1996

Determinants of teacher participation in outdoor education: A survey of Kent County teachers (Ontario).

T. Lance. Balkwill
University of Windsor

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

DETERMINANTS OF TEACHER PARTICIPATION IN OUTDOOR EDUCATION: A SURVEY OF KENT COUNTY TEACHERS

by

Lance Balkwill

A Thesis
Submitted to the Faculty of Graduate Studies and Research
through the Faculty of Education
in Partial Fulfillment of the Requirements for
the Degree of Master of Education at the
University of Windsor

Windsor, Ontario, Canada

1996

ABSTRACT

The purpose of this study was to investigate the extent to which Kent County elementary school teachers involve students in outdoor education activities and to determine the factors that influence this involvement. Four models were developed for this investigation: (a) school climate (i.e., awareness of curriculum, perceptions of administrative support, and legal liability); (b) teacher burnout; (c) teacher's personality type; and (d) teacher's personal background (i.e., qualifications, experience, interest, and expertise). Information for the study was gathered by surveying 203 teachers. The survey consisted of: (a) an Outdoor Education Questionnaire generated by the researcher, (b) Holland's Vocational Preference Inventory (VPI), and (c) the Maslach Burnout Inventory (MBI). Fifty five percent of the surveys were returned with useable data. Two-tailed correlation and stepwise multiple regression analyses indicated that teachers were more likely to involve students in outdoor education activities if they: (a) scored high on the personal accomplishment subscale of the MBI, (b) were identified as having an investigative personality type, according to the VPI, (c) scored high on the awareness scale of school climate model, (d) had been involved in teaching outdoor education in the past, and (e) were involved in outdoor activities during personal time.

DEDICATION

This paper is dedicated to my parents, Gary and Dorothy Balkwill who have been the most significant educators in my life, especially in the outdoors.

ACKNOWLEDGEMENTS

I would like to express my appreciation to my committee for the time and assistance they generously gave in preparing my Master of Education thesis:

Dr. Larry Morton: Thank you for your dedication as the chair of this committee. Your statistical expertise, the numerous meetings, E-mail messages and phone discussions that helped to bring this project to its completion have been invaluable.

Dr. Vern Stenlund - Your candid, explicit feedback was pivotal in keeping me on target throughout the writing of this paper. Thank you very much.

Dr. Victoria Paraschak - Your outdoor recreation course had a significant impact on my interest in this area and your encouragement to pursue this project gave me the motivation to accomplish it.

I would also like to express my gratitude to: the administrators of the Kent County Board of Education. Your approval was vital to the workings of this study; and to the teachers of the Kent County Board of Education. Thank you for the time you took to respond to the survey. Your participation was essential to the completion of this thesis.

Gratitude is also expressed to: Consulting Psychologists Press, Inc., for the Maslach Burnout Inventory; and Psychological Assessment Resources, Inc. for the Vocational Preference Inventory.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I
INTRODUCTION

A. Background

Outdoor Education has long been recognized as an effective teaching strategy. Research has shown it to be a justifiable means of curricular enrichment and a vital method for achieving basic educational goals (Staley, 1983). Teaching out-of-doors allows students to be exposed to an increased amount of educational experiences, and to a greater variety of stimuli than would otherwise be accomplished in a traditional classroom. This "hands on" approach to experiential learning enhances cognitive and skill development while providing avenues through which self-concept and self-esteem can be cultivated (Knapp, 1989).

The Common Curriculum (1995) states that learning involves effort and self-discipline, resulting in the achievement of various learning outcomes. These outcomes are based on building healthy lifestyles and relationships, protecting the environment and developing global perspectives in attitude and behaviour. This type of global, holistic pedagogy, which has been mandated by the Ontario Ministry of Education and Training, seems to emulate the nature and philosophy of outdoor education.

An underlying assumption of this thesis is that outdoor education is a valid, pedagogical strategy for achieving positive learning outcomes with students. This is consistent

with the findings of Staley (1983), Knapp (1989), Bowyer (1990) and Balkwill (1995), and is promoted by the Ontario Teachers' Federation (Babcock et al., 1970, 1971), and the Ministry of Education and Training of Ontario (Common Curriculum, 1995).

B. Definition of Outdoor Education

Many terms exist surrounding the concept of learning and teaching in an outdoor setting. These include: outdoor education, outdoor recreation, and outdoor adventure activities. For the purpose of this study, this author has accepted the following as the operational definition of outdoor education:

Outdoor education: "An experiential process of learning by doing, which takes place primarily through exposure to the out-of-doors" (Priest, 1986, p. 13). This implies that any subject taught outdoors is making use of outdoor education teaching methodologies.

For the purpose of clarity, outdoor recreation and outdoor adventure imply that the activities, which usually take place in a natural setting, contain an element of physical activity, perceived risk or physical danger, or require a wilderness setting. Please note that outdoor recreation and outdoor adventures are forms of outdoor education but outdoor education does not necessarily involve outdoor recreation or outdoor adventure activities. Similarly, an outdoor educator is one who uses the outdoors

as a vehicle to present content from any subject area, not necessarily one who instructs outdoor adventure activities.

C. General Statement of the Problem

Many potential benefits exist in outdoor education, yet how many teachers are actually implementing outdoor education activities in the school setting? What hinders the implementation of outdoor education activities in schools? Some factors may be associated with school climate, including legal liability and funding, teacher burnout, personality type and personal background. Any one, or any combination of these factors could influence teachers when they consider involving students in outdoor education activities. Four models have been developed to address these factors. Each model consists of a cluster of related variables which will allow various configurations of these variables to be statistically examined.

School Climate Model

The issues surrounding a teacher's interaction with the school system are many and complex. Among these issues, several stand out as key issues that may affect the likelihood of a teacher involving students in outdoor education activities. The variables examined here have logical connections to outdoor education and are measurable within the context of this research. They include: (a) awareness of outdoor education as a viable teaching methodology, (b) awareness of outdoor education curriculum

guidelines, (c) awareness of the availability of outdoor education resources, (d) perceptions of administrative support, and (e) legal liability issues.

Burnout Model

Teacher burnout is an issue that affects one's enthusiasm for the job and the quality of one's work. Positive feelings of success and accomplishment in their jobs, as opposed to negative perceptions of emotional or physical exhaustion, would presumably influence the likelihood of involving students in outdoor education activities. The degree to which teachers feel burned out will be assessed and the possible effects on outdoor education will be examined.

Personality Type Model

Recognizing that each person is unique and different, it is, however, reasonable to expect there to be some distinguishable characteristics common to certain types of individuals. People interested in outdoor activities may exhibit similar personality traits. Teachers may also have identifiable personality types. These profiles, and the behaviours associated with them, may indicate the type of teacher who would be more likely to involve students in outdoor education activities. This research will examine these areas of interest and attempt to construct a profile of an outdoor education teacher.

Personal Background Model

It is possible that certain personal factors such as age, years of teaching experience, undergraduate major, interest and expertise, past outdoor education teaching experience, personal involvement in outdoor activities, and a teacher's related qualifications may indicate that he/she is more likely to involve students in outdoor education activities. These factors alone and in combination with the models explained above will be analysed to determine their effects on outdoor education in elementary schools.

Summary

Within the conceptual framework of the four models described above, teachers will be surveyed and their responses will be analysed to determine the factors that are most compelling as the potential driving force behind the propensity for elementary school teachers to implement outdoor education programs with students, or to avoid them. After addressing these issues, one may speculate as to the profile of a teacher who would be more likely to involve his/her students in outdoor education activities.

CHAPTER II

REVIEW OF THE LITERATURE

There is an abundance of literature addressing outdoor education. The following selections, which deal specifically with the models developed herein, will attempt to account for the use, or lack of use, of outdoor education teaching methodologies in elementary schools.

A. School Climate

The following is a review of selected articles presented in chronological order. They deal with certain job related factors that may affect teachers' involvement in outdoor education. Literature that addresses legal liability issues and funding as they pertain to outdoor education in school situations are then examined.

Bowyer (1990) reported on a study of Toronto teachers to identify the reasons associated with the avoidance of out-of-class science activities. The study involved a survey that used a ten-point scale ranging from 'most worthwhile' to 'worthless' to rate outdoor science activities. There were a significant majority of teachers that rated outdoor activities 'most worthwhile' to both students and teachers. Bowyer found it disappointing though, that only 30% of the intermediate teachers and 10% of the senior teachers were involved in outdoor science activities. Bowyer reported that their hesitancy to involve students in outdoor education activities was due to the following concerns as explained by

Bain (in Bowyer, 1990):

1. Allocated class time was not sufficient to accomplish anything worthwhile;
2. Teachers lack the expertise for outdoor work;
3. Teachers do not want to be held responsible for any accidents that may occur and;
4. There is a lack of suitable area for field work. (p. 37)

Following this, research was conducted over a two-year period to examine various aspects of the school climate in 18 elementary schools, three middle schools, and three high schools in six districts of the United States. Based on the data from this research, Anderson (1994) compiled the following four articles that identified some key factors in building and maintaining successful physical education programs. These factors included: (a) supportive teacher relationships, (b) teacher knowledge, (c) program credibility, and (d) administrative support. Albeit a study of physical education programs, similarities such as students being engaged in active learning situations, teachers implementing experiential teaching strategies and classes being conducted outdoors may permit the generalization to an outdoor education program. From this research, Anderson developed a checklist to evaluate the conditions within a school setting that may hinder program development. (see Appendix A). The following four articles

provided the basis for Anderson's checklist.

Gay and Ross (1994) reported on the importance of teachers working collaboratively. Effective teachers took advantage of informal situations such as brief chats in the hallway or sharing stories during free time in addition to the planning that took place during formal gatherings such as staff meetings and while working on specific group projects. These teachers effectively used each other to increase their awareness of teaching strategies, curriculum development, and available resources.

Petersen, Allen and Minotti (1994) indicated that professional knowledge was predominantly a function of experience, and that good teaching depended on many types of knowledge (e.g., content, teaching strategies, the students, and the culture of the school or district).

Kimiecik, Demas and Demas (1994) described ways to create a positive image and to establish credibility for physical education programs. They described five proactive approaches: (a) staying up-to-date through professional involvement, (b) committee involvement, (c) broadening horizons, (d) presentations, displays and announcements, and (e) parent and community involvement. However, they indicated that attaining support and credibility is largely dependent upon the quality of the program itself.

Butler and Mergardt (1994) reported that "gaining administrative support for physical education was a pivotal

factor in building and maintaining programs" (p. 43). Administrative support that led to successful programs came in the following ways: (a) trusting teachers to make decisions and run the program in the best manner possible and allowing teachers to select activities, based on their own strengths and based on student needs; (b) encouraging professional growth through clinics, seminars and workshops (even if it meant hiring substitute teachers, or paying the registration fees); (c) standing behind the teachers in justifying programs to parents and board administrators and; (d) dealing with financial pressures by using discretionary funds, obtaining grants, lobbying PTAs and trading resources and equipment with other schools.

A study conducted by Balkwill (1995) surveyed twelve Boards of Education, representing all regions of Ontario. Results revealed that London, Etobicoke, Hamilton, Waterloo, Wellington, Ottawa, and Lakehead Boards of Education had specialized Outdoor Education Centres that, in some cases, accommodated every student of that particular Board for one or two visits each year. Many other Boards including Essex, Kent, Toronto, Sault St. Marie Separate, and East Parry Sound had Board-approved curriculum guidelines that outlined appropriate outdoor education activities. It was also found that some Boards, or isolated schools, or individual teachers also incorporated outdoor education into the physical education program.

Of particular import to this paper, Balkwill reported that the Kent County Board of Education had two outdoor education documents entitled Mathematics, outdoor style (1972) and Field trips and outdoor education (Pepper, 1974) and had permission from the Metropolitan Toronto School Board to use the document Be Outdoorable (1984). Teachers also could refer to the Ontario Teachers' Federation Manuals Outdoor Education Part I (Babcock et al., 1970) and Outdoor Education Part II (Babcock et al., 1971). Some teachers in Kent County made use of Ministry of Natural Resources programs such as Project WILD, Focus on Forests, and Fishways, along with other teacher-made and Board approved outdoor education resource packages. Workshops and professional development seminars were conducted to promote these programs.

The promotion of outdoor education was also found in the Ministry of Education and Training of Ontario's document The Common Curriculum (1995). A thorough review of the 183 specific learning outcomes in The Common Curriculum revealed that over 43% mentioned outdoor education activities, either directly or indirectly, as ways to achieve desired learning outcomes. Many of these appeared as mandates of what shall be done with students to achieve these essential or specific learning outcomes. The following are examples of statements taken from The Common Curriculum outlining what students will have done by the end of either grades three, six, or

nine (i.e., mandates) or are examples of suggestions given in The Common Curriculum about how teachers can help students achieve those outcomes: (a) visit local natural areas such as fields, woods, wetlands and identify local native plants and animals; (b) visit provincial parks to learn about art forms of various cultures; (c) get involved in skiing, hiking, or birdwatching; (d) identify the patterns of the pedals of a flower or the spiral of a shell; (e) use natural materials such as stone, bone, or wood to create artifacts; (f) observe the wind moving leaves; or (g) observe local wildlife to investigate the needs of living things. (See Appendix B for further examples)

The aforementioned articles generally advocate the use of outdoor education in the school setting. However, literature also exists that addresses some obstacles that may be encountered when promoting an outdoor education program.

For the purpose of this research, issues of legal liability will be considered to fall within the realm of school climate. Numerous pieces of literature that deal with this topic are available via ERIC searches, Internet queries, journal articles, policy documents and memos from various organizations, and transcripts from conferences and seminars. These items, which deal with safety, negligence, risk management, and liability are available in great quantities. The mere presence of these publications in such

numbers serves to indicate the degree of concern this area generates.

