The method of selection will be determined by the owner(s). The board members should be extremely dedicated to this concept as they will be empowered with decision-making capabilities. They will also have to devote quite a bit of personal time to this project, especially in the beginning stages. The board's major responsibilities will be to plan and execute the Master Plan for the conversion of the recreational camp into an environmental and educational learning center. They will also have the main budgetary responsibilities, beginning with the establishment of the salary of the senior director and making provisions for the allocation of any preliminary funds that will be used in the completion of the Master Plan. After the completion of the conversion, the executive board will become the advisory and major decision making body for the center. Another option would be for the board to appoint a planning committee to complete all the work necessary in the construction of a Master Plan. This committee would be responsible to the executive board. The work could also be split between the committee and the board, with the board still the main decision making unit.

Select the senior director. The executive board or planning committee will determine all aspects of the position of senior director. Qualifications and job description will have to be written and the salary and benefits determined. The person filling this position will have to work closely with the board or planning committee as well as the center staff; therefore, he/she should be chosen before any other planning is completed in order to be involved with the rest of the major planning. This position should be that of an advisor to the board during most of the planning process.

The method of selection could be by advertising the position and soliciting resumes and interviews. Another choice would be board appointment of someone who had already expressed a deep interest from the project conception. The contractual terms of this position should be included in the job description or formulated jointly by board and director. These terms include the areas of salary increments or raises, termination procedures, leave or absence procedures, etc. Often it is beneficial to include the person who's filling the position in the discussion of these terms. The person chosen as senior director will have to be involved immediately after selection; therefore, he/she should be ready to make this time commitment, and the board should be able to make the financial commitment.

Develop philosophy and goals of the center. One of the first responsibilities of the board or committee and senior director is to develop the philosophy of the center. Without this philosophy as a firm foundation, the center's progress may founder on questions or judgements that should have been addressed during the establishment. This task is definitely not easy; however, its completion may well facilitate the rest of the developmental tasks. Many brainstorming sessions may be necessary to develop the philosophy which will be the guiding standard of the learning center. Some of the issues which might be considered in the philosophical discussions include:

1. A definition of education in terms related to the center's concept.
2. The center's definition of environmental education.

3. Statements and arguments stating the purpose of environmental education to today's society.
4. Statements expressing advantages of lessons being taught in the environment of the learning center as opposed to the classroom.
5. The place for a learning center and its philosophies in the traditional school structure.
6. To what extent the center infuses its values into the user school system.
7. To what extent the center infuses its values into the individuals using the center.
8. Determination of the center's own environmental ethics and how these ethics dictate the operation of the center.
9. Policy of educational service to all people and to what extent the center's ethics and values will be incorporated into the various user groups' programs.
10. What or who is the ultimate authority in ethical disputes.
11. Determination of the center's educational ethics.
12. A democratic ideology concerning the rights of the individual while participating in center activities.
13. The influence of money or other gifts presented to the center.

Undoubtedly, the discussion of any of these issues will raise more issues and questions. The philosophy adopted by the center should be incorporated into a charter or permanent file of some sort to insure future adherence. It should be easily accessible and provided to every employee. A copy should also be provided to each user group or at least discussed with the group leaders.

The other part of this step consists of planning goals for the center. This would be somewhat like writing goals and objectives in the education field or in business. The goals deal much more specifically with programs and operations than the philosophy did. The major learning center goals should be developed by the executive board or committee and the senior director. There will be goals for each program, but these should be developed when the programs themselves are considered. Goals will answer the following types of questions:

1. How will the educational philosophy of the center be stressed?
2. What kinds of programs will the center strive to develop?
3. What will be accomplished by the various programs?
4. What are some of the expected results in people from a center experience?
5. What are the center's contributions to the community?
6. What are the center's contributions to the school systems it serves?
7. How much of an environmental ethic will be promoted by the center and how will this promotion be accomplished?

As with philosophy, discussions on some of these goals may open new questions which will also have to be answered. These are merely suggestions and the owner(s), board members, and director will also have their own ideas to discuss. It is necessary to maintain an open atmosphere during the discussion and keep the ultimate goal in mind -- that of creating an environmental and educational center that best serves its community.

Determine preliminary budget. The executive board should develop the general budget. Much research is needed to develop this general operating budget, and the final determinations will have to wait until after the site analysis and program development are complete. Initially, the executive board will need to determine allocations necessary to hire technical professionals to help complete the Master Plan. Technical assistance may be needed in the site analysis pertaining to construction costs, utilities, maintenance costs, etc. These experts may be hired temporarily as consultants. It may be well advised to hire an accountant and attorney as permanent advisors for the center's operation. The salaries of these people can generally be made up by the savings their advice produces (Wilkinson, 1981). There will be a salary or fee for the senior director and funds set up for any paperwork necessary to complete the initial investigations.

The board should also, at this step, determine various means of financing the center. Major financial supporters should be contacted such as the universities, schools, and community groups to determine attitudes of support. Fees for users could be approximated, to be firmly set after expenses are tabulated. Provisions could be made for gifts or donations. Promotional material that explains the center's philosophies and services should be developed for scholarship bequests.

Develop basic program outlines. Concurrently with the preliminary budget planning, the preliminary program outlining should be started. The senior director can begin to outline program options available to this type of center. These plans should consider:

1. Various educational staff options such as

- a. the skeleton staff used only as resource people with teachers conducting the instruction
 - b. complete resident staff that conducts instruction with teachers only as resource people advising about children (Donaldson, 1972)
 - c. any options between these two extremes
2. Various audiences and their needs
 - a. school groups of all ages
 - b. university groups
 - c. community groups
 - d. business groups
 - e. research projects
 3. Equipment and environments necessary
 4. Variety of times spent at center

This preliminary planning is necessary to complete a thorough site analysis. Much detailed program planning must wait until the staff and site have been determined. The preliminary needs can help in the recommendation of one site over another, or in determining how much renovation and money will be necessary to make the chosen site functional in educational terms.

Prioritize the needs and services of the center. Based on the establishment of the center's philosophy and goals, preliminary budget and program planning, certain priorities can be developed. The center may decide to employ a superb staff and make do with a facility that is somewhat primitive, or certain buildings may be necessary to begin operation of the center.

All preliminary findings should be prioritized in order to formulate a direction in which to proceed. This prioritizing should be handled by the board, planning committee, senior director and possibly the owner(s).

Appoint a site analysis committee and complete site analysis. This step must be completed before much else in the planning process can be accomplished. The previous section of this chapter detailed this operation.

Determine necessary staff and hiring procedures. The executive board or planning committee and senior director can collaborate on this step. This step is also extremely necessary before any other decisions can be made. The results of the site analysis and the personnel section of this chapter will serve as references for staff selection. The qualifications and job descriptions should be prepared and finalized; then the method of selection determined. It may be necessary to recruit personnel from various other professions such as those already employed by a school system or recreation department. There may be positions that can be advertised. If an interview is necessary, the format of the interview should be determined by the director and/or the board. If the position is subordinate to the directors, it may be advisable to wait until the supervisor of the position is chosen so that he/she can also participate in the interview and selection.

Prepare final budget. With the majority of the planning involving financial decisions completed, a more detailed budget can be prepared. There will be a need for an expert in financial matters to help with this step. All needs should be assessed and prioritized. The site analysis report will show what facilities are needed immediately and which can be included in a long-term plan. The development of staff positions and

their responsibilities will help in salary decisions. It should be possible to closely determine total expenditures for the acquisition, yearly operational, and long-term expenses of the learning center. The major sources of revenue should also be apparent at this time. After all the information is collected and analyzed, a clear financial picture should emerge.

Formulate and present recommendations. With the financial statement, site analysis, and program outlines completed, the executive board or planning committee can make recommendations to the owner(s) for the acquisition of a site, conditional on any changes that might have to be made or corrected by the center staff or the previous owner. An attorney should be involved with this step to draw up the necessary contracts.

Prioritize needs and set operational date goal. After the camp has been purchased, the actual work begins on converting the facility into the environmental and educational learning center. Much of the program planning needs to be detailed and this can be accomplished by the educational staff working with the rest of the operational staff. While this work is proceeding, it is necessary for the board or original planning committee to use the major recommendations and the reports from the site analysis committee to prioritize what must be done to the facility to make it operational. These needs can be ordered based on budget requirements or restrictions and/or program needs. Technical experts should have been consulted originally in the site analysis and their reports will be beneficial. These same experts may be called upon again in this stage to submit bids for any construction or remodeling that is necessary.

The bids for food contractors, necessary equipment or furnishings, and supplies may be accepted. A probable completion date for any construction will need to be considered when prioritizing. Any developments that are not necessary for operation but have been determined necessary to make the center as complete as originally desired, or for expansion should be included into the Master Plan under long-term goals. When consideration of all these factors has been taken, a time line can be developed, contracts for work can be let, and the work can begin. A goal for construction completion can be set and an operational date can be formulated. Hopefully all work will be completed on schedule. This will require accurate supervision and the absence of unforeseen problems (most problems should have been anticipated during the site analysis stage). Any program work and staff hiring can be completed as the construction progresses. As the completion date approaches, plans can be made to solicit user groups. Any necessary training of staff can also begin during the time the construction is finishing. All the hard, dedicated effort can culminate in a successful opening. If plans have been carefully made, all programs should function smoothly. It is necessary to emphasize again the importance of thorough, careful planning from the conceptual beginnings. There are many systems that must function separately, yet as a part of the whole operation. All planning, construction and operational records should be scrupulously maintained.

