

DOCUMENT RESUME

ED 113 113

RC, 008 825

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 TITLE The Development of an Instrument for Evaluating Residential Outdoor Education Centres in Canada.
 PUB DATE Apr 74
 NOTE 158p.; MS Thesis, Calgary University, Calgary, Alberta

EDRS PRICE MF-\$0.76 HC-\$8.24 Plus Postage
 DESCRIPTORS *Evaluation Methods; *Literature Reviews; Masters Theses; *Measurement Instruments; Objectives; *Outdoor Education; Program Content; *Residential Centers; Residential Programs

IDENTIFIERS *Canada

ABSTRACT

The study's purpose was to develop a valid instrument for evaluating residential outdoor education centres in Canada. Using published and unpublished literature, a preliminary instrument consisting of 206 criteria was constructed. Twenty-five recognized Canadian experts in residential outdoor education were randomly selected from 3 subsample areas (the Maritimes, Quebec-Ontario, and Western Canada); these were asked to act as jurors. To validate the preliminary instrument, the jurors were sent a copy of the instrument with instructions to rate each criterion on a 7-point scale: essential, very desirable, desirable, acceptable, questionable, unacceptable, not feasible, and an eighth scale, not applicable. Twenty jurors (80 percent of the total number) responded. Of the 206 criteria, 3 were excluded because their average ratings were lower than the required 4.0 and 1 because of the jurors' comments. The overall average rating of the 202 criteria retained in the instrument was 6.0 or very desirable. The final instrument was given a 6-point scale which included: met completely, great degree, moderate degree, small degree, not met to any degree, and not applicable. In addition, the average rating received from jurors for each criterion was included immediately following that criterion in the body of the instrument. (Author/NQ)

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THE UNIVERSITY OF CALGARY

THE DEVELOPMENT OF AN INSTRUMENT FOR EVALUATING
RESIDENTIAL OUTDOOR EDUCATION CENTRES
IN CANADA

by

NESTOR N. KELBA

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE

DEPARTMENT OF CURRICULUM AND INSTRUCTION

CALGARY, ALBERTA

APRIL 1974

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FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "The Development of an Instrument for Evaluating Residential Outdoor Education Centres in Canada" submitted by Nestor N. Kelba in partial fulfillment of the requirements for the degree of Master of Science.

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ABSTRACT

Problem

In this descriptive study the problem was to develop a valid instrument for evaluating residential outdoor education centres in Canada.

Procedure

A preliminary instrument was constructed using published and unpublished literature. 206 criteria for evaluating residential outdoor education centres in Canada were contained in the instrument. No criterion was included unless it was mentioned by at least two authors.

A list of recognized Canadian experts in residential outdoor education was prepared and these persons were asked if they would assist with the study.

A random selection of twenty-five experts from three subsample areas, the Maritimes, Quebec-Ontario and Western Canada, was made and these people were asked to act as jurors.

To validate the preliminary instrument the jurors were sent a copy of the instrument with instructions to rate each criterion on a seven point scale: essential, very desirable, desirable, acceptable, questionable, unacceptable, not feasible, and an eighth scale, not applicable.

Results

Twenty jurors or eighty percent of the total number of jurors replied within the deadlines set. A table giving the number of jurors selecting each rating, the mean rating for each criterion, and whether or not the criterion was acceptable for inclusion in the instrument was included in Chapter 4 of this study.

Findings

Of the 206 criteria three criteria were excluded because their average ratings were lower than the required 4.0. One criterion was excluded because of comments by jurors. The overall average rating of the 202 criteria retained in the instrument was 6.0 or very desirable.

Chapter 5 included a discussion of findings and the final validated instrument. This final instrument was given a six point scale which included: met completely, great degree, moderate degree, small degree, not met to any degree, and not applicable. In addition, the average rating received from jurors for each criterion was included immediately following that criterion in the body of the instrument.

ACKNOWLEDGEMENT

The writer wishes to express his appreciation to members of his committee for their assistance throughout the investigation. He would like to express his sincere thanks to Dr. S. A. Lindstedt for his supervision throughout the study.

The writer wishes to thank the members of the jury of experts who validated the instrument. Without the cooperation of these twenty individuals throughout Canada a study of this type would not have been possible.

The author is indebted to his typist Mrs. Laura Spensley for her thoughtfulness and assistance.

In conclusion, the writer is especially grateful to his wife, Ellen, and his children. They provided continuing support and inspiration.

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Chapter 1

INTRODUCTION

Educators have recognized that outdoor education can:

Offer meaningful learning situations which should be an important part of every child's education

Provide an opportunity for direct learning experiences which can enrich the school curriculum in all subject areas

Stimulate students' curiosity and permit them to discover the excitement and satisfaction of learning out-of-doors

Enable pupils to develop new interests and skills which can provide a basis for a lifetime of creative living

Help them discover the important relationship that can and should exist between classroom instruction and outdoor learning

Give them a much broader knowledge of ecological principles and their relationship to our quality of life

Provide excellent opportunities to examine through personal experiences many of our present social and cultural values

Help pupils to develop a better understanding of themselves, their teachers, and their total education.¹

Outdoor education is a method of education and can vary from a short field trip to an extended residential situation. This study deals with residential outdoor education which includes most other levels of outdoor education. The use of residential outdoor education by educators has been increasing rapidly in recent years.

Educational leaders, seeking more opportunities to provide real and direct learning experiences for children, have found that many things can be learned best in a camp setting. The acceptance of this principle by educators, coupled with the popularity of outdoor activities has given impetus to the development of a substantial number of school programs.²

The Research Department of the Metropolitan Toronto School Board stated in a recent publication after they had thoroughly reviewed available literature that "the technical and evaluative studies were

designed more to elicit funds than to describe or evaluate objectively outdoor educational programs.³

A similar conclusion was reached by the investigator who had placed particular interest and stress upon evaluative studies during his research and review of literature.

STATEMENT OF PROBLEM

The problem of this study was to develop a valid instrument for evaluating residential outdoor education centres in Canada. Sub-problems would include format of the instrument, selection of criteria, and actual validation of criteria and format.

NEED AND SIGNIFICANCE OF THE STUDY

Rudimentary guidelines for residential outdoor education centres* are available in Canada. However a validated instrument was required that would assist in the:

- A. evaluation of operational "centres"
- B. development of proposed "centres"
- C. establishment of priorities for the improvement of existing "centres."

To determine if a valid instrument for evaluating residential outdoor education centres in Canada had been developed both in the past and more recently the literature and research in the area of outdoor education was reviewed carefully. No evidence of published research in the evaluative area in Canada could be found. The investigator wrote to

*Hereafter referred to as "centres."



knowledgeable persons who were current in their information on outdoor education and residential outdoor education centres in Canada. Two questions asked of these people included:

1. Do you know of any similar recent studies of this type that have been carried out?
2. Do you think there is a need of such a validated instrument of this kind?

Professor John Passmore, of the University of Toronto, completed and published results of a cross-Canada tour including all provinces and territories during which he visited with knowledgeable Canadians in outdoor education and environmental studies. Upon his return he distributed a survey questionnaire throughout Canada on outdoor education and environmental studies. This study was carried out under the auspices of the Canadian Education Association with the support of a travel grant by Imperial Oil Company. Professor Passmore's letter of support for this study is contained in Appendix A.

Mr. Reg Houghton, a Dome Teaching Fellowship winner and recently named Supervisor of Outdoor Education and Tours for the Calgary Board of Education supported this study and his letter also appears in Appendix A.

DELIMITATIONS OF THE STUDY

The study was delimited to the development of a valid instrument for evaluating residential outdoor education centres in Canada.



LIMITATIONS OF THE STUDY

A limitation of the study was that validity of the instrument was not statistically calculated; a content validation based upon the opinions of a jury of experts was used. However, this method is an acceptable means of validation and should not influence the effectiveness of the instrument.

Another limitation of the study was that criteria may be misinterpreted by the jurors. This problem was alleviated by a thorough pilot study by twelve persons ranging from a professional thesis typist to recognized knowledgeable individuals in residential outdoor education many of whom had been recommended as jurors. Following the pilot study and upon revision of the instrument and criteria a sub pilot study by three persons was carried out and further revisions were made.

A limitation may have occurred because of the rating scale selected for the criteria. Eight choices were given the jurors and the risk was that one individual may see a particular scale, for example, "very desirable" much differently from another individual. Indications are that this limitation is overcome when the group exceeds twenty. Twenty-five jurors were selected, and twenty responded.

DEFINITIONS FOR THE STUDY

Outdoor Education: education in, about, and for the outdoors.⁴

Residential Outdoor Education Centre: is designed for an extended 24 hour-a-day experience in the out-of-doors.⁵

FOOTNOTES TO CHAPTER 1

¹John Passmore, Outdoor Education in Canada 1972 (Toronto: Canadian Education Association, 1972), p. 14.

²Julian W. Smith and others, Outdoor Education Second Edition (Englewood Cliffs, N. J.: Prentice-Hall, 1972), p. 104.

³Metropolitan Toronto School Board, Research Department, A Survey of Outdoor Education in Metropolitan Toronto: Attitudes, Activities and Facilities (Toronto: Metropolitan Toronto School Board, 1970), p. 1.

⁴George W. Donaldson and Louise E. Donaldson, "Outdoor Education--A Definition," Outdoor Education--A Book of Readings, ed. D. Hammerman and W. Hammerman (Minneapolis, Minn.: Burgess Publishing Company, 1968), p. 6.

⁵William H. Freeberg and Lorne E. Taylor, Programs in Outdoor Education (Minneapolis, Minnesota, 1963), p. 252.

Chapter 2

REVIEW OF LITERATURE

In obtaining knowledge and understanding required to develop a valid instrument to evaluate residential outdoor education in Canada the investigator reviewed many articles, books, theses, pamphlets, and papers both published and unpublished. In addition, the investigator relied on many aspects of his personal knowledge and experience and much personal discussion with experts in the field.

DEVELOPMENT OF AN EVALUATIVE INSTRUMENT

An evaluative instrument should be developed by using criteria and principles that lead to a valid study and in addition it should be acceptable to members of the academic community.

Best stated that descriptive or survey research should describe and interpret "what is." In other words what practices prevail; what beliefs, points of view, or attitudes are held; what processes are going on; what effects are being felt, or what trends are developing.¹

Borg supported the descriptive study:

A great many descriptive studies are direct sources of valuable information. . . .

. . . In addition to providing us with a great deal of sound scientific information, descriptive studies are used widely by public school systems in their educational planning . . . descriptive studies also provide the school system with the means of internal evaluation and improvement.²

Best stated that the purposes of content analysis are:

1. To describe prevailing practices or conditions
2. To discover the relative importance, or interest in, certain topics or problems.³

Inquiry forms include data gathering instruments through which respondents are asked to answer questions or respond to statements in writing.

The personal method is best for administering questionnaires. The investigator has an opportunity to establish rapport, explain the purpose of the study and explain the meaning of items that may be unclear. However, the individuals who have the desired information can not always be contacted personally without expenditure of a great deal of time and money in travel. The next best method, the mailed questionnaire is often selected.

Best discussed the characteristics of a good questionnaire. His main points included:

1. It deals with a significant topic, one the respondent will recognize as important enough to warrant spending his time on.
2. It seeks only that information which cannot be obtained from other sources such as school reports or census data.
3. It is as short as possible, only long enough to get the essential data.
4. It is attractive in appearance, neatly arranged, and clearly duplicated or printed.
5. Directions are clear and complete, important terms are defined, each question deals with a single idea, all questions are worded as simply and as clearly as possible, and the categories provide an opportunity for easy, accurate, and unambiguous responses.
6. The questions are objective, with no leading suggestions as to the responses desired.
7. Questions are presented in good psychological order, proceeding from general to more specific responses. This order helps the respondent to organize his own thinking, so that his answers are logical and objective.
8. It is easy to tabulate and interpret.⁴

The main considerations in the preparation and administration of the questionnaire are highlighted from Best as follows:

1. Get all the help that you can in planning and constructing

your questionnaire.

2. In the process of designing an inquiry form (questionnaire or opinionnaire) it is advisable to use a separate card or slip for each item.

3. Try out your questionnaire on a few friends and acquaintances. When you do this personally, you may find that a number of your items are ambiguous.

This "dry run" will be well worth the time and effort it takes. It may reveal defects that can be corrected before the final form is printed and committed to the mails.

4. Choose respondents carefully. It is important that questionnaires be sent only to those who possess the desired information -- those who are likely to be sufficiently interested to respond conscientiously and objectively.

5. Be sure to include a courteous, carefully constructed cover letter to explain the purpose of the study. The letter should promise some sort of inducement to the respondent for compliance with the request. . . . In educational circles a summary of questionnaire results is considered an appropriate reward, a promise that should be scrupulously honored after the study has been completed.⁵

Borg gave several steps in the use of the mailed questionnaire in descriptive research. His first step was "Defining the Problem."⁶

Unless you are able to state specifically and in detail what information you need, what you will do with this information after you get it, and how each item on the questionnaire contributes to meeting your specific objectives you have not thought through your problem sufficiently.⁷

Also in the preparation of objectives, or criteria one does not need to limit oneself to determining the current situation but may go further and seek the ideas and recommendations of respondents.

Borg's second step included "Constructing the Questionnaire."⁸

There is a great deal of antagonism towards mailed questionnaires. This attitude presents an obstacle to one planning to use this method. To overcome this Borg suggested:

Each item on your questionnaire must be developed to measure a specific aspect of one of your objectives. You should be able to explain in detail why you are asking the question and how you will analyze the response.⁹

Questionnaires may be either open or closed form. The open form

asks for an essay response or at least one in the respondent's own words whereas the closed form permits only certain responses. "Open ended questions requiring lengthy replies, however, are usually undesirable because it is very difficult to summarize such answers in quantitative terms."¹⁰ Other disadvantages of open form questionnaires are that they require considerable time and effort and that they yield many unusable replies or inadequate information.

Closed form questionnaires were covered well by Kerlinger when he wrote about "Objective Scales and Items."¹¹ He broke them down into two main types and a third minor type:

- 1. independent: this method includes two point scales (true-false), three point (yes?-no), or Likert five or more point scales (ranging from strongly agree to strongly disagree)
- 2. dependent: this method involves choosing one item or another which precludes others such as the "forced choice."¹²

Advantages and disadvantages of the two types of objective scales or items are as follows:

- 1. independent
 - (a) economy
 - (b) maximum information is derived for each item
 - (c) less time to administer
 - (d) there is a possibility of respondent-set biases, for example some respondents may endorse all items enthusiastically but there are indications that this may be offset by others if the group exceeds twenty
- 2. dependent or "forced choice"
 - (a) avoids to some extent respondent-set bias
 - (b) suffers from lack of independence
 - (c) lack of economy

- (d) over complexity (construction and administration)
- (e) strain subjects' endurance and patience, resulting in less cooperation
- (f) resistance to difficult choices.

Galfo illustrated another type of bias in the forced choice method. A subject may wish to use another term when confronted by a choice, as none of the suggested terms suit the item for that individual. The independent type of scale only asks opinion and records it for that particular independent item.¹³

A third type of objective scale was dealt with briefly by Kerlinger. It appeared to compromise the two positions. This approach was known as rank-order. For example, this method would have the subjects rank-order the objectives for outdoor education that have been established. This assumes that all objectives are acceptable to all subjects. Advantages listed for this method were as follows:

- (a) effective
- (b) economical
- (c) scales easily intercorrelated
- (d) composite easily correlated
- (e) establishes scale values
- (f) partially escapes respondent-set bias

Disadvantages appeared to be:

- (a) possible strain on subjects
- (b) forced acceptance of all criteria
- (c) possible mixing of objectives, for example cognitive, affective, psychomotor (apple and oranges effect).¹⁴

Borg stated that if items are controversial or personal we can

never be sure if the subject's responses are his true attitudes.¹⁵

In a discussion of developing categories for multiple choice responses Borg stated that where a certain number of unexpected responses may be expected provisions should be provided for this.

Borg's third step "Selection of Subjects"¹⁶ brought out the point that:

The most obvious consideration involved in selection of subjects for a questionnaire study is to get people who will be able to supply the information you want. . . . Most questionnaire studies conducted in education are aimed at specific professional groups.¹⁷

Borg further pointed out:

Once you have established that the professional group selected actually has access to the information you wish to obtain, the best method of selecting the subjects you want from the population involved is by some random technique.¹⁸

He also stated if subsamples were required that random selection should occur in each subsample.

Borg's fourth step included "Pretesting the Questionnaire."¹⁹

His guideline included:

In addition to the preliminary check that you make of your questions in order to locate ambiguities, it is very desirable to carry out a thorough pretest of your questionnaire before using it in your study. For the pretest of your questionnaire, you should select a sample of individuals from a population similar to that from which you plan to draw your research subjects.²⁰

Expected results from a pretest or pilot run would be as Wiersma explained:

The results of the pilot run would be to identify misunderstandings, ambiguities, useless items, and inadequate items. Additional items may be implied. Mechanical difficulties in matters such as data tabulation may be identified. Difficulties with the directions for completing the questionnaire might be uncovered.²¹

After the above expectations of the pretest or pilot study are met and completed with appropriate improvements made the investigator is

ready to proceed with the administration of the questionnaire to the sample selected.

Borg's fifth step dealt with the "The Letter of Transmittal."²² A major problem in the type of study contemplated is to get a sufficient percentage of responses returned to use as a basis for drawing conclusions. One of the most important factors besides those mentioned earlier in construction of the questionnaire is the letter of transmittal.

Wiersma commented: "The letter must be brief but yet must convey certain information and impressions to the subjects if you are to obtain a satisfactory percentage of responses."²³

Borg stated several points which are paraphrased as follows:

1. It is essential that you give the subjects good reasons for completing your questionnaire and sending it back to you.
2. The purpose of the study should be explained briefly and in such a way as to make the subject feel that the study is significant and important.
3. The questionnaire should make some reference to the person's professional status and his feelings of affiliation with the group.
4. An offer to send the respondent a copy of the results is often effective and if made this promise should be honored because neglect of these matters is not ethical and will weaken future studies involving persons of the sample.
5. A request should be made to return the questionnaire by a particular date.
6. A stamped self-addressed envelope should be enclosed so that the individual can respond with a minimum of inconvenience.

7. If possible it is desirable to associate the study with some professional institution or organization, with which the respondents might be expected to value or identify.²⁴

Borg's sixth step was "The Follow-Up Letter."²⁵ The follow-up letter should be sent a few days after the time limit that has been set if a reply has not been received.

The follow-up letter must generally assume the tone that you are certain the individual wished to fill out the questionnaire, but perhaps due to an error on your part or some oversight, it was overlooked. The follow-up letter should go on to point out again the importance of the study and value of the individual's contribution to this important project.²⁶

If a second follow-up letter is required it is desirable to ". . . send a follow-up letter along with another copy of the questionnaire and another self-addressed envelope."²⁷

A third follow-up letter may be used but this has not been successful with other studies. The National Education Association Research Division "Small Sample Techniques" N. E. A. Research Bulletin, XXXVIII (December 1960, Page 102) and reprinted by Borg found the first follow-up letter brought an additional 20%, the second follow-up letter an additional 15%, and the third follow-up letter resulted in an additional 2% return.²⁸

Borg therefore suggests that different approaches be used to encourage return of the questionnaires. Some alternative methods were the use of telegrams and telephone calls.²⁹

Finally Borg's seventh step was "What to Do About Nonresponding Subjects."³⁰

The question will arise "How would the results have been changed if all subjects had returned the questionnaire?" If more than 20% fail

to respond the results could be said to be questionable.

Therefore, if more than 20% of the questionnaires are not returned, it is desirable to check the nonresponding group by either (a) randomly selecting from this group, or (b) if the nonrespondents are geographically scattered by selecting at least a 20% sample of the nonrespondents from close by and interviewing them.

If this sample of nonresponding subjects answers the questions in about the same manner as the responding group, it is probably safe to assume that the responding group is an unbiased sample of those to whom you mailed the questionnaire.³¹

OUTDOOR EDUCATION LITERATURE

Outdoor education literature reviewed in this section includes information that is relevant to residential outdoor education.