The following are concrete examples of cases cited in Hanna (1986) that were litigated in Canadian courts. These illustrate the need for extreme caution and justify legitimate hesitancy on behalf of the outdoor educator to engage in activities involving even minimal risk. Here are the verdicts from actual cases where activities, some involving outdoor pursuits, led to precedent-setting battles that were settled by the courts.

Walton v. Vancouver (1924) - A school board was held liable for allowing an unqualified teacher to supervise a shooting competition, during which a rifle backfired and injured a student.

Moddejonge v. Huron County Board of Education (1972) - An outdoor education coordinator was found negligent, and the board vicariously negligent, when two fourteen-year-old girls drowned at an unsupervised beach while on a field trip. The trip leader was a non-swimmer and no lifeguard was present. Total damages awarded were $56 000.

Michalak v. Dalhousie College and University, Governors of (1983) - An eighteen-year-old girl fractured her fourth thoracic vertebrae while participating in a high-ropes course. She was originally awarded $200 000. After the appeal her damages were lowered to $30 000 due to a substantial recovery. (See Appendix C for other cases

involving litigations against school boards).

These examples of successfully litigated *tort* cases bring to the forefront of the educator's mind justification for avoidance of activities that involve inherent risk.

Tort law, simply put, deals with compensating victims who have been injured due to the action (or failure to act) of another (Hanna, 1986). Litigations in tort proceedings function to (a) establish the relative abilities of the involved parties to bear the financial loss, (b) to punish the wrongs committed, and (c) to discourage the repetition of the wrongful act.

Cases involving outdoor educators usually deal with allegations of negligence. Hanna (1986) describes negligence as an act or statement that is "reckless, careless, and/or involving judgmental error" (p. 28). The five criteria, which if proven, constitute a basis for legal action due to negligence are:

1. A duty of care owed by the defendant to the plaintiff, requiring that the defendant meet a certain standard of care.
2. A breech of the established standard of care or failure to conform to it.
3. Actual injury(ies) suffered by the plaintiff
4. A proximate connection between the defendant's conduct and the plaintiff's injury(ies)
5. No conduct by the plaintiff which will be

prejudicial to this action (i.e., voluntary assumption of risk). (Hanna, 1986 p. 29)

Specifically, for the outdoor educator, one can use the following test for liability when dealing with the moral obligations and legal implications of an outdoor leader's liability while involving participants in an outdoor activity program. The test to determine the outdoor leader's negligence falls within the realm of the five factors stated previously:

1. Determination of the duty owed by the leader to the participant.
2. A breech of that established duty; the failure to meet the prescribed standard of care.
3. Actual physical and/or mental injury to the participant
4. Proof that the defendant leader's negligence was the proximate cause of the participant's injury(ies)
5. Evidence showing that the participant did not voluntarily assume the particular risk which resulted in his injury(ies). (Hanna, 1986 p. 88)

The first of these criteria deals with duty of care. This implies that there is some relationship between the defendant and the plaintiff. In particular for the outdoor leader or teacher, the duty is to supervise, instruct, and train the participant comprehensively and safely in an outdoor activity (Hanna, 1986).

Once the duty of care is established and, in the event of an injury, the injury is attributed to the action of the teacher, tort negligence may be justifiably based on this breech of duty and standard of care. This is provided that the participant did not willingly accept the risk (i.e., signed a release waiver). Since elementary school teachers deal with children under the age of majority, and since an individual (even a parent) cannot sign away another's rights, the concept of voluntary assumption of risk and waivers will not be discussed in this paper.

Closely related to duty of care is standard of care. Standard of care refers to the degree to which the participant entrusts him/herself to another. This may vary depending on: (a) the age, intellect, emotional state and experience of the participant, (b) the difficulty of the activity, and (c) foreseeable risk. In dealing with age, the customary understanding that children are generally owed a higher standard of care than adults is illustrated in the following remarks of a Chief Justice while rendering his verdict, "Children, wherever they go, must be expected to act upon childish instincts and impulses, and those who are charged with a duty and caution towards them, must calculate upon this and take precaution accordingly" (in Hanna, 1986 p. 46). This standard of care, which extends to anyone standing *in loco parentis* -in the place of a parent- was articulated during a case in 1893 when it was stated:

> The school master was bound to take such care of his boys as a careful father would take care of his boys and there could not be a better definition of the duty of a schoolmaster. Then he was bound to take notice of the ordinary nature of young boys, their tendency to do mischievous acts and their propensity to meddle with anything that came in their way. (in Hanna, 1986 p. 51)

The teacher may have a good idea of the students' expected behaviour and capabilities in the classroom, but when involved in outdoor activities, the teacher/leader has the duty to assess each student's capabilities, experience, intellect, and emotional state for him/herself before allowing participation in an activity. Although personal responsibility generally increases with age, it remains the duty of the teacher to recognize debilitating emotional stress as well as overconfidence and prevent those participants from taking undue risk. Assessing the situation using the standard of care expected of a reasonable and careful parent will be the comparative basis for determining if the teacher properly evaluated the likelihood of injury and its potential severity. Hanna (1986) cautions outdoor educators that gearing an activity to the average student leaves the less capable or less experienced students to possibly attempt feats beyond their means.

Difficulty of the activity is strongly related to the relative experience of each participant and the trust that

the teacher is not misleading them into a false sense of competence. This would be a negligent misrepresentation of the real risk to that participant.

Foreseeable risk is also closely linked to participant capabilities. Risks, depending on the activity, may include adverse weather, poisonous plants, wild animals, natural occurrences, the chance of participant illness, and all dangers associated with the activity itself. Many of these risks, and others, can be minimized by: (a) using proper equipment, (b) maintaining a reasonable student:teacher ratio, and (c) ensuring that the activities are appropriate for the competency and capacity of the students involved. At any rate, the teacher has the duty to assess the inherent risks to each individual of the particular group in all circumstances that may occur during the activity.

Weighing the aforementioned factors, not individually but in combination with all others, should guide the teacher in making prudent, reasonable decisions.

> [A]n outdoor leader facing tort charges would be evaluated largely on the basis of the foreseeability he exercised in predicting the likelihood of one of his students/participants being injured, in the activity pursued, and in the manner he was directing it. (Hanna, 1986 p. 97)

As previously mentioned, there is an abundance of literature offering advice and guidance on how to minimize

the chance of an accident happening and to reduce the risk of being successfully sued. This is emphasized by Anglin et al. (1979) after reviewing the safety procedures of the Ministry of Community and Social Services' outdoor programs. They warned that:

> Even for the most experienced and proficient participants, such activities may be hazardous if the weather is bad, the planning is inadequate, the equipment is deficient, or the leader is incompetent. (Section II - Outdoor activities)

To help protect oneself from successful litigation, the teacher/leader should possess actual training and certification in the activity in which the students are being involved (Hanna, 1986; Anglin et al., 1979,1980; Provincial Sport Organization, 1987; van der Smissen, 1994).

It is also the responsibility of the agency (school board) for whom the outdoor leader/teacher works, to ensure that the teacher has the technical knowledge and skill, physical fitness, age, experience, judgement, certification required by law, and common sense to do the job (Hanna, 1986). In reflecting on some of the cases cited earlier, one can see the importance of having qualified people run programs, not only for legal reasons but to avoid unnecessary injuries in the first place. For example, in the Walton case the teacher was not trained in the use of firearms; in the Moddejonge case, the trip leader was

neither qualified (he was a non-swimmer), nor certified (as an aquatics lifesaver) to assume the role of lifeguard.

It was also recommended by Hanna (1986) that teachers should teach and guide activities that are within their personal comfort zone and well below their competency level. This will leave a safety margin of expertise for dealing with adverse or unexpected situations. The leader, whether paid or acting as a volunteer, must assume the role of a reasonable and prudent professional. By accepting a task, one is proclaiming one's competence (van der Smissen, 1994). Supervisory duties include management of behaviour, establishment and enforcement of rules and regulations and inspection of equipment.

Publications dealing with liability, risk management, and safety precautions can be found in great quantities from highly respected sources. The Children's Division of the Ontario Ministry of Community and Social Services produced a 52-page Report of the working group proposing standards and guidelines for outdoor/wilderness programming (Anglin et al., 1979); and a 35-page handbook entitled The Outdoor/ Wilderness Programs Handbook (Anglin et al., 1980). In 1987, the Sport and Fitness Division of the Ontario Ministry of Tourism and Recreation published the Provincial Sport Organizations' Risk Management Manual; and in 1992, the Ontario Physical Education Association held a conference informing educators of Legal Liability and Risk Management

(McGregor, 1992). Also in 1992 Canoe Ontario published its Canoeing Safety Resource Manual (Williams, 1992).

Careful consideration of the aforementioned documents and legal ramifications lead one to suspect that fear of litigation plays an important role in deciding whether or not a teacher would be willing to involve students in outdoor activities, especially activities involving potential risk.

Funding of programs generally varies from Board to Board and from school to school. The Kent County Board of Education policy manual on outdoor education outlines funding guidelines as follows "The cost of an outdoor education programme shall be the responsibility of the school involved" and "transportation shall be within the budget allotted" or "shall be borne by the students and supervisors" (Pepper, p.28)

The literature that deals with issues labelled in this paper "school climate" tends to indicate that the availability of programs, resources, and workshops provides adequate opportunity for making teachers aware of outdoor education as a viable teaching methodology and increasing their experience and expertise in this area. However, there may be other issues such as teaching assignment and years of teaching experience that could affect their involvement. These will be addressed in the survey as possible reasons for the avoidance of outdoor education programs.

B. Teacher Burnout

Burnout of people in helping professions, and of teachers in particular, can adversely affect the lives of the many people who look to them for advice, positive reinforcement, guidance, or approval and those who rely on them to provide a service on which the rest of their lives may depend (Schaufeli et al., 1993)

Since 1980 when Maslach and Jackson designed the Maslach Burnout Inventory (MBI) to assess the frequency and intensity of perceived burnout among persons in helping professions, researchers have been examining and cross examining this tool. Development of the MBI was based on samples of workers in human services organizations including nurses, physicians, teachers, psychologists, psychiatrists, social workers, police officers, and lawyers.

The MBI is a 22-item self administered questionnaire that provides a measure of perceived burnout on three related but independent components. The subscales into which these questions are grouped for analysis are: (a) Emotional Exhaustion (nine items), (b) Depersonalization (five items), and (c) Personal Accomplishment (eight items). Gold (1984) explained the manifestations of these three areas of burnout as follows: The perception of emotional exhaustion occurs when someone feels that they can no longer give of themselves as they could in the past. Depersonalization is the aspect of the burnout syndrome where individuals express

negative and cynical attitudes toward others and, in particular, the people in their charge. Personal accomplishment reflects the perception that one is, or is not, achieving satisfying levels of fulfilment of the job and is or is not making a valuable contribution to the work.

In the original inventory, each statement was rated twice, once for frequency of occurrence of that particular feeling or attitude and once for the intensity of its manifestation. Frequency ratings range from 1 (a few times a year) to 6 (every day). Intensity ratings range from 1 (very mild, barely noticeable) to 7 (major, very strong). Respondents may also indicate that they "never" experience a particular feeling or attitude. Separate scores for each of the subscales on both ratings are generated. High mean scores on the Emotional Exhaustion and the Depersonalization subscales with a low mean score on the Personal Accomplishment subscale indicate the subject perceives him/herself as being "burned out". These scores do not actually categorize a person as "burned out" or "not burned out", but rather allow the respondent to be placed on a continuum from "more burned out" to "less burned out".

Teachers who feel burned out may have more negative perceptions of themselves, their work, and the students. This cynicism can have a detrimental effect on their students, their colleagues, and their families. Teacher burnout has become "a problem of increasing professional

concern" and may be manifested through "irritability, fatigue, frustration, and anger" (Gold, 1984 p. 1009).

Powers and Gose (1986) reported on the Maslach and Jackson finding that burnout can lead to job turnover, absenteeism and low morale. The following section will examine the literature in chronological order, surrounding the implementation and validation of the Maslach Burnout Inventory (MBI). It will focus chiefly on the use of the MBI as it pertains to the teaching profession.

Iwanicki and Schwab (1981) identified the MBI as a useful tool for assessing perceptions of burnout among helping professionals yet they were interested in determining the validity and reliability of the MBI when used with a sample of teachers only. A sample of 469 randomly selected Massachusetts teachers completed the MBI (entitled Survey of Professional Occupations to minimize reactive effects). These educators consisted of classroom teachers, special education teachers and guidance counsellors.

Validity was examined using principal factor analysis with iterations and varimax rotation. Iwanicki and Schwab reported that when used with educators, the MBI measured the same basic constructs as those of the original inventory. They also concurred with authors of the inventory that a negative correlation was found between Emotional Exhaustion and Depersonalization on both the frequency and the

intensity ratings. In assessing construct validity, Iwanicki and Schwab found a moderately strong relationship between the frequency with which feelings associated with burnout are felt and the intensity of those feelings. By contrast though, they recommended that when using the MBI with educators, the Depersonalization subscale should be separated into job-related and student-related factors.

Iwanicki and Schwab used Chronbach's coefficient alpha to determine the reliability of the MBI. Results indicated an acceptable measure of reliability for both frequency and intensity ratings on the Emotional Exhaustion (.90 & .89) and Personal Accomplishment (.76 & .79) subscales and on the job-related factor of Depersonalization (.79 & .80). These compare very closely to the results attained from the administration of the MBI to persons in the helping professions in general. It was noted, however, that there was a low reliability score on the student-related factor of Depersonalization (.66 & .66). Using the Spearman-Brown formula, Iwanicki and Schwab determined that at least three similar items would need to be added to this factor to raise its reliability to .80.