Once the center is operational, the Master Plan has essentially been fulfilled. This Plan should be kept on file for constant reference to the philosophy and goals of the center and for any future developmental plans

in the event of a new administration. The long-term plans need to be worked on continuously. In such a learning center, it is conceivable that there will be adjustments or changes constantly being considered. A good, stable philosophy will help the administration sort through the ideas that arise. There has been flexibility built into the center's philosophy and in the personality of the staff selected. Hopefully, all the people involved in this type of center will be able to maintain their flexibility, encouraging progress and the development of new and creative programs.

The daily operational functions can be developed by the administration. There are manuals and books available on office management skills, food service operations, maintenance skills, etc. The directors hired to head these areas should be proficient and held accountable for the successful operation of their areas.

CHAPTER 4

EDUCATIONAL PROGRAM DEVELOPMENT

The development of the programs offered by the learning center was begun with the statement of the center's philosophy and goals. Much thought about the general direction of the programs was completed when the goals were developed. These thoughts now need to be specified, and programs written that will accomplish the ideals presented in the philosophy and goals. It is necessary for environmental education programs to be grounded in firm convictions and based on solid principles of education as well as facts about the present and future happenings in our environment.

The definition of environmental education given previously implies a holistic approach to education. A person must learn to deal effectively with his/her total environment. Brennan (1973, p.7) talked of a new kind of education, "education for the total environment". He explained that this involves external environment. Likewise Agne and Nash (1974, p.315) believe that "environmental education programs will have both short- and long-term effectiveness only when they raise a student's personal and political consciousness and only when they provide him with the personal and professional skills and knowledge to transform his life". These men reflect the idea that if environmental education is to be seriously considered in our present and future school curricula, then we, as educators, must recognize its benefits to the development of the persons we educate. The center should produce programs that express this serious dedication to the education of the total being and his/her relationship to the environment, not just programs that teach

natural awareness or outdoor skills. In order to create programs with this emphasis, the center personnel need to be knowledgeable in educational methods and theories as well as environmental studies. They need to be able to design programs that will integrate with the existing curricula of any school group as well as provide experiences for the students that cannot be duplicated in a classroom. To be effective, the programs will need to be tailored to the particular class, including its background, teacher, perceptions, and all the other factors that make each group of students unique. The challenge for this environmental and educational learning center will be to practice the philosophy that environmental education espouses - that each person interacts uniquely with his/her environment. If the programs are always aimed at meeting this challenge, then the seriousness and dedication of the center and its staff will be apparent, thereby helping to insure credibility and a secure future.

The remainder of this section will be divided into two parts, formal and non-formal educational programs. Each part will discuss the various factors of human and curricula development that need to be considered when designing programs to be used at a center. Examples relating to the environmental theme of interdependence will be provided to explain ideas.

Formal Education Programs

This section will parallel the section dealing with potential users. Discussions will concern program development for the K-12 school groups, university groups, teacher in-service, and formal research projects.

Grades K-12 Programs

When one designs curricular programs for a school group, it is necessary to keep in mind that each grade level is only one step along the total development of a student and his/her educational career. It is necessary to guide the objectives of any program along the sequential developmental continuum. A serious need exists in environmental education for the construction of programs that consider all the developmental factors and the needs of each group. It should also be stressed, as Williams (1982) suggests, that the program includes the whole experience at the center, the adjustment to the setting, living together, working together, and the various attitudes encountered, not just the activities. Programs developed with these considerations will be much more effective with students. There is a need for continuity built upon prior skills that leads to a basic knowledge and attitudes concerning the environment. For ease, the areas of cognitive, moral, psycho-social and physical development will be discussed separately. By using the theme of interdependence, examples will be given to illustrate how activities can be designed to incorporate the developmental theories.

Cognitive Development. Hendee (1972) maintained that before any attitude can be internalized, the student must be versed in knowledge pertaining to that attitude. Unless there is a basis in facts and concepts, a person can be influenced by any persuasive talker. Therefore, if one goal is to have environmentally aware citizens, knowledge concerning environmental issues must be learned. Only then can intelligent decisions be made. Too often the existing environmental education programs have

focused on attitudes and feeling, attempting only to establish a positive connotation for the environment. The studies by Piaget (1977) concerning cognitive developmental levels appear to support Hendee's ideas concerning facts and attitudes. Students need concrete experiences with their environment before they can begin to develop values or attitudes about this environment. Piaget suggested that there are definite stages or steps in the development of cognitive abilities, that these stages are sequential and that each stage is dependent to some extent on what is assimilated in preceding stages (Labinowicz, 1980; Mallon, 1976; Piaget, 1977). Ages can be loosely assigned to these stages; however, the important idea is that each stage builds on another. This implies that if a student has never been exposed to the natural environment for study, it will be necessary to start with activities aimed at some of the beginning, concrete stages, no matter what age.

Three levels in the environmental education process have been identified which are based on Piaget's cognitive developmental stages - awareness, resource management and decision-making or interpretation (Clausen & McCalley, 1979). Many commercial programs deal only with an awareness stage of environmental education, such as Essence (American Geological Institute, 1971) and Acclimatization (Van Matre, 1972). The activities in the awareness stage focus on concrete experiences that lead students to becoming aware and developing positive attitudes about their environment. They become aware of what comprises their environment. There is little abstraction required in awareness activities. The next level, resource management, continues with awareness but adds activities dealing with some

abstract ideas based on student experience in the area of management and how individuals interact with their environment. Management activities are usually directed at the upper elementary grades and middle school/junior high school level. The final stage of decision-making involves using the knowledge gained in the awareness and management stages and encourages students to engage in formal thinking about environmental decisions and in applications of the decisions. Students are generally in secondary school before this level of abstraction can be successfully attempted. Van der Smissen (1975) observes that the "learning by doing" approach often associated with the concrete stages is also suitable to the higher level cognitive development skills of analysis, application and synthesis. The "hands on" approach need not be confined to the early grades; however, the older students should be encouraged to use their "discoveries" as means of developing attitudes and ethics based on facts and making well informed decisions.

One activity that demonstrates understanding of cognitive level, based on the interdependence theme developed for grades K-2, is called "Playground for Wildlife" (Outlook, 1983). It involves students touring the school yard to find places that meet basic needs of animals or birds. Students list the things that these places have that meet the needs of the animals and birds. By actually observing the area, the teacher can lead the students in a discussion of the things that are necessary for survival of animals and birds. Students have a chance to use their senses to make the list of requirements. From these lists students can begin to understand that the animals and birds are dependent on their surroundings to

provide materials necessary for survival. Students are then asked to go a step further and plan ways that they could increase the number of birds and animals in the school yard. They are being asked to apply some of their knowledge to a new situation. The class cooperates to complete a plan for increasing the number of animals and birds by class discussions where people express their ideas, by contacting people like the school principal and the county conservationist, and by drawing plans. The plan should be implemented, at least partially. The cognitive abilities of the young children in the concrete level were used as a guide for this activity that stresses the "hands on" and "discovery" techniques. Group work is used when students are asked to make somewhat more involved plans, accommodating students who need the cognitive challenge and eliminating the pressure from students who are not ready. This activity is basically awareness with the beginnings of some management skills incorporated in the later stages.

In the upper elementary grades, the focus is still primarily on concrete and awareness activities. Students should be encouraged to explore more abstract ideas; however, the initial stages of an activity should be concrete in order to give students a firm foundation. An activity entitled "King of the Mountain" (Outlook, 1983) designed for grades 3-5 begins by asking students to write the name of a plant or animal on a slip of paper. They are then instructed to form a pyramid by having all people who wrote the name of a plant sit on the floor as the base. The students who wrote herbivores (plant-eating animals) kneel, and those with carnivores (meat-eating animals) stand. Usually most

children will choose animals and the pyramid will be unbalanced. The concept of "balance" will now be meaningful, because students actually experienced the concept. They are then asked to balance the pyramid. This leads to students selecting new names in an effort to create a balanced pyramid. The discussion centers on the food "pyramid" in nature and the interdependence of plants and animals. From observing the imbalance students can apply these facts to situations the teacher suggests. Students should then apply what they have learned by individually designing their own pyramid deciding where to place themselves. This activity is based in concrete actions, for students experience the unbalanced pyramid. Then they are encouraged to start expanding their abstracting skills by applying the principle to the other natural situations involving themselves. The teacher should take advantage of the individual pyramids by asking students to explain the consequences if one of the plants in the pyramid was eliminated due to a natural phenomenon. This line of questioning encourages abstract thought based on the concrete work of constructing their own pyramid. The awareness level of environmental education is strongly emphasized in this activity; however, the resource management can be developed easily by class discussion of the consequences of removing one group of living things and applying it to the present environment.