Outdoor education has been seen as a valuable educational method for many hundreds of years. Modern outdoor educators have certainly been influenced by the early educational philosophies of the Greeks and the writings of Comenius, Pestalozzi, Rousseau, and Thoreau.

Over the years field trips and studies have always been part of the teaching repertoires of interested teachers.

Educators throughout the world have seen the advantages of residential outdoor education.

Ministries or Departments of Education, National and Provincial, in England, Scotland, Wales, Australia, Tasmania, Union of South Africa, British Honduras, and other countries, have created or operated school camps in various ways for many years.³²

Since the beginning of this century and before, throughout the Scandinavian countries and particularly in Germany it has been common practice for whole school classes or smaller groups to go out on teacher-led trips or school journeys.³³

Residential outdoor education had its earliest start with recreational camping programs. The first organized recreational-

educational camp in America is thought to have been developed by Frederick Gunn in 1861 in Washington, Connecticut.³⁴

Canadian agencies which included as part of their overall program a camping program had a positive affect on residential outdoor education. Organizations such as the Y.M.C.A., Y.W.C.A., Boy Scouts, Girl Guides, Boys' Clubs of Canada, church groups, were but a few. Some prominent leaders in private recreational camping in Canada of the 1930's included Taylor Statten, C. E. Hendry, Mary Edgar, and C. R. Blackstock.³⁵

Smith stated that:

The current pattern of outdoor classrooms, or school camping as it was first termed, can be traced directly to two institutions-- Life Camps Incorporated, and the W. K. Kellogg Foundation.³⁶

L. B. Sharp established Life Camps in New Jersey in the 1930's and began encouraging school camping.³⁷ The first year round venture did not begin until 1940. This program was made possible by the W. K. Kellogg Foundation of Battle Creek, Michigan.³⁸ Although several instructional levels were involved, the emphasis was placed at the fifth and sixth grade levels.

Subsequently, from these early beginnings, the use of residential outdoor education as a method of education has grown at a rapid rate.

In Canada early attempts involving outdoor studies began during 1953 in the Toronto area where students between grades four and ten participated in a residential camp.³⁹

Generally the growth of residential outdoor education programs has been uneven in Canada. The main emphasis for its development has come from the "grassroots."

Passmore stated:

It became very evident to me while I was travelling on my fact-finding mission that one of the unusual features about outdoor education in Canada is that it has clearly been a "grass-roots" development; that it has come about with relatively little encouragement and support from above.⁴⁰

Since 1960 a great many residential outdoor education centres have been developed or are proposed for development in Canada.⁴¹

The first on-going residential program was begun in 1960 when part of the regular school building on Toronto Island was converted into a natural science residential outdoor school for eighty grade six students. The first residential outdoor school primarily for secondary students opened in 1962 at the Albion Hills Conservation Field Centre by the Metropolitan Toronto and Region Conservation Authority. These two residential outdoor education centres had a marked influence on similar developments in the rest of Canada. The Regina School Board with a program in the Cypress Hills, and the Calgary Public School Board with a program west of that city were next to follow with pilot residential outdoor education programs.⁴²

Provincial Governments which are responsible for education within their boundaries are now becoming aware of outdoor education and are passing legislation to allow school boards to more easily conduct these programs. Two notable examples are Ontario and Alberta. As a result of 1965 and 1972 amendments of the Schools Administration Act in Ontario school boards with a student population of over 10,000 can now lease or purchase land inside or outside their boundaries and are encouraged to operate natural science programs and outdoor education activities.⁴³ In 1970 The School Act of Alberta stated that a school board may "arrange for, undertake or sponsor, for its pupils and at its

own cost or otherwise, educational, cultural, or recreational trips inside or outside its district or division.⁴⁴

Universities and teacher training colleges are recognizing the need and value of outdoor education. Most teachers in training are now being exposed to outdoor education in regular courses or to specialized courses on an optional basis. Anderson of The University of Saskatchewan exemplifies the attitude of University staffs:

Outdoor education is not new--it is only a resurrection of an old teaching method pricking the imagination of today's educators. Pick up the challenge. Teach and learn with your children in the Out-of-Doors!!⁴⁵

It is apparent because of the spectacular growth and support of residential outdoor education in Canada that problems will arise. Many of these problems will be caused from the lack of experience on the part of school personnel and the lack of precedence in the community.⁴⁶ Also because residential outdoor education has been a "grassroots" development, interested teachers have not had the time to do a great deal of research or develop validated evaluative instruments. It is imperative that a study such as this one be completed and made available to educators. This emphasizes the significance of the study.

Philosophy and Objectives

Generally the better known authors in outdoor education such as Julian Smith from Michigan, George Donaldson from Illinois, Charles Mand of Ohio State University, Donald Hammerman of Northern Illinois University, William Hammerman of San Francisco State College, and I. B. Sharp, New Jersey (deceased), have stated that since outdoor education is an integral part of education all children should be exposed to outdoor education as part of their general universal education. Smith, in fact,

went to great lengths to emphasize that outdoor education is not a specialized or a circumscribed area of learning but touches, or is part of, all disciplines. He further produced a continuum of outdoor education experiences from Kindergarten to Grade 12. Residential outdoor education stands at the pinnacle of the outdoor education continuum.⁴⁷

Rosenstein in Outdoor Education Guide for Residential Programs stated:

A cardinal principle of planning should be that basic educational planning must come first. Every other aspect of planning should then refer to the educational plan and it should continually be evaluated in regard to whether it makes possible, facilitates, or encourages the basic educational plan.⁴⁸

Robert Mager wrote that goals should state:

1. intended outcome
2. what the learner will be doing when demonstrating
3. the statement of objectives will consist of several specific statements
4. most usefully stated is one that communicates instructional intent.⁴⁹

Benjamin S. Bloom talked of three domains of educational objectives. These included the cognitive domain, which is in turn broken down into levels or hierarchies from lowest to highest:

1. Knowledge
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

His second domain, the affective, was also broken down into several levels again from lower to higher:

1. Receiving
2. Responding

3. Valuing
4. Organization
5. Value concept.⁵⁰

The third domain, the psychomotor, was not developed adequately by Bloom. However, several persons have taken the principles and concepts that Bloom used to develop the cognitive and affective domains and have attempted to develop levels or hierarchies within the psychomotor domain. The most notable attempt was made by Jewett. Her hierarchical classification for the motor domain is as follows:

1. Generic Movement
 - a. Perceiving
 - b. Imitating
 - c. Patterning
2. Ordinate Movement
 - a. Adapting
 - b. Refining
3. Creative Movement
 - a. Varying
 - b. Improvising
 - c. Composing.⁵¹

Administration

Organized residential camping has offered much to residential outdoor education. The facility is usually a common facility.

The administration of a residential outdoor education centre employs the same organization and administration policies as used in other phases of the education program but certain attendant problems

arise when the students are off the campus, away from their homes for several days, and must therefore be fed and generally cared for.

Research in general organization for extended twenty-four hour-a-day living in the out-of-doors of numbers of children led to standards established by both the American Camping Association and the Canadian Camping Association.

The Canadian Camping Association is an organization made up of nine Provincial Camping Associations dedicated to having "one official voice of organized camping in Canada."⁵²

The American Camping Association has set standards for organized residential camps in the United States. One of the main objectives of the "Standards for Organized Camps" is "to protect campers by examining the operation of camps in the light of proven, acceptable, high level performance."⁵³ The standards deal with (1) Administration, (2) Program, (3) Personnel, (4) Camp Site, Facilities and Equipment, (5) Health, (6) Safety, (7) Sanitation, (8) Transportation.⁵⁴

The Canadian Camping Association on the other hand has not set national standards for organized camping in Canada. All provincial camping associations with the exception of New Brunswick have their own residential camp standards. There is a great variation in these standards from rudimentary health standards held by Nova Scotia to quite sophisticated standards held and required for provincial licensing by Ontario and Quebec. In addition, several provincial camping associations, namely Ontario, British Columbia and Alberta, have "Desirable Practices" which go beyond the minimum standards. No foreseeable move towards national camp standards in Canada was apparent at the recent Canadian Camping Association National Camp Standards Workshop held in

February of 1974 in Toronto.

Camp standards from the nine provinces and the United States were researched. Additional criteria were gathered from readings by Smith (1972), Mand (1967), Donaldson (1972), Rosenstein (1972), Esther Railton who completed a visit of eighty-one residential outdoor education centres in the United States in 227 days in 1971, Professor Passmore of The University of Toronto who carried out a similar study in Canada in 1972, and Cyril Busbee (1971) of Southern Carolina when he set guidelines for "Outdoor Laboratory Development."

Program

Criteria selected for the area of "program" in the instrument came from a review of literature that originated primarily from the United States and Canada.

Five areas of program are discussed which include program objectives, program planning, program activities, program organization, and program evaluation.

Program objectives. Rosenstein in discussing program stated: "The program involves a variety of activities that are directly concerned with living and learning in a natural environment. Classroom experiences and subjects are related to the reality of the outdoors."⁵⁵

Smith stated that "program activities include those experiences that cannot be achieved as well, or at all, in the classroom. In addition, the outdoor classroom experiences should supplement and enrich many in-school learning opportunities."⁵⁶

Passmore gave classroom teachers program objectives on which to plan and build. The objectives were discussed in the introduction of

this study, therefore, only require paraphrasing here. He stated that outdoor education can offer: 1. meaningful learning situations 2. direct learning experiences 3. stimulation of student curiosity 4. development of new interests 5. discovery of important human relationships 6. broader knowledge of ecological principles 7. examination of social and cultural values and 8. better understanding of selves and others.⁵⁷

Mand saw residential outdoor education programs as a response to changing circumstances:

The first response to correct the problems attendant upon more people and less land is already underway. As stated there is greater desire by more people for wise use of resources. Implicit in this desire we call the conservation movement is the fact of natural resources to man.⁵⁸

According to Mand the conservation movement should be present in all areas of the school curriculum leading to a residential outdoor education experience highlighting conservation. Secondly Mand felt that residential outdoor education also met the objective of changing teaching methods.

This is the effort to provide sensory, direct learning experiences for children to assist their development as individuals. . . . Obviously children learn as a result of using their eyes, ears, nose, and muscles and in turn seem to enjoy the process.⁵⁹

Smith gave six vital objectives to program:

1. Experiencing democratic and social living
2. Learning to live happily and healthfully out-of-doors
3. Understanding the physical environment and man's relationship to it
4. Learning to appreciate natural resources and how to use them wisely
5. Providing direct learning situations, including purposeful work experiences, where many of the skills and attitudes developed in the classroom may be applied
6. Initiating and completing effective teaching processes in pupil-teacher planned experiences.⁶⁰

The Outdoor Education Committee of the Calgary Board of Education

in a recent brief, "Outdoor Education Calgary," Recommendation number 12 listed program objectives as follows:

that the following General Objectives be accepted
An Outdoor Education program is designed

1. To provide a special "laboratory," unique in its reality, avoiding the artificiality of the classroom, which is best and ideally suited for the teaching of particular and important concepts;
2. To permit children from all scholastic levels, all areas of the community, and all backgrounds, to react in and with the environment in a concrete, rather, than abstract, fashion;
3. To provide educational experiences of a developmental type (growing in sophistication from level to level) which are difficult or impossible to replicate in the conventional classroom;
4. To develop, within the student, an awareness of the frailty of the environment and the necessity of its preservation;
5. To provide for new adventures and unstructured experiences;
6. To develop new attitudes and skills for later use in coping with and using leisure time;
7. To offer opportunities for personal development and social learnings.⁶¹

L. B. Sharp stated succinctly in one of the most famous and often quoted passages in outdoor education literature:

That which can best be learned inside the classroom should be learned there; and that which can best be learned through direct experience outside the classroom, in contact with native materials and life situations, should there be learned.⁶²

Program planning. A distinctive advantage of residential outdoor education is the freedom from tradition and classroom pressures.

Smith gave as his principles of program planning

An outdoor classroom program is developed in much the same way as good classroom activities. The freedom from tradition and classroom pressures makes it easier to follow the best procedures in the learning process. The following general principles are important in securing the greatest value from experiences in camp settings.

1. The entire experience should be planned jointly by students, teachers, parent groups, and resource leaders.
2. The facility and surrounding area should be carefully studied so maximum use can be made of its unique teaching and learning resources.
3. The planning should begin with the interests and purposes of the students, in terms of what can be learned best during

- the period at camp.
4. The structure for achieving the purposes should provide for maximum participation of students and teachers.
 5. The program should, whenever possible, grow out of classroom planning, and in the post-camp period, be utilized to the greatest extent.
 6. There should be careful evaluation, by students, teachers, and parents, of the camp-related experiences.

To date, one of the most impressive characteristics of unfolding resident outdoor education programs has been the pupil-teacher planning and the assumption of responsibility for the activities by students. The new relationship established between students and teachers, plus the genuineness of the experiences, is conducive to cooperative planning. It is common practice for student committees to explore the camp in advance, consider items of food and clothing, to establish committees with specific responsibilities, and participate in evaluation activities. Often the group is completely organized and ready to start exploring or preparing the camp meal when the bus unloads.⁶³

Research carried out by the Metropolitan Toronto School Board found that the majority of teachers spent the greatest amount of time preplanning the actual trip and that they felt this should be the case.⁶⁴ The Calgary Board of Education Brief Recommendation 18 further suggested "the selection of content and the implementation of the program of studies for the class in Outdoor Education studies be the responsibility of the classroom teacher."⁶⁵ Recommendation 19 of that same brief recommended "that the structuring of a timetable to accommodate this program be determined by that teacher in consultation with the appropriate representative of the Central Authority at some time prior to the arrival of that class on the site."⁶⁶ Also Recommendation 21 stated:

that the teacher be involved to a much greater extent such that she becomes the prime planner in the area of curriculum selection in the light of her knowledge of class and individual needs, and that these special needs and problems of her group be communicated to appropriate personnel at the site.⁶⁷

Donaldson saw programs falling into two types:

1. Those based primarily on school curriculum, and

2. Those programs more nearly problem centred, drawing from the camp site both motivation and materials of instruction.⁶⁸

According to Donaldson most programs will be seen to have aspects of both but most residential outdoor education programs are predominantly one or the other. Usually parents and laymen (including students) are almost always involved in planning problem centred programs whereas professional educators usually plan the more curriculum centred ones. A fundamental question in Canadian residential outdoor education or at least for a specific "centre" in Canada may be "who plans?" which ultimately is answered by the type of program desired. Most programs in Canada by the nature of the educational "grassroots" effect mentioned earlier by Passmore appear to be curriculum centred because teachers plan them.

Blanche Snell's "Guide to Preplanning," a guide used in preparation of classes attending Albion Hills Conservation Field Centre or Claremont Conservation Field Centre notes that "the success of the stay at the Centre will depend on how well the teacher involves his class in pre-planning, post studies, and evaluation."⁶⁹ This guide is a good example of student, teacher, "centre" staff planning.

Program activities. Smith saw program activities consisting of a series of complete activities centred around (1) the natural living situations that occur, and (2) the best use of the camp environment for learning activities that grow out of the children's interests and the on going school curriculum.⁷⁰

Donaldson's two categories of "Problem Centred" and "Curriculum Centred" outdoor education programs would lead to different activities

being studied, or in the cases where the same activities were studied, two different approaches being used. Examples of problem centred activities may be bridge building, cook outs, conservation-work projects and survival hikes. Activities included in a curriculum centred approach may be nature hikes, mapping, geology hikes.

The two approaches to the same activity may be illustrated in the following way:

(a) a curriculum centred approach to mapping may be a hike to a vantage point and study of the topography of the land and its relation to a topographical map and compass

(b) a problem centred approach to mapping may be to use the compass and map to navigate cross-country as in the sport of orienteering.

A most complete list of "curriculum centred" activities possible within the program at a residential outdoor education centre was found in an unpublished thesis by Jan James entitled "An Interdisciplinary Approach to Outdoor Education and Selected Program Implications for Grade Six Pupils" for the Department of Physical Education, The University of Alberta. Other sources of program activities were Charles Mand in his book Outdoor Education; the Shoreline School District No. 412, Seattle, Washington, An Interdisciplinary Outdoor Education Program; and Smith's classics, Outdoor Education, editions one (1963) and edition two (1972).

Jan James deals with a number of activities as illustrated in Chapter 5, Table of Contents:

Activities to Teach Arithmetical Concepts
 Activities to Teach Concepts of Art
 Activities That Will Teach Concepts of Handwriting

Activities That Will Teach Health Concepts
 Activities That Will Teach Language Concepts
 Activities That Will Teach Concepts of Music
 Activities That Will Teach Concepts of Physical Education
 Activities That Will Teach Reading Concepts
 Activities That Will Teach Science Concepts
 Aquatic Plants and Animal Life
 Botany
 Rocks and Fossils
 Soil and Water Conservation
 Tasks for Learning Aspects of Conservation
 Examples of Activities for Teaching Concepts of Light and
 Sound
 Learning Associated with Weather
 Activities Involving Astronomy
 Activities That Will Teach Social Studies Concepts
 Activities That Will Teach Concepts of French⁷¹

Miss James limited her study to the Alberta Curriculum but her activities and the conceptual bases for these have application in all levels of education.

Two authors who lean more to a problem centred approach in selection of activities for outdoor education are Wilbur Schramm, Classroom Out-of-Doors, and Cecil Garrison, Outdoor Education Principles and Practice. Schramm's activities are not listed under subject headings but rather:

A Lesson in Democratic Living
 Hike into The Forest
 Relating to Man's Environment
 Learning from the Desert
 What Conservation Means
 The Laboratories of Nature
 Last Evening in Camp⁷²

Smith gave an outline of program activities but emphasized that these are not isolated but are interwoven throughout the curriculum.⁷³ Individual activities listed by Smith are not included.

1. Social Living

- (1) Children and teachers living together 24 hours a day.
- (2) Cooperative learning person to person, group to group, and teacher to teacher.
- (3) Opportunities for growth in social amenities, religious

tolerance, intercultural understandings, race relations, and socioeconomic problems.

- (4) Social growth through planning activities, cooperative endeavors, evaluations, camp citizenship, and group activities for camp living.
 - (5) Children living together with their peers in social patterns that are different from those usually found in the home and school.
 - (6) Additional opportunities for youth to be inducted into society through participation in service activities such as conservation and camp improvement projects.
2. Healthful Living
- (1) Engaging in a proper balance of outdoor activity, work, and recreation.
 - (2) Practicing good habits of eating, sleeping, and care of the body; having opportunities to observe the benefits of an orderly plan of living.
 - (3) Being in a good environment for mental health, with fewer tensions from the rapid tempo of adult society.
 - (4) Working with problems of food, clothing, and shelter--having direct experiences in personal health such as planning menus, preparing foods, and wearing proper clothing.
 - (5) Considering camp health problems, such as water supply, sanitation, cleanliness, garbage disposal, and general health conditions.
3. Purposeful Work Activities
- (1) Those necessitated when a group lives together in camp, such as the routine activities relating to food, shelter, and comfort;
 - (2) Projects for the improvement of the camp and the physical environment.
4. Recreation and Outdoor Living
- (1) Social activities in camp
 - (2) Outdoor activities
5. Outdoor Education Activities⁷⁴

Smith included many subject matter areas in the section "Outdoor Education Activities" most of which are included in the James thesis.

6. Exploration Activities

Some examples under this heading included trail blazing, cook outs and hikes, historical explorations, hike to a bog, and tree planting.⁷⁵

A general guide line to program planning of outdoor experiences therefore may well be to conceive the camp setting as another school

laboratory. Pupils and teachers go to the outdoors to have certain experiences in the same way that they might go to a science laboratory, library, or tour of an industrial plant.

Program organization. Much of the planning for program must be done prior to the camping period but final details wait until arrival at the "centre."

In order to use the camp resources most effectively the classroom group needs to be oriented to the resources of the camp, by advance exploratory visits and/or discussions with resource leaders or school staff members. . . .