It was concluded that the MBI held sufficient construct validity and reliability (within the parameters mentioned above) to be used with teachers. However, since there was such a high relationship between the frequency of feelings and the intensity of feelings, it may not be necessary to

administer both dimensions to educators, thus reducing the administration time of the inventory.

Gold (1984) administered the MBI to 462 classroom teachers (81% females) from Southern California to empirically test the factorial validity of the inventory. Eighteen schools from six school districts were involved in the replication of the Iwanicki and Schwab (1981) study that would allow comparative results either to strengthen or to refute the reliability and construct validity of the MBI. Prior to the administration of the questionnaire, the title of the Maslach Burnout Inventory was changed to Human Services Survey, to minimize influencing teachers' attitudes. Frequency and intensity ratings were scored separately, and principal factors and varimax rotation were used to analyze the data.

Gold concluded that the MBI demonstrated factorial validity for each of the three subscales that were hypothesized and tested (i.e., Emotional Exhaustion, Depersonalization, and Personal Accomplishment). Both dimensions of the MBI (frequency and intensity) yielded comparable factor structures. It would appear that either scoring system would suffice in identifying teachers who are perceiving themselves as becoming burned out.

This study supported the results of the Massachusetts survey done by Iwanicki and Schwab (1981). A high degree of invariance was reported between the two studies. This lends

credence to this particular inventory as a valid test of perceived burnout among teachers. Gold did, however, reiterate the cautions expressed by Iwanicki and Schwab concerning the interpretation of the Depersonalization scale because of the low reliability estimates of .54 and .63.

Reliability and construct validity were again tested in a study by Powers and Gose (1986). Seventy-two university students including 25 males and 47 females who were enroled in the College of Education at the University of Arizona participated in this study. As did Iwanicki and Schwab (1981), Powers and Gose, used the MBI according to the instructions outlined by the original authors, Maslach and Jackson. Chronbach's coefficient alpha generated estimates for the frequency scores of the Emotional Exhaustion (.86), Depersonalization (.63) and Personal Accomplishment (.72) subscales. The intensity scores of these three subscales produced alpha estimates of .84, .54, and .79 respectively. Powers and Gose extracted four principal factors from both the frequency and intensity dimensions and used varimax rotation to analyze the factor loadings on each subscale.

Powers and Gose summarized by stating that their results furnished some empirical support for the reliability and factorial validity of the MBI when used to measure emotional exhaustion, depersonalization, and lack of personal accomplishment.

Lee and Ashford (1990) compared Maslach's three-factor

model with a two-factor and a single factor inventory. They do acknowledge the convincing support favouring the results of using the three subscales of emotional exhaustion, depersonalization, and personal accomplishment as measures of burnout, but note that the factors of depression, strain, disillusionment, and various coping strategies may affect the manifestation of burnout. Lee and Ashford explain that both physiological and psychological symptoms combine in multiplicative ways to become observable as the syndrome of burnout. Emotional exhaustion parallels the concept of strain and is linked to anxiety, tension, physical fatigue, and insomnia. Depersonalization is a coping strategy engaged to minimize the depletion of one's emotional energy. This is done by treating people as objects or numbers. They speculated that reduced personal accomplishment was the outcome of a "stress-strain-coping sequence" (p. 744). This reflects the use of control and the motivation one assumes in one's work. The perception of mastery of one's employ and the appraisal of one's performance, if negative, may be associated with a sense of helplessness.

Lee and Ashford's data were collected from a sample of 181 human service workers holding supervisory and managerial positions. All three dimensions of the MBI were administered, yet based on recommendations found in previous literature, these researchers collected data for the frequency scale only. Items were grouped into three factors

in each of the three dimensions and the analysis was based on those composite factors using a covariance matrix input model. Statistical analyses were performed using factor analysis with the LISREL VI computer program, which included the parsimonious fit index. In the one-factor model all nine indicators were designed to load together. In the two-factor model, Emotional Exhaustion and Depersonalization were specified to load together and Accomplishment indicators loaded on the second factor. In the three-factor model, each dimension loaded separately.

Results confirmed the hypotheses that Emotional Exhaustion and Depersonalization were strongly associated with physiological and psychological strain, and Personal Accomplishment was strongly correlated with perceptions of performance and the use of control. Lee and Ashford also found, although unexpectedly, a relationship between helplessness and both Emotional Exhaustion and Depersonalization. This was contrary to their initial belief that helplessness was related to Personal Accomplishment. They speculated that helplessness was akin to strain which many dampen one's enthusiasm and motivation, thereby triggering the burnout process itself. Another rationale for these results could have been the wording used in the MBI. Statements designed to assess Emotional Exhaustion and Depersonalization were negatively worded whereas statements soliciting data regarding Personal Accomplishment were

positively worded. Since Lee and Ashford used the MBI with supervisors and managers, the data itself may not be accurately generalized to teachers, although it is important to note that their concluding statement supports the use of the MBI as a useful tool in measuring perceived burnout. They stated that "The three-factor model was superior in fit to the two- and one-factor models, with the first two factors highly correlated." (p. 745)

Byrne (1991) conducted a study to validate the factorial validity of the MBI using 543 teachers (54% males and 46% females) from six intermediate schools, four secondary schools, and one university. Byrne explained the dimensions of the MBI as follows: emotional exhaustion involves feelings of fatigue as one's emotional energies become drained; depersonalization is the development of negative and uncaring attitudes toward others; reduced personal accomplishment consists of a deterioration of self-competence, and the dissatisfaction with one's achievements. This study extended the exploratory factor analytic procedures used by most others, to directly test the three-factor structure using a confirmatory factor analytic approach. Given the limitations recognized by previous researchers, this was to give more construct validity to fully establish the psychometric soundness of the instrument. Initial hypotheses were rejected and exploratory factor analyses were conducted for the two-, three-, and

four-factor models. Both the two- and four-factor structures were rejected for substantive as well as statistical reasons. They did not yield results that could be interpreted meaningfully. Given basic substantive and statistical considerations, the three-factor structure was deemed to be optimal in representing the data for each group of educators. Most items did, in fact, load on their expected target factors.

Post hoc analyses discovered that five items may not be psychometrically sound for use with university professors due to undesirable cross-loading into factors other than the one it was intended to represent. Byrne's (1991) concluding statements revealed strong support for the MBI as a valid and reliable tool for measuring perceived burnout in elementary and secondary teachers. Byrne went on to speculate that the purpose of work for these teachers is primarily focused on helping the students to learn; therefore, emotional exhaustion and depersonalization are inversely related to personal accomplishment. The rationale was that the former two items would be impediments to student achievement, thereby affecting a teacher's perception of the latter.

A longitudinal study of teacher burnout was conducted by Capel (1991). This involved administering a questionnaire to 640 teachers in September, February and June of one school year. Regression analyses were conducted to determine

the predictive influence of the burnout variables over time. Profile analyses investigated changes in the individuals over time. The questionnaires consisted of the MBI being integrated with other scales. Capel stated that

> Burning out results in the long-term gradual erosion of important professional, technical, psychological, and social resources. Burnout occurs when the teacher shows a significantly reduced capability for effective performance with students, due to the substantial depletion of critical resources. (p. 36)

Basically, burnout was the negative consequence of long term stress, and stress was explained as a response syndrome of negative effects. Based on prior research, Capel stated that teachers experience stress in a clear pattern of a regular cycle and the highest degree of stress was found in December and June. Elementary teachers appeared to experience four strong peaks of stress during a ten-month school year, with the possibility of recovery from stress being good in the spring term.

The results from this longitudinal study revealed that no definite pattern of increasing stress emerged over the course of the study, as there was significant variation in the scores at different times of the year. Burnout levels were fairly consistent over the duration of the study. This refutes the hypothesis that burnout is the process of *wearing down over time*. This study concluded that "burnout

is very personal in nature" (p. 44) and may be influenced by a multitude of factors that may or may not be directly related to the job.

Starnaman and Miller (1992) agree that burnout is an individual, psychological and negative phenomenon. It occurs within the individual and may begin with job dissatisfaction or job-related tension. They used the MBI with 182 teachers to assess their degree of stress and hypothesised correlations with various exogenous variables such as, workload, role conflict, and role ambiguity. They identified the outcomes of excess stress to be considerations of leaving the profession or merely continuing to teach at a "minimal level of involvement" (p. 40).

Also in 1992, Walkey and Green performed a study examining the replicable factor structure of the MBI. They indicated that when the three factors, as indicated in the Inventory, were rotated "identical three-factor solutions, reflecting the expected factor structure, were found" (p. 310). These results provided strong support for the presence of the three factors identified by the authors of the Inventory and indicated that the features of the MBI were extremely robust. In their summation, they recommended that Emotional Exhaustion and Depersonalization be thought of as the *core of burnout* and Lack of Personal Accomplishment was closely associated with these two.

The salient points of this review of the literature

germane to teacher burnout are reiterated here as they have implications for the current study.

The MBI is a valid, reliable, and robust instrument for assessing the degree to which human services personnel, including teachers, perceive themselves as becoming "burned out". (Byrne, 1991, 1994; Capel, 1991; Iwanicki & Schwab, 1981; Powers & Gose, 1986; Walkey & Green, 1992).

Burnout is individual in nature (Capel, 1991) but its causes are closely related to job related factors (Starnaman & Miller, 1992). Therefore, the MBI may be used to evaluate a person's perceptions of oneself rather than to evaluate the profession itself.

Levels of teacher burnout fluctuate over the course of the school year and there is good recovery from stress in the spring term (Capel, 1991).

Outcomes of excess stress, leading to burnout, included considerations of leaving the profession or merely continuing at a minimal level of involvement (Starnaman & Miller, 1992). The latter point has implications for a lack of teacher involvement in additional programs such as outdoor education.

Based on this review of the literature surrounding the MBI this researcher feels that this inventory will generate reliable, valid data for analysis in this research.

C. Personality Type

Personal preferences and behaviours may be influenced

by the interaction of a variety of cultural and personal forces such as social class, physical environment, peers, and parents. The question "What type of people are interested in outdoor education?" will be addressed by first examining various personality types.

Holland (1973) identified six personality types by which people could be characterized. Resemblance to a particular type is reflected in one's personal traits and behaviours. These, in turn, affect one's preference for certain activities, interests and vocations. Based on the principle that "The choice of vocation is an expression of personality" (Holland 1973, p. 6), Holland developed the Vocational Preference Inventory (VPI) which consists of a list of 160 occupations to be rated by the subject as interesting or uninteresting. Scores provide an indication of one's vocational preference, which mirrors one's personality type. Personality types, according to Holland are: (a) realistic, (b) investigative, (c) artistic, (d) social, (e) enterprising, and (f) conventional. The following is a brief explanation of each personality type and the vocations associated with them.

Realistic (R)

People categorized as realistic tend to show preference for activities that involve the manipulation of objects, tools and machines. They perceive themselves to have athletic ability and to be persistent, practical, and

masculine. Realistic individuals tend to seek technical, skilled and labouring occupations.

Investigative (I)

People categorized as investigative tend to prefer activities involving the investigation of biological and physical phenomena. They report themselves to be curious, intellectual, analytical, and introverted. They tend to have mathematical and scientific abilities. Investigative individuals tend to seek scientific occupations.

Artistic (A)

People categorized as artistic tend to prefer the creation of art forms including language, visual art, music and drama. They perceive themselves to be expressive, intuitive, feminine, and impulsive and they seem to have an aversion to systematic, ordered activities. Artistic individuals tend to seek artistic, literary and musical occupations.

Social (S)

People categorized as social are generally cooperative, friendly, generous, feminine, kind and understanding. There tends to be a lack of scientific and mechanical ability and an aversion to ordered, systematic activities. Social individuals tend to seek educational and social welfare occupations.

Enterprising (E)

People categorized as enterprising tend to show

persuasive competencies used in the manipulation of others for personal or economic gain. They tend to be aggressive, self confident, adventurous, argumentative, domineering, and impulsive. Enterprising individuals generally possess speaking abilities yet lack scientific abilities and seek sales and managerial occupations.

Conventional (C)

People categorized as conventional tend to show preference for clerical, computational and organizational duties such as maintaining records, filing materials, and manipulating data. They perceive themselves to be conforming, obedient, efficient, inflexible and having numerical ability. There tends to be an aversion to exploratory or unsystematized and artistic activities. Conventional individuals tend to seek office and clerical occupations.

Morton et al. (in press) conducted a study involving 312 university students in Ontario who were on the teaching career path. They reported that "Of the numerous devices available to assist guidance counselors in vocational guidance Holland's (1985) Vocational Preference Inventory (VPI) is one of the easier instruments to use." (p. 1). They also reported that the VPI may be utilized to explore the behavioural characteristics that may have a bearing on teaching practices. It was also reported that the reliability, internal consistency and validity of the VPI is

satisfactory and encouraging when used as measures of personality scales.

Based on Holland's (1973) descriptions of personality types, this study will investigate whether or not outdoor educators (and people interested in outdoor education) have common personality types.

D. Personal Background

Presented here is a review of the available literature addressing the issues of expertise, qualifications, and outdoor education teaching experience as they pertain to the likelihood of a teacher being involved in outdoor education programs with students.

Pepper (1974) prepared guidelines for organizing field trips and outdoor education programs within the Kent County Board of Education. It was expressed that when considering implementing an outdoor education program at the elementary school level, the major concerns focused on the teacher (specifically interest, apprehension, and inexperience). To help deal with this, strict policies on teacher:student ratios were stated, limitations were set on the types of activities that would be approved, and specifications for the teacher/supervisor's qualifications were expressed.