Students in grades 6-8 are progressing into the more formal thought levels of cognitive development. Theoretically the school curriculum has planned and encouraged activities that have fostered the development of abstract thought. There is still a need for concrete activities when

the thoughts or ideas being discussed are new or unfamiliar to the student. If there has been continual exposure to environmental awareness concepts with concrete experiences, students should be able to formulate abstract thoughts with a minimum of concrete preparation. On the other hand, if students have not been exposed to the environmental concepts in the elementary grades, then it may be necessary to provide the concepts through awareness or concrete activities before the abstractions can be attempted. "Aggie's Web" (Outlook, 1983) is an activity designed to ask students to list the various needs people have for farm lands, parks and home sites. This requires some abstract thought; however, it is a group brainstorming activity, which encourages all people to contribute ideas and eliminates the stress of each individual producing a list. This type of activity accommodates the various abstraction levels of students this age. Students are then asked to concretely express these needs by creating a mural that visually expresses the interdependencies of the agricultural and urban areas of the country. Students will most likely draw lines to show the interdependence which will create a spider-web effect. This concrete activity reinforces the abstractions students explored originally. The final part to the activity consists of students applying the same interdependence principle to a natural community. This involves abstraction which has been tested in the first part of the activity. The awareness level is not as prominent as the resource management level of environmental education in this activity. Discussion should center on how various aspects of a community depend on agriculture and what would happen if various changes in the relationship were encountered. Students' abilities

to abstract and understand cause and effect will be apparent in this type of discussion. It should be noted that without the understandings built on the concrete awareness levels, the abstractions concerning interdependence will have little depth.

As students mature, they need to practice their abstracting skills, and activities should provide this practice. The emphasis should be on encouraging students to expand their abstracting abilities and applying these abilities to formulating creative, feasible decisions concerning environmental issues. Options to all decisions should be discussed. These kinds of activities give students practice in situations they will encounter after they've become responsible citizens in a community. An Outlook (1983) activity titled "The 'Prodistribution' of Automobiles" begins by asking secondary students to briefly survey industries which support or are supported by the automobile industry. Students then individually construct a diagram which shows the interdependencies. This is similar to the previous activity, except the diagram is an individual abstract thought. Students discuss their individual diagrams and then draw implications about the future with and without the automobile. Various consequences several levels removed from the automobile are discussed. Students are then required to express their values about this by writing an essay about how these situations make the U.S. a different place to live. This activity requires an abstraction ability and gives practice in decision-making skills.

These examples of activities at various developmental stages illustrate the necessity of incorporating knowledge of cognitive development in order to provide quality educational activities that encourage constructive, cognitive growth.

Moral Development. Generally speaking, moral or attitude development has been of great concern to most environmental education programs. Many commercial programs such as Essence (American Geological Institute, 1971), Green Box (Humbolt Office of Education, 1975), Project Learning Tree (American Forest Institute, 1977), and Acclimatization (Van Matre, 1972) stress the teaching of values and attitudes concerning the environment. However, if educators are interested in developing attitudes, they must begin by instilling knowledge (Hendee, 1972). Ideally from knowledge will come attitudes. Simultaneously with the cognitive skills pursued in programs, students need to pursue the development of their own values and feelings about the happenings in their environment. If these personal feelings are considered and then compared with fellow students' personal feelings or statements of attitudes by governmental agencies or interest groups, then a much stronger value or personal attitude will be developed. This value will cause students to act responsibly on issues pertaining to that value and will internalize the value rather than merely indoctrinate it (Hendee, 1972).

It is necessary to consider the theories concerning moral development when planning programs for school groups at the center. Galbraith and Jones (1976) suggest that by understanding Kohlberg's stages of moral development educators will be able to help students examine their own feelings as well as the feelings of their peers and society concerning the environment. Kohlberg believes that humans pass progressively through stages in their abilities to make moral decisions. These stages, like Piaget's, are somewhat age-related as well as progressing in a spiral fashion - one stage building on the previous one. Trying to indoctrinate

students with moral values is very difficult if they are not at the stage necessary to understand the reasoning involved in the certain ethic being considered. Understanding of Kohlberg's theory can help center staff plan programs which will allow students to examine their feelings at any level and compare them with their peers or society. In this manner of examination and comparison, teachers can help to guide students in methods of decision-making and problem-solving.

Referring to the examples of activities promoting the interdependence theme explained in the previous section, it should be noted that it is through the cognitive activity that the moral development level is approached. It is necessary for the teacher to be aware of the developmental level in order to take advantage of the moral situation the activities provide. The K-2 activity, "Playground for Wildlife" encourages cooperation in small groups and as a class. There are opportunities for children to express their ideas, but they are not asked to express a value about their findings. The students are only asked for cognitive ideas concerning needs of wildlife and how they, as students, might encourage more wildlife. Opinions from resource people are a part of the activity and students tend to accept these views because they represent authority. The small groups and class discussions should be used by the teacher as means of teaching students to listen to each other as well as expressing their own ideas. At this stage of development students tend to focus only on satisfying their own needs. By providing non-threatening class discussions, students can comfortably express themselves and learn to listen to others. They are still greatly influenced by authority figures, as exemplified in Kohlberg's punishment and obedience stage, so the

acceptance of certain suggestions will come easier if the adults in charge make the final decision based on student ideas.

Students in grades 3-5 working on the food pyramid activity are still focused on self and their own needs. The activity requires that they think of interdependence in terms of themselves by designing a pyramid with themselves at the top. They visually begin to understand that they wouldn't survive if it were not for the rest of the pyramid. An understanding of cooperation is reinforced, and students sometimes change their own names in order for the pyramid to survive, thus ensuring their personal survival. There are opportunities to encourage development of the conventional level of moral reasoning through the cooperation required and by changing for the survival of all. The discussions are centered, not on individual needs so much as on what is necessary for the group survival. Facts are needed but children also have the opportunities to make some decisions as to what is needed for survival and to explore the consequences of certain behaviors. Students should begin to understand that their behaviors influence others in certain ways.

The 6-8 grade activity "Aggie's Web" takes the emphasis off the individual and transfers it to the community and society. They look at some of the interrelationships and begin to notice some cause and effect relationships. In discussions students are asked to make some decisions about the value of the various uses of farmland, parks and homesites. Students can determine which businesses are more important to the interdependence. The emphasis is on how society works together and yet strives to meet individual needs. By abstracting the principle to a natural

area, students are encouraged to make some value judgements and discuss these judgements in small groups. Again reliance on facts is encouraged, and students begin to discern which value judgements are based on significant facts and which are purely emotional. The teacher must guide the class discussion in order to emphasize the distinction between fact and opinion. This may require some post conventional thoughts and not all students will be able to meet this challenge. However, opportunities are provided and students are encouraged to push their thoughts beyond the conventional level.

The activity for the 9-12 grades clearly asks students to make factual value judgements on what the future would be like with and without the automobile. Students are encouraged to think about prioritizing values for the good of society and the environment. They must explain their ideas to the class and are asked to evaluate other students ideas. There is an opportunity for teachers to develop some post conventional situations. Here students must make some decisions and then evaluate their decisions in terms of self, community and society in general.

It is difficult to separate the process of moral development from that of cognitive development. The concepts presented for cognitive growth should and must be used to help strengthen moral development. Teachers are dealing with these domains simultaneously and should be aware that one affects the other.

Psychosocial Development. Program planning also needs to incorporate knowledge and understandings of the psychosocial developmental dimension. Activities must be planned that provide and encourage growth in the social and emotional skills. The residential setting is beneficial in part

because it provides a relaxed atmosphere where students become a part of a mini-society for a period of time with little outside influence. The theories of Maslow and Erikson are especially pertinent to this domain and should be incorporated into the program planning. Maslow's theory of a needs hierarchy (Maslow, 1970) and Erikson's theory of psychosocial development (Erikson, 1968) help to explain children's emotional capabilities and probable reactions to certain situations. There are definite motivational techniques that can be developed by understanding both these theories. A brief discussion of each of these theories follows.

Maslow's needs hierarchy. Maslow theorized that human needs are organized in a hierarchial manner. The basic physiological needs of humans must first be satisfied. When a person no longer worries about these basic needs, a new set of needs becomes apparent. Satisfying the security or safety needs becomes the focus of a person's behavior after the physiological needs are met. The hierarchy continues in this manner with a new set of needs emerging as a person finds ways of meeting the present set. This theory is not the same as a stage theory in that a person may move up and down the hierarchy depending on the circumstances of a situation. If a person has not eaten for five hours, then it will be difficult to get his/her attention to focus on some abstract knowledge until the hunger or physiological need is satisfied. This shifting is individual, and teachers need to be aware that all students could be in different levels of the hierarchy depending on their own needs.

The residential setting enhances the lower needs of the hierarchy by providing meals, shelter, in secure settings of the center area. The

students know they belong to the group for a certain time period. Because these needs are satisfied by little effort on the part of the student, there is more energy to devote to more advanced needs like self-actualization including the need to know and understand. Programs must provide opportunities for students to experience ways of attempting to meet their own needs in the protective atmosphere of the residential center.

The theme of interdependence can be emphasized with the belonging needs. When the K-2 groups are discussing the needs of birds and animals they can extend the concept to include the idea that all living things need to be part of a group. The students are encouraged to share their ideas with the group, with little threatening activity involved. Students are secure in their belonging to a group. As a group, they arrive at some possible solutions to their challenge. Students are also given opportunities to explore higher hierarchical needs depending on their sense of security and self-esteem. Some children may be extremely curious about all the ways different birds and animals meet their needs, and these children may suggest creative additions to attract more creatures. Some children will have a difficult time focusing on the concept because they are too worried about who they will sit with at lunch. This extreme is an example of students at different levels on the hierarchy.