.
The usual plan of organization is to divide the group into program units, with 10 to 15 each.⁷⁶

Smith further recommended:

Student-teacher program planning is one of the most significant contributions of outdoor living to education. Perhaps no single aspect of the program has made such an impression on pupils as the opportunity to plan their own learning activities for camp. This should be constantly kept in mind lest there be temptation to dictate a rigid schedule, and rob the program of one of its greatest values.⁷⁷

Donaldson in his guide listed some characteristics of program organization that should be common to most programs:

1. They transport children some distance from school for live-in educational experiences not available at school.
2. They are conducted on school time.
3. They include one overnight stay at the site, typically they involve the five-day school week, hence four nights.
4. Teachers accompany their children and, usually, both teachers and children are involved in planning for the experience.
5. Sites are rather typical children's camps, sometimes modified to permit cool or cold weather use.
6. The program is conceived as an integral part of the educational program of the sponsoring school.
7. Staff personnel are predominantly certified teachers.
8. Typically, these programs serve upper elementary pupils although each year a greater variety of practice is noted.⁷⁸

Some further organizational criteria listed by Freeberg were that a decentralized plan should be used in which the students are

divided into small groups for sleeping, and activities, but that the large group should come together for meals and some activities such as campfires.⁷⁹ Freeberg did not think that the site should be cluttered with athletic fields, baseball bats, volleyball courts, et cetera, that can be used more safely back home.⁸⁰ Freeberg was also adamant that the program should allow the teacher and pupil a chance for intimate contact with each other in an informal environment to learn and live together as they establish common interests and close companionship and that they have cooperative adventures in those things not possible at school.⁸¹

As residential outdoor education programs become more common a "centre" finds that more and more of its clients (teachers, students and possibly parents and lay people) wish to take a greater part in planning and organizing their own program. The "centre" therefore must be ready to offer services as required. This was illustrated by L. W. Fraser, Coordinator of Outdoor Education, North York Board of Education, in an address to the Ontario Camping Association in February, 1972, when he drew a triangle of services. At the base a "centre" may offer meals, services, leadership and in fact most services expected. The next level included most of the amenities such as meals, maintenance, and so on, as above but the school supplied its own leadership. The third level saw the school responsible for its own amenities as well as leadership and requiring only sanction to participate.

Program evaluation. Rosenstein wrote: "Evaluating the effectiveness of an outdoor education program is essential in order to determine its value in the educational curriculum."⁸² Evaluative techniques listed by Rosenstein were:

1. Attitudinal and personality tests

2. Rating scales
3. Questionnaires
4. Anecdotal records
5. Sociograms
6. Interviews⁸³

He further wrote, "It is also necessary to continually review, and refine the evaluation process in order to make it as effective as possible."⁸⁴

Donaldson stated in the area of program evaluation that:

Much needs to be studied and researched in the area of these relatively intangible values. In the meantime, most outdoor educators insist that there is validity in the considered opinions and feelings of mature educators, and of the parents, teachers, and children involved. Believing this, they commend an evaluation scheme that uses the opinions about the experiences of those who were involved and the opinions of "outside experts" as primary evaluation data. Testing for cognitive gains, preferably with the standard controls, would assume a secondary role.⁸⁵

Smith in discussing evaluation felt that:

Because outdoor education is an integral part of the learning experiences of the various curriculum areas and activities, and since it contributes to the attainment of many of the school program's objectives, evaluation in outdoor education should be consistent with a part of general evaluation practices of the school.⁸⁶

Smith further pointed out that "evaluation in outdoor education is further complicated by the fact that many of the outcomes of outdoor education are not only cognitive and motor performance domains, but also in the affective domain which is more difficult to measure."⁸⁷

The Michigan Department of Education prepared several excellent evaluation instruments that can be used in evaluating programs. These instruments were designed to evaluate programs through responses from students, teachers, and parents.⁸⁸

Rosenstein pointed out follow-up to evaluation when he stated: After a program has been evaluated, the school should analyze

the results and include them in a written report . . . and should be made available to the board of education, teachers, parents, and the citizens of the community.⁸⁹

Staff

The personnel who make up the staff of a residential outdoor education centre are the most important single influence in determining success. "Unless a staff is selected on the basis of some fundamental underlying principles, the selection is likely to be opportunistic and sketchy."⁹⁰

Wiles suggested that a central authority or administrative unit be responsible for outdoor education and that among other things it be responsible for the development and execution of underlying principles in the selection, supervision, and education of staff.⁹¹

Freeberg felt that the outdoor education residential centre should be administered by an outdoor school principal who would be expected to spend at least eighty percent of his duty time on site and have complete administrative responsibility for the program.⁹²

Gabrielsen in discussing personal competence of the principal included:

1. A knowledge of human growth and development
2. Competence in teaching methods, and
3. General knowledge of the environment.⁹³

The ideal outdoor educator possesses a broad scientific background with a firm grasp of the meaning and significance of this background in relationship to his physical environment; he possesses the ability to communicate this in socially significant terms to others.⁹⁴

The Calgary Board of Education "Brief on Outdoor Education" stated:

that the principal in addition to those duties unique to the residential outdoor school should function in the general capacity as any other principal and also that remuneration be supported by a system of bonuses or gratuities.⁹⁵

Smith described a principal as:

. . . the person qualified to perform a variety of functions in administration, curriculum, guidance, buildings and grounds, finance, and public relations. . . . In most instances a central staff has had experience in some type of camping.⁹⁶

"One of the basic premises is that all teachers and leaders in outdoor education should be competent to teach wherever the learning environment is best, including the outdoors."⁹⁷ Leadership preparation should therefore involve both in-service and preservice training.

Teacher in-service training should be carried out in a camp setting and should emphasize all aspects including all curriculum areas, health, sanitation, safety and general housekeeping responsibilities required in the twenty-four hour-a-day situation. AAHPER also states that the in-service should not be compartmentalized but that various studies should be integrated throughout the training session.⁹⁸

Preservice education of teachers should include criteria as listed by Smith:

1. Do they offer opportunities to understand children, human growth, and development, and the nature of learning?
2. Will they give insights as to what potential learning situations are encountered in an outdoor setting?
3. Will there be opportunities to gain competency in the interpretation of the outdoors in all seasons and in all types of topography, such as a woodland, swamps, and water areas?
4. Does the institution offer opportunities for field experience in courses and activities such as science, social studies, physical education and recreation?
5. Are teaching techniques and methods for outdoor experiences used and taught in teacher and leadership preparation?
6. Are there provisions for student teaching and intern experiences in outdoor programs where there are opportunities to work with children?
7. After analyzing the existing offerings of an institution, what new courses need to be added to constitute a complete program

of preparation for outdoor education?

8. Are there adequate facilities and land areas available to the institution that may be used as outdoor laboratories?⁹⁹

The Calgary Board of Education "Brief on Outdoor Education," recommendation 43 stated:

that all participating teachers have certain special qualifications and that one route for the achievement of such qualifications be made available to the teachers through selected preservice (university) courses or in-service (Calgary School Board) courses.¹⁰⁰

Donaldson realized that no single set of criteria can be drawn up for personnel selection of teachers but experience has shown that the following are desirable:

1. the traits that describe "a good teacher"
2. good physical and mental health
3. love of children
4. love of the outdoors
5. energy and enthusiasm
6. a desire to put the above characteristics into action in an educational program.¹⁰¹

Continuous in-service education is a necessity for two reasons, (1) there will be turnover of personnel, and (2) fresh new ideas should be fed into the program.

Program specialists must have a thorough knowledge of outdoor education and truly enjoy outdoor activities and outdoor life.

Rosenstein saw the program specialist as one who "must possess many of the characteristics of the resident director and work closely with him in all matters concerning program. He is usually responsible for daily programs."¹⁰² He would be expected to be one who could work well in the preservice and in-service education program.

In addition to classroom teachers and program specialists some residential programs have a supplement to personnel of college or high school students.

"Usually these students are carefully selected young people who intend to become teachers or youth leaders and are deeply interested in working with children."¹⁰³ Rosenstein pointed out further that: "It must be remembered that these young people are students themselves and that adequate supervision be provided for the safety, education, and welfare of all concerned."¹⁰⁴

A good staff, with high morale, and a clear understanding of outdoor education and its objectives will mean a successful residential outdoor education program.¹⁰⁵

RESEARCH STUDIES RELATED IN METHOD

Studies referred to are not in the area of outdoor education but they assisted in the development of the method used by the investigator. The Oregon Association for Health, Physical Education and Recreation developed "Teacher Education Standards in Physical Education." Vernon S. Sprauge edited the evaluative instrument and stated: "The standards and criteria presented portray the thinking of the people on the job."¹⁰⁶ A ten point scale was developed with two abstention alternatives "no opinion" and "does not apply."

Alan Brawn (1970) developed "An Instrument for Evaluating the Intramural Sports Programs for Men at Degree-Granting Institutions in Canada" in partial fulfillment of requirements for a Doctor of Physical Education degree at Indiana University. Brawn researched criteria in intramural literature, prepared a preliminary instrument and selected a

jury of seven experts (from a list of those who previously agreed to act as jurors) to improve and validate the criteria. A five point scale ranging from essential (five points) to unacceptable (one point) was used in the validation. Any criterion with a mean of "3" or better was retained in the final instrument. The final instrument included a six point scale so each intra-mural director could determine the extent his intramural program met each criterion. The scale included "completely," "great degree," "moderate degree," "small degree," "not met to any degree," and "does not apply."

RESEARCH STUDIES RELATED IN CONTENT

Studies referred to are in the field of outdoor education and contributed much to the selection of criteria used in the instrument.

Charles Isaac Wiles, Jr, (1969) of George Washington University in Maryland surveyed 261 sixth-grade classroom teachers and from related pertinent published and unpublished materials prepared four major recommendations. For the sake of brevity they are paraphrased as:

1. An administrative unit for outdoor education should be developed. This authority should
 - a. coordinate
 - b. organize in-service sessions
 - c. develop comprehensive training programs including pre-service
 - d. develop policy for teacher attendance to resident outdoor education facilities
 - e. organize a corps of teacher specialists
 - f. maintain an inventory of unique and contributory teacher

skills

- g. develop a curriculum which would include the limitless opportunities in outdoor education.
2. Administrators of local schools should assume an increasing role in facilitating outdoor education programs.
 3. The Department of Staff Development should make strong efforts to
 - a. organize workshop-type activities as a basic teacher training method, and
 - b. cooperate with colleges and universities in developing graduate and undergraduate courses in outdoor education, and
 - c. encourage colleges and universities to establish off-campus centres in or near schools demonstrating an interest in residential outdoor education.
 4. The Board of Education should appropriate funds to
 - a. employ local education personnel to prepare instructional guides
 - b. embark on an information and orientation program with the citizenry
 - c. purchase a limited number of outdoor education camps while concentrating on renting and leasing the majority of such facilities.¹⁰⁷

James of The University of Alberta in 1969 developed "An Interdisciplinary Approach to Outdoor Education and Selected Program Implications for Alberta Grade Six Pupils." To quote James:

As all program areas included in an approved curriculum are

based upon a conceptual structure, this study cites the conceptual learnings in each of the subjects to be taught at the Grade Six level in Alberta . . . using the out-of-doors as a medium of learning, presents numerous examples of activities which will teach the required concepts at the Grade VI level.¹⁰⁸

James also included possible testing devices for the purpose of evaluation and suggestions to those undertaking such a venture (residential outdoor education). Examples of pre-camp activities suited to the classroom were included along with samples of Grade VI school camp programs and sources of pupil work books and teacher guides.

Charlene Vogan in 1970 completed a doctoral dissertation entitled "Criteria for Evaluating Condition Changes Affecting Teacher-Student Relationships in Outdoor Education." This study was designed to determine objectives which would foster conditions for positive teacher-student relationships and to establish evaluative criteria for determining success in meeting these objectives through residential outdoor education. Nine points which should be of concern to the classroom teacher were listed as follows:

1. gaining a positive feeling regarding the residential outdoor experience
2. working with students in
 - a. general planning
 - b. determining goals and behavior
 - c. planning use of facilities
3. contribution to the outdoor experience
 - a. professionally
 - b. personally
4. being an "active learner" during the event
5. encouraging "openness" in conversation with students
6. using time more effectively
7. becoming "forgetful" of classroom routines
8. participating in evaluation with students
9. bringing back and using new ideas and skills into the classrooms.¹⁰⁹

The evaluative guide developed as part of this study could be used as a sample of the process and building of an evaluative instrument.

Morris Wiener of Michigan State University attempted to examine and analyze the historical development of the basis for outdoor education and to suggest a current rationale. His conclusions stated:

1. "Rationale Development" afforded an appropriate means for examining the basis of outdoor education and for building a logical foundation for outdoor education.
2. Identifying the present basis for outdoor education through the contributions of Sharp and Smith resulted in an understanding of their own interpretation of that basis.
3. Outdoor education is best conceived of as a process of utilizing the outdoors as an integral part of the school curriculum.
4. The development of rational powers can serve as an acceptable criterion for determining priorities in outdoor education.
5. The uniqueness of the outdoors as a setting for learning experiences is basically an expression of the unity of the universe of which man is an integral part.¹¹⁰

Frank De Gaff Schaffer at Columbia University developed "An Administrative Guide for Initiating Resident Outdoor Education in Public Schools." After a review of literature a questionnaire survey was prepared and carried out to 340 communities in 50 states. Conclusions included a statement for support of this study: "Because school resources are increasingly limited, there is a special need to objectively and thoroughly assess the merits of proposed school activities."¹¹¹ Programs of resident outdoor education were found to facilitate learning if they are based on sound educational goals and standards.

Major guides resulting from Schaffer's study were:

1. many school and community people should be involved in initiatory planning. A pilot program should introduce resident outdoor education to the community.

2. these programs should be considered as an integral part of the regular school program.

3. leadership qualifications should include: teaching skill, prior experience in, or observation of, such programs.

4. teachers and administrators should receive reduced loads and/or extra salary for this work.

5. consideration should be given to using a regional outdoor school serving several school districts.

6. students should bear at least part of the financial costs.

7. consideration should be given to the use of objective evaluative techniques consistent with the maintenance of a flexible program.¹¹²

Morris Davidson of the University of California, Berkley, carried out a study that measured changes in self-concept and socio-metric status in children as a result of two different school camp curricula. Two curricula described as "adult centered" and "child centered" were developed and taught separate groups. After testing group I, "child centered" showed positive changes in some items and group II showed positive changes in other items. Positive changes in social relationships were evidenced in both groups. It was concluded that "school camping regardless of which of the two approaches used does produce positive changes in self-concepts and social relationships of elementary school children."¹¹³

George Anthony Crocicchia of George Washington University found

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that:

1. Of 14 school systems, all if possible intended to expand the program.
2. Outdoor education resident facilities should be administered by an outdoor school principal who has complete administrative and supervisory responsibility for the program and should devote 80 percent of his time to outdoor education.
3. All outdoor education programs are inhibited by insufficient financial resources.
4. New outdoor schools rely heavily on information from established schools.
5. Curriculum guides are nothing more than administrative guide books.
6. An outdoor resident facility is not necessary to have a successful outdoor education program.
7. Most school systems use the classroom teacher as an instructor or at least for follow-up.
8. Student fees and tuition are primary source of revenue for underwriting of resident outdoor programs.¹¹⁴

Jones, 1972, The University of Calgary, produced a study that was "An Affective Evaluation of an Outdoor Education Program for Grade VI Students." The results of the study indicated significant attitude changes in two of four subscales of an attitude questionnaire as a result of participation in a residential outdoor education centre. Ten activities also evaluated by the study revealed that all were found to be desirable but that modification was required in the slough study, traverse trip, and weather study.

Plaxton, 1972, The University of Calgary, administered two questionnaires, one to grade seven and eight students and one to secondary science teachers. Some conclusions reached were:

1. The teachers believed outdoor field studies assisted in the development of most science course objectives.
2. Teacher opinions indicated there was a need for in-service and practical field study programs.
3. Both students and teachers recorded a desire to engage to a greater extent in field studies of a scientific nature.
4. Family and community organizations exposed sixty-five percent of the students to an outdoor environment through a camping experience, but activities engaged in were generally dissimilar.¹¹⁵

Finally E. A. Beckett produced "A Checklist of Desirable Facility Criteria for Outdoor Education Resident Centres" in 1964. All items were listed in a positive manner. Two checkoff columns appeared to the right of the criteria entitled "Applicable to Program" and "Site Survey." 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. Main headings of the instrument included:

- I Planning and Site Selection
- II Master Planning for Outdoor Education
- III Layout and Planning of Buildings
- IV Administrative Centre
- V The Dining-Hall Lodge
- VI The Health Centre
- VII Library and Field Research Facility
- VIII Resident Quarters
- IX Service and Storage Facilities for Trailer Units
- X Entrance Roads, Parking Areas
- XI Service Roads and Trails
- XII Maintenance Area
- XIII Utilities

In all approximately 163 criteria are listed as part of the instrument.¹¹⁶

The researcher was unable to locate studies which provided any evaluative instruments for residential outdoor education.

FOOTNOTES TO CHAPTER 2

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Chapter 3

PROCEDURES

The problem of this study was to develop a valid instrument which could be used to evaluate residential outdoor education centres in Canada. The procedures used to develop the instrument and to validate the instrument were adapted from ideas and procedures mentioned in Chapter 2.

DEVELOPMENT OF THE INSTRUMENT

The following steps based on Borg's seven steps were utilized in development of the instrument:

1. The problem was identified:
 - A. Literature in the area of instrument construction was reviewed to select principles applicable to the development of an evaluative instrument.
 - B. Literature in the area of residential outdoor education was reviewed to select criteria which should be used in the instrument.
2. Constructing the Preliminary Instrument:
 - A. The instrument was constructed using principles and ideas listed in Chapter 2 of this study.

- B. The residential outdoor education criteria were not included in the preliminary instrument unless they were mentioned by at least two authors. In addition further ideas and recommendations were asked from the respondents.
3. Selection of the Jurors:
- A. All Canadians listed in Leaders in Outdoor Education were selected and an introductory letter was written to them. Besides introducing the study and the investigator, the introductory letter* asked the proposed respondent if he would assist as a juror in the study. Finally, the proposed respondent was asked if he knew of any other person or persons whom he would recommend as a Canadian expert in residential outdoor education.† Any person so nominated was further sent an introductory letter and asked to nominate any other experts in outdoor education. A system of cross checking nominations was developed and a list of fifty experts in residential outdoor education in Canada was established, all of whom had agreed to act as jurors for the study.
- B. Of the list of fifty volunteer jurors twenty-five were selected randomly from various geographical areas in Canada. The number of twenty-five was derived from discussions with the investigator's supervisor, and it

*Introductory letter enclosed in Appendix B.

†Reply sheet enclosed in Appendix C.

would allow some leeway for the required number of twenty respondents (to mitigate against set bias).

These three subsample areas included the Maritimes, Ontario-Quebec and Western Canada.

- C. Those experts not selected were sent a letter of apology and a promise to send a copy of the final instrument to them upon completion.

4. Pretesting the Preliminary Instrument:

- A. The preliminary copy of the instrument was submitted to a group of twelve residents of Alberta ranging from knowledgeable residential outdoor educators, several of whom were nominated as jurors, to a professional typist.
- B. The pretest group was asked to identify misunderstandings, ambiguities, useless items and inadequate items. Further a request was made by the investigator to the pretest group to indicate additional items, point out mechanical difficulties in matters such as data tabulation and general difficulties with directions for completing the instrument.
- C. After revisions a subgroup of three was given the preliminary instrument with the above instructions for a final pretesting.
- D. The first preliminary instrument was revised accordingly to form the final preliminary instrument.*

5. Letter of Transmittal:

*Enclosed in Appendix E.

- A. The letter of transmittal* that accompanied the final preliminary instrument followed good practices as listed in Chapter 2 of this study. A three week limit was set to which the jurors were asked to adhere.
 - B. Forty percent of the respondents replied within, or close to the time limit.
6. The Follow-Up Letter:
- A. The follow-up letter was written to include good follow-up practices as listed in Chapter 2 of this study. An offer was made that if a person was unable to complete the task he could keep the criteria but to inform the investigator of this.
 - B. An additional thirty-two percent of replies was received. One respondent was unavailable, constituting four percent of the jurors.
 - C. A second follow-up letter was forwarded to late respondents including another copy of the final preliminary instrument and the usual self-addressed envelope.
 - D. Rather than a third follow-up letter being used Borg's suggestion was taken and late respondents were telephoned personally by the investigator.
 - E. The total response was eighty percent of the samples or twenty respondents.
7. What to Do About Non-responding Subjects:

No action was taken with non-responding subjects as the

*Included in Appendix D.

required number of jurors replied to the questionnaire. An eighth additional step was added to Borg's seven steps.