Additional time is often required to be spent to ensure quality programs are being offered. It is a policy of the Kent County Board of Education that an advance visit be made to the site by the supervising teacher for any outdoor

education programme (Pepper, 1974). The Noisy River Environmental Education Centre teacher's handbook (1987) also outlined the extra time teachers should dedicate to outdoor education programs. It was suggested that a teacher can greatly enhance the success of the program through careful pre-planning, and well-chosen follow-up activities. Their booklet suggested more than 21 preliminary steps to be completed by the teacher before visiting the centre.

A review of the Manual of procedures and criteria for outdoor education programs (1993) of the Muskoka Board of Education revealed stringent guidelines regarding the experience and qualifications required by teachers on outdoor education trips. It was stated that an outdoor leader is one who "is a qualified teacher and who holds additional qualifications" and "the teacher with the most expertise in the activity shall make safety related decisions" (p.2).

Many of the issues identified in this research as personal background factors are intertwined with the school climate model, the burnout model, or the personality model. The literature rarely deals with these items individually, however when developing the four models for the purpose of this research and for the predictions and analyses that follow, individual factors have been isolated.

Summary

Literature suggests that outdoor education is a sound

teaching strategy, and there are sufficient resources available to teachers across Ontario, yet many teachers are reluctant to involve students in outdoor education activities. The following reasons for this reluctance were implied in the literature: (a) there are many school-related factors with which teachers must contend, (b) teachers are burned out, (c) teachers do not have the personality profile suited to outdoor education, or (d) certain personal factors affect teachers' interest and involvement in outdoor education activities. The following chapter offers predictions that may account for the current trends in the use of outdoor education activities by teachers within the Kent County Board of Education.

CHAPTER III

PREDICTIONS

Based on the review of pertinent literature, the following predictions are advanced according to the four models that have been developed. The analysis of these models will attempt to explain the extent of student involvement in outdoor education and will seek to identify any predictors that may affect elementary school teachers' propensity to involve students in outdoor education activities.

School Climate Model

Prediction one: Awareness

Teachers who are more aware of: (a) outdoor education as a viable teaching methodology, and/or (b) policy and curriculum guidelines, and/or (c) the availability of resources will be more likely to involve students in outdoor education activities. This prediction is based on Anderson's (1994) research on teacher relationships and teacher knowledge in developing successful school programs.

Prediction two: Administrative support

Teachers who perceive that they have the support of their administrators will be more likely to involve students in outdoor education activities. This prediction is based on Anderson's (1994) research on administrative support in developing successful school programs.

Prediction three: Legal liability

Teachers who believe that outdoor education involves greater risk of legal liability will be less likely to involve students in outdoor education activities. This prediction is based on research outlining some defenses against litigation (Hanna, 1986; van der Smissen, 1994).

Burnout Model

Prediction four: Burnout

Teachers who perceive themselves to be experiencing emotional exhaustion and depersonalization will be less likely to involve students in outdoor education activities, whereas teachers who score high on the personal accomplishment subscale will be more likely to involve students in outdoor education activities. This prediction is based on research by Lee and Ashford (1990) and Starnaman and Miller (1992) outlining how burnout affects teachers.

Personality Type Model

Prediction five: Personality Type

There will be a relationship between the degree to which a teacher involves students in outdoor education activities and the following (teacher) personality types listed in order from suspected strongest correlation to weakest: realistic, investigative, social, enterprising, conventional, artistic. This prediction is based on this researcher's interpretation of Holland's (1973) personality profiles as compared to individuals known to engage in

outdoor activities.

Personal Background Model

Prediction six: Age

Teachers in the 20-30 year old range will be more likely to be involved in outdoor education activities with students. The basis of this prediction lies in the notion that younger teachers are more involved in these types of activities and are willing to accept and try new teaching methods.

Prediction seven: Years of teaching experience

Teachers in the ranges of 4-7 and 8-12 years of teaching experience will be more likely to involve students in outdoor education activities. This prediction is based on the experience of this researcher that teachers in the first three years of their career tend to focus on learning curriculum content and developing effective discipline procedures. They tend to remain within a controlled environment such as that provided by their classroom.

Prediction eight: Undergraduate major

Graduates from kinesiology, science, and biology will be more likely to take students outdoors. This prediction is based on this researcher's experience that it is more common and, more readily accepted to see teachers in these areas taking students outdoors without being perceived as being engaged in a non-academic activity. Whereas teachers from other subject areas may not be afforded this tolerance.

Prediction nine: Interest and expertise

Teachers who show interest in outdoor education and those who have expertise in outdoor activities will be more likely to involve students in outdoor education activities. This prediction is based on the logical connection between what one is interested in and what one does.

Prediction ten: Personal involvement

Teachers who are involved in outdoor activities in their leisure time will be more likely to involve students in outdoor education activities. This prediction is based on the logical connection between one's habits and practices in one's personal life and one's habits and practices at work.

Prediction eleven: Outdoor education teaching experience

Teachers who have experience teaching outdoor education in the past will be more likely to involve students in outdoor education activities. This prediction is based on a logical connection made through this researcher's intuition.

Prediction twelve: Qualifications

Teachers with outdoor education qualifications or other related qualifications will be more likely to involve students in outdoor education activities. This prediction is based on a logical connection made through this researcher's intuition.

To address these 12 predictions, a comprehensive, and specially designed instrument would be needed. The likelihood of finding one published instrument to address

all these factors is doubtful. Since inventories currently exist that address personality and burnout, they were used. However, a questionnaire to specifically address the outdoor education issues and related demographics was created.

CHAPTER IV

DESIGN AND METHODOLOGY

A. Pilot Study

A pilot study involving seven colleagues was performed to check the clarity, validity and appropriateness of the instructions and the questions of the entire survey. Initial contact of these selected individuals was made by telephone. The purpose of the study and the nature of the instrument to be used was explained and a request for participation was extended. A package containing a cover letter, an evaluation page, the Outdoor Education Questionnaire, the Maslach Burnout Inventory, the Holland Vocational Preference Inventory and a return envelope was sent. These teachers were asked to: (a) complete the survey according to the instructions and record the time taken, (b) make notes on the evaluation page of any confusing or unclear instructions, (c) give positive and/or constructive feedback regarding the survey, (d) refrain from discussing it with anyone and, (e) return it in the envelope provided to ensure confidentiality.

Comments from the pilot study subjects noted on their evaluation pages included: (a) "I liked the idea of the instruction 'Please mark on the line'. Therefore, people can't be too wishy-washy." (b) "Clear instructions and good questions." (c) "Very clear and concise. The opportunity for clarification and withdrawal from survey are good ideas."

(d) "The survey looks very professional." (e) "Everything was straight forward. You covered all aspects of outdoor education." (f) "Everything was very clear to me. The cover letter and the clarity of the instructions were excellent."

Based on the feedback received from the pilot study and upon final review of the instrument, "golf or tennis" was added to the list of personal involvement activities, "art" and "health" were added to the list of rotary subjects, and "undergraduate major" was repositioned on page one of the Outdoor Education Questionnaire to reduce the possibility of missing this item. Since it was felt that these changes would not significantly skew the results, the pilot study surveys were included in the data analysis.

Finally, the pilot study instructions and the evaluation page were removed, the Outdoor Education Questionnaire was copied on recycled paper (both sides), then collated with the VPI and the MBI, and prepared for final distribution in late April.

B. Subjects

The target population for this study included those persons employed by the Kent County Board of Education who had full time teaching duties. Using the most current seniority list, all names not representative of the population of interest were eliminated (i.e., principals, vice principals, consultants, secondees, board office personnel, teachers on leave, those who participated in the

pilot study, and anyone else familiar with the preliminary workings of this study). After deciding that a sufficient amount of data could be gathered from approximately 110 surveys, and estimating that 45% would be unreturned or incomplete, approximately 200 surveys would need to be distributed. An equal distribution of males and females was desired so pertinent data was entered and the SPSS PC+ computer statistics program generated a sample of 98 males and 98 females. Including the pilot study subjects, total sample size was 203.

C. Instrumentation

Survey research was conducted to obtain immediate information from such a large sample. The survey consisted of an Outdoor Education Questionnaire, the VPI and the MBI.

Based on a review of the available literature, the researcher developed a five-part Outdoor Education Questionnaire (see Appendix D). Part A of the questionnaire generated demographic information such as gender, age, undergraduate major, years of teaching experience, present teaching assignment, prior teaching experience in the area of outdoor education, and related qualifications. Current and past personal involvement in outdoor education activities were measured on a four-point Likert-type scale. This type of scale is easy for the subjects to understand and complete. It simply requires a checkmarks to generate the frequency data required by the researcher for entry and

analysis. The information from Part A was used in attempting to construct a profile of an outdoor education teacher. Part B consisted of 21 items and used the same four-point Likert-type scale as Part A. This generated information regarding the frequency of current student involvement and past student involvement in outdoor education activities by the teachers surveyed. In part C of the questionnaire, 24 items surveyed the teachers' opinions toward the implementation of outdoor education programs. A four-point Likert-type scale forced the respondents to choose the option that most accurately indicated their beliefs. Choices included "strongly agree", "agree", " disagree", "strongly disagree". Questions were randomly presented. Some questions were positively worded and some were stated negatively in order to generate thoughtful responses. For the purposes of analyses, they were designed in groups to generate information in the following areas: (a) personal interest and expertise teaching in outdoor activities, (b) awareness of outdoor education as a teaching methodology, (c) awareness of outdoor education curriculum guidelines, (d) awareness of the availability of outdoor education resources, (e) perceptions of bureaucratic or administrative support, and (f) feelings toward the risk of legal liability.

The final two parts of the Outdoor Education Questionnaire invited teachers to express their thoughts and

offer any comments that may help in interpreting the results.

Holland's Vocational Preference Inventory was administered to gather information regarding the vocational preferences and, hence the personality types of the respondents.

There are numerous statistically sound instruments for measuring burnout in professionals. The one most suited for this particular application was The Maslach Burnout Inventory - Educators Survey. It was specifically designed to assess the degree to which teachers felt physically and emotionally burned out and the degree to which they felt they were accomplishing worthwhile goals with students. Sufficient copies of the inventory, a manual and a scoring key were purchased from Consulting Psychologists Press Inc., California.

D. Procedures

Request for approval was sent to the Educational Research Ethics Committee of the University of Windsor (see Appendix E). Upon approval, a letter was sent to Mr. B. Asselin, Superintendent of Education - Elementary, Area II (see Appendix F). This letter requested permission to conduct this survey and to use the Board courier for the distribution and return of the questionnaires. A letter endorsing the research was also requested. Approval from the Board was granted to conduct the study and to use the

Board's interschool courier, yet in accordance with Board policy a letter of endorsement was not provided.

On April 15, a package containing a cover letter and instructions (Appendix G), the survey, and a return envelope was sent to each subject. The letter explained the purpose and importance of the research, assured confidentiality and provided instructions for completing and returning the survey by May 3.

Three days after the requested deadline had passed, an E-mail was sent to each school in Kent County. The message expressed appreciation to all staff members who received and completed the Outdoor Education survey and reminded those who did not return it (completed or not), to please send it as soon as possible.

E. Limitations of the Design

The part of the survey entitled "Outdoor Education Questionnaire" was generated by this researcher to address the issues of interest to this study. This may have been a limiting factor since validity and reliability coefficients had not been calculated.

A four-point forced-choice Likert-type scale for responses was used to generate decisive results by forcing subjects to describe most accurately how they felt. This may, however, have caused some frustration if undecided on a response.

Other limitations, over which the researcher had no

control once the instrument was distributed, included: (a) the subjects' understanding of the statements as written, (b) the subjects' preconception of outdoor education (c) the sincerity of the responses, (d) the percentage of unanswered items, (e) the percentage of unreturned surveys, and (f) the inability to determine specific reasons that teachers did, or did not return, the survey.

F. Data Analyses

The focus of the analyses was to identify the type of teacher who would be more likely to involve students in outdoor education activities. Subjects' responses for the Outdoor Education Questionnaire, the scores from the VPI and the scores from the MBI were coded as numerical values and were entered into a SPSS-PC+ computer database. Once the responses for each variable were entered as numerical values, commands were written to the SPSS-PC+ statistical analysis computer program to generate frequency statistics, and perform correlation analyses and stepwise multiple regression analyses. Frequency commands generated response percentages, maximum, minimum, range, mean and standard deviation scores of selected items or variables. Correlation analyses were calculated to assess the strength of the relationships between the dependent variable "current student involvement" and each independent variable. Correlation coefficients are reported at the .01 or .001 level of significance. Stepwise multiple regression analysis

was used to examine multiple variables. One variable was added on each step of the analysis beginning with the most significant. Beta coefficients and R^2 values were reported for the variables in the equation (i.e., within .05 level of significance). Beta coefficients were also reported for variables not in the equation. These values indicated the relationship and the predictability of the independent variables influencing student involvement in outdoor education.

Dependent Variable

The dependent variable was designed to indicate the frequency of "current student involvement" in outdoor education activities. Scores were generated by examining the responses in Part B of the Outdoor Education Questionnaire. Here, teachers indicated the number of times during the current school year they involved students in outdoor education activities in any subject area. The four levels of the response scales were assigned the values zero, one, two, and three. This reflected the level of involvement in the activities listed. If a subject indicated only the activities in which he/she was involved, missing values were treated as if he/she was not involved and zero was entered. By computing the sum of the values assigned to the response scale, a numerical score was generated. This served as an indicator of current student involvement and became the basis for all comparisons. If the Outdoor Education

Questionnaire, overall, was not satisfactorily completed, the entire survey was discarded since the dependent variable would not be available for analysis. This resulted in 112 surveys suitable for analysis.