The student's sense of belonging is expanded and strengthened in the 3-5 and 6-8 activities "King of the Mountain" and "Aggie's Web". Students begin to understand how they belong in their environment - how they contribute to as well as take from their surroundings. This also reinforces the theme of interdependence. In these activities

opportunities are presented for students to rely more on their own ideas. These ideas are encouraged and accepted because of the structure of the activity, thereby helping students develop ways of meeting the self-esteem and sense of self actualization needs. Cognitive skills of students are considered in the activities and the relationship between the cognitive developmental level and Maslow's needs hierarchy becomes apparent. The student must be able to complete the activity in order for esteem needs to be met. Maslow's theories can also relate to Erikson's theory of identity formation.

Erikson's psychosocial theory. Erikson (1968) emphasizes that students proceed through various psychosocial stages, and, like those of Piaget and Kohlberg, these stages are sequential and dependent on previous steps being satisfied before progressing. His stages indicate how a person develops his/her sense of identity, and much of how the individual feels is formulated by interactions with significant others. Like other developmental levels, the stages can be somewhat related to ages; however, once again a caution should be issued. Each person is an individual bringing his/her own background, perceptions, and attitudes to the present situation. Because many students in the class indicate that they are in the identity vs identity confusion stage does not mean that all students will be there. Care must always be taken to insure against standardization or insistence on conformity during the activities. By structuring activities with reference to Erikson's stages the teacher or staff can produce a program that motivates the student to challenge his/her maturity limits.

The activity "Playground for Wildlife" enhances students' sense of worth and industry by encouraging them to explore a wide variety of animal and bird needs and to plan ways of attracting more wildlife. Students have a chance to follow through with the ideas developed and agreed upon by the group. A sense of accomplishment helps students formulate ideas about the worth of work and about their own abilities. The activity removes much of the threatening aspects of such an activity by providing group and class discussions. Students are also still responsive to authority, and this attitude is used to advantage by the participation of authorities when deciding what can or cannot be done to the playground to encourage more wildlife.

The activities while carrying the theme of interdependence also illustrate to students their own place in the scheme of the natural and man-made environments. "Aggie's Web" encourages students to submit their own ideas to a small group of peers instead of a large group or on an individual project. A student's idea of identity is strongly influenced by his/her peers at this age and by carefully constructing the student groups, teachers can help students accomplish a small group task of which all members will be proud thereby enhancing self-worth, sense of industry, and identification of the skills needed to complete a task successfully.

The 9-12 activity further enhances identity by providing the opportunity for students to explore their own sense of initiative and their abilities. Students research various aspects of the automobile

industry and determine how these aspects are interdependent and how society is influenced by the automobile industry. Students, by looking at all the relationships, must determine various cause and effect relationships. By looking at consequences, students hopefully begin to understand that knowledge helps people make informed decisions that take into account needs of the various factors involved. Students strengthen their sense of identity by formulating values backed by knowledge.

The previous discussion focuses on the psychosocial domain and the way activities can encourage and strengthen the developmental sequence of this domain. Many additional opportunities for group dynamics arise due to the residential setting and advantage should be taken of these opportunities. Teachers must have a stable sense of their own self and their role in program development in order to be effective facilitators of psychosocial activities (Rogers, 1969). Once again, the relationships between domains can be determined. Each affects the other and the programs developed must consider the interrelated nature of developmental abilities.

Physical Development. There obviously are many opportunities to enhance the physical development of students while they are staying at the center. Not only should physical activities be a part of any program, but the stages of physical development should be considered when planning any program. Students should be able physically to complete any activity to which they are assigned. Age also makes a difference in this area of development.

The activities pertaining to interdependence are geared to the physical needs of the age group. The K-2 group uses a lot of movement and breaks up the discussion with movement around the playground. The 3-5 activity also encourages movement by children actually forming a pyramid. There is also part of the time devoted to smaller muscle development by designing their own pyramids. The 6-8 activity allows students to work on murals out of their seats, but the physical activity is not stressed as much as the mental. Students this age are able to attend for longer periods of time. There is opportunity for a break in class discussion by designing the mural. The high school grades rely almost entirely on students researching and planning their own diagram. There is not the need for large movements, and students can attend to a mental task longer than junior high students.

Programs at a residential center need to, however, include active games in the daily schedule as all people need a variety of activities. Many social skills can be enhanced by planning group games that are designed for the age levels. The individualistic attitude of young children requires different games than the competitiveness of junior high students. A sense of self can also be enhanced by structuring the activities to challenge the physical abilities of each age group.

These four domains are especially important to the development of programs for grades K-12. However, they should also be part of the considerations in programs for the other educational groups that use the center. Often the developmental spiral has slowed considerably but the staff should always be aware of the sequence.

University Programs

Programs for specific university classes do need to consider the previously mentioned areas of development and often some stages need to be re-emphasized and reviewed before work in the age stage can be attempted. Students may be lacking some cognitive skill for which they have the ability but have never received the exposure. It is then a matter of reviewing the concepts before commencing the actual program. One aspect of the university level that can be enhanced is encouraging students to exceed the limits of some skills they already possess. When students face a challenge for which they are conceptually and/or physically equipped and can accomplish this challenge, then esteem is enhanced. Students can be greatly motivated to try more. Stretching students' maturity is an area that should be considered in program development for the university or college level.

The theme of interdependence can be incorporated by developing challenges that force students to depend on other people or some other aspect of their environment. A course dealing with outdoor skills such as edible plants and orienteering can culminate in an activity where students are left alone in a secluded natural area for more than a day. Students would be minimally equipped forcing them to rely on their learned skills, their environment, and their own emotional maturity to stay the time limit. Students at the university level are often very able to memorize ideas and information, but the concept may need to be experienced to be internalized. Teachers and program designers must not assume that just because a student is able to discuss concepts that he/she has actually internalized the idea. There is still a need for concrete experiences that help relate to the various abstract ideas presented.

Another aspect of university programming is the intern program. Interns are at the center as students as well as teachers. The programs developed to teach the interns to be teachers must incorporate aspects of development while instructing interns in these same theories. The interns will be involved in program design using these developmental theories so they should be able to use the ideas. This position will be unique. The intern program must be a collaboration between the university and the residential center. Interns will be enrolled in specific courses that require "on the job training" which the center provides. These people are in charge of the small group instruction for all school groups using the center. Interns are required to have environmental content background and educational skills. Their duties and classes must provide for their education and challenge their abilities. Cooperation between the educational staff at the center and the university department which requires the internship is a necessity to insure that needs of both groups are met.

The intern program itself is one that exemplifies the theme of interdependence. The interns are dependent on the center and its programs for the interns' preparation for the future. The interns also serve a necessary function for the center and its staff. It is important that the interns realize this relationship and that the degree of self preparation will be dependent on the amount of effort exerted to fulfill their requirements.

Teacher Preparation and In-Service Programs

The residential center will be able to provide opportunities to help in the preparation of teachers. University teacher education courses would have access to the center to allow students to observe the activities of the school groups at the center. There would be possibilities for students to prepare curricular units and then present them to groups using the center. The programming staff at the center could also provide mini-courses for teacher education students dealing with various aspects of environmental education, science education, group dynamics, etc. The atmosphere of a residential center would enhance the mini-courses.

As well as preparing students conceptually for the teaching profession, a center may emphasize several themes including that of interdependence by providing experiences that deal with a teacher's role in the community. Students need to understand that their profession, as are many others, is dependent on aspects of the school administration and the community. The administration and community are also dependent on teachers. This teacher/community relationship requires nurturing but can lead to a very fruitful existence for both parts. A learning center could make a strong contribution to the education profession by providing workshops for preservice teachers focusing on developing skills used to enhance this interdependence.

The center staff could also provide programs for teacher in-service. These programs would be directed at teachers already practicing their profession. Many school systems survey their staff as to types of

in-service programs desired, and the center staff should provide the expertise to develop programs on any educational topic. One idea for programming that could be developed concerns motivational techniques. Taking time outside the classroom to explore methods of relating to students can provide a great deal of insight. Just as important is the aspect of understanding how student behaviors affect the teacher. This concept of motivation can be used to convey the theme of interdependence to the classroom teacher. The teacher's and students' behaviors interact to produce an environment for a school year. There are techniques that can be employed to develop the most positive environment possible with the contributing circumstances.

An aspect of the center which would promote program use is the relaxed atmosphere provided by the residential setting. It tends to be less threatening than the classroom setting. Programs developed as in-service should be the same quality found at the university. The center's staff must cooperate with the school system and a university to provide programs that can be taken for recertification and/or college credit. By providing excellent courses the center could become a contributing member to the maintenance of quality education.