8. Follow-Up to Completion of the Study:

All members of the jury and those experts who had agreed to participate in the study and were not selected were sent a letter of appreciation, and a final copy of the instrument.

VALIDATION OF THE INSTRUMENT

1. The instrument was forwarded to all members of the jury to make their comments and suggestions for the improvement of the instrument and also for the rating of each criterion by the following scale:

- "A" The criterion is "essential" for evaluating a residential outdoor education centre (7 points)
- "B" The criterion is "very desirable" for evaluating a residential outdoor education centre (6 points)
- "C" The criterion is "desirable" for evaluating a residential outdoor education centre (5 points)
- "D" The criterion is "acceptable" for evaluating a residential outdoor education centre (4 points)
- "E" The criterion is "questionable" for evaluating a residential outdoor education centre (3 points)
- "F" The criterion is "unacceptable" for evaluating a residential outdoor education centre (2 points)
- "G" The criterion is "not feasible" for evaluating a residential outdoor education centre (1 point)
- "H" The criterion is "not applicable" to an expert's specific situation and is not included as a possible reply..

The jury was not informed that each criterion which had a mean of 4 or better was necessary to retain it in the final instrument.

2. The instrument was revised according to comments, suggestions, and ratings of the jury of experts.

3. The instrument was revised to include a six point scale which then could enable the instrument to be used to evaluate residential outdoor education centres in Canada. The scale is as follows:

- (a) The criterion is met "completely" at the "centre"
- (b) The criterion is met to a "great degree" at the "centre"
- (c) The criterion is met to a "moderate degree" at the "centre"
- (d) The criterion is met to a "small degree" at the "centre"
- (e) The criterion is "not met to any degree" at the "centre"
- (f) The criterion "does not apply" at the "centre"

4. The average rating received from the jurors was included immediately following each criterion in the body of the instrument.

Chapter 4

ANALYSIS, AND INTERPRETATION OF DATA

The study was undertaken to develop a valid instrument for the evaluation of residential outdoor education centres in Canada.

ANALYSIS

The instrument was validated by a jury of twenty experts in residential outdoor education in Canada. The sample of jurors was divided into three subsamples, Maritimes, Quebec-Ontario and Western Canada, and was selected randomly from a prepared list of fifty experts. Each juror was asked to rate each criterion independently on an eight point scale and to make comments and recommendations for the improvement of the instrument. Criteria receiving an average rating of 4.0 were included in the final instrument with one exception.

The number of jurors selecting each rating, the average rating for each criterion, and whether the criterion received a high enough rating to be included in the instrument are listed in Table 1.

Table 1. The Numbers of Jurors Selecting Each Rating, the Mean Rating for Each Criterion, and Whether or Not the Criterion Was Acceptable for Inclusion in the Instrument

Items	Rating								Mean	Acceptable	
	7	6	5	4	3	2	1	NA			
Philosophy and Objectives											
1	12	3	3	1	1	0	0	0	6.2	yes	
2	7	10	2	0	0	0	0	1	6.3	yes	
3	6	9	3	1	0	0	0	1	6.1	yes	
4	7	8	4	0	0	0	0	1	6.2	yes	
5	7	10	2	0	0	0	0	1	6.3	yes	
6	16	4	0	0	0	0	0	0	6.8	yes	
7 A	14	6	0	0	0	0	0	0	6.7	yes	
B	9	1	7	0	2	0	1	0	5.6	yes	
C	5	7	7	0	0	0	0	1	5.9	yes	
D	6	10	3	0	0	0	0	1	6.1	yes	
E	3	6	8	2	0	0	0	1	5.5	yes	
F	4	8	7	0	0	1	0	0	5.7	yes	
G	3	11	5	0	1	0	0	0	5.8	yes	
H	1	12	4	2	0	0	0	0	5.5	yes	
I	10	7	5	2	0	0	0	0	6.3	yes	
J	3	3	11	3	0	0	0	0	5.3	yes	
K	11	1	5	0	3	0	0	0	5.9	yes	
L	11	8	0	1	0	0	0	0	6.5	yes	
M	8	8	2	1	0	0	0	1	6.2	yes	
N	2	9	4	2	2	0	0	1	5.5	yes	
O	0	7	6	3	4	0	0	0	4.8	yes	
Adminis- tration											
1	15	4	0	0	0	0	0	1	6.8	yes	
2	16	4	0	0	0	0	0	0	6.8	yes	
3	13	5	2	0	0	0	0	0	6.6	yes	
4	3	7	6	1	2	0	0	1	5.4	yes	
5	7	6	3	1	2	0	0	1	5.8	yes	
6	4	7	8	0	1	0	0	0	6.7	yes	
7	12	4	4	0	0	0	0	0	6.6	yes	
8	17	2	0	1	0	0	0	0	6.8	yes	

Table 1 (continued)

Items	Rating								Mean	Acceptable
	7	6	5	4	3	2	1	NA		
9	16	3	1	0	0	0	0	0	6.8	yes
10	16	3	1	0	0	0	0	0	6.7	yes
11	4	8	3	0	4	0	0	1	5.4	yes
12	3	11	3	0	4	0	0	0	5.6	yes
13	4	12	2	1	1	0	0	0	5.9	yes
14	8	8	3	0	1	0	0	0	6.1	yes
15	4	9	5	2	0	0	0	0	5.8	yes
16	2	7	8	2	1	0	0	0	5.4	yes
17	5	6	2	1	4	1	1	0	5.0	yes
18	5	5	9	0	0	0	0	1	5.8	yes
19	5	11	3	0	1	0	0	0	6.0	yes
20	16	4	0	0	0	0	0	0	6.8	yes
21	0	2	8	3	6	0	1	0	4.1	yes
22	17	2	0	0	0	0	0	1	6.9	yes
23	2	7	7	2	2	0	0	0	5.3	yes
24	14	5	1	0	0	0	0	0	6.7	yes
25	5	9	4	0	2	0	0	0	5.8	yes
26	3	3	9	5	0	0	0	0	5.2	yes
27	5	5	8	1	1	0	0	0	5.6	yes
28	8	4	6	1	1	0	0	0	5.9	yes
29	8	8	1	0	2	1	0	0	5.9	yes
30	1	10	6	1	1	0	0	1	5.5	yes
31	6	4	3	0	4	1	0	2	5.3	yes
32	8	3	3	0	5	1	0	0	5.3	yes
33	5	5	6	2	1	1	0	0	5.4	yes
34	5	9	3	0	2	1	0	0	5.6	yes
35	17	3	0	0	0	0	0	0	6.9	yes
36	6	2	5	0	5	2	0	0	4.9	yes
37	3	6	3	0	6	1	0	1	4.8	yes
38	1	5	8	4	2	0	0	0	5.0	yes
39	6	3	8	2	0	0	0	1	5.7	yes
40	11	5	4	0	0	0	0	0	6.4	yes
41	1	6	10	2	0	0	1	0	5.1	yes
42	1	0	7	0	7	4	0	1	3.7	no
43	0	2	4	4	9	0	0	1	3.9	no
44	13	6	1	0	0	0	0	0	6.6	yes
45	0	10	5	0	5	0	0	0	5.0	yes

Table 1 (continued)

Items	Rating								Mean	Acceptable
	7	6	5	4	3	2	1	NA		
46	9	8	1	1	1	0	0	0	5.8	yes
47	5	9	3	2	0	1	0	0	6.6	yes
48	4	3	6	4	1	2	0	0	5.0	yes
49	9	8	2	0	1	0	0	0	5.9	yes
50	16	3	0	0	0	1	0	0	6.6	yes
51	1	2	0	4	9	4	0	0	3.5	no
52	10	6	2	1	0	0	0	1	6.3	yes
53	12	4	1	1	1	0	0	1	6.3	yes
54	13	3	1	1	2	0	0	0	6.2	yes
55	12	3	2	1	2	0	0	0	6.1	yes
56	6	4	3	0	5	0	0	2	5.3	yes
57	13	5	1	0	1	0	0	0	6.5	yes
58	4	8	7	0	1	0	0	0	5.7	yes
59	12	8	0	0	0	0	0	0	6.6	yes
60	6	10	3	0	0	1	0	0	6.0	yes
61	2	9	7	1	1	0	0	0	5.5	yes
Program										
1	13	1	2	0	3	1	0	0	5.9	yes
2	7	4	4	1	3	1	0	0	5.4	yes
3	14	4	2	0	0	0	0	0	6.6	yes
4	8	11	1	0	0	0	0	0	6.4	yes
5	10	7	1	0	2	0	0	0	6.2	yes
6	5	9	5	1	0	0	0	0	5.9	yes
7	3	8	6	3	0	0	0	0	5.6	yes
8	6	9	3	2	0	0	0	0	5.6	yes
9	3	13	3	0	1	0	0	0	5.9	yes
10	11	8	1	0	0	0	0	0	6.5	yes
11	14	3	3	0	0	0	0	0	6.6	yes
12	19	1	0	0	0	0	0	0	7.0	yes
13	9	7	3	1	0	0	0	0	6.2	yes
14	17	3	0	0	0	0	0	0	6.9	yes
15	8	7	2	1	2	0	0	0	5.9	yes
16	6	9	3	2	0	0	0	0	6.2	yes
17	11	7	1	0	0	1	0	0	6.2	yes
18	5	9	1	2	3	0	0	0	5.6	yes
19	5	13	2	0	0	0	0	0	6.2	yes
20	12	8	0	0	0	0	0	0	6.6	yes

Table 1 (continued)

Items	Rating								Mean	Acceptable
	7	6	5	4	3	2	1	NA		
21	15	4	1	0	0	0	0	0	6.7	yes
22	16	3	1	0	0	0	0	0	6.8	yes
23	15	3	2	0	0	0	0	0	6.0	yes
24	10	7	3	0	0	0	0	0	6.4	yes
25	9	10	1	0	0	0	0	0	6.1	yes
26	10	9	1	0	0	0	0	0	6.5	yes
27	8	8	3	1	0	0	0	0	6.2	yes
28	1	6	5	4	3	1	0	0	4.8	yes
29	2	7	5	3	3	0	0	0	5.1	yes
30	0	5	7	3	3	0	1	1	4.6	yes
31	0	5	6	2	5	0	1	1	4.4	yes
32	10	7	2	0	0	0	0	1	6.4	yes
33	6	12	1	0	0	0	0	1	6.3	yes
34	5	12	1	1	0	0	0	1	6.1	yes
35	2	12	4	1	0	0	0	1	5.8	yes
36	14	5	0	0	0	0	0	1	6.7	yes
37	2	10	5	2	0	0	0	1	5.6	yes
38	9	8	2	0	0	0	0	1	6.4	yes
39	2	9	4	0	1	1	0	1	4.9	yes
40	6	11	2	1	0	0	0	0	6.1	yes
41	1	11	5	1	3	0	0	0	5.4	yes
42	11	9	0	0	0	0	0	0	6.6	yes
43	11	9	0	0	0	0	0	0	6.6	yes
44	8	12	0	0	0	0	0	0	6.4	yes
45	4	6	4	0	3	2	1	0	4.9	yes
46	4	9	5	1	0	0	1	0	6.1	yes
47	11	8	0	1	0	0	0	0	6.5	yes
48	12	8	0	1	0	0	0	0	6.6	yes
49	17	1	2	0	0	0	0	0	6.8	yes
50	10	10	0	0	0	0	0	0	6.5	yes
51	1	13	6	0	0	0	0	0	5.5	yes
52	6	6	8	0	0	0	0	0	5.9	yes
53	19	0	1	0	0	0	0	0	6.9	yes
54	12	7	1	0	0	0	0	0	6.6	yes
55	13	5	1	1	0	0	0	0	6.5	yes
56	10	5	3	1	1	0	0	0	6.1	yes
57	16	2	1	0	0	0	0	1	6.8	yes

Table 1 (continued)

Items	Rating								Mean	Acceptable
	7	6	5	4	3	2	1	NA		
58	7	5	4	1	2	0	1	0	5.5	yes
59	8	11	1	0	0	0	0	0	6.4	yes
60	6	6	3	0	3	1	0	1	5.5	yes
61	3	7	5	4	0	0	0	1	5.5	yes
62	7	13	0	0	0	0	0	0	6.4	yes
63	10	9	1	0	0	0	0	0	6.5	yes
64	13	6	1	0	0	0	0	0	6.6	yes
65	13	4	1	1	1	0	0	0	6.4	yes
66	10	6	2	0	1	0	0	1	6.3	yes
67	11	1	2	0	3	1	0	2	5.8	no (comments)
Staff										
1	6	6	3	1	2	1	0	1	5.5	yes
2 A	3	9	3	3	1	0	0	1	5.5	yes
B	11	5	3	0	0	0	0	1	6.4	yes
C	5	13	1	0	0	0	0	1	6.2	yes
D	9	5	2	2	0	1	0	1	5.9	yes
E	4	10	4	1	1	0	0	1	6.1	yes
F	4	10	5	0	0	0	0	1	5.9	yes
G	9	5	4	1	0	0	0	1	6.2	yes
H	7	10	2	0	0	0	0	1	6.3	yes
I	6	11	0	0	1	0	0	2	6.2	yes
J	5	7	4	1	2	0	0	1	5.6	yes
K	10	6	3	0	0	0	0	1	6.4	yes
3	12	4	0	1	2	0	0	1	6.2	yes
4	7	6	3	0	3	1	0	0	5.6	yes
5	4	7	2	2	5	0	0	0	5.2	yes
6	5	6	4	1	4	0	0	0	5.4	yes
7	3	11	3	1	2	0	0	0	5.6	yes
8	11	5	2	0	2	0	0	0	6.2	yes
9	10	6	3	0	1	0	0	0	6.2	yes
10	7	4	4	1	4	0	0	0	5.5	yes
11	12	4	2	1	1	0	0	0	6.3	yes
12	6	11	1	0	2	0	0	0	6.0	yes
13	13	4	2	0	1	0	0	0	6.4	yes
14	9	7	3	0	1	0	0	0	6.2	yes
15	18	2	0	0	0	0	0	0	6.9	yes
16	6	10	3	1	0	0	0	0	6.1	yes

Table 1 (continued)

Items	Rating								Mean	Acceptable
	7	6	5	4	3	2	1	NA		
17	9	10	1	0	0	0	0	0	6.4	yes
18	3	4	3	2	4	3	1	0	4.4	yes
19	8	5	6	0	0	1	0	0	5.9	yes
20	6	11	3	0	0	0	0	0	6.2	yes
21	5	3	5	1	3	1	2	0	4.8	yes
22 A	4	8	7	1	0	0	0	0	5.8	yes
B	4	11	5	0	0	0	0	0	6.0	yes
C	2	7	5	4	1	0	1	0	5.1	yes
23	1	6	3	3	5	1	0	1	4.6	yes
24 A	2	9	5	1	2	1	0	0	5.3	yes
B	7	11	1	0	1	0	0	0	6.3	yes
C	7	11	1	0	1	0	0	0	6.2	yes
D	10	9	1	0	0	0	0	0	6.5	yes
E	9	11	0	0	0	0	0	0	6.5	yes
25	7	9	2	0	2	0	0	0	6.0	yes
26	10	9	1	0	0	0	0	0	6.5	yes
27	10	9	1	0	0	0	0	0	6.5	yes
28	9	10	1	0	0	0	0	0	6.4	yes
29	0	9	5	3	3	0	0	0	5.0	yes
30	3	6	6	2	2	0	0	1	5.3	yes
31	2	10	6	0	1	0	0	1	5.6	yes
32	11	4	3	1	1	0	0	0	6.2	yes
33	13	5	1	1	0	0	0	0	6.5	yes
34	6	11	2	0	0	0	1	0	6.0	yes
35	4	13	2	0	0	0	1	0	5.9	yes
36 A	8	11	1	0	0	0	0	0	6.4	yes
B	7	10	2	1	0	0	0	0	6.2	yes
C	0	6	6	1	5	1	0	1	4.6	yes
D	3	9	5	1	1	0	0	1	5.6	yes
E	5	9	5	1	0	0	0	0	5.9	yes
37	4	11	1	0	0	1	1	2	5.7	yes

INTERPRETATION

Two hundred and six criteria were included in the preliminary instrument. Four of these criteria were rejected. Three criteria were rejected because of a low rating and one because of comments.

The item included as "The sixth grade is the age level (12 years) best suited to a residential outdoor education experience" received a rating of 3.7. Comments from jurors included "This has been the case traditionally but I haven't seen any validity" or "This is not the case anymore, students of all ages are suited to this experience."

When the jurors were asked to rate "Where more than one classroom is involved at a session it is encouraged that classrooms come from different schools," a 3.9 rating resulted. Apparently the jurors thought that students often did not know each other to any degree. In a short experience such as this, meeting classmates under different circumstances was enough for the students and staff to absorb without adding complete strangers to the scene unnecessarily.

The item "Whole group assembly and meal times are announced by gongs, bells, or other loud devices" received an average rating of 3.5. Most jurors thought that in special cases or emergencies this may be acceptable but most questioned this criterion because they felt it made the centre "schoolish" or "it gives the connotation of school." Some jurors thought that this took some self responsibility away from students.

The fourth criterion excluded from the instrument was "75% of the preceding program criteria should be met for an acceptable Residential Outdoor Education Program." This criterion was deemed to be, not in keeping with the intent of the instrument, that is to be a criterion

for evaluation not a criterion for evaluation of evaluation. Further, the criterion was worded and constructed in such a way that did not suit itself to the rating scale used. This type of criterion is best answered by an open form or a forced choice method, for example, pick one of the following: 100%, 95%, 90%, and so on. Many of the jurors commented that 75% was not high enough and therefore they selected the essential rating.

One criterion received a rating of 7.0. This item on which the jurors felt most strongly read, "The program allows for students to be active learners not merely observers." Outdoor educators in Canada want the students to be mentally, emotionally, and physically active at residential outdoor education centres.

Criteria judged sufficiently high to receive at least a 6.9 rating included: "Adequate water for domestic and program purposes is available," "The centre regularly evaluates its objectives," "The program requires the observance of health and safety rules," "Learning methods vary with the age and maturity of the participants," and finally, "The classroom teacher understands his or her responsibility for the safety and welfare of students while off the school grounds." The jurors hold safety and supervision, adjustment to needs of children, and constant evaluation of objectives, as extremely important.

Those criteria judged as borderline or 4.1 and 4.4 were as follows: "The centre is within one hour driving time of the school," "The program allows for domestic animals to be cared for by participants," and "A teacher requires a minimum of experience, in-service, or preservice education in outdoor education before he or she is allowed to accompany the class."

The main arguments against the first two points were that many times the "centre" objectives may be mixed. In other words, should the program be geared to a semi-wilderness experience which is not available often within one hour travelling time of the school, and are domestic animals conducive to the semi-wilderness experience? If these two criteria are to be met adequately, is the program a rural or semi-wilderness experience? Several jurors felt that clarification is needed on this point for many "centres" in Canada.

The third point, that a teacher requires certain education or experience in outdoor education before being allowed to accompany his or her class, was felt to be discriminatory, a negative approach and some asked the question, "why should the teacher's first exposure to outdoor education not be classed as an in-service for that teacher?" Many jurors expressed the opinion that inexperienced teachers should be allowed to accompany the class but their role might be quite different to the normal situation.

In conclusion, forty-eight criteria received an average "essential" rating; one hundred and nineteen received an average "very desirable" rating; thirty-three criteria received an average "desirable" rating; and six criteria received an average "acceptable" rating. Three criteria were dropped from the instrument because the rating was lower than 4.0, and one criterion was dropped because of comments. The average rating received by those items retained for the instrument was 5.989 or, if treated as the original ratings and rounded out to the nearest tenth, 6.0 therefore very desirable.