Independent Variables

Analyses were computed using the factors within the four models as independent variables. The relationship between "current student involvement in outdoor education activities" and these independent variables was examined to determine their contribution to the variance within the dependent variable.

School Climate Variables

School climate variables included awareness, perceptions of administrative support, and perceptions of legal liability issues.

Awareness scores were generated from the responses to questions 4, 5, 13, 15, 16, 17, 18, 20 and 23 of Part C of the Outdoor Education Questionnaire. These responses indicated teachers' awareness of: (a) outdoor education as a viable teaching methodology, (b) policy and curriculum guidelines, and (c) the availability of resources. Administrative support scores were generated from the responses to questions 6, 7, 19, and 22 of Part C of the Outdoor Education Questionnaire. Perceptions of liability issues were measured by the responses to questions 8, 21, and 24 of Part C of the Outdoor Education Questionnaire.

The four levels of the response scale used for these variables were assigned the values zero, one, two, and three. This reflected the degree to which subjects agreed or disagreed with the statements.

Unanswered questions were assigned a value of 1.5. This indicated neither agreement nor disagreement since the scale ranged from zero to three.

Burnout Variables

Burnout scores were generated for each of the three subscales of the MBI. Emotional exhaustion was measured by the responses to nine items, depersonalization was based on five items, and personal accomplishment had eight items. Each item was rated by the subject on a scale from zero to six to indicate how often these feelings are experienced. Zero indicates never and six indicates every day. The sum of the scores within each subscale was calculated. This produced a numerical value for each of the three subscales. These values were compared to the MBI Scoring Key to indicate low, moderate, or high levels of burnout for EE, DP and PA. These scores were entered into the SPSS-PC+ database. If the MBI was not satisfactorily completed, all items were treated as "no-response". Of the 112 completed surveys, 5 subjects did not satisfactorily complete the Maslach Burnout Inventory. This reduced the number of subjects to 107 that were used for analysis of the variables measured by the MBI. If an item was left unanswered, the

mean of the items in that subscale that were answered was calculated and that value was entered for the missing score. The sum of the scores was then calculated and entered into the database.

Personality Type Variables

Personality types were measured by Holland's Vocational Preference Inventory in the following categories: realistic, investigative, artistic, social, enterprising, conventional, self-control, masculinity-femininity, status, infrequency, acquiescence. Scores were tabulated according to the VPI Form HS Answer Sheet and a numerical value for each scale was recorded. Raw scores were converted to z-scores to allow accurate comparisons among the 11 variables. To deal with missing scores, respondents who selected only the items of interest to them, and left the others blank were scored as if they answered "no" to those missing items. If the VPI was not satisfactorily completed, all items were treated as "no-response". Of the 112 completed surveys, 12 subjects did not complete the Vocational Preference Inventory. This reduced the number of subjects to 100 that were used for analysis of the variables measured by the VPI.

In an attempt to construct a profile of the type of teacher interested in outdoor education activities, correlation coefficients and regression coefficients were calculated. This would provide an indication of the relationship between each personality type and current

student involvement.

Personal Background Variables

Personal background variables included: age, years of elementary teaching experience, undergraduate major, interest and expertise in outdoor education, past personal involvement, current personal involvement, past student involvement, past outdoor education teaching experience, outdoor education teaching qualifications and other related qualifications.

Demographic data were generated by the responses to Part A of the Outdoor Education Questionnaire. Unanswered items or missing values were treated as "no-response" and reduced the number of subjects used for analysis of that variable. Age was reported according to five ranges in increments of ten years from 20 to 60+. Data for years of elementary teaching experience was entered from the information contained on the seniority list and its accuracy was confirmed by the responses on the questionnaire. Undergraduate major was coded into the database according to two groups. Group one included kinesiology, science, and biology since they were predicted to be most related to the dependent variable. All other undergraduate majors were treated as the control group in the analysis.

Teachers' interest in outdoor education and the perception of their expertise were measured by the responses to questions 1, 2, 3, 9, 10, 11, 12, and 14 of Part C of the

Outdoor Education Questionnaire. The four levels of the response scales were assigned the values zero, one, two, and three. This reflected the degree to which subjects agreed or disagreed with the statements. Unanswered questions were assigned a value of 1.5. This indicated neither agreement nor disagreement since the scale ranged from zero to three.

Teachers indicated the extent of both their current and their past personal involvement in outdoor activities (other than with students) by reporting the number of times per year they engaged in the activities listed in Part A of the Outdoor Education Questionnaire. The four levels of the response scale were assigned the values zero, one, two, and three. This reflected the level of involvement in the activities listed. If a subject indicated only the activities in which he/she was involved, missing values were treated as if he/she was not involved and zero was entered. By computing the sum of the values assigned to the response scale, a numerical score was generated and used for analysis.

Past student involvement used the same list and response scale as "current student involvement" but asked how many times in their career teachers involved students in the outdoor activities listed in Part B of the Outdoor Education Questionnaire. Scoring and treatment of missing values was handled the same as "current student involvement".

Past outdoor education teaching experience, was measured by the extent to which teachers had experience teaching or supervising outdoor education activities or programs in any capacity such as at school, summer camps, canoeing, skiing and so on. Scores of zero, one, and two were used to indicate no experience, involvement one to five times and involvement more than five times respectively.

Teachers' outdoor education teaching qualifications were measured by the extent to which they had formal training through the Ontario Teachers' Federation Outdoor Education Part I or Part II courses, they held an outdoor education specialist certificate or had received training through any other outdoor education teaching program. Responses were assigned the value zero for "none" and one, two, or three as qualifications increased. Other related qualifications were measured by yes or no responses to holding a current certificate in the following: standard first aid or better, CPR, swimming Bronze medallion or better, and canoeing. Subjects could indicate "other" qualifications by adding to the list and responding to them. These items were rated one for "yes" and zero for "no". The sum of all qualifications scores provided a numerical value for the qualifications variable.

CHAPTER V

RESULTS

Of the 203 surveys sent out, 121 were returned (nine were not completed). This represents 60% that were returned, and 55% suitable for analysis. Based on the returned and usable surveys, the statistical outcomes of this research are reported within the conceptual framework of the four models set forth: (a) school climate, (b) burnout, (c) personality type, and (d) personal background. All reported R^2 values were significant at the .05 level.

Dependent Variable

As a measure of "current student involvement in outdoor education activities", ratings on the four-point scale (0-3) for the 21 items in Part B of the questionnaire could yield a maximum score of 63 for each subject. Actual scores ranged from 0 to 23 with a mean of 4.7, and a standard deviation of 4.9. The frequencies of respondents' scores showed that a very high percentage of teachers never involved students in these activities during the school year (see Appendix H for the results of the Outdoor Education Questionnaire). The following is a list of the activities or subject areas in which students were involved outdoors more than five times during the school year, and the percentage of teachers who reported this involvement: physical education (16.4%), geography (11.9%), science (8.2%), nature walks on school property (7.3%), math (1.8%), technology (0.9%), nature

walks off school property (0.9%), field trips to provincial parks (0.9%), and field trips to natural settings with a guide (0.9%).

School Climate Model

Reported here are the results of the independent variables awareness, administrative support and legal liability. Frequency scores of the responses to questions 4, 5, 13, 15, 16, 17 18, 20 and 23 of the Outdoor Education Questionnaire (shown in Appendix H) indicated that the majority of respondents were aware of, and agreed that outdoor education was a useful teaching strategy that could be integrated with other subject areas, but few were aware of the Board's policy or documents on outdoor education. Teachers who felt they had the support of their administrators were also found to be more likely to involve students in outdoor education activities. The majority of respondents felt that their administrator would approve of, or at least would not discourage, outdoor education activities. Data generated from legal liability questions showed that over 85% of respondents indicated that they would worry about the legal ramifications of teaching outdoor education and almost 60% indicated that teachers who take students on outdoor excursions are at risk of being sued yet only 29% agreed that teachers should have extra insurance (see Appendix H).

The correlation coefficients reported in Table I_1

indicate that significant positive relationships existed between the dependent variable and the following two factors within the school climate model: awareness and perceptions of administrative support.

Stepwise multiple regression analysis was computed by entering the three independent variables that pertain to teachers' interaction with the school system (i.e., awareness, administrative support, and legal liability). An R^2 value of .23 for awareness emerged on step number one of the multiple regression analysis. Administrative support emerged on step two and yielded an R^2 value of .25. Perceptions of legal liability was not found to be a statistically significant predictor of student involvement in outdoor education activities (see Table 1 for beta coefficients). This indicated that general awareness of outdoor education and perceptions of administrative support may be driving forces behind involving students in such activities.

Table 1

Summary of Stepwise Multiple Regression Analysis for School Climate Variables Predicting Current Student Involvement in Outdoor Education.

School climate variables	Beta
Variables in the equation	
Awareness	.43*
Administrative support	.17*
Variables not in the equation	
Legal liability perception	.03

*p < .05.

Burnout Model

Reported here are the results of the independent variables emotional exhaustion, depersonalization, and personal accomplishment. Results of frequency analysis tend to indicate that, in general, the teachers who completed and returned this inventory did not show high levels of burnout. Although 34% of the respondents scored high on the emotional exhaustion scale of burnout, the other two scales indicated that only 21% and 14% scored high on these burnout scales. Table 2 reports the percentages of respondents whose scores fall in each category for the three subscales of the MBI.

Of the three subscales by which burnout is measured (emotional exhaustion, depersonalization and personal accomplishment), a statistically significant relationship was noted for personal accomplishment. The correlation coefficients shown in Table I_2 indicate that a significant positive relationship existed between current student involvement in outdoor education activities and the personal accomplishment subscale of MBI.

Stepwise multiple regression analysis was computed after entering the three MBI subscales as independent variables. An R^2 value of .07 emerged for personal accomplishment on step number one of the multiple regression analysis. This indicated that a low degree of burnout on the personal accomplishment subscale may predict a teacher's likelihood of involving students in outdoor education

activities. Emotional exhaustion and depersonalization were not found to be significant predictors at the .05 level (see Table 3 for beta coefficients).

Table 2

Scores showing Percentage of Respondents for each Level of Burnout for each Subscale of the MBI.

Level of Burnout	Emotional Exhaustion	Depersonalization	Personal Accomplishment
High	33.6	21.5	14.0
Moderate	29.9	27.1	15.9
Low	36.4	51.4	70.1

n = 107

Table 3

Summary of Stepwise Multiple Regression Analysis for Burnout Variables Predicting Current Student Involvement in Outdoor Education.

MBI Subscales	Beta
Variables in the equation	
Personal Accomplishment	.26*
Variables not in the equation	
Emotional exhaustion	.06
Depersonalization	-.04

*p < .05.

Personality Type Model

Reported here are the results of the independent variables of the personality scales; realistic, investigative, artistic, social, enterprising, conventional, self-control, masculinity-femininity, status, infrequency, acquiescence.

Correlation analysis indicated that teachers who scored high on the investigative scale were reported to show a significant positive relationship with current student involvement in outdoor education (see Table I_3).

Stepwise multiple regression analysis was computed using z-scores of Holland's 11 personality types as independent variables and current student involvement as the dependent variable. An R^2 value of .07 emerged for investigative personality type on step number one of the multiple regression analysis. This indicated that a person with an investigative personality type, as defined by Holland, may be more inclined to involve one's students in outdoor education activities. No other personality types were found to be significant predictors at the .05 level (see Table 4 for beta coefficients).

Table 4

Summary of Stepwise Multiple Regression Analysis for Personality Type Variables Predicting Current Student Involvement in Outdoor Education.

Personality Type variables	Beta
Variables in the equation	
Investigative	.26*
Variables not in the equation	
Realistic	.003
Artistic	.01
Social	-.12
Enterprising	-.14
Conventional	-.14
Self-control	-.09
Masculinity-femininity	-.05
Status	-.05
Infrequency	.04
Acquiescence	-.02

*p < .05.

Personal Background Model

Reported here are the results of the ten independent variables related to subjects' personal background (i.e., age, gender, years of elementary teaching experience, undergraduate major, interest and expertise in outdoor education, past personal involvement, current personal involvement, past student involvement, past outdoor education teaching experience, qualifications).

Frequency data regarding the demographic variables showed that less than 20% of respondents were under 40 years old, 57% were between 40 and 49, and 15% were over 50 years old. The average years of teaching experience was 18.3 and ranged from 0 to 35. Undergraduate major statistics showed that 50% of the respondents did not answer this section. Of the subjects that did indicate their undergraduate major, 6.3% graduated from either kinesiology, science or biology. Frequency scores also revealed that the majority of teachers showed interest in the outdoors but did not feel they had the expertise to teach outdoor education. More than 54% of the respondents reported having no prior experience teaching or instructing outdoor education activities, whether at school, at a summer camp, or in any other capacity.

Current personal involvement scores were generated by calculating the sum of the ratings on the four-point scale (0-3) for the 12 items in Part A of the questionnaire. This could yield a maximum score of 36 for each subject. Actual

scores ranged from 0 to 19 with a mean of 5.3, and a standard deviation of 4.4.

Almost 90% of respondents reported having no formal teaching qualifications in the area of outdoor education. Some did however, report having swimming, canoeing, first aid or CPR qualifications. There were a few (5.5%) that reported having related training from other sources such as the army, or a Faculty of Education, an Educators course at Bark Lake, sailing, or SCUBA diving or through participation in programs such as Focus on Forests, Fishways, Project Wild.