Research Programs

Research programs need to be strongly encouraged at the center (Brennan, 1974; Hendee, 1972; Mason, 1981). One of the responsibilities of the educational director is to recruit research projects. Environmental education has suffered somewhat due to lack of organized and consistent

research in the field. Hendee (1972) and Brennan (1974) insist that much of the writing and research has been based on emotional and affective beliefs. There is a need for more concise, systematic projects that will verify the affective as well as the cognitive benefits of environmental education. Hendee indicated that the field needs an inventory of all the previous studies and evaluations as to their validity, reliability and substance. There are many creative opportunities for research in environmental education as well as research in social behavior and group dynamics, some of which were mentioned in a previous chapter. The center will establish its credibility as a source of information if it encourages quality research projects. The educational staff should set qualifications for acceptance and standards for fulfillment for all proposed projects. The decision for project acceptance resides with the educational staff.

There are several means of incorporating the theme of interdependence into this aspect of an environmental and educational learning center. Empirical research studies could be developed dealing with the widespread effects of the chemical products used in agriculture. How these chemicals affect the human environment and alternative methods of controlling the pests could be examined. This kind of research is certainly not unique, but is of importance. Social behavior studies could be developed that focus on the population growth problems and the effects on the local community. Educational research and theory development in areas such as motivation and how it affects and is affected by the school environment could be encouraged. The center itself serves as a mediator in interdependence

by encouraging the research studies and providing the dissemination service for the results of the research. The center benefits from the publicity and reputation gained as a center dedicated to learning.

Non-formal Education Programs

The programs developed for non-formal educational groups such as community organizations or business leadership groups will be dependent on the needs and goals of these groups. Communication between the educational staff and the directors of the user groups is imperative if the needs of the group are to be met. The developmental theories can be incorporated to the extent that the group directors know the background of the members. Care must be taken on the part of the center to not assume that the group members have certain skills. There are quick surveys or methods that should be employed to determine the knowledge and skills of the group. These surveys will help in program planning. The goals of the center need to be almost visibly kept in mind when developing programs for the non-formal educational groups. The only limit to the possibilities of programs is maintaining adherence to the center philosophy and goals and the inabilities of the staff to produce innovative ideas.

One example of a program possibility draws soil conservation and water resource authorities together for a forum focusing on the interdependence between soil erosion and water pollution. Not only would the problem be identified but possible solutions would be proposed.

The forum would serve at least two major functions: the discussion of a serious environmental/political issue and the cooperative meeting of two separate civil and governmental areas. The center staff would have the opportunity to provide activities encouraging these two distinct areas to appreciate the interdependent aspect of soil and water and of the agencies managing these resources.

Program development is not an easy task but rather a challenge to the educational staff. Therefore, the selection of a staff who can meet this challenge with creative ideas is imperative. It cannot be stressed too strongly that the staff must be knowledgeable in both environmental studies and the developmental theories mentioned within this discussion. The programs are the future of the center. Without credible, productive, satisfying programs people will not choose to make use of even the most appealing site or facility.

CHAPTER 5

SUMMARY AND RECOMMENDATIONS

Summary

Incorporating environmental education processes into the existing curriculum of our schools is indeed a challenge for the present and the future. With the guidance and support of a residential environmental and educational learning center and its professional staff, this challenge can be successfully accomplished. A center offers more than direction for school children; it encourages environmental literacy for all people by dedicating itself to environmental and educational programs for all ages. The development of such a center can be more easily accomplished by starting with the existing facilities of a recreational camp and adapting these facilities to the needs of the learning center.

The conceptualization of the learning center idea begins with a group of people dedicated to the converting of a recreational camp into a learning center. This group can become the Board of Directors or can appoint different people to serve as the Board of Directors. The board should first develop a Master Plan which is a sequential list of steps that, when completed, will lead to the conversion of the recreational camp into the environmental and educational center. Three major sections of the Master Plan deal with the following:

1. Development of the center philosophy and goals. This is necessary to give direction and stability to the learning center. Since all other

plans involve adherence to the philosophy, it is imperative that this statement be developed first.

2. Development of the list of potential users of the center (K-12 school groups, higher education groups, and non-formal educational groups) as well as a list of necessary staff, their qualifications and job descriptions (the operational staff including senior director, program, food service, health, maintenance, business and the educational staff including director, program development, instruction, and intern). Quality staff is imperative to the success of the center. Care should be taken to employ people who are not only knowledgeable in their field but are capable of making a commitment to the philosophy of the center.

3. Development of a detailed site analysis. The analysis, based on the philosophy and goals, provides an accurate account of the facilities (natural and man-made) of the proposed site. This account is necessary to determine financial and program options. After the completion of these three major sections of the Master Plan, realistic short- and long-term plans can be formulated for the center's operation.

Once personnel and site have been determined and financial arrangements made, the work of planning programs begins. Programs must not only adhere to the philosophy and goals of the center, but also be the starting point for the development of numerous creative and innovative program ideas for all the potential users of the center. Program development involves knowledge of developmental theories and ability to incorporate educational and environmental studies methods to these theories through coherent,

usable activities. Attempts should also be made to meet the needs of the classroom teachers and/or administrators as well as the students or groups they bring to the center.

Recommendations

There is indeed much more research and work that could be done to add to this writer's discussion of the conversion of a recreational camp into an environmental and educational learning center. Some of the recommendations for implementing this proposal include the following:

1. There are many advantages for such a learning center to be strongly tied to a college or university. The quality of programs can be maintained, there are many avenues for cooperative programs between the center and a university, the center is dedicated to educational purposes and can only be enhanced by the opportunities available through the university, and the university can benefit from the exposure to the community and surrounding area the center will provide.

2. It is recommended that the financial support come from the center and/or the community rather than relying heavily on federal or state funds. There may be funds available from organizations interested in promoting some aspect of outdoor education (i.e. the Audubon Society). Relying on support other than governmental funds tends to make the center self-sufficient and less susceptible to administrative changes in funding priorities.

3. It may well be wise for the center to begin slowly, provide services only partially at first and expand in an organized manner. For

instance, it may be necessary to only accommodate K-12 educational groups at the beginning, adding community and university groups as each facet becomes secure in its operation.

4. Serious consideration should be given to developing a strong internship program at a center even if there is little university involvement. The intern will be an asset and encourage many classroom teachers to make use of the center.

5. It is important that time and money be spent on publicity even before the center is ready to open. All people in the area should know of the center, its purpose, and its place in the community so that they can begin to feel a part of something that may well be a unique operation.

6. All stages of development should be accurately and consistently recorded in order to preserve the original ideas and aid anyone else interested in accomplishing the same task.

7. Programs aimed at providing education to senior citizens in the area of planning for retirement and leisure time should be seriously considered.

The conversion of a recreational camp into an environmental and educational learning center will be a task requiring a great deal of dedication, perserverance, money and time; however, the result will be a facility committed to excellence in education and environmental literacy for the people it touches. It will make a contribution to the community it serves and to society in general, and it will in many ways meet the challenges education faces today.

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APPENDIX A

Site Analysis Checklists

Checklist A

A CHECKLIST OF DESIRABLE FACILITY CRITERIA

FOR OUTDOOR EDUCATION RESIDENT CENTERS

(From E. A. Beckett's Theses, S.I.U., 1964)

All items contained on the checklist are stated in a positive manner.

As all criteria are desirable, a distinction must be made, based upon specific program needs, between what is necessary for and applicable to the program and what is not.

It is suggested that the checklist first be compared against program needs and then used in the site survey. In this way, the site can be compared against specific program needs.

At the right of the criteria items are two columns. In comparing the checklist against program needs, a check in the column labeled "Applicable to Program" would designate that criterion as being necessary for a good program. A blank space in this column would automatically render an item invalid.

In comparing the checklist against existing or projected sites and facilities, a check in the column "Site Survey" would indicate that the particular criterion, as it relates to program needs, can be or has been met.

The degree to which the site meets specific program needs would vary in accordance with the number of corresponding checks.

	Appli- cable To Program	Site Survey
--	-------------------------------	----------------

I. Planning and Site Selection

In planning and selecting the site, the following have been considered:

- | | | |
|---|-------|-------|
| A. Program requirements. | _____ | _____ |
| B. Program possibilities of the site. | _____ | _____ |
| C. Present and future needs of the program. | _____ | _____ |
| D. Uses and purpose of the total tract of land. | _____ | _____ |
| E. What groups will be using the land. | _____ | _____ |

	Appli- cable To Program	Site Survey
--	-------------------------------	----------------

In planning and selecting a site, use has been made of the following resources:

- | | | |
|--|-------|-------|
| F. Published materials relevant to philosophy, program, and facilities in outdoor education. | _____ | _____ |
| G. Specialists in outdoor education. | _____ | _____ |
| H. Visitations to existing outdoor education facilities. | _____ | _____ |
| I. Technical help for specific facilities. | _____ | _____ |
| J. The Classroom Teacher. | _____ | _____ |
| K. Various administrators of outdoor education programs. | _____ | _____ |

The following criteria pertinent to the site have been considered:

- | | | |
|--|-------|-------|
| L. Site possesses a source for adequate pure water resources. | _____ | _____ |
| M. Site is far enough away from the city to be isolated from city influences, traffic, and other annoyances yet close enough to facilitate ease of transportation. | _____ | _____ |
| N. Area possesses varied topography with diversified natural resources. | _____ | _____ |
| O. Relationship of site to present or project highways, high tension lines, aviation fields, and other man made detriments. | _____ | _____ |
| P. Site possesses good access roads yet is sufficiently isolated from major highways and other developments. | _____ | _____ |
| Q. Requirements of one to five acres of land per pupil, depending upon topography of the land, has been reached. | _____ | _____ |
| R. Relative to projected use, both present and future acquisition of as much land as possible has been made. | _____ | _____ |
| S. Site possesses ample open as well as shaded areas. | _____ | _____ |
| T. Site possesses program or interest factors such as a pond, lake, river, stream, or bog. | _____ | _____ |
| U. Area is reasonably free of excessive insects, flood danger, and other public health hazards. | _____ | _____ |

	Appli- cable To Program	Site Survey
II. <u>Master Planning for Outdoor Education</u>		
A. The master plan is a complete plan representing program, philosophy and facilities.	_____	_____
B. Master plan is based upon careful analysis of program needs.	_____	_____
C. It is a long range plan considering additional facilities necessitated by expanded program and made possible by additional funds.	_____	_____
D. In master planning the area, program and leadership have not been sacrificed for the inclusion of elaborate facilities.	_____	_____
E. It is an adequate master plan representing, at any given time, the best arrangement and design of facilities that will serve the present and prospective program envisioned at that time.	_____	_____
F. The master plan projects a plan of conservation for the entire area including specific areas designated as sanctuaries.	_____	_____
G. Facilities have been planned and located in order to provide a sense of isolation and feeling of living in the woods.	_____	_____
H. Architectural treatment established by this master plan is compatible with the basic philosophy of outdoor education as established in the master plan.	_____	_____
I. Master plan establishes the architectural treatment of all developments.	_____	_____
J. A master plan covering all factors and conditions from program objectives to physical detail has been projected prior to site development.	_____	_____
K. Where feasible, and applicable, a plan of decentralization has been followed.	_____	_____
L. The master plan has projected sites and facilities for the following basic program facilities:		
Administration Center	_____	_____
Dining and Food Service Facilities	_____	_____
Lodge or Assembly Facility	_____	_____
Library and Field Research Center	_____	_____
Health Service Facilities	_____	_____
Staff Quarters	_____	_____
Counselor and Student Quarters	_____	_____
Storage Space	_____	_____
Maintenance Facilities	_____	_____
Nature Trails	_____	_____
Basic Utilities (water, sewerage, electricity, telephone, refuse disposal.)	_____	_____

Appli- cable To Program	Site Survey
-------------------------------	----------------

III. Layout and Planning of Buildings

- | | | |
|--|-------|-------|
| A. All structures are designed to promote the health, welfare, and safety of participants. | _____ | _____ |
| B. Buildings conform to fire and building codes of the area. | _____ | _____ |
| C. All buildings are equipped with necessary fire-fighting equipment. | _____ | _____ |
| D. Permanent buildings are planned so that additions can be made as needed. | _____ | _____ |
| E. Buildings are laid out and constructed so that they are in harmony with the natural environment. | _____ | _____ |
| F. Buildings are adequately spaced and located thus avoiding congestion and preserving the natural effect of the area. | _____ | _____ |
| G. Buildings are so designed to allow as much daylight as possible to enter, thus, making artificial lighting unnecessary except on dark days. | _____ | _____ |
| H. Program needs were the final determinant in number, size, and shape of existing and planned building. | _____ | _____ |
| I. Tall, massive, spectacular structures have been avoided. | _____ | _____ |
| J. Use has been made of natural finishes. | _____ | _____ |
| K. Buildings are of a simple, rustic, nature suited to the natural environment. | _____ | _____ |
| L. Formal city type landscaping around buildings has been avoided. | _____ | _____ |
| M. Structures lend themselves to the theme, "living and learning in the out-of-doors," and stress ease and efficiency of learning. | _____ | _____ |
| N. Daily supervision has been kept in order that the points listed have been accomplished. | _____ | _____ |

	Appli- cable To Program	Site Survey
IV. <u>Administration Center</u>		
A. The central administration headquarters is an example of the style, pattern, and atmosphere of construction used throughout the center.	_____	_____
B. It is the first structure encountered upon entering the property.	_____	_____
C. Building is weatherized.	_____	_____
D. Space is provided for:		
1. Director's office.	_____	_____
2. Staff and clerical work.	_____	_____
3. Large main lobby containing a fireplace.	_____	_____
4. Adequate work space.	_____	_____
5. Staff toilet facilities.	_____	_____
V. <u>The Dining Hall-Lodge</u>		
A. General Criteria:		
1. Occupies a prominent location setting it off from the other structures.	_____	_____
2. Structure is so designed that it will blend aesthetically with and enhance the landscape rather than distract from it.	_____	_____
3. Permanent weatherized year-round structure possessing ample window space.	_____	_____
4. Interior surfaces finished to facilitate ease of cleaning.	_____	_____
5. Floor is impervious to water and grease.	_____	_____
6. Contains adequate staff and student toilet facilities.	_____	_____
B. Lodge Area: (if dining area is not feasible for assemblies or indoor use during inclement weather)		
1. Separate wing.	_____	_____
2. Contains own fireplace.	_____	_____
3. Provides a friendly and rustic atmosphere.	_____	_____
C. Dining Area:		
1. Capable of seating all participants.	_____	_____
2. Overall size of dining area provides a minimum of twelve feet per student.	_____	_____
3. Makes use of small table designed to seat five to eight students, thus facilitating small group, family type service.	_____	_____

	Appli- cable To Program	Site Survey
4. Ample space is allowed between tables for easy traffic movement.	_____	_____
5. Provisions are made for storage of overclothing during inclement weather.	_____	_____
6. Containing adequate lighting and ventilation.	_____	_____
D. Kitchen Area:		
1. Kitchen area allows a minimum of three square feet per person to be served.	_____	_____
2. Provisions are made for adequate lighting and cross ventilation.	_____	_____
3. The kitchen has been provided with maximum fly and insect protection.	_____	_____
4. Provisions have been made for:		
a) Food Storage	_____	_____
b) Food Receiving	_____	_____
c) Refrigeration	_____	_____
d) Serving Area	_____	_____
e) Food Preparation Area	_____	_____
f) Diswashing Area	_____	_____
5. Refrigeration provides an average of two and one-half cubic feet per person served.	_____	_____
6. Food preparation area provides for:		
a) Vegetable Preparation Area	_____	_____
b) Baking Area	_____	_____
c) Stove-top Cokkery	_____	_____
d) Adequate Counter Space	_____	_____
7. The diswashing facility occupies a separate alcove set off from the rest of the kitchen.		
a) Area provides receiving space for dirty dishes.	_____	_____
b) Space is provided for scraping and stacking of dirty dishes.	_____	_____
c) Area is located to provide a minimum amount of steps from dish storage and dispersion area.	_____	_____
8. Kitchen is capable of providing a decentralized food service by means of thermal units.	_____	_____
9. Hot water facility is capable of providing approximately one and one-half gallons of hot water per person per meal.	_____	_____

	Appli- cable To Program	Site Survey
10. Area is provided with a camp store which can handle cookout and checkout food service.	_____	_____
11. Advice of professional food handlers and qualified architects has been obtained in developing an efficient kitchen.	_____	_____

VI. The Health Center

A. Size and extent of this facility have been determined by:		
1. Number of participants in the outdoor education program.	_____	_____
2. Length of time students will be in residence.	_____	_____
3. Distance from school, home, or hospital.	_____	_____
B. Structure is located a suitable distance from other structures to insure isolation and quiet.	_____	_____
C. Designed so addition can be made without destroying general outline of structure.	_____	_____
D. Building contains (if program requires this extensive a structure):		
1. Lobby or waiting room.	_____	_____
2. Examination room.	_____	_____
3. Small kitchenette for food preparation.	_____	_____
4. Facilities for hot water, shower, and tub bath.	_____	_____
5. Supply room for towels and linens.	_____	_____
6. Boys and girls ward rooms.	_____	_____
7. Isolation rooms.	_____	_____
8. Quarter for doctor and nurse.	_____	_____
E. Structure is weatherized.	_____	_____
F. Telephone for emergency use is provided.	_____	_____

VII. Library and Field Research Facility (A combination library, laboratory, and display center.)

A. Library and research facility has been provided either as separate structure or in combination with another such as in the administration center or the lodge.	_____	_____
---	-------	-------

	Appli- cable To Program	Site Survey
B. Facilities in this area have been provided for:		
1. Space for library purposes or large group meetings.	_____	_____
2. Small discussion room.	_____	_____
3. Storage space for extra books, materials, and equipment.	_____	_____
4. Equipment for films and slides.	_____	_____
5. Blackboard.	_____	_____
6. Work room with work tables for research and experimentation.	_____	_____
7. Running water.	_____	_____
C. Facility is weatherized.	_____	_____
 VIII. <u>Resident Quarters</u>		
A. Adequate living quarters are provided for residence of staff temporarily involved in the program.	_____	_____
B. Whenever possible, and practical, structures emphasizing small group concept have been used rather than dormitory-type living for the students.	_____	_____
C. Living units are weatherized.	_____	_____
D. Units possess adequate garment storage facility.	_____	_____
E. Units possess adequate lighting and ventilation.	_____	_____
F. Resident structures designed to accommodate a minimum of one to two leaders for every six to ten students.	_____	_____
 IX. <u>Service and Storage Facilities for Trailer Units</u> (if program requires)		
A. Facility has been provided for storage of trailer units. (Could be provided in maintenance area.)	_____	_____
B. Adequate facilities are available for emptying and flushing of toilet unit.	_____	_____
C. Facility is provided for servicing and re-equipping mobile program units.	_____	_____
D. Vehicle is provided to transport trailer units to designated areas.	_____	_____