Chapter 5

FINDINGS AND RECOMMENDATIONS

The problem of this study was to develop a valid instrument for the evaluation of residential outdoor education centres in Canada. Sub-problems involved developing a format, selection of criteria and validation of the criteria and format.

FINDINGS

The findings have been divided into the four areas included in the instrument, a fifth general area and the validated instrument.

Findings in Philosophy and Objectives

The average rating received by this section was 6.0, very desirable. The problem that confronted many jurors was one that Donaldson¹ talked of when he described "problem centered" and "curriculum centered" programs. If a juror's philosophy was a "problem centered" one then some objectives would be lower or unacceptable and the opposite was true with those of a "curriculum centered" philosophy.

A case in point was the objective "students will have had direct (first hand) experiences in the out-of-doors for each specific subject matter area." Several jurors rated this "questionable" and "not feasible" and accompanying comments included "this should not necessarily be an objective."

Those with a "curriculum centered" philosophy tended to rate

objectives low that dealt with items such as "experience the concept of a self-contained community" and "experience and use a variety of skills required for outdoor recreation." Comments by jurors included "not necessary depending on point of view" or "if these are goals of the program, okay, but excellent programs can be run without them."

Findings in Administration

The average rating received by this section was 5.9, very desirable.

It appeared that the "curriculum centered" and "problem centered" conflict arose in this section. For example those jurors with the "curriculum centered" philosophy tended to rate criteria such as "the general organization for living accommodation is of a decentralized nature," or "a separate and distinct area is available for an infirmary" lower than other criteria. Comments included "this depends upon objectives, whether these are needed or not" and "essential if major objectives are camp type, social development, et cetera; where major objectives are academic, living accommodation may be of secondary importance." Comments in regards to the infirmary included "if the student is sick send him home as he can't study anyway" or "take them home or to hospital."

Another finding that became apparent, especially after reading the comments, was in relation to the criterion "the entire unit does not exceed 120 participants." Generally Quebec-Ontario jurors rated the criterion lower because they felt that more than 120 participants could be accommodated. Maritime and Western Canadian jurors accepted the criterion but many made comments that 120 participants may be too

large a group.

A third finding dealt with the types of outdoor education: urban, rural, or wilderness. A juror quoted a geographer, "that the North American landscape is divided into wilderness, the pasturage, and the city, and that we have special sets of values which are related to each of these areas." The juror was concerned that we tend to blur these value components of human landscape and accordingly also blur the values associated with each. This thinking led to wide variation in responses to criteria such as "the 'centre' is within one hour driving time of the school," "site has or is in proximity to program enrichment features (waterfront, open playing field, campfire area, variety of plant life, trees, animals, and other natural phenomena)," or "the site is located in a natural setting with a minimum intrusion or development by man."

Another finding was that a division existed between jurors connected with operational "centres" and jurors who had established programs and then had acquired or rented a site on a short term basis at which to carry out residential programs. The criterion "the 'centre' supplies services and resources to the degree required by the school" met with opposition from the group that were worried about final overall control and met with agreement from the group that wished services as they required them.

Finally a finding related to the provincial camping associations and Canadian Camping Association standards revealed that some jurors thought their standards were too strict but other jurors felt that the standards were not strict enough.

Findings in Program

The program average rating received was 6.0 or very desirable.

Findings included the controversy of the "problem centered" and "curriculum centered" philosophies, hence two general program criteria showed wide variations. The two general criteria revealing variation were "the program arises from the stated objectives of the 'centre'" and "the program has particular and specific activities related to the achievement of each objective."

The jury reacted to other criteria in a similar manner, for example, "the program is planned to act as a catalyst to all subject matter areas of the school curriculum," "the program is varied and diversified, not emphasizing one subject to the exclusion of others," and "prestudy and follow-up study together should require more time than study on location."

Many jurors felt that the program may become too rigid if it was forced to revolve around certain resident functions such as meal times. Therefore, criteria such as "the program allows for meal times to be suitably established and observed," "the program initially is a basic necessity schedule. It is presented to the school for activities to be included," "the program allows time blocks of at least one half regular school day per activity," and "the program encourages the benefits of an orderly plan of living" showed wide variation in ratings. The jurors apparently wanted as much flexibility as possible in programming.

The wilderness and pasturage division was evident in two criteria, namely, "the program allows for domestic crops to be planted, cultivated, or harvested by participants" and "the program allows for domestic animals to be cared for by participants."

Findings in Staff

The section relating to staff received an overall 5.9, very desirable, rating from the jurors.

The criterion "an administrative unit is responsible for outdoor education" received such comments as, "I believe that all teachers in a school district should assume responsibility for different school experiences. An administrative unit may assist them but often takes over the responsibility and teachers are no longer involved," and "if the administrative unit fails to initiate a program, somebody else should be permitted to do so." Generally it appeared that since little leadership has come from the upper echelons in the educational structure in the area of outdoor education and the main thrust has come from the "grassroots"² or teaching force, jurors from newer programs tended to rate this criterion (administrative unit) lower than those jurors representing longer established programs.

The division between those who felt that the resident director or principal should have final overall authority, or those who worried about flexibility and teacher and student input, became evident in criteria "the principal or his assistant has complete administrative and supervisory responsibility for the program," and "the principal of the 'centre' appraises teacher qualifications, determines special interests and stresses program activities for which teachers are best qualified." Comments included "the teachers in attendance bear some responsibility as well" and "I would tend to de-emphasize this position unless it can be staffed by a person who sees his role as solely that of a facilitator or resource person who assists teachers, students, parents

et cetera, to plan and operate their own programs."

A finding referred to earlier dealt with "a teacher requires a minimum of experience, in-service, or preservice education in outdoor education before he or she is allowed to accompany the class," and "all teachers are able to teach out-of-doors." Some jurors thought that this was not feasible whereas others thought this was an excellent objective to strive for, and one juror changed the criterion to read "all teachers teach out-of-doors."

The jurors who were "curriculum centered" tended to downgrade the role of the "centre" for leadership training of "preservice and in-service programs of private and public programs concerned with camping and out-of-doors."

Over one third of the jurors did not see as acceptable the criterion that "any workshops, clinics, or in-service programs attended by the teachers are recorded on the teacher's work record for credit."

The jurors rated one objective of preservice as lower than the other objectives regarding preservice, "to conduct a residential outdoor education centre."

General Findings

All four areas received fairly high average ratings (6.0, 5.9, 6.0 and 5.9), with an overall average for the entire final instrument of 6.0 or very desirable. On the whole the instrument is not a controversial one and appears to be well accepted by experts in the field of residential outdoor education. Residential outdoor education in Canada is relatively new but it is maturing as evidenced by the ratings and comments of jurors. Philosophies in outdoor education are being developed and various outlooks can be identified. This is a healthy sign that much thought is taking place in the area of residential outdoor education and for that fact in outdoor education.

The Final Instrument

The final validated instrument is enclosed in the body of the thesis as the development of it was the problem of the study.

AN INSTRUMENT FOR EVALUATING RESIDENTIAL
OUTDOOR EDUCATION CENTRES
IN CANADA

by

Nestor N. Kelba

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INTRODUCTION

The criteria in this instrument were validated by a jury of twenty recognized experts in the field of residential outdoor education from the Maritimes, Quebec-Ontario and Western Canada.

The experts were asked to rate each criterion for evaluating residential outdoor education centres on a seven point scale including "essential," "very desirable," "desirable," "acceptable," "questionable," "unacceptable," "not feasible," and an eighth "not applicable" column. In addition the experts were asked to make suggestions and comments that would further enhance the instrument. Only those criteria which received an average rating of 4.0 or better from the jury of experts, and comments that would clarify or improve the instrument, were retained in this instrument.

The purposes of this instrument are to assist in:

- A. evaluation of operational residential outdoor education centres*
- B. development of proposed "centres"
- C. establishment of priorities for improvement of existing "centres."

It is the sincere hope that this instrument will aid in the development and improvement of residential outdoor education centres in Canada.

*Hereafter known as "centres".

DIRECTIONS

1. Briefly read the entire instrument so as to get an understanding of its nature and content.
2. If the criterion is:
 - a. met completely at the "centre" circle "6" to the right of the criterion
 - b. met to a great degree at the "centre" circle "5" to the right of the criterion
 - c. met to a moderate degree at the "centre" circle "4" to the right of the criterion
 - d. met to a small degree at the "centre" circle "3" to the right of the criterion
 - e. not met to any degree at the "centre" circle "2" to the right of the criterion
 - f. not applicable at the "centre" circle "1" to the right of the criterion.
3. To aid eventual interpretation of findings from evaluation using this instrument, the following information is included. The average rating by the jurors for each criterion follows that criterion in the body of the instrument.
 - a. rating of 6.5 to 7.0 is "essential"
 - b. rating of 5.5 to 6.4 is "very desirable"
 - c. rating of 4.5 to 5.4 is "desirable"
 - d. rating of 4.0 to 4.4 is "acceptable"

Part I

PHILOSOPHY AND OBJECTIVES

	C M	G D	M D	S D	N M	N A
1. A philosophy for outdoor education is developed which is in harmony with the educational philosophy of the sponsoring school board. (6.2)	6	5	4	3	2	1
2. Those areas within the total school curriculum that are better taught out-of-doors are taught out-of-doors. (6.3)	6	5	4	3	2	1
3. Outdoor educational experiences ¹ are offered to all levels of the school system. (6.1)	6	5	4	3	2	1
4. All students are offered a variety of outdoor education experiences. (6.2)	6	5	4	3	2	1
5. All students are offered at least one opportunity to be involved in a residential outdoor education experience during their school years. (6.3)	6	5	4	3	2	1
6. A variety of learning experiences are used, monitored, evaluated, and adapted as necessary in changing circumstances. (6.8)	6	5	4	3	2	1

¹Outdoor education experiences ranging from the field trip or field study to a stay in a residential outdoor education centre or wilderness camp

C G M S N N
M D D D M A

7. Students during their stay at the "centre" or as a result of their stay at the "centre" will:

A. experience elements of social living ² through group planning, sharing, working and living together with peers and adults. (6.7)	6	5	4	3	2	1
B. have had direct (first hand) experiences in the out-of-doors for most specific subject matter areas. (5.6)	6	5	4	3	2	1
C. evaluate ³ the importance of the natural environment. (5.9)	6	5	4	3	2	1
D. value ⁴ the natural environment. (6.1)	6	5	4	3	2	1
E. respond ⁵ to a meaningful work experience. (5.5)	6	5	4	3	2	1
F. experience and use a variety of skills required for outdoor recreation. ⁶ (5.7)	6	5	4	3	2	1
G. respond ⁵ to the opportunity to assume responsibility. (5.8)	6	5	4	3	2	1
H. value ⁴ and use personal health practices. (5.5)	6	5	4	3	2	1
I. value ⁴ and use safety practices. (6.3)	6	5	4	3	2	1

²respect the rights of others

³make qualitative and quantitative judgments

⁴give worth to; slowly being internalized

⁵actively attend to; committing himself in some small measure

⁶archery, shooting and hunting, angling and casting, boating and water activities, skin and scuba diving, outdoor winter sports, mountain activities, orienteering, family camping, arts and crafts, hiking and so on.



	C	G	M	S	N	N
	M	D	D	D	M	A
J. perceive ⁷ and use basic survival skills required when in the out-of-doors. (5.3)	6	5	4	3	2	1
K. analyse relationships and integrate the outdoor experiences with the regular school curriculum. (5.9)	6	5	4	3	2	1
L. enjoy himself, or herself. (6.5)	6	5	4	3	2	1
M. relate and be comfortable with peers and adults in informal situations. (6.2)	6	5	4	3	2	1
N. experience the concept of a self-contained community. ⁸ (5.5)	6	5	4	3	2	1
O. make spiritual responses ⁹ to outdoor experience. (4.8)	6	5	4	3	2	1

Part II

ADMINISTRATION

1. Good employment procedures and practices¹⁰ are followed in relations with staff. (6.8) 6 5 4 3 2 1
2. Good medical procedures and practices¹¹ are followed before staff and students arrive on the site. (6.8) 6 5 4 3 2 1

⁷ attach meaning and improvisations to objects, events, or situations occurring within the spatial or temporal proximity of the individual

⁸ converging needs of individual and society

⁹ verbalize and think

¹⁰ written job descriptions, and staff contracts for teaching staff (may be standard teaching contract) as well as for support staff. Canada Pension Plan, Unemployment Insurance, holiday pay, workmen's compensation, Medical Health Plan are considered where they apply

¹¹ registration forms indicating next of kin, address and phone, and medical records stating physical health and limitations are required, provincial health care number, other insurance, etc.

	C	G	M	S	N	N
	M	D	D	D	M	A
3. Good business procedures and practices ¹² are followed. (6.6)	6	5	4	3	2	1
4. Compensation in the form of reduced load or financial compensation is allowed to professional teaching staff who participate in the 24-hour a day outdoor experience. (5.4)	6	5	4	3	2	1
5. Support staff is employed on the basis of the respective provincial labor codes as to minimum wages, hours of work, time off, etc. (5.8)	6	5	4	3	2	1
6. Volunteer staff ¹³ fulfills all conditions ¹⁴ as allowed under the various provincial labor codes. (5.7)	6	5	4	3	2	1
7. Adequate support staff ¹⁵ is available. (6.6)	6	5	4	3	2	1
8. Adequate insurance ¹⁶ is maintained and coverage is reviewed periodically. (6.8)	6	5	4	3	2	1
9. Records of accidents, illness and medical treatment administered on site are maintained. (6.8)	6	5	4	3	2	1
10. Guidelines are established in the area of parent and teacher liability and both teachers and parents are aware of these. (6.7)	6	5	4	3	2	1

¹²budgets are prepared, financial records are kept and audited, inventories and food records are available, etc.

¹³special resource volunteers such as foresters, local farmers, counsellors (high school students, student-teachers or para-professionals)

¹⁴to allow them to be exempt from provincial labor codes where they apply to minimum wages, etc.

¹⁵food service staff, maintenance staff, health staff, stenographic and clerical staff

¹⁶liability insurance, motor vehicle insurance, non-owner vehicle insurance, passenger hazard insurance, fire and theft insurance, staff accident insurance including workmen's compensation, etc., and extended health care insurance for students

	C M	G D	M D	S D	N M	N A
1. The general organization for living accommodation is of a decentralized nature. (5.4) ¹⁷	6	5	4	3	2	1
2. The site is located in a natural setting with a minimum intrusion or development by man. (5.6) ¹⁸	6	5	4	3	2	1
3. The facilities are designed to complement the surrounding environment. (5.9)	6	5	4	3	2	1
4. Site has or is in proximity to program enrichment features. ¹⁹ (6.1)	6	5	4	3	2	1
5. Facilities are planned to fulfill educational objectives. ²⁰ (5.8)	6	5	4	3	2	1
6. Facilities are designed to serve the community when not in use by the schools. (5.4)	6	5	4	3	2	1
7. A large enough tract of land is available to provide for most phases of outdoor education. A suitable ratio is 1 acre per participant. (5.0)	6	5	4	3	2	1
8. The facilities are winterized. (5.8)	6	5	4	3	2	1
9. The site is well drained. (6.0)	6	5	4	3	2	1
10. Fire protection equipment and procedures are explained to all incoming staff and students. (6.8)	6	5	4	3	2	1

¹⁷cabin or tent units not larger than 10 students, but entire group comes together as a whole for meals, campfires, etc.

¹⁸secluded, with plenty of shade, natural features such as hillside, brooks, lakeside and variety of plants and animal life

¹⁹waterfront, open playing field, campfire area, variety of plant life, trees, animals and other natural phenomena. It should be considered that the program be an entirely wilderness, entirely rural or one of compromise of both types.

²⁰weather stations, lab, large building that can include entire group, nature trails, small museums, library, trading post, storage space for tools, display and demonstration areas, etc.

	C	G	M	S	N	N
	M	D	D	D	M	A
21. The "centre" is within one hour driving time of the school. ²¹ (4.1)	6	5	4	3	2	1
22. Adequate water of acceptable quality for domestic and program purposes is available. (6.9)	6	5	4	3	2	1
23. A dining hall is available for feeding the entire group at one sitting. (5.3)	6	5	4	3	2	1
24. Adequate storage for food, supplies and equipment is available. (6.7)	6	5	4	3	2	1
25. A separate and distinct area is available for an infirmary. ²² (5.8)	6	5	4	3	2	1
26. Laundry facilities ²³ are available. (5.2)	6	5	4	3	2	1
27. An administrative office ²⁴ is available.(5.6)	6	5	4	3	2	1
28. Adequate parking ²⁵ is available for busses, staff and volunteer vehicles, "centre" vehicles and others. (5.9)	6	5	4	3	2	1
29. Program units do not average more than 15 students to 1 teacher. (5.9)	6	5	4	3	2	1
30. Special facilities are available that enhance the program unique to the site. (5.5)	6	5	4	3	2	1

²¹ease of transportation and potential for broad use--quality should not be sacrificed, however

²²it is used for no other purpose

²³not necessarily for the students

²⁴contains usual office fixtures including typewriter, duplicating machine, etc.

²⁵traffic routes are considered as well, eg. no roads between cabins, etc.

	C	G	M	S	N	N
	M	D	D	D	M	A
31. The facilities cannot be described as resort type. ²⁶ (5.3)	6	5	4	3	2	1
32. The entire unit does not exceed 120 participants. (5.3)	6	5	4	3	2	1
33. Living accommodation units do not exceed 10 students to 1 teacher or counsellor. (5.4)	6	5	4	3	2	1
34. The "centre" supplies services and resources ²⁷ to the degree required by the school. (5.6)	6	5	4	3	2	1
35. The "centre" regularly evaluates its objectives. (6.9)	6	5	4	3	2	1
36. Boys and girls live in separate buildings. (4.9)	6	5	4	3	2	1
37. Teachers and counsellors are provided with separate rooms from students. (4.8)	6	5	4	3	2	1
38. Toilet ²⁸ and shower facilities are located within the living quarters: (5.0)	6	5	4	3	2	1
39. Adequate personal storage space is available for students and staff. (5.7)	6	5	4	3	2	1
40. Provision is made for housing of program staff and others who are not accommodated in students' living quarters. (6.4)	6	5	4	3	2	1
41. Provision is made for housing of over-night visitors. ²⁹ (5.1)	6	5	4	3	2	1
42. A classroom teacher accompanies the students. (6.6)	6	5	4	3	2	1

²⁶tennis courts, athletic fields, volleyball courts, basketball courts, softball diamonds, large modernistic centralized buildings and services that are found at public recreation areas or near the child's home

²⁷may vary from centre supplying leadership, equipment, meals, etc. to merely a sanction for a group supplying its own leadership, food, equipment, etc. within set standards

²⁸or are easily accessible

²⁹guests, specialist resource personnel

	C	G	M	S	N	N
	M	D	D	D	M	A
43. The length of stay at the "centre" is at least 5 days and 4 nights. ³⁰ (5.0)	6	5	4	3	2	1
44. The "centre" is considered as a part of the total school system by teachers, administration, and board. ³¹ (5.8)	6	5	4	3	2	1
45. The cost of operation ³² of the "centre" comes from school funds ³³ as does any other part of the school system. (6.6)	6	5	4	3	2	1
46. Personal costs of participants ³⁴ are borne by the participants. (5.0)	6	5	4	3	2	1
47. The entire population of the classroom is encouraged to participate. (5.9)	6	5	4	3	2	1
48. No student is denied the right to participate because of inability to meet financial obligations. ³⁵ (6.6)	6	5	4	3	2	1
49. Selection procedures are made available to all concerned if schools apply or are selected in some manner. (6.3)	6	5	4	3	2	1
50. Respective provincial camping association ³⁶ health and sanitation standards for children's resident camps are adhered to. (6.3)	6	5	4	3	2	1

³⁰arrive Monday and leave Friday

³¹teachers' association, administration represented by Central Office administration and principals' associations, and school board have reaffirmed the concept of residential outdoor education

³²maintenance, utilities, instruction, materials, etc.