The correlation coefficients shown in Table I_4 indicate that significant positive relationships existed between current student involvement in outdoor education activities and the following personal background factors: interest and expertise, past outdoor education teaching experience, past personal involvement, current personal involvement, and past student involvement. Weak positive correlations emerged for qualifications, and gender. Weak negative correlations emerged for age, undergraduate major, and years of teaching experience when compared with the dependent variable current student involvement. These variables, however, were not statistically significant at the .01 level.

Stepwise multiple regression analysis was computed using all ten variables listed above as the independent variables. An R^2 value of .27 emerged for past outdoor

education teaching experience on step number one of the multiple regression analysis. Current personal involvement emerged on step two and yielded an R^2 value of .38, and on step three past student involvement emerged with an R^2 value of .44 (see Tables 5 for beta coefficients). This indicated that having taught outdoor education in the past in any capacity, being involved in outdoor activities in leisure time and having involved students in outdoor activities in the past may drive current involvement of one's students in outdoor activities.

Table 5

Summary of Stepwise Multiple Regression Analysis for Personal Background Variables Predicting Current Student Involvement in Outdoor Education.

Personal Background variables	Beta
Variables in the equation	
Past outdoor education teaching	.32*
Current personal involvement	.33*
Past student involvement	.25*
Variables not in the equation	
Interest & Expertise	.22
Undergraduate major	-.05
Qualifications	.07
Age	-.08
Years of elementary teaching	-.17
Gender	.12

*p < .05.

Summary

The factors motivating people to choose certain activities and to avoid others are unique to each individual. From the results reported here, generalities may provide an indicator of the types of individuals who are attracted by outdoor activities and more likely to involve students in them. Certain factors were found to be correlated with the extent to which students were involved in outdoor activities in schools. Some factors were computed to have predictive influences on this involvement. These factors, along with the factors that were not found to be related to the dependent variable will be discussed according to the predictions that were made previously. Logical explanations and intuitive interpretations of these results will be offered.

CHAPTER VI

DISCUSSION

Scores for the dependent variable, which was a measure of student involvement in outdoor education activities, were very low (a mean of 4.7 out of a possible 63). This indicates a general trend of teachers not taking advantage of the outdoors to teach lessons or to integrate curriculum. The possible reasons for this will be discussed according to the four models that have served as the basis for investigating the research question "What hinders the implementation of outdoor education activities in schools?"

School Climate Model

Two factors within the school climate model that were found to be associated with student involvement in outdoor education activities were awareness and perceptions of administrative support.

Prediction one: Awareness

Significant results of the correlation and regression analyses support the prediction that teachers who are more aware of: (a) the potential benefits of outdoor education programs; (b) the availability of resources, curriculum guidelines; and (c) the types of activities that constitute outdoor education in other subject areas will be more likely to involve students in outdoor education activities.

Comments made by subjects give further evidence of the high level of awareness and positive attitudes demonstrated

by some of the respondents. Examples include "I have found children to be intrinsically motivated when involved in outdoor education. The quality of learning is superior to the class experience" and "I feel outdoor education is a great way to teach many subject areas. Students love it." (Appendix J reports the comments made by respondents.)

This finding seems quite logical. Teachers who are involved in outdoor education would naturally be more aware of outdoor education methods and teachers who are more aware would be more inclined to be involved. One can enter such a cycle at either point. Increasing awareness can be targeted or getting more teachers involved may be a starting point to promoting outdoor education. It is the opinion of this researcher that once this cycle has begun it will perpetuate itself and lead to a more extensive outdoor education program.

Prediction two: Administrative support

Correlation analysis indicated that teachers who perceive that they had the support of their administrators were more likely to involve students in outdoor education activities. Administrative support also generated a significant regression value which further supports the predictability of this variable affecting student involvement in outdoor education activities.

Perceptions of administrative support may be affected by the professional and social relationship between the

teacher and the administrator, and by the similarities or differences in their personalities, opinions and teaching styles. It is hoped that administrators would support and encourage teachers to take advantage of all available resources and professional development to help provide a wide range of educational experiences for students. This is consistent with the findings of Butler and Mergardt (1994) that supportive administrators trusted teachers, encouraged professional growth, became involved in their programs and stood behind teachers in advocating the program and justifying funding. One respondent summed up this issue very clearly by stating "I think it all comes down to what the administration at the school allows you to do and how they make you feel about using the outdoors."

Prediction three: Legal liability

Legal liability did not manifest itself as a statistically significant factor in the analysis. This may have been affected by the few number of items in the questionnaire dealing with this issue. Frequency data did however show that most respondents agreed that the risk of litigation is real, but felt that extra insurance was not needed. This apprehension was expressed by one respondent as follows: "In this age of the fear of lawsuits, I'm not too keen on taking a class of 30 intermediate students into the outdoors unless there were a structured and supervised program available which was age appropriate."

It was indicated in the literature that a successful lawsuit would be based primarily on proof of negligence, yet this researcher feels that even if found not guilty, the allegation itself and the process of following legal channels to prove one's innocence sometimes takes years to sort out and does irreparable damage to a teacher's career. Consequently, many teachers may simply avoid programs such as outdoor education in the first place. As one teacher commented "I enjoy the outdoors but don't always enjoy sharing it with students. The responsibility scares me."

In some cases, however, fear of litigation may encourage teachers to develop a highly credible, safe, and well-planned program of activities. If the teacher adheres to the guidelines and policies of the Board in terms of appropriate activities and required qualifications, and if he/she uses good judgement, legal concerns will not be strong enough to warrant avoidance of outdoor activities.

Burnout Model

Prediction four: Burnout

It was not surprising to find that teachers who returned the survey did not report high levels of burnout. As for the others, one can only speculate if burnout was the reason for them not returning it. Although emotional exhaustion and depersonalization were not found to be statistically significant factors in the analysis, it may be logical to surmise that teachers who were emotionally

exhausted may not have completed or returned the survey. Also, teachers who may have depersonalized their students would not feel comfortable reporting this on a written survey.

Personal accomplishment refers to one's feelings of competence and successful achievement in one's work with people. Specifically for teachers, success is generally seen as helping students to learn and grow. Analyses indicate that teachers who feel they have been a positive influence on students' lives would be more likely to involve students in outdoor education activities. The converse may also be true, that seeing students enjoy participating in outdoor education activities enhances feelings of personal accomplishment. Either way, the results would be very positive for the students.

Personality Type Model

Prediction five: Personality type

Results indicate that teachers who show an affinity for involving students in outdoor activities tend to score high on the investigative personality scale. The personal preferences and behaviours associated with this personality type have logical connections to outdoor education activities. It is the experience of this researcher that individuals known to engage in activities related to outdoor education tend to display the following traits: (a) They enjoy investigating biological and physical phenomena such

as stars, trees, waterfalls, and plant and animal life. (b) They are curious and analytical. They often are intrigued by things such as an animal they have not seen before and seek to find out what it is, where it lives, and how it interacts with its surroundings. (c) They may appear introverted. That is, they can be quite content being by themselves enjoying the peaceful solitude of a natural setting. (d) They have mathematical and scientific abilities. These are sometimes necessary for navigation or survival. For example, they are often proficient in skills such as orienteering, telling time and direction by shadows, and identifying poisonous and edible plants. These qualities of a typical outdoors-person parallel the traits of a person identified by the VPI as having an investigative personality.

It is interesting to note that realistic personality type was not a predictor as was originally anticipated. This shows that outdoor education does not necessarily attract people who are athletic and enjoy physical occupations. This may help to dispel the stereotype that outdoor education is for active, athletic individuals. It is far broader than originally thought.

Personal Background Model

Prediction six, seven, and eight: Age, years of teaching experience, and undergraduate major

It is intriguing to note that neither age, years of teaching experience nor undergraduate major were found to be

statistically significant factors in predicting the likelihood of involving students in outdoor education activities. The predictions regarding these factors may have been affected by stereotypes and the past experiences of the researcher. It is now the contention of this researcher that outdoor education can be used by teachers of any age, experience or subject area. This makes perfect sense because outdoor education is not necessarily physical activity and can be a welcomed change from the classroom for teachers and their students. Outdoor education is the vehicle by which content is introduced and presented, therefore can be used by teachers in any specialty subject area. For example teachers who majored in history or art can take students outdoors and research or sketch ancient buildings or cemetery headstones. Math teachers can teach ratios by examining sizes of objects and their shadows. Teachers specializing in English can have students write poetry about what they see in a garden or the school yard.
Teachers who majored in french can hold conversation classes outdoors or have as scavenger hunt to increase students' vocabulary. And finally, science and environmental studies specialists have a world of resources to study ecosystems, and the impact of humans on the environment.

Prediction nine: Interest and expertise

It is interesting that correlation analysis generated a statistically significant positive correlation between the

dependent variable and the measure of interest and expertise, yet regression analysis did not show it to be a predictive factor. The logical assumption that teachers interested in outdoor education would have completed and returned the survey leads one to speculate that there should have been a stronger relationship. A possible explanation for this may be that one's interest may be different than the perception of one's expertise or their ability to teach outdoor education. For example, a teacher may be interested in outdoor activities but may not feel confident in taking students outdoors and maintaining a comfortable level of class control. A future study may benefit from testing these variables individually. Also, the number of variables listed in the regression analysis may have affected this outcome. As the number of variables increases in regression analysis the distribution of the variance of the dependent variable is altered.

Prediction ten: Personal involvement

Personal involvement is undoubtedly a reflection of one's interest and contributes to one's expertise so it is puzzling why current personal involvement scores emerged as a statistically significant factor on the regression analysis and interest and expertise did not. This raises an interesting point. Were these people first involved in various outdoor activities, then chose teaching as a career; or were they teachers first who chose to involve their

students in outdoor education activities? One may only speculate where this involvement began for these current teachers, but for future generations of students who may become teachers, if exposure and positive experiences are presented early in one's life, the possibility of perpetuating outdoor education in schools is optimistic.

Prediction eleven: Outdoor education teaching experience

Generally, having successfully taught something increases one's confidence and competence. For this reason it is not surprising that the prediction was supported that having past teaching experience in outdoor education would be positively related to currently involving students in such activities. It is interesting to note though, that this was the strongest predictor within the personal background model. Closely associated with this was the past student involvement variable, which also was a significant factor. From this, one may suspect that if a teacher can be encouraged to become involved in outdoor education, he/she will continue this involvement.

Prediction twelve: Qualifications

Since so few respondents held any related qualifications, a pattern of any relationship was not indicated by the analyses. This lack of qualified people is cause for concern and leads to questions as to why this is so.

Other Issues that Emerged from this Research

Funding was mentioned as a peripheral issue in the school climate model and was not directly investigated in this study. Comments from respondents did mention concerns of lack of funding for school programs in general and more specifically that outdoor education "will be cut dramatically with cutbacks in funding". Other comments mentioned funding, money, and lack of equipment as limiting factors to implementing outdoor education programs.

CHAPTER VII

CONCLUSIONS

A. Summary

The main purpose of this study was to investigate the extent to which teachers of Kent County elementary schools involve students in outdoor education activities, and to determine the factors that influence this involvement. Results indicate that teachers, in general, involve students in few outdoor education activities, if any.

Analysis of the results of the four models may allow one to speculate as to the profile of the type of teacher who is more likely to involve students in outdoor education. This teacher perceives him/herself to be one who: (a) is aware of how outdoor education can be implemented in schools (scores high on awareness scale of school climate); (b) believes that administrators support outdoor education (school climate); (c) generally accomplishes goals and feels successful in one's job (high personal accomplishment on MBI); (d) has an investigative, curious and intellectual personality (high investigative score on VPI); (e) has taught outdoor education in the past (past experience in personal background model), and (f) is involved in outdoor activities during personal time (current personal involvement in personal background model).

The results of this study may be used to promote an awareness of outdoor education as a valuable teaching method

to help students to achieve educational outcomes. Heightened awareness may be the first step toward the acceptance of an outdoor education program as an advantageous part of the curriculum. This acceptance may, in turn, initiate the approval and promotion of these long overdue programs. The benefits will be realized by students involved in future outdoor education programs. Consequently, outdoor education should be introduced into the school curriculum in the early years and continue to be offered throughout every grade level of the school system. Participants will then benefit from the healthy habits and positive attitudes that these activities can promote. With these arguments in mind, one could make a strong case for encouraging the implementation of outdoor education into the regular school curriculum.

It must also be recognized that outdoor education may not be of interest to some people. Teaching methodologies should not be forced on people who do not feel comfortable in these areas, yet the option should be available.

B. Recommendations to Educators

As a basis for long term development and significant change in curriculum, the results and conclusions of this study indicate that the Kent County Board of Education might be advised to: (a) examine how outdoor education can meet many of the learning outcomes stated in the Common Curriculum; (b) update the 1974 policies and guidelines for the administration of outdoor education programs; (c)

increase the awareness of outdoor education as a practical, and viable teaching methodology through workshops during professional activity days; (d) research and promote the use of various outdoor education resources and locations available to teachers for field trips, day trips and extended excursions; (e) promote the opportunity for teachers to join their classes with experienced teachers on outdoor education activities and field trips to increase the involvement, experience and expertise of more teachers; (f) allow teachers the flexibility afforded them by The Common Curriculum to present content from all subject areas using outdoor education methodologies; (g) allocate sufficient funds to outdoor education programs for the purchase of equipment, training of teachers and management of programs; (h) consider selecting for the position of outdoor education coordinator, a person who has awareness, training, qualifications and experience teaching outdoor education. This person should be one who is not burned out, has an investigative personality, and is very involved in various outdoor pursuits in leisure time.