	Appli- cable To Program	Site Survey
X. <u>Entrance, Roads, Parking Areas</u>		
A. The entrance conveys a feeling of naturalness and openness, and not the impression that there is a clutter of man-made structures.	_____	_____
B. Buildings are secluded from the entrance as much as possible.	_____	_____
C. Entrance located at a point safe from the standpoint of affording a clear view in both directions along the highway.	_____	_____
D. Entrance sign lends itself to the natural beauty of the area.	_____	_____
E. Entrance road built to withstand heavy bus and delivery truck traffic.	_____	_____
F. Road width is a minimum of eighteen feet.	_____	_____
G. Entrance road terminates in parking lot adjacent to main administration building.	_____	_____
H. A spur or service road is provided linking the entrance road with the kitchen and the health center.	_____	_____
I. Adequate signs instructing new arrivals are provided.	_____	_____
J. Necessary culverts and fords are constructed to fit the natural woods setting.	_____	_____
K. Culverts and fords are large enough to carry any freshet and sturdy enough to carry heavy traffic.	_____	_____
L. When feasible, numerous smaller areas fitted into the contour of the land are provided for parking rather than leveling off one big area.	_____	_____
M. In construction of entrance road and parking areas, every effort has been made that they do not detract from the natural beauty of the area.	_____	_____
N. Gate is provided at, or close to, the entrance allowing the blocking out or diversion of traffic to grounds manager's home when the center is not in use.	_____	_____

Appli- cable To Program	Site Survey
-------------------------------	----------------

XI. Service Roads and Trails

- | | | |
|---|-------|-------|
| A. In laying out roads and trails, the natural contour of the land has been followed in order that these roads and trails will blend with rather than detract from the natural landscape. | _____ | _____ |
| B. Service roads and trails are provided only to the extent and specifications necessitated by primary program and maintenance needs. | _____ | _____ |
| C. In constructing service roads and trails, bulldozing, has been restrained. | _____ | _____ |
| D. Service roads have been kept to an absolute minimum. | _____ | _____ |

XII. Maintenance Area

- | | | |
|---|-------|-------|
| A. A specific area has been set aside for the maintenance and service of the entire area. | _____ | _____ |
| B. The service area is located away from the central administration area. | _____ | _____ |
| C. The service area is arranged so that close contact can be kept with regard to most activities. | _____ | _____ |
| D. The area is located to permit diversion of traffic to grounds manager's home during those times when the center is not in use. | _____ | _____ |
| E. Year-round modern living accommodations for the grounds manager and his family have been provided in good proximity to the service area. | _____ | _____ |
| F. Contained in the service area are provisions for the following: | | |
| 1. Shops and equipment facilitating necessary maintenance and repair needs of the property, facilities and equipment. | _____ | _____ |
| 2. A building for storage of maintenance equipment such as cars, truck and tractor. | _____ | _____ |
| 3. Adequate size storage building containing a well ventilated vermin-proof room. | _____ | _____ |

	Appli- cable To Program	Site Survey
4. A separate, fire-proof storage facility for oil and other combustibles.	_____	_____
5. Adequate space for expansion as program needs dictate.	_____	_____
6. Fire building for storage of all such equipment containing adequate fire alerting system.	_____	_____

XIII. Utilities

A. In master planning the area, the following utilities have been provided for:		
1. Water for domestic use.	_____	_____
2. Electrical power.	_____	_____
3. Sewage disposal	_____	_____
4. Refuse disposal	_____	_____
5. Telephone	_____	_____
B. In planning and providing utilities, authorities, experts, and engineers have been consulted.	_____	_____
C. In laying out and providing utilities, extreme effort has been made to retain the naturalness of the area.	_____	_____
D. Pipe and power lines have been run underground below the frost line whenever possible.	_____	_____
E. Electrical power has been provided for main buildings.	_____	_____
F. Water and sewage disposal has been provided for all areas and main buildings.	_____	_____
G. Telephone service has been provided for the administration center, dining hall and the service area.	_____	_____

Checklist B

1 Excellent 3 Good 5 Poor
 2 Very Good 4 Fair

	(✓) for Adequacy				
	1	2	3	4	5
1. Accessibility					
2. Animals					
3. Average Rainfall					
4. Bottom of Swim Area					
5. Building Materials					
6. Character of Adjoining Developments					
7. Dangerous Cliffs					
8. Dangerous Rapids					
9. Excessive Dust					
10. Fire Hazards					
11. Floods					
12. Fog and Dampness					
13. Forest Cover					
14. General Elevation					
15. Geology					
16. History					
17. Insect Pests					
18. Lakes and Ponds					
19. Lake Site					
20. Level Space					
21. Open Area					
22. Plants					
23. Poisonous Plants					
24. Poisonous Reptiles					
25. Potable Water Supply					
26. Prevailing Winds					
27. Privacy					
28. Slope					
29. Soil					
30. Springs					
31. Streams and Rivers					
32. Swamps					
33. Temperature and Humidity					
34. Underground Water					
35. Use of Area					
36. Varied Topography					
37. Ventilation					
38. Vistas and Beauty					

Fig. 4-1. Selected factors in campsite selection.

Note. From Camp Administration (p. 93) by L. S. Rodney and P. M. Ford, 1971, New York: John Wiley and Sons

APPENDIX B

Sample Staff Contracts

Social Security Account Number _____

CONTRACT

THIS AGREEMENT, made and entered into by and between _____
CAMP, hereinafter called "Camp, party of the first part," and _____
hereinafter called the "Employee, party of the second part."

WITNESSETH THAT

WHEREAS, the party of the first part is operating summer camps at _____
_____ and requires the services of a person qualified to act as _____

WHEREAS, the undersigned Employee has presented the necessary qualifications for such
work to the Camps and Directors, the party of the first part desires to, and does hereby employ and
appoint the party of the second part to perform these and other services at camp upon the terms and
conditions set forth below.

* * * * *

NOW, THEREFORE, the undersigned Employee, for consideration, agrees to accept the position at
camp as outlined above, and agrees to perform the camp work in connection herewith, and to serve
as chaperon to campers, if required.

The consideration for this agreement on employment is mutual as expressed above with the
following additions, terms and conditions:

1. The Camps agree to pay said Employee for his services during the Camp season, which
shall begin _____ and end _____, the
sum of \$ _____.

2. The Camps agree to furnish room and board at Camp and on camping trips when attend-
ance at meals is included in the assignments required by the camps, and to pay the Employee an
allowance for travel to and from the camps in the amount of _____.

3. The said Employee agrees to learn and abide by the rules and regulations of the Camps
and to accept the special conditions attached to this agreement.

4. The said Employee agrees to perform his regular counselor activity assignments and cabin
duties, and in addition thereto, is to be ready to take responsibility for one or more extra curricular
assignments such as flag raising, vespers, stunts, campfires, special programs, Officer of the Beach work,
swimming period duty, group cookouts, overnights, etc., etc.

IN WITNESS WHEREOF: The parties hereto have hereunto set their hands and seals this
_____ day of _____ 19____.

IN THE PRESENCE OF: _____ CAMP

Witness By _____ Director

Witness _____ Employee

SPECIAL CONDITIONS TO THIS AGREEMENT

1. THIS CONTRACT IS CONFIDENTIAL!
2. The employee is to furnish his own bedding and linen and to pay for laundry and miscel-
laneous store purchases for personal use.
3. In consideration of the free services which the Camp Doctor, Nurse or Infirmary offers to
Employees, the Employee agrees not to hold the Camp liable for accidents, special doctor or hospital
services to the Employee unless within the provisions of the State Workmen's Compensation Act.
4. In cases where Employee is required to chaperon campers to or from camp, Employee will
be reimbursed for the actual amount of expenditures on presentation of an agent's receipt.
5. In case of absence or early departure, or dismissal from camp, or should the camp work be
shortened because of fire, epidemic, accident, etc., the Employee's salary and travel allowance will be
prorated and based on the number of weeks of employment.
6. In the event that government decree or other emergencies, due to war conditions, make it
impossible to operate the camps, this contract would be null and void.
7. No oral or written agreement shall alter the terms or conditions of this agreement unless
duly signed and attached hereto.
8. Those employees who serve as representatives and benefit from the commission clause
shall release all rights to any and all commissions as soon as they or the Employer terminate the rela-
tionship, or some other affiliation is made—unless specific arrangements are made otherwise.
9. In accordance with the regulations of the state Health Department, each employee is to
be prepared to submit on request, proof that he or she is in good health. Each certificate is to be of
current (within six months) date.

Note. From Camp Administration (pp. 374-375) by L. S. Rodney and P. M. Ford, 1971, New York: John Wiley and Sons.

WRITTEN AGREEMENT FOR CAMP CARETAKER

(Example for adaptation)

BETWEEN: _____ and _____

who agrees to fill the position of Camp Caretaker for the year of January 1, 19 ____ to December 31, 19 ____.