³³not from a special budget, trust fund, parents' contribution, etc

³⁴food, food services, laundry, transportation, nursing, extended health insurance, etc.

³⁵the regular constituted agency which normally provides for the child should assume responsibility or an allowance may be built into the budget to support such participants

³⁶exceptions are New Brunswick and Prince Edward Island which have none at this time. Up to 30 items could be included here.

	C M	G D	M D	S D	N M	N A
51. Respective provincial camping association ³⁷ safety standards for children's resident camps are adhered to. (6.2)	6	5	4	3	2	1
52. Respective provincial camping association transportation standards for children's resident camps are adhered to. (6.1)	6	5	4	3	2	1
53. The "centre" achieves respective provincial and <u>Canadian Camping Association</u> ³⁸ camp accreditation. (5.3)	6	5	4	3	2	1
54. Appropriate permission is sought to use all outdoor study stations off the site. (6.5)	6	5	4	3	2	1
55. Each new residential outdoor education program begins with a pilot project that is thoroughly evaluated. (5.7)	6	5	4	3	2	1
56. All teachers who accompany students are informed and oriented. (6.6)	6	5	4	3	2	1
57. Adequate instructional material, equipment, and professional assistance ³⁹ is made available to all teachers. (6.0)	6	5	4	3	2	1
58. Special interest materials, equipment, and professional assistance ⁴⁰ is made available to the teacher. (5.5)	6	5	4	3	2	1

³⁷exceptions are New Brunswick and Prince Edward Island. Most comprehensive safety standards are required by Ontario and to a lesser extent by Quebec and British Columbia. Up to 100 items could be included here.

³⁸If the provincial camping association accredits a camp by its own standards Canadian Camping Association accreditation follows.

³⁹consultative help, resource specialists, reference library, first aid kits, etc.

⁴⁰photography, rocketry, music, archery, angling, camping, etc.

Part III

PROGRAM

	C M	G D	M D	S D	N M	N A
1. The program arises from the stated objectives of the "centre." (5.9)	6	5	4	3	2	1
2. The program has particular and specific activities related to the achievement of each objective. (5.4)	6	5	4	3	2	1
3. The program is designed to use outdoor education as a process of education not as a subject in itself. (6.6)	6	5	4	3	2	1
4. The program provides for individual, small group ⁴¹ and large group ⁴² activities. (6.4)	6	5	4	3	2	1
5. The program is varied and diversified, not emphasizing one subject to the exclusion of others. (6.2)	6	5	4	3	2	1
6. The program makes use of human resources ⁴³ from the community. (5.9)	6	5	4	3	2	1
7. The program makes use of material resources ⁴⁴ from the community. (5.6)	6	5	4	3	2	1
8. The program makes use of human resources ⁴⁵ from within the school system. (5.6)	6	5	4	3	2	1

⁴¹five to ten students.

⁴²single classroom to entire group, more than just eating together

⁴³forestry officers, farmers, private camp operator, etc.

⁴⁴neighbors' land, farm machinery, and other privately and publicly owned outdoor study stations, camps, etc.

⁴⁵purchasing department, audio-visual department, specialist consultants, etc.

	C M	G D	M D	S D	N M	N A
9. The program makes use of material resources ⁴⁶ from within the school system. (5.9)	6	5	4	3	2	1
10. The program allows for repose and meditation with the amount of time dependent upon age, physical needs, weather, previous activity, length of stay, etc. (6.5)	6	5	4	3	2	1
11. The program and objectives are communicated to parents and public adequately. ⁴⁷ (6.6)	6	5	4	3	2	1
12. The program allows for students to be active learners not merely observers. (7.0)	6	5	4	3	2	1
13. The program allows time for students to share in care and improvement ⁴⁸ of the "centre." This includes grounds, facilities, and sanitation. (6.6)	6	5	4	3	2	1
14. The program requires the observance of health and safety rules. (6.9)	6	5	4	3	2	1
15. The program allows for meal times to be suitably established ⁴⁹ and observed. (5.9)	6	5	4	3	2	1
16. The program provides students with an opportunity to relax ⁵⁰ and create their own leisure activity. (6.2)	6	5	4	3	2	1

⁴⁶ loan of special equipment such as cameras or telescopes

⁴⁷ opportunity for parents to attend at least one meeting to discuss program and objectives; public informed through media, displays, and so on

⁴⁸ with emphasis upon leaving site as good if not in better condition for future participants

⁴⁹ at least 1½ hours is allowed for wash up, eating, clean up and relaxation per meal

⁵⁰ other than rest periods

	C	G	M	S	N	N
	M	D	D	D	M	A
17. The program does not excessively duplicate services ⁵¹ offered by other institutions. (6.2)	6	5	4	3	2	1
18. The program is planned to act as a catalyst ⁵² to most subject matter areas of the school curriculum. (5.6)	6	5	4	3	2	1
19. The program serves to integrate and correlate subject matter areas of the curriculum. (6.2)	6	5	4	3	2	1
20. The program is closely related ⁵³ to the natural environment. (6.6)	6	5	4	3	2	1
21. The program is planned to meet the needs and interests ⁵⁴ of participants. (6.7)	6	5	4	3	2	1
22. The program allows for flexibility. ⁵⁵ (6.8)	6	5	4	3	2	1
23. The program allows for progressive levels of achievement. ⁵⁶ (6.0)	6	5	4	3	2	1
24. The program allows for the psychomotor ⁵⁷ domain. (6.4)	6	5	4	3	2	1

⁵¹it may enhance these services

⁵²renew interest by giving a subject relevancy

⁵³Is the site used only because of the large area present, e.g. to fire rockets or have an expanded archery or golf program?

⁵⁴salable skills, health and physical fitness, rights and duties of a citizen, family life, economic consequences, methods of science, appreciation of art, literature, music, nature, wise-use of leisure time, respect for self and others, ability to think rationally

⁵⁵program may be changed not necessarily by adult planning alone but by child interest, inclement weather, materials not available, etc. The general atmosphere is informal.

⁵⁶activities would become more challenging rather than repetitious

⁵⁷manual and motor skills

	C	G	M	S	N	N
	M	D	D	D	M	A
25. The program allows for the affective ⁵⁸ domain. (6.1)	6	5	4	3	2	1
26. The program allows for the cognitive ⁵⁹ domain. (6.5)	6	5	4	3	2	1
27. The program allows for group planning, ⁶⁰ discussion, and evaluation by participants. (6.2)	6	5	4	3	2	1
28. The program allows for participants to be involved in a representative form of government at the "centre." (4.8)	6	5	4	3	2	1
29. The program allows for health examinations and check-ups of the participant and his living quarters by a registered nurse or equivalent person. ⁶¹ (5.1)	6	5	4	3	2	1
30. The program allows for domestic crops to be planted, cultivated, or harvested by participants. (4.6)	6	5	4	3	2	1
31. The program allows for domestic animals to be cared for by participants. (4.4)	6	5	4	3	2	1
32. The program emphasizes the study of nature ⁶² within its context. (6.4)	6	5	4	3	2	1

⁵⁸internalization of receiving, responding, valuing, organization and value concept

⁵⁹acquisition of knowledge, and the development of those skills and abilities necessary to use knowledge

⁶⁰committee work in which each participates as a follower and leader, member of a work project, field trip, campfire program, etc.

⁶¹to make the participant health conscious and expand his education in this area; to correct and observe health habits, personal hygiene, sanitation, appropriate dress for weather, etc.

⁶²for example, the study of a living frog in a pond contrasted to a study of a dead frog in formaldehyde

	C	G	M	S	N	N
	M	D	D	D	M	A
33. The program encourages outdoor activities that may become life-long hobbies. ⁶³ (6.3)	6	5	4	3	2	1
34. The program encourages skills ⁶⁴ required for the out-of-doors. (6.1)	6	5	4	3	2	1
35. The program encourages social recreation skills. ⁶⁵ (5.8)	6	5	4	3	2	1
36. The program discourages the use of formal classroom instruction ⁶⁶ in an outdoor setting. (6.7)	6	5	4	3	2	1
37. The program allows for informal games ⁶⁷ designed to fit the needs of children. (5.6)	6	5	4	3	2	1
38. The program allows for the staff and teachers to see and study at the "centre" prior to arrival of the students. (6.4)	6	5	4	3	2	1
39. The program initially is a basic necessity schedule. ⁶⁸ It is presented to the school for activities to be included. (4.9)	6	5	4	3	2	1
40. Input for the activities to be included is received from teachers, resource persons, students, and parents cooperatively. (6.1)	6	5	4	3	2	1
41. The activities to be included are finally organized by the classroom teachers. (5.4)	6	5	4	3	2	1

⁶³rock collecting, bird watching, photography, nature craft, etc.

⁶⁴education for the outdoors, e.g. some are fishing, boating, swimming, skiing, snowshoeing, etc.

⁶⁵folk and square dancing, folk singing, dramatic presentations, story telling, etc.

⁶⁶an example may be to bring a math text from school and answer the questions included in the text while sitting under a tree

⁶⁷wide games using the whole group, scavenger hunts, treasure hunts, etc.

⁶⁸meal times, rest times, chores, days which special resource leaders from the "centre" staff and community are available, etc. Flexibility in these is allowed for if the school wishes.

	C	G	M	S	N	N
	M	D	D	D	M	A
42. A directory of possible program activities is available to the school. ⁶⁹ (6.6)	6	5	4	3	2	1
43. The program attempts to relate classroom experience and subject matter to reality in the out-of-doors through first-hand experience. (6.6)	6	5	4	3	2	1
44. The program encourages exploration and adventure. ⁷⁰ (6.4)	6	5	4	3	2	1
45. The program allows time blocks of at least one half regular school day per activity. ⁷¹ (4.9)	6	5	4	3	2	1
46. The program allows for the classroom group to be visited for the purpose of orientation by the "centre" staff some time before the group's arrival at the "centre." (6.1)	6	5	4	3	2	1
47. The program attempts to be real rather than simulation. (6.5)	6	5	4	3	2	1
48. The program captures the participants' imagination as being worthwhile and relevant. (6.6)	6	5	4	3	2	1
49. The program stresses good conservation practices in all activities. ⁷² (6.8)	6	5	4	3	2	1
50. The program encourages informal teacher-pupil, teacher-counsellor, counsellor-student relationships. (6.5)	6	5	4	3	2	1

⁶⁹This should not limit program possibilities. The teachers should not be encouraged to rely on this list completely.

⁷⁰following trails, mountain climbing, cook-outs and hikes, historical explorations to such sights as abandoned farms, navigating with map and compass and so on

⁷¹three available per day: (a) after breakfast, (b) after lunch, (c) after dinner

⁷²cook-outs, overnight hikes, biology, geology, artifacts, food waste from kitchen, overuse of wilderness study areas, etc.

	C	G	M	S	N	N
	M	D	D	D	M	A
51. The program deals with some local aspects of environmental abuse, misuse or pollution. (5.5)	6	5	4	3	2	1
52. The program encourages the attempt to solve problems connected with man's basic needs of food, clothing, shelter, group living and spiritual uplift. (5.9)	6	5	4	3	2	1
53. Learning methods vary with the age and maturity of the participants. ⁷³ (6.9)	6	5	4	3	2	1
54. The program uses a variety of learning and teaching methods for each particular group. (6.6)	6	5	4	3	2	1
55. The facility and surrounding area has been closely studied by persons representing various disciplines so that maximum use can be made of its unique teaching learning resources in the program. (6.5)	6	5	4	3	2	1
56. As age of participants increases so does specialization and intensity of program. (6.1)	6	5	4	3	2	1
57. The program adjusts and adapts as the season of the year changes. (6.8)	6	5	4	3	2	1
58. The program encourages the benefits of an orderly plan of living. ⁷⁴ (5.5)	6	5	4	3	2	1
59. The program is progressive in that it follows a sequence of prestudy, study on location, and follow-up study. (6.4)	6	5	4	3	2	1
60. Prestudy and follow-up study together should require more time than study on location. (5.5)	6	5	4	3	2	1

⁷³abilities, limitations, needs, interests

⁷⁴regular well balanced meals as well as regular rest periods, play periods and study periods, etc.

	C M	G D	M D	S D	N M	N A
61. The program encourages a spiritual response from participants. ⁷⁵ (5.5)	6	5	4	3	2	1
62. The program encourages self-discipline and group discipline. (6.4)	6	5	4	3	2	1
63. The program emphasizes the intricate relationships between man and environment. (6.5)	6	5	4	3	2	1
64. The program encourages the development of the powers of observation as a means of learning through the involvement of all the senses. (6.6)	6	5	4	3	2	1
65. The outdoor education program is considered to be an integral part of the regular school program. (6.4)	6	5	4	3	2	1
66. The program is evaluated by teachers, students, parents. (6.3)	6	5	4	3	2	1

Part IV

STAFF

- | | | | | | | |
|--|---|---|---|---|---|---|
| 1. An administrative unit ⁷⁶ is responsible for outdoor education. (5.5) | 6 | 5 | 4 | 3 | 2 | 1 |
| 2. The head of the administrative unit is responsible for: | | | | | | |
| A. coordinating efforts of an advisory outdoor education study committee ⁷⁷ (5.5) | 6 | 5 | 4 | 3 | 2 | 1 |

⁷⁵closeness to creation, experience harmony and order, challenge to creativity, adaptability, cooperative fellowship

⁷⁶supervisor, authority, etc.

⁷⁷purpose to make evaluation and recommendations concerning program objectives, and problems, teacher concerns, administrative procedures, etc.

	C	G	M	S	N	N
	M	D	D	D	M	A
B. organizing informational and training sessions ⁷⁸ to familiarize teachers with purposes, guides, and materials for outdoor education (6.4)	6	5	4	3	2	1
C. developing comprehensive teacher training programs by incorporating university courses, in-service courses, visits to camps and other acceptable media (6.2)	6	5	4	3	2	1
D. developing policy for teacher attendance ⁷⁹ at residential outdoor education facilities (5.9)	6	5	4	3	2	1
E. organizing a corps of teacher specialists to cooperate and share with classroom teachers the responsibility for pre-planning activities, resident teaching and follow-up activities (6.1)	6	5	4	3	2	1
F. maintaining an inventory of unique and contributory teacher skills which may be used in teaching outdoor education activities (5.9)	6	5	4	3	2	1
G. developing a program to familiarize teachers with possibilities for the use of the school site and nearby natural areas for the purposes of outdoor education (6.2)	6	5	4	3	2	1
H. coordinating development of a program with offerings appropriate to students from kindergarten to grade 13 (6.3)	6	5	4	3	2	1
I. administering a comprehensive information and public relations program for outdoor education (6.2)	6	5	4	3	2	1

⁷⁸in-service

⁷⁹while being cognizant of teacher concerns such as time away from home, long hours, unfamiliarity with out-of-doors, non-availability of instructional materials and guides, and extra pay for "centre" responsibilities

	C	G	M	S	N	N
	M	D	D	D	M	A
J. coordinating outdoor activities and interests of schools and other interested and concerned persons or groups (5.6)	6	5	4	3	2	1
K. providing necessary service functions. ⁸⁰ (6.4)	6	5	4	3	2	1
3. The "centre" is administered by an outdoor school principal. ⁸¹ (6.2)	6	5	4	3	2	1
4. The principal or his assistant has complete administrative and supervisory responsibility for the program on the site. (5.6)	6	5	4	3	2	1
5. The principal spends at least 80% of his duty time on site. (5.2)	6	5	4	3	2	1
6. The principal of the "centre" appraises teacher qualifications, determines special interests and stresses program activities for which teachers are best qualified. (5.4)	6	5	4	3	2	1
7. The principal has a strong environmental education background. ⁸² (5.6)	6	5	4	3	2	1
8. The principal is able to communicate outdoor education in socially significant terms. (6.2)	6	5	4	3	2	1
9. The principal is able to demonstrate and communicate skills in outdoor activities. ⁸³ (6.2)	6	5	4	3	2	1
10. The principal is a trained competent teacher. (5.5)	6	5	4	3	2	1

⁸⁰negotiations for suitable study sites, requests for special personnel, materials, supplies, equipment, transportation, etc.

⁸¹also may be known as coordinator or director

⁸²physical environment both natural and urban

⁸³recreational, social, personal health, group planning, conservation, science and other school subject areas, and value concepts related to above

	C M	G D	M D	S D	N M	N A
11. The principal is knowledgeable of most aspects ⁸⁴ of the operation of a resident children's camp. (6.3)	6	5	4	3	2	1
12. The principal is able to integrate most outdoor education skills and other outdoor learnings through field work. (6.0)	6	5	4	3	2	1
13. The principal has knowledge of human growth and development. (6.4)	6	5	4	3	2	1
14. The principal is acquainted with research ⁸⁵ in outdoor education. (6.2)	6	5	4	3	2	1
15. The classroom teacher ⁸⁶ understands his or her responsibility for the safety and welfare ⁸⁷ of students while off the school grounds. (6.9)	6	5	4	3	2	1
16. Teachers are encouraged to set learning experiences in activities in which they have most skill and knowledge and which coincide with needs of the group. (6.1)	6	5	4	3	2	1
17. Teacher in-service training for outdoor education is held outdoors in a camp or outdoor school setting. (6.4)	6	5	4	3	2	1
18. A teacher requires a minimum of experience, ⁸⁸ in-service, or pre-service ⁸⁹ education in outdoor education before he or she is allowed to accompany the class. (4.4)	6	5	4	3	2	1

⁸⁴ administration, health and sanitation, safety, campsite facilities and equipment, transportation, leadership and program

⁸⁵ so that he can guide the program planning group

⁸⁶ hereafter known as "teacher"

⁸⁷ a written policy is set

⁸⁸ evaluated by a board or director of the administrative unit

⁸⁹ formal training such as teacher education courses

	C	G	M	S	N	N
	M	D	D	D	M	A
19. Teachers are made aware of the amount of "housekeeping" ⁹⁰ time required in the operation of a residential outdoor school. (5.9)	6	5	4	3	2	1
20. Teacher in-service training is not compartmentalized but various studies are integrated through-out the training session. (6.2)	6	5	4	3	2	1
21. All teachers are able to teach out-of-doors. (4.8)	6	5	4	3	2	1
22. The "centre" is used as a headquarters for leadership training and experience in the out-of-doors for:						
(a) teacher candidates (5.8)	6	5	4	3	2	1
(b) in-service program for practicing teachers (6.0)	6	5	4	3	2	1
(c) preservice and in-service programs for personnel of private and public programs concerned with camping and out-of-doors. (5.1)	6	5	4	3	2	1
23. Any workshops, clinics, or in-service programs attended by the teachers are recorded on the teacher's work record for credit. (4.6)	6	5	4	3	2	1
24. The general format of outdoor education in-service is that:						
(a) teachers go through a program just as their students might (5.3)	6	5	4	3	2	1
(b) teachers are assisted in discovering those things which can be best taught out-of-doors (6.3)	6	5	4	3	2	1
(c) teachers are given techniques and illustrations for use in outdoor education (6.2)	6	5	4	3	2	1

⁹⁰general clean up of cabin and cabin area, dining hall or kitchen duty, etc.