C. Recommendations for Future Research

This study was an exploratory, cross-sectional survey of Kent County Elementary school teachers. The following ideas for future research may further advance this field of knowledge: (a) perform longitudinal studies on those teachers who are involved in, or dropped out of, outdoor

education activities with students to investigate the effects on those teachers (e.g., burnout scores, liability issues), (b) focus on students whose teachers involve them in outdoor education activities to investigate the effectiveness of this methodology in meeting educational outcomes, (c) compare these findings to the trends of outdoor education in secondary schools.

If replication of this survey were to be done the following suggestions are offered: (a) follow up on unreturned surveys to determine the reason that it was not completed and returned, (b) add more questions dealing with the liability issue, (c) separate interest and expertise as personal background factors, (d) condense certain items to reduce the administration time of the survey.

REFERENCES

Anderson, W. G. (Ed.). (1994). Building and maintaining outstanding physical education programs: Key factors. Journal of Physical Education Recreation and Dance, 65(7), 22-49.

Anglin, J., Cartwheel, G., Dawson, R., Hoen, B., Hogg, E., Lowes, B., Palm, J., Miranda, B. L., Metcalf, J., Trussler, T., & Walter, D. (1979). Report of the working group proposing standards and guidelines for outdoor/wilderness programming. Ontario: Ministry of Community and Social Services: Children's Services Division.

Anglin, J., Cartwheel, G., Dawson, R., Hoen, B., Hogg, E., Lowes, B., Palm, J., Miranda, B. L., Metcalf, J., Trussler, T., & Walter, D. (1980). The outdoor /wilderness programs handbook. Ontario: Ministry of Community and Social Services: Children's Services Division.

Babcock, W. J., Bidal, R., Duquemin, C., Fraser, L., Johnson, B., Van Den Hoek, H. J., & Whyte, B. (1971). Outdoor education manual: Part II. Ontario Teachers' Federation.

Babcock, W. J., Bidal, R., Duquemin, C., Fraser, L., Van Den Hoek, H. J., Johnson, B., & Archer, B. (1970). Outdoor education manual: Part I. Ontario Teachers' Federation.

Balkwill, T. L. (1995). Outdoor education in Ontario schools. Unpublished manuscript, University of Windsor, Windsor, ON.

Bowyer, J. (1990). Practical solutions to problems in outdoor education. Crucible,21(5), 37-38.

Butler, L. F., & Mergardt, G. C. (1994). The many forms of administrative support. Journal of Physical Education Recreation and Dance, 65(7), 43-47.

Byrne, B. M. (1991). The Maslach Burnout Inventory: Validating factorial structure and invariance across intermediate, secondary, and university educators. Multivariate Behavioral Research, 21(4), 583-605.

Byrne, B. M. (1994). Testing for the factorial validity, replication, and invariance of a measuring instrument: A paradigmatic application based on the Maslach Burnout Inventory. Multivariate Behavioral Research, 29(3), 289-311.

Capel, S. A. (1991). A longitudinal study of burnout in teachers. British Journal of Educational Psychology, 61, 36-45.

The common curriculum: Policies and outcomes, grades 1-9. (1995). Ontario Ministry of Education and Training: Queen's Printer for Ontario.

Gay, D. A., & Ross, J. R. (1994). Supportive relationships. Journal of Physical Education Recreation and Dance, 65(7), 27-30.

Gold, Y. (1984). The factorial validity of the Maslach Burnout Inventory in a sample of California elementary and junior high school classroom teachers. Educational and Psychological Measurement, 44(4), 1009-1016.

Hanna, G. (1986). Legal liability in outdoor education/recreation. Unpublished master's of arts thesis.

Holland, J. L. (1973). Making vocational choices: A theory of careers. Englewood Cliffs, NJ: Prentice-Hall.

Iwanicki, E. F., & Schwab, R. L. (1981). A cross validation study of the Maslach Burnout Inventory. Educational and Psychological Measurement, 41(4), 1167-1174.

Kimiecik, S. J., Demas, K. R., & Demas, C. B., (1994). Establishing credibility: Proactive approaches. Journal of Physical Education Recreation and Dance, 65(7), 38-42.

Knapp, C. E. (1989). Humanizing Outdoor education: Exploring the affective domain. Journal of Physical Education, Recreation and Dance, 60(2), 40-43.

Lee, R. T., & Ashford, B. E. (1990). On the meaning of Maslach's three dimensions of burnout. Journal of Applied Psychology, 75(6), 743-747.

Manual of procedures and criteria for outdoor education programs. (1993). The Muskoka Board of Education.

Mathematics outdoor style. Tanser and Churchill environmental studies. (1972). Unpublished manuscript, Kent County Board of Education.

McGregor, I. (1992). Legal liability and risk management. Paper presented at the Ontario Physical and Health Education Association regional conference, Toronto, ON.

Morton, L. L., Diubaldo, D., & Awender, M. A. (in press). Vocation related characteristics of Ontario university students on the teaching career path. Guidance and Counselling.

Noisy River Environmental Education Centre: Residential program teacher's handbook. (Rev. ed.). (1987). The Board of Education for the City of Etobicoke.

Be outdoorable. (1984). The Metropolitan Toronto School Board.

Pepper, J.G. (1974). Field trips and outdoor education. Kent County Board of Education.

Petersen, S. C., Allen, V. L., & Minotti, V. L. (1994). Teacher knowledge and reflection. Journal of Physical Education Recreation and Dance, 65(7), 31-37.

Powers, S., & Gose, K. F. (1986). Reliability and construct validity of the Maslach Burnout Inventory in a sample of university students. Educational and Psychological Measurement, 46(1), 251-255.

Priest, S, (1986). Redefining outdoor education: A matter of many relationships. Journal of Environmental Education, 17(3), 13-15.

Provincial Sport Organizations risk management manual. (1987). Ontario: Ministry of Tourism and Recreation: Sport and Fitness Ontario.

Schaufeli, W. B., Maslach, C., & Marek, T. (Eds.). (1993). Professional burnout: Recent developments in theory and research. Washington, DC: Taylor & Francis

Staley, F. A. (Ed.). (1983). Outdoor education in the total curriculum. Journal of Physical Education, Recreation and Dance, 54(1), 55.

Starnaman, S. M., & Miller, K. I. (1992). A test of a causal model of communication and burnout in the teaching profession. Communication Education, 41(1), 41-53.

Smissen, B. van der. (1994). Risk management: Beyond safety checklists. Paper presented at the Professional Development Seminar, Wayne State University, MI.

Walkey, F. H., & Green, D. E. (1992). An exhaustive examination of the replicable factor structure of the Maslach Burnout Inventory. Educational and Psychological Measurement, 52(2), 309-323.

Williams, L. (Ed.). (1992). Canoeing safety resource manual. Willowdale, ON: Canoe Ontario.

APPENDIX A

Physical Education Program Inventory

Program Inventory

Check the enabling factors that apply in your district/school.

1. Teacher Relationships

Do the physical education teachers...

- ❑ informally consult with colleagues about the program regularly?
- ❑ collaborate on particular program development projects?
- ❑ help plan and attend regular staff meetings devoted to program concerns?
- ❑ think of themselves as part of a team?
- ❑ socialize in school, and on special occasions, outside of school?
- ❑ observe each others' classes to learn and/or to give help?
- ❑ regularly collaborate on planning programs, schedules, and special events?

2. Teacher Knowledge and Reflection

Do the physical education teachers...

- ❑ focus on student learning as their central goal in program planning and teaching?
- ❑ use students' achievement of outcomes as the basis for assessing and revising learning progressions?
- ❑ adjust teaching strategies to accommodate individual student learning capabilities?
- ❑ monitor class events to determine their place within the larger programmatic picture?
- ❑ resolve or ameliorate difficult problems embedded in the teaching-learning setting?
- ❑ habitually employ the plan-teach-think cycle?
- ❑ continually seek new information about teaching?

3. Establishing Program Credibility

Do the physical education teachers...

- ❑ take responsibility for establishing their program's credibility?
- ❑ initiate activities designed to secure support for their program?
- ❑ keep up-to-date on professional issues and stay active in professional organizations?
- ❑ inform school administrators about the teachers' professional involvement and its effect on the program?
- ❑ regularly serve on various school and district committees?
- ❑ participate in community service programs?
- ❑ make frequent presentations about the program to school and community groups?
- ❑ use visual and verbal communications to promote program activities?
- ❑ get parents to observe and participate in the program?

4. Administrative Support

Do the principals...

- ❑ know what the physical education program is all about?
- ❑ believe that the physical education teachers have earned their respect?

Do the principals and physical education directors...

- ❑ trust the teachers to build their own programs?
- ❑ encourage participation in professional development activities?
- ❑ become directly involved in planning and executing program initiatives?
- ❑ support teachers when important policy issues are raised?
- ❑ keep teachers informed on matters that are vital to teachers' interests?
- ❑ secure the funds and other resources to run a good program?
- ❑ collaborate with teachers to solve everyday problems?

Other enabling factors: _____

_____

September 1994/JOPERD

Source: Anderson, 1994.

APPENDIX B

Statements in The Common Curriculum Alluding to Outdoor Education

Included here are statements from the Common Curriculum that refer to outdoor education. These may be statements of mandated learning outcomes or as suggested ways to meet learning outcomes.

Outdoor Education and the Essential Learning Outcomes.

a) use appropriate ideas, models, and theories to investigate and describe the natural world.
b) evaluate the interdependence of local, national, and global communities and their dependence on the environment.
c) demonstrate concern and care for the environment.
d) describe aesthetic qualities in natural objects
e) describe and evaluate their feelings and thoughts about the natural world.

Outdoor Education and the Specific Learning Outcomes.

ARTS

Mandated outcomes:
a) identify aspects of natural materials that appeal to the senses;
b) use art to explore environmental issues, express their thoughts on environmental issues and explore environmental concerns;

Suggested means of achieving learning outcomes:
a) identify the rhythms of nature, sounds in the forest, and movement of animals;
b) use drawing skills in the study of plant and animal forms;
c) identify conflicts in the animal world;
d) use natural materials to create art works;
e) create or perform works that display such expressions as the grace of a deer;
f) identify artistic form, line, shape and colour in animals, plants and landforms.

LANGUAGE

Although there was no specific mention of Outdoor Education activities in this area, it was expressed that "Language and communication skills must be a focus in all areas of the curriculum" (Common Curriculum, p. 50).

MATHEMATICS, SCIENCE AND TECHNOLOGY

Mandated outcomes:

a) investigate and explain the relationships among patterns in mathematics and natural environments;
b) identify living things, sort and classify them and describe their properties and function in natural environments;
c) use tools and materials to investigate and explain natural phenomena;
d) describe environmental cause-and-effect relationships and suggest solutions to environmental problems;
e) investigate the features of plants and animals that help them to survive in their surroundings;
f) identify and compare local natural habitats;
g) describe the features and function of their local bioregion;
h) analyze ways in which human and natural systems are connected;
i) describe the effect of people's actions on plants and animals;
j) assess environmental problems and implement an action plan to deal with them;

Suggested means of achieving learning outcomes:

a) make and read maps of the community;
b) classify living things by their covering, movement, protective devices, or features of adaptation to their habitat;
c) use magnifiers to see small things and investigate cells;
d) make charts, write descriptions and draw pictures showing the similarities and differences among animals and plants;
e) use magnifiers and microscopes to investigate pond water or body parts of insects and compare plant and animal cells;
f) analyze the interrelationship of plants in the environment;
g) investigate plants and animals as sources of various products;
h) explain the impact of the demand for wood on sensitive habitats;
i) predict changes due to exposure to the elements;
j) predict the effects of habitat restoration;
k) describe the cycling of nutrients in nature, migration and hibernation patterns, and the growth rings on a tree;
l) investigate the webbed feet of frogs, and the feathers of birds;
m) identify a species' adaptations, such as protective colouring and body covering;
n) describe the impact of pesticides and fertilizers on food chains;

o) observe the effect of flood-control systems;
p) practise questioning skills such as "How many leaves are there on a plant?";
q) experiment with the germination of seeds;
r) use math skills to investigate a stream;
s) put up bird houses as an example of how humans can have positive effects on animals;
t) address environmental issues by planting trees, or restoring a stream or woodlot.

PERSONAL AND SOCIAL STUDIES:SELF AND SOCIETY

Mandated outcomes:
a) describe personal experiences of nature;
b) describe the pleasure they experience when visiting natural areas;
c) engage in recreational activities in natural environments.

Suggested means of achieving learning outcomes:
a) participate in outdoor activities as daily physical exercise;
b) evaluate environmental regulations and advocate the preservation of a local wetland;
c) undertake habitat restoration as a school project;
d) look for signs of spring;
e) experience delight in observing living things;
f) analyze the influence of waterways on recreational activities.

APPENDIX C

Litigations Against School Boards

Tyler v. Board of Ardath (1935) - The school board was found vicariously liable for a bus accident caused by the negligent operation of its driver.

Mackay v. Govan School Unit No. 29 of Saskatchewan (1968) - The school was found negligent in not providing a qualified instructor and the teacher was found negligent in failing to provide adequate instruction when a sixteen-year-old boy fell from parallel bars while performing a gymnastics routine and broke his back. The plaintiff was awarded $183 000.

Thornton v. Board of School Trustees (Prince George, British Columbia) (1976) - A fifteen-year-old boy broke his neck when he vaulted over his protective landing mats. The teacher was found negligent in failing to provide adequate instruction and supervision. Thornton received $1 534 059.