It is agreed that he is to perform those duties usually performed by a Camp Caretaker as listed on the job analysis sheet and other needed tasks as mutually agreed upon.

He shall be paid a salary of \$ _____ monthly, \$ _____ annually. In addition he shall live in the Caretaker's house at Camp _____, rent free, and shall be furnished water, light, fuel for furnace. He shall be responsible for keeping the house in good condition and the area around the house in order. He shall also be responsible for maintaining the electricity, water, etc., to meet needs adequately.

He shall be allowed two weeks vacation with pay at a time to be mutually agreed upon. This vacation cannot be taken during the spring preceding camp or during the regular camping season. The Camp Caretaker shall be entitled to two weeks of sick leave each fiscal year.

It is agreed that the Caretaker upon beginning of work shall participate in the Social Security program and after working one year may participate in the National Health and Welfare Retirement plan.

It is agreed that should either party wish to terminate this contract, a thirty-day notice in writing shall be given.

The camp truck will be in camp and shall be used by the Camp Caretaker for regular camp business around camp, to and from _____ and _____ when scheduled. The Camp Caretaker may use the truck for buying groceries, etc., in _____ when trips are necessary. The truck will be driven only by Camp Caretaker and Camp Staff as assigned.

The Camp Caretaker will be expected to work Monday through Friday on an 8-hour day and until noon on Saturday except during regular camp season. If there are group week-ends or work to be done on week-ends at camp during the year other than the Camp season, the Camp Caretaker will be expected to be in camp and help where needed. In this case he may have Monday off instead of Sunday.

The Camp Caretaker will be expected to work the same hours as the regular camp staff during the camping season, which is that the staff are responsible on a 24-hour a day basis, and will be given time off on Saturdays as scheduled for all staff.

The Camp Caretaker shall be responsible for sending to Headquarters the 1st and 15th of each month a mileage report of usage of camp truck; a list of work that has been done, and the hours of work or time schedule. Only actual time worked should be recorded.

Camp Caretaker's Signature

President of the Council (Signature)

Date: _____

Chairman of Camp Committee (Signature)

Executive Director (Signature)

Date: _____

It is my understanding that I am to serve at _____ Camp for the season beginning _____ and ending _____.

- Responsibilities: 1.
(Subject to change) 2.
3.

In addition, I will assist in other phases of the camp program when called upon, according to my ability:

Remuneration: Board & lodging
(No additional gratuities of any kind will be accepted for services rendered.)

Relief Time: One day a week (excluding first & last weeks of season) for a total of 6 days off.

I will have a health examination within 3 weeks prior to my arrival at camp.

Private cars are not brought to camp except by permission of the Camp Executive.

I have read the accompanying letter and agree to the standards contained therein.

If the services or conduct of the Staff Member are deemed to be unsatisfactory, the camp shall have the right to terminate employment without notice. In such cases, the Staff Member shall be entitled to all wages or salary earned up to the termination of employment and the camp shall be under no further obligation to the Staff Member.

Pursuant to Article 5 of the Civil Rights Law, I hereby consent to the use of my name, portrait or picture by the camp in furtherance of its corporate purposes, including the use thereof in its publications or booklets.

Signed: _____ Date _____
Social Security No. _____ Staff Member

Camp Executive Date _____

Original copy of this contract is to be signed by you and returned to us promptly. You should keep the duplicate for your records.

APPENDIX C

Sample Job Descriptions

Program director. The program director is the senior executive person responsible for all facets of the camp program. These include developing, implementing, and coordinating the overall program of the camp. He is responsible for the supervision of each program specialist and activity head.

Accountability. The program director is responsible to the camp director and is required to submit a written program report at the end of the camp season.

Requirements. The program director should:

1. Normally be a minimum of 25 years of age and have at least 5 years of camping experience, two of which involve some administrative responsibility
2. Have a thorough understanding of the camp philosophy, its aims, and objectives
3. Possess a broad working knowledge of many, if not all, of the activities offered in the camp program
4. Whenever possible, possess a degree in recreation or physical education
5. Possess the ability to get along with people and have strong communication skills

Duties. The program director:

1. Assists the director in the recruitment, selection, and orientation of all program staff
2. Accepts primary responsibility for the planning and conduct of all staff pre-camp and in-service training that relates to program
3. Is responsible for supervising the planning and scheduling of all program activities within the camp as well as assigning staff for the conduct of these activities
4. Coordinates the various facets of the program as well as the facilities and equipment necessary
5. Develops and supervises all camper reports
6. Serves as liaison between the program department and other units of the camp
7. Is responsible for coordinating the supervision and evaluation of all program staff

Fig. 4-1. Sample position description for a program director.

Administrator's name _____ Date _____

Note: In order to assist administrative personnel to improve their effectiveness, you are asked to assess the person whose name appears above.

A list of 20 traits that are considered to be important for camp administrators is found below. Place a check (✓) in the appropriate column on the right. Additional comments are welcomed regarding the individual or the camp administration generally.

	Outstanding	Above average	Average	Needs improvement	Poor
1. Demonstrates insight and vision regarding camp objectives and long-range plans	—	—	—	—	—
2. Sets high standards for the staff and camp	—	—	—	—	—
3. Possesses the physical stamina and drive to handle the rigors of the position	—	—	—	—	—
4. Demonstrates pleasant personality and good communication skills	—	—	—	—	—
5. Is consistent and fair: does not play favorites	—	—	—	—	—
6. Solves problems rationally: can come right to the heart of things	—	—	—	—	—
7. Gets along well with other people	—	—	—	—	—
8. Demonstrates ability to get staff to work together as a team	—	—	—	—	—
9. Recognizes staff contributions and a job well done	—	—	—	—	—
10. Is approachable and a good listener	—	—	—	—	—
11. Takes personal interest in each staff member	—	—	—	—	—
12. Welcomes and respects the opinions of others	—	—	—	—	—
13. Instills confidence and trust	—	—	—	—	—
14. Criticizes constructively	—	—	—	—	—
15. Is continuously alert to new ideas	—	—	—	—	—
16. Has ability to recruit competent staff and place the right person in the right position	—	—	—	—	—
17. Encourages the professional growth of staff	—	—	—	—	—
18. Is well informed at all times regarding the total camp operation	—	—	—	—	—
19. Delegates responsibility and authority effectively	—	—	—	—	—
20. Encourages effective, continuous evaluation	—	—	—	—	—

Comments:

Fig. 11-5. Sample form for evaluation of administrators.

Note. From Camps, Their Planning and Management (pp. 64 & 274) by R. E. Wilkinson, 1981, St. Louis: C. V. Mosby.

Position: Waterfront Director

Qualifications:

1. At least 21 years of age
2. Current Water Safety Instructors Certificate from the American Red Cross or an organization having equivalent standards
3. At least one year experience on a camp waterfront
4. High moral character
5. Emotional maturity and stability

Responsible to: Program Director

General Responsibilities:

1. Over-all direction of all waterfront activities
2. Initiation of a strict and efficient water safety program for the entire camp in keeping with the American Camping Association standards and Red Cross requirements
3. Evaluation of the progress of the program and the campers

Specific Responsibilities:

1. Development and operation of a well-planned program of instruction
2. Testing and classifying swimming abilities of camp personnel and utilizing these abilities to the best advantage in carrying out the waterfront program
3. Testing and evaluating the swimming abilities of each camper
4. Supervision of camp staff as to lifeguard duties during general swim periods
5. Supervision of waterfront staff, including instructors of canoeing, boating, and sailing
6. Coordination of all camp activities using waterfront facilities such as fishing, nature lore, etc.
7. Preparation of progress reports for each camper
8. Responsibility for maintenance and inventory of all waterfront equipment
9. Participation in all camp-wide activities

Authority: Commensurate with responsibilities

Counseling Responsibilities: No cabin responsibilities

Job Description for a Waterfront Director.

Position: Cook

Responsible to: Camp Director

General Responsibilities: Preparation and service of food

Specific Responsibilities:

1. With the assistance of kitchen staff, prepare and serve food for all meals
 2. Train and supervise kitchen staff
 3. Maintain proper standards of sanitation and care of kitchen equipment, appliances, and utensils
 4. Assist the program director in filling requisitions for cookouts and overnights
 5. Assist camp director with inventory and storing equipment for closing of camp
-

Job Description for a Cook.

Position: Nurse

Responsible to: Camp Director

General Responsibilities: All aspects of health program

Specific Responsibilities:

1. Assume responsibility for total health program of camp
 2. Assume responsibility for standing orders from camp
 3. Take charge in situations requiring medical assistance, referring to physician if necessary
 4. Keep record of all medical treatment and all special prescriptions
 5. Advise camp director and staff on matters related to health education, sanitation, accident prevention, child health, nutrition, and first aid in the camping situation
 6. Check camp health supplies and set up suitable camp infirmary
 7. Check incoming campers' medical cards, advising cabin counselors of cases which may require special attention; check departing campers, making any necessary or advisable recommendations to parents
 8. Supervise any special diets which may be required
-

Job Description for a Nurse.

Note. From Camp Administration (pp. 390-391) by L. S. Rodney and P. M. Ford, 1971, New York: John Wiley and Sons.