	C	G	M	S	N	N
	M	D	D	D	M	A
(d) teachers are acquainted with learning resources ⁹¹ in the out-of-doors (6.5)	6	5	4	3	2	1
(e) teachers are encouraged to develop programs for their own students. (6.5)	6	5	4	3	2	1
25. Resource teachers ⁹² are employed at the "centre." (6.0)	6	5	4	3	2	1
26. Resource teachers are selected for their general abilities and qualities of leadership. (6.5)	6	5	4	3	2	1
27. Use is made of resource teachers' special talents. (6.5)	6	5	4	3	2	1
28. The make-up of the entire "centre" staff ⁹³ includes as much variety as possible in interests, abilities, training, and experience. (6.4)	6	5	4	3	2	1
29. Counsellors are students. ⁹⁴ (5.0)						
30. Counsellors receive education credit for their work at the "centre." (5.3)	6	5	4	3	2	1
31. The principal has at least one evaluation seminar ⁹⁵ with each counsellor during his or her stay at the "centre." (5.6)	6	5	4	3	2	1
32. Counsellors are treated as members of the staff. (6.2)	6	5	4	3	2	1
33. Counsellors must attend teacher in-service programs or a special counsellor training program. (6.5)	6	5	4	3	2	1

⁹¹human as well as material

⁹²qualified, competent teachers that can help visiting classroom teachers

⁹³principal, resource teachers, counsellors

⁹⁴high school, college or university; usually volunteers

⁹⁵evaluation of the counsellor as well as program

	C	G	M	S	N	N
	M	D	D	D	M	A
34. Counsellors arrive at the "centre" before the students for final briefing. ⁹⁶ (6.0)	6	5	4	3	2	1
35. Preservice in outdoor education is offered to all teacher candidates. ⁹⁶ (5.9)	6	5	4	3	2	1
36. The objectives of the preservice are:						
(a) educational experience for students and teachers to increase their knowledge and value of the environment (6.4)	6	5	4	3	2	1
(b) education of future teachers and in-service for practicing teachers (6.2)	6	5	4	3	2	1
(c) to conduct a residential outdoor education centre (4.6)	6	5	4	3	2	1
(d) that all teacher candidates receive outdoor education experience (5.6)	6	5	4	3	2	1
(e) that stress is laid on inter-relationships (5.9)	6	5	4	3	2	1
37. Preservice at the teacher education level is administered by an interdisciplinary advisory council. ⁹⁷ (5.7)	6	5	4	3	2	1

⁹⁶in institutions that train the largest number of locally hired teachers

⁹⁷plans and guides, professional preparation, informs of trends, needs, and plans, analyzes and evaluates courses, interprets concepts

RECOMMENDATIONS

The following suggestions are offered as recommendations for further outdoor education research:

1. The evaluative instrument developed in this study should be used to evaluate a sample of residential outdoor education centres in Canada.
2. A similar validated evaluative instrument should be developed for "day" outdoor education centres in Canada.
3. A similar validated instrument should be developed for "wilderness" or "outdoor pursuit" outdoor education centres in Canada.
4. A similar validated instrument should be developed for educational tours.
5. Delimitations could be placed upon the development of the validated evaluative instruments that would make them regionalized and possibly more specific, for example, Alberta only.
6. A study should be designed to compare "problem centered" to "curriculum centered" residential outdoor education programs.

FOOTNOTES TO CHAPTER 5

¹George Donaldson, Planning for Resident Outdoor Education
(Northern Illinois University: Lorado Taft Field Campus, 1972), p. 2.

²John Passmore, Outdoor Education in Canada 1972 (Toronto:
Canadian Education Association, 1972), p. 11.

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APPENDICES

APPENDIX A

LETTERS OF SUPPORT

CALGARY SCHOOL BOARD

CALGARY SCHOOL DISTRICT 19

EDUCATION CENTRE BUILDING
515 MACLEOD TRAIL S. E.
CALGARY 21, ALBERTA.

TELEPHONE: 267-9910 (AREA CODE 403)

TRUSTEES

DELOY M. SALLENBACK, Chairman
I. C. MARTINI (Mrs.), Vice Chairman
JOHN CURRAN
HARALD GUNDERSON
JOHN KUSHNER
ALEX PROUDFOOT
SCOTT D. SAVILLE

SUPERINTENDENTS

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C. SAFRAN, B.Sc., M.Ed., Ed.D.
Chief Superintendent of Schools
J. W. JAMES, B.A., M.Ed.
Superintendent Secondary Schools
G. L. FOWLER, M. Ed.
Superintendent Elementary Schools
C. H. SANGSTER, M.Ed., Ph.D.
Superintendent Special Education
G. E. HOLMES, F.C.A.
Superintendent of Business Affairs

TO WHOM IT MAY CONCERN

I wish to offer this letter as support for the thesis topic "Development of an Instrument for Evaluation of Residential Outdoor Education Centres in Canada" as proposed by Master of Education candidate Mr. Nestor N. Kelba.

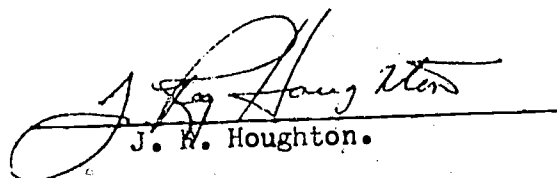
I feel that there is a very real need for such a study to be undertaken and for a suitable evaluative instrument to be devised. As Co-ordinator of Outdoor Education for the Calgary Public School system I receive a great many requests for information on the introduction and development of Residential Outdoor Education centres and programs. There have been, over the past few months, a considerable number of representatives of various educational and governmental agencies who have been making coast to coast examinations and surveys of Outdoor Education. For these reasons such a document, as might result from Mr. Kelba's research and study, would be extremely valuable for the purposes of educators and others interested in developing and promoting Outdoor Education.

It is always a sad thing when groups or organizations are forced to begin endeavours from the very beginning making the identical mistakes that others may have made before them. In truth it should not be necessary for all people to "re-invent the wheel" before they can get their proposal rolling.

I know that I and my colleagues in the field of Outdoor Education would find an evaluatory instrument most valuable in our work. Such an instrument would no doubt be of great interest to the Department of Education and the Department of Culture, Youth and Recreation, both of which are currently engaged in examination of Outdoor Education in Alberta.

Mr. Kelba, by virtue of his experience and his collegial relationships in the field of Outdoor Education is admirably suited to carry out this most important study. To the best of my knowledge there have been no studies of a similar order done in this area and I encourage Mr. Kelba in this project.

I trust that this letter will be considered as a strong recommendation for the existence, pursuit and ultimate completion of this study as a suitable and desirable thesis topic.


J. W. Houghton.

MEMORANDUM

June 8, 1972.

FOR: Mr. Nestor Kelba

FROM: Professor J.H. Passmore

RE: Your Thesis Topic: "The Development of an Instrument
for Evaluation of Outdoor Education Centres in Canada".

1. During recent months I have had an opportunity of travelling across Canada making a study of Outdoor Education and Environmental Education programmes for the Canadian Education Association.
2. Residential Outdoor centres have been established, or are being planned, in all provinces.
3. Many school administrators have expressed a wish for some kind of a well prepared instrument for conducting a reasonably accurate evaluation of the programmes they are presently conducting.
4. Your project would be extremely valuable in providing this assistance, and would nicely complement the national report I am preparing.
5. I strongly support the thesis topic you have chosen for your graduate dissertation.

J.H.P.

APPENDIX B

INTRODUCTORY LETTER

Kamp Kiwanis,
R. R. 1,
Calgary, Alberta.
T2P 2G4

Dear Sir:

I am a Master of Education student at the University of Calgary, Calgary, Alberta. I am presently on sabbatical leave from the Calgary Public School Board where I have held dual positions of Assistant Supervisor of Physical Education and Principal/Director of the Calgary Public School Board Outdoor Laboratory School for the past four years. In addition I am the Director of Kamp Kiwanis, a camp for underprivileged children, which operates for six weeks in July and August.

The Calgary outdoor education program has grown from an initial involvement of 180 students to over 5,000 students this present year. Because of my participation in outdoor education I have met many persons with a like interest and found them all to be different and fascinating people. Through conversations and idea exchange with these people, and because of concerns expressed at the National Camp Standards Conference held from February 29 to March 2, 1972 in Toronto (sponsored by the Fitness and Amateur Sport Directorate and the Canadian Camping Association) at which I was one of the two Alberta delegates, it is apparent that an evaluative instrument for residential outdoor education centres is required.

This instrument would be useful to those who wish to develop, evaluate, or establish priorities for the improvement of residential outdoor education centres.

A jury of twenty-five experts in residential outdoor education representing various geographical areas in Canada will be selected and asked to validate criteria which will become the basis of the instrument.

You have been recommended as a possible member of this jury because of your recognized knowledge and interest in the field of residential outdoor education.

The validation process will require about one hour to complete. Jurors will be urged to complete the validation within a week of receipt of the criteria. In all cases a stamped self-addressed envelope will be enclosed so that a minimum of inconvenience will be caused to the juror.

I would like to emphasize that if you are able to assist me as a juror your efforts and promptness will be greatly appreciated. Your cooperation will enable me to complete my study and will help provide a useful evaluative instrument for residential outdoor education centres in Canada for future years.

I have enclosed a reply sheet for you to complete and return.

Thank you for your time and cooperation.

Respectfully yours,

Nestor N. Kelba.

NNK:les
Encl. 2

APPENDIX C

REPLY SHEET INCLUDED WITH INTRODUCTORY LETTER

Name: _____

Title: _____

Preferred: _____

Address: _____

Please check (✓) the appropriate spaces:

- _____ (1) I would like to act as a juror in this study, will be available in June, and promise to return it with my comments within a week of receipt.
- _____ (2) I regret that I will not be able to act as a juror.
- _____ (3) I would appreciate receiving a copy of the instrument for my files.
- _____ (4) Enclosed is the name, address and position of a person or persons who in my opinion would be acceptable as a prospective juror or jurors.

Name: _____

Title: _____

Address: _____
_____Reason for recommendation: _____

(If more than one juror is recommended please add additional sheets.)

The basis of the list of prospective jurors is Leaders in Outdoor Education by Orville E. Jones and Douglas E. Wade, Northern Illinois University, September, 1971.

APPENDIX D

LETTER INCLUDED WITH PRELIMINARY INSTRUMENT
SENT TO JURORS

R. R. # 2,
Calgary, Alberta,
T2P 2G5
March 4, 1974.

Over a year ago you agreed to assist me in my study "The Development of an Instrument for Evaluating Residential Outdoor Education Centres in Canada." This study would form the thesis requirement for my Master of Science at the University of Calgary.

Subsequently I became ill, a new camp season began and finally my job from which I had a sabbatical leave at the time changed significantly upon my return. I laid my research and completed pilot study aside for a time but now I am able to begin work on my thesis again.

I have updated my research and revised my criteria. The next step is to forward the criteria to the selected jurors for their opinions. As you may recall the response to my request for jurors from all parts of Canada was overwhelmingly positive. Please allow me the privilege to assume that you will still serve as a juror to validate criteria which will become the basis of the instrument.

The validation will require about one to two hours to complete. A self-addressed envelope is enclosed for your convenience.

If you are now unable to act as a juror please return the contents in the self-addressed envelope. If the criteria would be of some use to you please retain it, but in any event let me know if you are unable to act as a juror.

If you are able to act as juror your efforts and promptness will be greatly appreciated. I will take the liberty to gently prod you if I do not have a reply from you in three weeks.

Your cooperation will enable me to complete my study and provide a useful evaluative instrument for residential outdoor education centres in Canada. I have enclosed the preliminary form of the instrument with the directions to the jury of experts included on pages iii and iv.

Respectfully yours,

Nestor N. Kelba

NNK:les
Encl. 2

APPENDIX E

PRELIMINARY INSTRUMENT

Preliminary Form

AN INSTRUMENT FOR EVALUATING RESIDENTIAL
OUTDOOR EDUCATION CENTRES
IN CANADA

by

Nestor N. Kelba

Name of Juror _____

Title of Juror _____

Desired final copy of instrument:

yes

no

TABLE OF CONTENTS

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INTRODUCTION

Outdoor education has been defined as that area of educational experience which can be best acquired out-of-doors. An increasing number of educators are recognizing the advantages of outdoor education as a method of achieving objectives of education.

Residential outdoor education centres are found in most provinces in Canada. The following instrument has been developed for the purpose of giving these residential outdoor education centres a vehicle for self-evaluation.

Where used in this instrument the word "centre" refers to "residential outdoor education centre."

DIRECTIONS TO THE JURY OF EXPERTS

Prior to rating please read the following directions carefully.

1. Briefly read the entire instrument so as to understand its nature and content.

2. Rate each criterion for evaluating a "centre" by placing a circle around the appropriate letter to the right of the criterion:

"Essential" circle "A"

"Very Desirable" circle "B"

"Desirable" circle "C"

"Acceptable" circle "D"

"Questionable" circle "E"

"Unacceptable" circle "F"

"Not Feasible" circle "G"

"Not Applicable" circle "H"

3. If you feel the wording of a criterion may be improved please make the appropriate corrections.

4. If you feel a criterion should be placed in another of the four areas please indicate in which area you would place it.

5. If you wish to add some criteria, please do so, but then rate the added criteria with the same scale as discussed under step two.

Please return the instrument and your comments and suggestions in the enclosed stamped, self-addressed envelope as quickly as possible.

Thank you for your time and consideration.

Part I

PHILOSOPHY AND OBJECTIVES

E V D A Q U N N
S E C U N
S D S C E A F A
E S C E P
S A P

A B C D E F G H

1. A philosophy for outdoor education is developed which is in harmony with the educational philosophy of the sponsoring institution.

A B C D E F G H

2. Those areas within the school curriculum that are better taught out-of-doors are taught out-of-doors.

A B C D E F G H

3. Outdoor educational experiences are offered to all levels of the school system.

A B C D E F G H

4. All students are offered a variety of outdoor education experiences.

A B C D E F G H

5. All students are offered at least one opportunity to be involved in a residential outdoor education experience during their school years.

A B C D E F G H

6. A variety of learning experiences are used, monitored, evaluated, and adapted as necessary in changing circumstances.

¹Outdoor education experiences ranging from the field trip or field study to a stay in a residential outdoor education centre or wilderness camp

E V D A Q U N N
 S E C U N
 S D S C E A F A
 E S C E P
 S A P

7. Students during their stay at the "centre" or as a result of their stay at the "centre" will:

A. experience elements of social living² through group planning, sharing, working and living together with peers and adults.

A B C D E F G H

B. have had direct (first hand) experiences in the out-of-doors for each specific subject matter area.

A B C D E F G H

C. evaluate³ the importance of the natural environment.

A B C D E F G H

D. value⁴ the natural environment.

A B C D E F G H

E. respond⁵ to a meaningful work experience.

A B C D E F G H

F. experience and use a variety of skills required for outdoor recreation.⁶

A B C D E F G H

G. respond⁵ to the opportunity to assume responsibility.

A B C D E F G H

H. value⁴ and use personal health practices.

A B C D E F G H

I. value⁴ and use safety practices.

A B C D E F G H

² respect the rights of others

³ make qualitative and quantitative judgments

⁴ give worth to; slowly being internalized

⁵ actively attend to; committing himself in some small measure

⁶ archery, shooting and hunting, angling and casting, boating and water activities, skin and scuba diving, outdoor winter sports, mountain activities, orienteering, family camping, arts and crafts, hiking and so on.

E V D A Q U N N
 S E C U N N
 S D S C E A F A
 E S C E P
 S A P

J. perceive⁷ and use basic survival skills required when in the out-of-doors.

A B C D E F G H

K. analyse relationships and integrate the outdoor experiences with the regular school curriculum.

A B C D E F G H

L. enjoy himself, or herself.

A B C D E F G H

M. relate and be comfortable with peers and adults in informal situations.

A B C D E F G H

N. experience the concept of a self-contained community.⁸

A B C D E F G H

O. make spiritual responses⁹ to outdoor experience.

A B C D E F G H

Comments and Suggestions

(if more space is needed use other side of page)

⁷attach meaning and improvisations to objects, events, or situations occurring within the spatial or temporal proximity of the individual

⁸converging needs of individual and society

⁹verbalize and think

Part II

ADMINISTRATION

E V D A Q U N N
S E C U N
S D S C E A F A
E S C E P
S A P

1. Good employment procedures and practices¹ are followed in relations with staff.

A B C D E F G H

2. Good medical procedures and practices² are followed before staff and students arrive on the site.

A B C D E F G H

3. Good business procedures and practices³ are followed.

A B C D E F G H

4. Compensation in the form of reduced load or financial compensation is allowed to professional teaching staff who participate in the 24-hour a day outdoor experience.

A B C D E F G H

5. Support staff is employed on the basis of the respective provincial labor codes as to minimum wages, hours of work, time off, etc.

A B C D E F G H

¹written job descriptions, and staff contracts for teaching staff (may be standard teaching contract) as well as for support staff. Canada Pension Plan, Unemployment Insurance, holiday pay, workmen's compensation, Medical Health Plan are considered where they apply

²registration forms indicating next of kin, address and phone, and medical records stating physical health and limitations are required.

³budgets are prepared, financial records kept and audited, inventories and food records available, etc.

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P

6. Volunteer staff⁴ fulfills all conditions⁵ as allowed under the various provincial labor codes.
7. Adequate support staff⁶ is available.
8. Adequate insurance⁷ is maintained and coverage is reviewed periodically.
9. Records of accidents, illness and medical treatment administered on site are maintained.
10. Guidelines are established in the area of parent and teacher liability and both teachers and parents are aware of these.
11. The general organization for living accommodation is of a decentralized⁸ nature.
12. The site is located in a natural setting with a minimum intrusion or development⁹ by man.

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

⁴special resource volunteers such as foresters, local farmers, counsellors (high school students, student-teachers or para-professionals)

⁵to allow them to be exempt from provincial labor codes where they apply to minimum wages, etc.

⁶food service staff, maintenance staff, health staff, stenographic and clerical staff

⁷liability insurance, motor vehicle insurance, non-owner vehicle insurance, passenger hazard insurance, fire and theft insurance, staff accident insurance including workmen's compensation, etc., and extended health care insurance for students

⁸cabin or tent units not larger than 10 students, but entire group comes together as a whole for meals, campfires, etc.

⁹secluded, with plenty of shade, natural features such as hillside, brooks, lakeside and variety of plant and animal life

E V D A Q U N N
S E C U N N
S D S C E A F A
E S C E P
S A P

13. The facilities are designed to complement the surrounding environment.

A B C D E F G H

14. Site has or is in proximity to program enrichment features.¹⁰

A B C D E F G H

15. Facilities are planned to fulfill educational objectives.¹¹

A B C D E F G H

16. Facilities are designed to serve the community when not in use by the schools.

A B C D E F G H

17. A large enough tract of land is available to provide for all phases of outdoor education. A suitable ratio is 1 acre per participant.

A B C D E F G H

18. The facilities are winterized.

A B C D E F G H

19. The site is well drained.

A B C D E F G H

20. Fire protection equipment and procedures are explained to all incoming staff and students.

A B C D E F G H

21. The "centre" is within one hour driving time of the school.¹²

A B C D E F G H

22. Adequate water of acceptable quality for domestic and program purposes is available.

A B C D E F G H

23. A dining hall is available for feeding the entire group at one sitting.

A B C D E F G H

¹⁰ waterfront, open playing field, campfire area, variety of plant life, trees, animals and other natural phenomena

¹¹ weather stations, lab, large building that can include entire group, nature trails, small museums, library, trading post, storage space for tools, display and demonstration areas, etc.

¹² ease of transportation and potential for broad use--quality should not be sacrificed, however

E V D A Q U N N
 S E C U N N
 S D S C E A F A
 E S S C E P
 S A P

- 24. Adequate storage for food, supplies and equipment is available.
- 25. A separate and distinct area is available for an infirmary.¹³
- 26. Laundry facilities¹⁴ are available.
- 27. An administrative office¹⁵ is available.
- 28. Adequate parking is available for busses, staff and volunteer vehicles, "centre" vehicles and others.
- 29. Program units do not average more than 15 students to 1 teacher.
- 30. Special facilities are available that enhance the program unique to the site.
- 31. The facilities cannot be described as resort type.¹⁶
- 32. The entire unit does not exceed 120 participants.
- 33. Living accommodation units do not exceed 10 students to 1 teacher or counsellor.

A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H
 A B C D E F G H

¹³it is used for no other purpose

¹⁴not necessarily for the students

¹⁵contains usual office fixtures including typewriter, duplicating machine, etc.

¹⁶tennis courts, athletic fields, volleyball courts, basketball courts, softball diamonds, large modernistic centralized buildings and services that are found at public recreation areas or near the child's home

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P

34. The "centre" supplies services and resources¹⁷ to the degree required by the school.

A B C D E F G H

35. The "centre" regularly evaluates its objectives.

A B C D E F G H

36. Boys and girls live in separate buildings.

A B C D E F G H

37. Teachers and counsellors are provided with separate rooms from students.

A B C D E F G H

38. Toilet and shower facilities are located within the living quarters.

A B C D E F G H

39. Adequate personal storage space is available for students and staff.

A B C D E F G H

40. Provision is made for housing of program staff and others who are not accommodated in students' living quarters.

A B C D E F G H

41. Provision is made for housing of overnight visitors.¹⁸

A B C D E F G H

42. The sixth grade is the age level¹⁹ (12 years) best suited to a residential outdoor education experience.

A B C D E F G H

43. Where more than one classroom is involved at a session it is encouraged that classrooms come from different schools.

A B C D E F G H

44. The classroom teacher accompanies the students.

A B C D E F G H

¹⁷ may vary from centre supplying leadership, equipment, meals, etc. to merely a sanction for a group supplying its own leadership, food, equipment, etc. within set standards

¹⁸ guests, specialist resource personnel

¹⁹ first priority is given to this group though this is not the only level that should be offered this experience

E V D A Q U N N
 S E C U N
 S D S C E A F A
 -E S C E P
 S A P

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

- 5. The length of stay at the "centre" is at least 5 days and 4 nights.²⁰
- 6. The "centre" is considered as a part of the total school system by teachers, administration, and board.²¹
- 7. The cost of operation²² of the "centre" comes from school funds²³ as does any other part of the school system.
- 8. Personal costs of participants²⁴ are borne by the participants.
- 9. The entire population of the classroom is encouraged to participate.
- 10. No student is denied the right to participate because of inability to meet financial obligations.²⁵
- 11. Whole group assembly and meal times are announced by gongs, bells, or other loud devices.
- 12. Selection procedures are made available to all concerned if schools apply or are selected in some manner.

²⁰ arrive Monday and leave Friday

²¹ teachers' association, administration represented by Central Office administration and principals' associations, and school board have reaffirmed the concept of residential outdoor education

²² maintenance, utilities, instruction, materials, etc.

²³ not from a special budget, trust fund, parents' contribution, etc.

²⁴ food, food services, laundry, transportation, nursing, extended health insurance, etc.

²⁵ the regular constituted agency which normally provides for the child should assume responsibility or an allowance may be built into the budget to support such participants

E V D A Q U N N
 S E C U N N
 S D S C E A F A
 E S C E P
 S A P

A B C D E F G H

53. Respective provincial camping association²⁶ health and sanitation standards for children's resident camps are adhered to.

A B C D E F G H

54. Respective provincial camping association²⁷ safety standards for children's resident camps are adhered to.

A B C D E F G H

55. Respective provincial camping association transportation standards for children's resident camps are adhered to.

A B C D E F G H

56. The "centre" achieves respective provincial and Canadian Camping Association²⁸ camp accreditation.

A B C D E F G H

57. Appropriate permission is sought to use all outdoor study stations off the site.

A B C D E F G H

58. Each new residential outdoor education program begins with a pilot project that is thoroughly evaluated.

A B C D E F G H

59. All teachers who accompany students are informed and oriented.

A B C D E F G H

60. Adequate instructional material, equipment, and professional assistance²⁹ is made available to all teachers.

²⁶ exceptions are New Brunswick and Prince Edward Island which have none. Up to 30 items could be included here.

²⁷ exceptions are New Brunswick and Prince Edward Island. Most comprehensive safety standards are required by Ontario and to a lesser extent by Quebec and British Columbia. Up to 100 items could be included here.

²⁸ If the provincial camping association accredits a camp by its own standards Canadian Camping Association accreditation follows.

²⁹ consultative help, resource specialists, reference library, first aid kits, etc.

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P
A	B	C	D	E	F	G	H

61. Special interest materials, equipment, and professional assistance³⁰ is made available to the teacher.

Comments and Suggestions

(if more space is needed use other side of page)

³⁰photography, rocketry, music, archery, angling, camping, etc.

Part III

PROGRAM

E V D A Q U N N
 S E C U N
 S D S C E A F A
 E S C E P
 S A P

- | | |
|---|-----------------|
| 1. The program arises from the stated objectives of the "centre." | A B C D E F G H |
| 2. The program has particular and specific activities related to the achievement of each objective. | A B C D E F G H |
| 3. The program is designed to use outdoor education as a process of education not as a subject in itself. | A B C D E F G H |
| 4. The program provides for individual, small group ¹ and large group ² activities. | A B C D E F G H |
| 5. The program is varied and diversified, not emphasizing one subject to the exclusion of others. | A B C D E F G H |
| 6. The program makes use of human resources ³ from the community. | A B C D E F G H |
| 7. The program makes use of material resources ⁴ from the community. | A B C D E F G H |

¹five to ten students

²single classroom to entire group, more than just eating together

³forestry officers, farmers, private camp operator, etc.

⁴neighbors' land, farm machinery, and other privately and publicly owned outdoor study stations, camps, etc.

E V D A Q U N N
 S E C U N N
 S D S C E A F A
 E S C E P
 S A P

8. The program makes use of human resources⁵ from within the school system.

A B C D E F G H

9. The program makes use of material resources⁶ from within the school system.

A B C D E F G H

10. The program allows for repose and meditation with the amount of time dependent upon age, physical needs, weather, previous activity, length of stay, etc.

A B C D E F G H

11. The program and objectives are communicated to parents and public adequately.⁷

A B C D E F G H

12. The program allows for students to be active learners not merely observers.

A B C D E F G H

13. The program allows time for students⁸ to share in care and improvement of the "centre." This includes grounds, facilities, and sanitation.

A B C D E F G H

14. The program requires the observance of health and safety rules.

A B C D E F G H

15. The program allows for meal times to be suitably established⁹ and observed.

A B C D E F G H

⁵purchasing department, audio-visual department, specialist consultants, etc.

⁶loan of special equipment such as cameras or telescopes

⁷opportunity for parents to attend at least one meeting to discuss program and objectives; public informed through media, displays and so on

⁸with emphasis upon leaving site as good if not in better condition for future participants

⁹at least 1½ hours is allowed for wash up, eating, clean up and relaxation per meal

E V D A Q U N N
 S E C U N
 S D S C E A F A
 E S C E P
 S A P

A B C D E F G H

16. The program provides students with an opportunity to relax¹⁰ and create their own leisure activity.

A B C D E F G H

17. The program does not excessively duplicate services¹¹ offered by other institutions.

A B C D E F G H

18. The program is planned to act as a catalyst¹² to all subject matter areas of the school curriculum.

A B C D E F G H

19. The program serves to integrate and correlate subject matter areas of the curriculum.

A B C D E F G H

20. The program is closely related¹³ to the natural environment.

A B C D E F G H

21. The program is planned to meet the needs and interests¹⁴ of participants.

A B C D E F G H

22. The program allows for flexibility.¹⁵

A B C D E F G H

23. The program allows for progressive levels of achievement.¹⁶

¹⁰other than rest periods

¹¹it may enhance these services

¹²renew interest by giving a subject relevancy.

¹³Is the site used only because of the large area present, e.g. to fire rockets or have an expanded archery or golf program?

¹⁴salable skills, health and physical fitness, rights and duties of a citizen, family life, economic consequences, methods of science, appreciation of art, literature, music, nature, wise use of leisure time, respect for self and others, ability to think rationally

¹⁵program may be changed not necessarily by adult planning alone but by child interest, inclement weather, materials not available, etc. The general atmosphere is informal.

¹⁶activities would become more challenging rather than repetitious

E V D A Q U N N
 S E C U N N
 S D S C E A F A
 E S C E P
 S A P

24. The program allows for the psychomotor¹⁷ domain.

A B C D E F G H

25. The program allows for the affective¹⁸ domain.

A B C D E F G H

26. The program allows for the cognitive¹⁹ domain.

A B C D E F G H

27. The program allows for group planning,²⁰ discussion, and evaluation by participants.

A B C D E F G H

28. The program allows for participants to be involved in a representative form of government at the "centre."

A B C D E F G H

29. The program allows for health examinations and check-ups of the participant and his living quarters by a registered nurse or equivalent person.²¹

A B C D E F G H

30. The program allows for domestic crops to be planted, cultivated, or harvested by participants.

A B C D E F G H

31. The program allows for domestic animals to be cared for by participants.

A B C D E F G H

¹⁷ manual and motor skills

¹⁸ internalization of receiving, responding, valuing, organization and value concept

¹⁹ acquisition of knowledge, and the development of those skills and abilities necessary to use knowledge

²⁰ committee work in which each participates as a follower and leader, member of a work project, field trip, campfire program, etc.

²¹ to make the participant health conscious and expand his education in this area; to correct and observe health habits, personal hygiene, sanitation, appropriate dress for weather, etc.

E V D A Q U N N
 S E C U N
 S D S C E A F A
 E S C E P
 S A P

A B C D E F G H

32. The program emphasizes the study of nature²² within its context.

A B C D E F G H

33. The program encourages outdoor activities that may become life-long hobbies.²³

A B C D E F G H

34. The program encourages skills²⁴ required for the out-of-doors.

A B C D E F G H

35. The program encourages social recreation skills.²⁵

A B C D E F G H

36. The program discourages the use of formal classroom instruction²⁶ in an outdoor setting.

A B C D E F G H

37. The program allows for informal games²⁷ designed to fit the needs of children.

A B C D E F G H

38. The program allows for the staff and teachers to see and study at the "centre" prior to arrival of the students.

A B C D E F G H

39. The program initially is a basic necessity schedule.²⁸ It is presented to the school for activities to be included.

²²for example, the study of a living frog in a pond contrasted to a study of a dead frog in formaldehyde

²³rock collecting, bird watching, photography, nature craft, etc.

²⁴education for the outdoors, e.g. some are fishing, boating, swimming, skiing, snowshoeing, etc.

²⁵folk and square dancing, folk singing, dramatic presentations, story telling, etc.

²⁶an example may be to bring a math text from school and answer the questions included in the text while sitting under a tree

²⁷wide games using the whole group, scavenger hunts, treasure hunts, etc.

²⁸meal times, rest times, chores, days which special resource leaders from the "centre" staff and community are available, etc.

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P

A B C D E F G H

40. Input for the activities to be included is received from teachers, resource persons, students; and parents cooperatively.

A B C D E F G H

41. The activities to be included are finally organized by the teachers.

A B C D E F G H

42. A directory of possible program activities is available to the school.²⁹

A B C D E F G H

43. The program attempts to relate classroom experience and subject matter to reality in the out-of-doors through first-hand experience.

A B C D E F G H

44. The program encourages exploration and adventure.³⁰

A B C D E F G H

45. The program allows time blocks of at least one half regular school day per activity.³¹

A B C D E F G H

46. The program allows for the classroom group to be visited for the purpose of orientation by the "centre" staff some time before the group's arrival at the "centre."

A B C D E F G H

47. The program attempts to be real rather than simulation.

A B C D E F G H

48. The program captures the participants' imagination as being worthwhile and relevant.

²⁹This should not limit program possibilities.

³⁰following trails, mountain climbing, cook-outs and hikes, historical explorations to such sights as abandoned farms, navigating with map and compass and so on

³¹... available per day: (a) after breakfast, (b) after lunch, (c) after dinner

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

- 49. The program stresses good conservation practices in all activities.³²
- 50. The program encourages informal teacher-pupil, teacher-counsellor, counsellor-student relationships.
- 51. The program deals with some local aspects of environmental abuse, misuse or pollution.
- 52. The program encourages the solving of problems connected with man's basic needs of food, clothing, shelter, group living and spiritual uplift.
- 53. Learning methods vary with the age and maturity of the participants.³³
- 54. The program uses a variety of learning and teaching methods for each particular group.
- 55. The facility and surrounding area has been closely studied by persons representing various disciplines so that maximum use can be made of its unique teaching learning resources in the program.
- 56. As age of participants increases so does specialization and intensity of program.
- 57. The program adjusts and adapts as the season of the year changes.
- 58. The program encourages the benefits of an orderly plan of living.³⁴

³²cook-outs, overnight hikes, biology, geology, artifacts, food waste from kitchen, overuse of wilderness study areas, etc.

³³abilities, limitations, needs, interests

³⁴regular well balanced meals as well as regular rest periods, play periods and study periods, etc.

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

- 59. The program is progressive in that it follows a sequence of pre-study, study on location, and follow-up study.
- 60. Pre-study and follow-up study together should require more time than study on location.
- 61. The program encourages a spiritual response from participants.³⁵
- 62. The program encourages self-discipline and group discipline.
- 63. The program emphasizes the intricate relationships between man and environment.
- 64. The program encourages the development of the powers of observation as a means of learning through the involvement of all the senses.
- 65. The outdoor education program is considered to be an integral part of the regular school program.
- 66. The program is evaluated by teachers, students, parents.
- 67. 75% of the preceding program criteria should be met for an acceptable Residential Outdoor Education Program.

Comments and Suggestions

(if more space is needed use other side of page)

³⁵ closeness to creation, experience harmony and order, challenge to creativity, adaptability, cooperative fellowship

Part IV

STAFF

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P
A	B	C	D	E	F	G	H

1. An administrative unit¹ is responsible for outdoor education.

2. The head of the administrative unit is responsible for:

A. coordinating efforts of an advisory outdoor education study committee²

A B C D E F G H

B. organizing informational and training sessions³ to familiarize teachers with purposes, guides, and materials for outdoor education

A B C D E F G H

C. developing comprehensive teacher training programs by incorporating university courses, in-service courses, visits to camps and other acceptable media

A B C D E F G H

D. developing policy for teacher attendance⁴ at residential outdoor education facilities

A B C D E F G H

¹supervisor, authority, etc.

²purpose to make evaluation and recommendations concerning program objectives, and problems, teacher concerns, administrative procedures, etc.

³in-service

⁴while being cognizant of teacher concerns such as time away from home, long hours, unfamiliarity with out-of-doors, non-availability of instructional materials and guides, and extra pay for "centre" responsibilities

E V D A Q U N N
 S E C U N
 S D S C E A F A
 E S C E P
 S A P

- | | |
|--|-----------------|
| E. organizing a corps of teacher specialists to cooperate and share with classroom teachers the responsibility for pre-planning activities, resident teaching and follow-up activities | A B C D E F G H |
| F. maintaining an inventory of unique and contributory teacher skills which may be used in teaching outdoor education activities | A B C D E F G H |
| G. developing a program to familiarize teachers with possibilities for the use of the school site and nearby natural areas for the purposes of outdoor education | A B C D E F G H |
| H. coordinating development of a program with offerings appropriate to students from kindergarten to grade 12. | A B C D E F G H |
| I. administering a comprehensive information and public relations program for outdoor education | A B C D E F G H |
| J. coordinating outdoor activities and interests of schools and other interested and concerned persons or groups | A B C D E F G H |
| K. providing necessary service functions. ⁵ | A B C D E F G H |
| 3. The "centre" is administered by an outdoor school principal. ⁶ | A B C D E F G H |
| 4. The principal or his assistant has complete administrative and supervisory responsibility for the program. | A B C D E F G H |

⁵negotiations for suitable study sites, requests for special personnel, materials, supplies, equipment, transportation, etc.

⁶also may be known as coordinator or director

E V D A Q U N N
 S E C U N
 S D S C E A F A
 E S C E P
 S A P

A B C D E F G H

5. The principal spends at least 80% of his duty time on site.

A B C D E F G H

6. The principal of the "centre" appraises teacher qualifications, determines special interests and stresses program activities for which teachers are best qualified.

A B C D E F G H

7. The principal has a strong environmental education background.⁷

A B C D E F G H

8. The principal is able to communicate outdoor education in socially significant terms.

A B C D E F G H

9. The principal is able to demonstrate and communicate skills in outdoor activities.⁸

A B C D E F G H

10. The principal is a trained competent teacher.

A B C D E F G H

11. The principal is knowledgeable of all aspects⁹ of the operation of a resident children's camp.

A B C D E F G H

12. The principal is able to integrate all outdoor education skills and other outdoor learnings through field work.

A B C D E F G H

13. The principal has knowledge of human growth and development.

A B C D E F G H

14. The principal is acquainted with research¹⁰ in outdoor education.

⁷physical environment both natural and urban

⁸recreational, social, personal health, group planning, conservation, science and other school subject areas, and value concepts related to above

⁹administration, health and sanitation, safety, campsite facilities and equipment, transportation, leadership and program

¹⁰so that he can guide the program planning group

E V D A Q U N N
 S E C U N
 S D S C E A F A
 E S C E P
 S A P

15. The classroom teacher¹¹ understands his or her responsibility for the safety and welfare¹² of students while off the school grounds. A B C D E F G H
16. Teachers are encouraged to set learning experiences in activities in which they have most skill and knowledge and which coincide with needs of the group. A B C D E F G H
17. Teacher in-service training for outdoor education is held outdoors in a camp setting. A B C D E F G H
18. A teacher requires a minimum of experience¹³, in-service, or pre-service¹⁴ education in outdoor education before he or she is allowed to accompany the class. A B C D E F G H
19. Teachers are made aware of the amount of "housekeeping"¹⁵ time required in the operation of a residential camp. A B C D E F G H
20. Teacher in-service training is not compartmentalized but various studies are integrated through-out the training session. A B C D E F G H
21. All teachers are able to teach out-of-doors. A B C D E F G H

¹¹ hereafter known as "teacher"

¹² a written policy is set

¹³ evaluated by a board or director of the administrative unit

¹⁴ formal training such as teacher education courses

¹⁵ general clean up of cabin and cabin area, dining hall or kitchen duty, etc.

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P

22. The "centre" is used as a headquarters for leadership training and experience in the out-of-doors for:

- (a) teacher candidates
- (b) in-service program for practicing teachers
- (c) preservice and in-service programs for personnel of private and public programs concerned with camping and out-of-doors.

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

23. Any workshops, clinics, or in-service programs attended by the teachers are recorded on the teacher's work record for credit.

24. The general format of outdoor education in-service is that:

- (a) teachers go through a program just as their students might
- (b) teachers are assisted in discovering those things which can be best taught out-of-doors
- (c) teachers are shown techniques and illustrations for use in outdoor education
- (d) teachers are acquainted with learning resources¹⁶ in the out-of-doors
- (e) teachers are encouraged to develop programs for their own students.

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

25. Resource teachers¹⁷ are employed at the "centre."

¹⁶human as well as material

¹⁷qualified, competent teachers that can help visiting classroom teachers

E V D A Q U N N
 S E C U N N
 S D S C E A F A
 E S S C E P
 S A P

A B C D E F G H

26. Resource teachers are selected for their general abilities and qualities of leadership.

A B C D E F G H

27. Use is made of resource teachers' special talents.

A B C D E F G H

28. The make-up of the entire "centre" staff¹⁸ includes as much variety as possible in interests, abilities, training, and experience.

A B C D E F G H

29. Counsellors are students.¹⁹

A B C D E F G H

30. Counsellors receive education credit for their work at the "centre."

A B C D E F G H

31. The principal has at least one evaluation seminar²⁰ with each counsellor during his or her stay at the "centre."

A B C D E F G H

32. Counsellors are treated as members of the staff.

A B C D E F G H

33. Counsellors must attend teacher in-service programs or a special counsellor training program.

A B C D E F G H

34. Counsellors arrive at the "centre" before the students for final briefing.

A B C D E F G H

35. Preservice in outdoor education is offered to all teacher candidates.²¹

¹⁸ principal, resource teachers, counsellors

¹⁹ high school, college or university; usually volunteers

²⁰ evaluation of the counsellor as well as program

²¹ in institutions that train the largest number of locally hired teachers

E	V	D	A	Q	U	N	N
S		E	C	U	N		
S	D	S	C	E	A	F	A
	E			S	C	E	P
	S					A	P

36. The objectives of the preservice are:

- (a) educational experience for students and teachers to increase their knowledge and value of the environment
- (b) education of future teachers and in-service for practicing teachers
- (c) to conduct a residential outdoor education centre
- (d) that all teacher candidates receive outdoor education experience
- (e) that stress is laid on inter-relationships.

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

A B C D E F G H

37. Preservice at the teacher education level is administered by an interdisciplinary advisory council.²²

Comments and Suggestions

(if more space is needed use other side of page)

²²plans and guides, professional preparation, informs of trends, needs, and plans, analyzes and evaluates courses, interprets concepts