Boese v. Board of Education of St. Paul's Roman Catholic Separate School District No. 20 (Saskatoon) (1976) - The instructor was found negligent when an obese thirteen-year-old boy fractured his leg when he jumped from a seven-foot platform in a required physical education activity.

Piszel v. Board of Education of Etobicoke (1977) - The school board was found liable for an injury to a wrestling student when the mats separated and the student injured his elbow on the hard floor below.

Meyers v. Peel County Board of Education (1981) - The teacher and the school board were found liable for failing to properly supervise a fifteen-year-old gymnastics student and to provide adequate protective matting when a fall from gymnastics rings resulted in injuries causing quadriplegia. Meyers was found 20% contributorily negligent[1].

---

[1]Contributory negligence - when the injured person does some act which enhances the likelihood of injury; for example, disobeys the directions of the person in charge (van der Smissen, 1994).

Smith v. Horizon Aerosports Ltd. et al. (1981) - The sport parachuting school was found negligent due to inadequate instruction when a jumper failed to safely steer her parachute to the ground. She landed in a tree, then fell to the ground leaving her a paraplegic.

Delaney et al. v. Cascade River Holidays Ltd. et al. (1982) - A white water rafting company was found negligent for not providing life jackets with appropriate buoyancy specifications (31 lbs.) for a specific trip (jackets with 21 lbs. were worn). No award was recovered due to a clause included in the disclaimer.

Lowry et al. v. Canadian Mountain Holidays Ltd. et al. (1985) - A ski instructor and Canadian Mountain Holidays Ltd. were deemed negligent when an avalanche fatally injured two skiers. Families were awarded $200 000 and $500 000.

Source: Hanna, 1986.

APPENDIX D

Outdoor Education Questionnaire

OUTDOOR EDUCATION QUESTIONNAIRE

Thank you again for your participation. Your answers are very important to me, so please find a comfortable location, take your time and answer as accurately as possible.

PART A - BACKGROUND INFORMATION

Gender _____ Male _____ Female

Undergraduate Major _____

Age

_____ 20-29 years
_____ 30-39 years
_____ 40-49 years
_____ 50-59 years
_____ 60 years or over

Experience Teaching ELEMENTARY School

_____ 1 - 3 years
_____ 4 - 7 years
_____ 8 -11 years
_____ 12-15 years
_____ 16-18 years
_____ 19 or more years

Present Teaching Assignment

Homeroom Subjects

_____ none
_____ Grade 1
_____ Grade 2
_____ Grade 3
_____ Grade 4
_____ Grade 5
_____ Junior Kindergarten
_____ Grade 6
_____ Grade 7
_____ Grade 8
_____ Grade 1/2
_____ Grade 2/3
_____ Kindergarten
_____ Grade 3/4
_____ Grade 4/5
_____ Grade 5/6
_____ Grade 6/7
_____ Grade 7/8
_____ Behaviour Modification
_____ Other _____

Rotary Subjects

_____ none
_____ Art
_____ Music
_____ other _____
_____ Library
_____ Health
_____ French
_____ Physical Education
_____ Learning Resource Centre

Experience Teaching or Supervising Outdoor Education Activities

Please indicate your experience in teaching or supervising outdoor education activities or programs in any capacity. (school, summer camps, canoeing, skiing ...)

_____ none
_____ assistant instructor/supervisor on one to five occasions
_____ assistant instructor/supervisor on more than five occasions
_____ head instructor/supervisor on one to five occasions
_____ head instructor/supervisor on more than five occasions
_____ full time outdoor education teacher
_____ other _____

Qualifications in Outdoor Education

Please indicate your qualifications for teaching outdoor education.

_____ none
_____ Outdoor Education Part I
(Ontario Teachers' Federation course)
_____ Outdoor Education Part II
(Ontario Teachers' Federation course)
_____ qualified outdoor education specialist
_____ other _____

Other Related Qualifications

Please indicate the related qualifications for which you hold a CURRENT certificate.

_____ none
_____ Standard first aid or better
_____ CPR basic rescuer or better
_____ Swimming - Bronze medallion or better
_____ Canoeing - Level _____
_____ other _____ , _____ , _____

Personal Involvement in Outdoor Activities

Use the scale provided to indicate your personal involvement in the following activities (other than with students) for the current year AND for previous years for each item.
Please place a check mark on a line

	TIMES DURING THIS YEAR (Mar. 95 - Mar. 96)				TIMES IN PREVIOUS YEARS			
	0	1-5	6-10	>10	0	1-5	6-10	>10
Camping (at a campground)	___	___	___	___	___	___	___	___
Wilderness camping	___	___	___	___	___	___	___	___
Canoeing or kayaking	___	___	___	___	___	___	___	___
Hiking or birdwatching	___	___	___	___	___	___	___	___
Fishing or ice fishing	___	___	___	___	___	___	___	___
Boating or sailing	___	___	___	___	___	___	___	___
Skiing or snowshoeing	___	___	___	___	___	___	___	___
Golf or tennis	___	___	___	___	___	___	___	___
Other outdoor activities								
_____	___	___	___	___	___	___	___	___
_____	___	___	___	___	___	___	___	___

PART B - OUTDOOR EDUCATION ACTIVITIES INVOLVING STUDENTS

Use the scale provided to indicate how much you involve, and have involved, your students in the following activities.
Use one check for current year AND one check for previous years for each item.
Please place a check mark on a line

	TIMES DURING THIS SCHOOL YEAR				TIMES IN CAREER - ALL PREVIOUS YEARS			
	0	1-5	6-10	>10	0	1-5	6-10	>10
Nature walks on school property	___	___	___	___	___	___	___	___
Nature walks off school property	___	___	___	___	___	___	___	___
Camping	___	___	___	___	___	___	___	___
Canoeing	___	___	___	___	___	___	___	___
Kayaking	___	___	___	___	___	___	___	___
Cross-country skiing on school property	___	___	___	___	___	___	___	___
Cross-country skiing off school property	___	___	___	___	___	___	___	___
Orienteering on school property	___	___	___	___	___	___	___	___
Orienteering off school property	___	___	___	___	___	___	___	___
Field trips to natural settings with a guide	___	___	___	___	___	___	___	___
Field trips to natural settings without a guide	___	___	___	___	___	___	___	___
Field trips to Provincial parks	___	___	___	___	___	___	___	___
Science lessons outdoors	___	___	___	___	___	___	___	___
Math lessons outdoors	___	___	___	___	___	___	___	___

	TIMES DURING THIS SCHOOL YEAR				TIMES IN CAREER - ALL PREVIOUS YEARS			
	0	1-5	6-10	>10	0	1-5	6-10	>10
Technology lessons outdoors	___	___	___	___	___	___	___	___
Geography lessons outdoors	___	___	___	___	___	___	___	___
History lessons outdoors	___	___	___	___	___	___	___	___
Language lessons outdoors (English or French)	___	___	___	___	___	___	___	___
Physical education lessons outdoors such as hiking & cycling (excluding competitive or team sports)	___	___	___	___	___	___	___	___
Arts lessons outdoors (visual, music, drama)	___	___	___	___	___	___	___	___
Guidance lessons outdoors	___	___	___	___	___	___	___	___
Other _____	___	___	___	___	___	___	___	___

PART C - OPINION QUESTIONS

Please use the scale provided to respond as accurately as possible regarding your feelings about the following statements. Please mark ON a line.

1) I have the experience to provide students with positive outdoor education outcomes.

strongly agree	agree	disagree	strongly disagree

2) I have participated in many outdoor activities, therefore I could teach them.

strongly agree	agree	disagree	strongly disagree

3) I feel that I am not qualified to teach outdoor education.

strongly agree	agree	disagree	strongly disagree

4) I am aware of the Board policy on outdoor education.

strongly agree	agree	disagree	strongly disagree

5) I know where to get the documents and materials needed to teach outdoor education.

strongly agree	agree	disagree	strongly disagree

6) If I want to take my class on an outdoor education excursion my supervisor will approve it.

strongly agree	agree	disagree	strongly disagree

7) Administrators generally do not want teachers to involve their classes in outdoor activities.

strongly agree	agree	disagree	strongly disagree

8) Anyone who takes students on outdoor excursions is at risk of being sued.

strongly agree	agree	disagree	strongly disagree

9) Going on long walks in the outdoors is interesting.

strongly agree	agree	disagree	strongly disagree

10) I think the woods are full of unpleasant things.

strongly agree	agree	disagree	strongly disagree

11) In my spare time, I would rather stay indoors.

strongly agree	agree	disagree	strongly disagree

12) I enjoy being outdoors.

strongly agree	agree	disagree	strongly disagree

13) Outdoor education involves only wilderness excursions.

strongly agree	agree	disagree	strongly disagree

14) I like to read books on outdoor education.

strongly agree	agree	disagree	strongly disagree

15) Outdoor education does not fit into the language arts curriculum.

strongly agree	agree	disagree	strongly disagree

16) Many subjects can be integrated and taught using outdoor education methods.

strongly agree	agree	disagree	strongly disagree

17) Outdoor education is just an excuse to play outside.

strongly agree	agree	disagree	strongly disagree

18) I know of courses teachers can take to improve their outdoor education skills.

strongly agree	agree	disagree	strongly disagree

19) Administrators encourage teachers to take advantage of our many natural resources.

strongly agree	agree	disagree	strongly disagree

20) I can use the school yard as an outdoor education setting.

strongly agree	agree	disagree	strongly disagree

21) Teachers should have extra insurance before teaching any outdoor education lessons.

strongly agree	agree	disagree	strongly disagree

22) Administration would discourage a field trip to a local woodlot.

strongly agree	agree	disagree	strongly disagree

23) I would have to take my class on a field trip to teach outdoor education.

strongly agree	agree	disagree	strongly disagree

24) I do not need to worry about legal ramifications of teaching outdoor education.

strongly agree	agree	disagree	strongly disagree

PART D - OTHER FACTORS

Have there been any significant personal, political, or other events that may have affected your involvement in outdoor education with your students?

_____ Yes _____ No

Comment_____

_____

PART E - COMMENTS

Please express your thoughts about outdoor education, this survey, or anything that may be useful in interpreting these results.

_____

_____

_____

_____

Once again, thank you for your participation. Please continue.

APPENDIX E

Letter to the Ethics Committee

L. Balkwill
201 Harvey St.,
Chatham, Ontario
N7M 1M8
February 22, 1996

Dr. L. Morton
Chair of The Ethics Committee
Faculty of Education
University of Windsor
Windsor, Ontario
N9B 3B4

Dear Dr. Morton:

Please accept this letter as request for research approval from the Faculty of Education: Research Ethics Committee. This research will involve a survey of elementary teachers of the Kent County Board of Education. The survey will gather information regarding the attitudes of elementary teachers toward the implementation of outdoor education programs.

A copy of the research proposal is enclosed, including the letter and questionnaire that will be sent to the randomly selected teachers.

Thank you, in advance, for reviewing my request. Your response and any suggestions that you may have concerning this proposal are eagerly awaited.

Sincerely,

Lance Balkwill

APPENDIX F

Letter to the Superintendent

L. Balkwill
201 Harvey St.,
Chatham, Ontario
N7M 1M8
February 19, 1996

Mr. B. Asselin
Superintendent of Education, Elementary - Area II
The Kent County Board of Education
Box 1000
Chatham, Ontario
N7M 5L7

Dear Mr. Asselin:

Please accept this letter as a request for permission to conduct a study that would involve the elementary teachers of the Kent County Board of Education. I wish to use the Board's courier service to send a survey to selected teachers to gain information regarding outdoor education practices in our county.

It is my understanding that there are some extremely effective programs within Kent County that incorporate outdoor education methodologies. Outdoor education has been shown to offer the opportunity to meet many of the educational outcomes outlined in the Common Curriculum - 1995. It allows the teacher to address the needs of students of all backgrounds and abilities through interesting and fully integrated activities, while maintaining a high regard for educational content.

This study will gather information about the teachers who are implementing outdoor education with their classes, those who are not. The results of this study will provide insight into how more teachers can effectively achieve these educational outcomes.

This research is the foundation of my Master's Degree Thesis through the University of Windsor. A copy of the research proposal is enclosed for your inspection. Participation in this study is voluntary and all participants' responses will be strictly confidential.

In order to not overburden these teachers, this survey has been designed to take only 15-20 minutes, and minimal effort to complete.

Consideration of this request, at your earliest convenience, would be appreciated. A summary of the results will be available for review upon request at the completion of the data analysis.

Thank you, in advance, for your cooperation.

Sincerely,

Lance Balkwill

APPENDIX G

Cover Letter and Instructions

April 15, 1996

Dear Colleague:

To complete a Master's Degree Thesis, I am conducting research in the area of outdoor education. Your name was randomly selected from teachers of the Kent County Board of Education as a possible participant for this study. Your participation is very important to me and will be greatly appreciated. Please note that your participation is voluntary and you may decline to respond to any part of the survey.

The enclosed questionnaire will take approximately 20 minutes to complete and will generate valuable information about the use of outdoor education teaching methodologies in our schools. Surveys are identified by number only to track returns and all responses will remain confidential. You may contact me before, during or after the completion of the questionnaire and I will be happy to answer any questions or address your concerns (TAPS - 682-2260; Home 351-7922). Concerns of an ethical nature may be directed to Dr. L. Morton, Chair of the Ethics Committee at the University of Windsor (519) 253-4232 Ext. 3800.

Upon completion of the questionnaire, (or even if you choose not to participate) please return it before May 3, 1996, by courier, in the envelope provided.

I also ask that you do not discuss the survey questions or answers with anyone (except Dr. Morton or me) to ensure that the results remain unbiased.

A summary of the results of this survey will be available for review upon request at the completion of the data analysis.

I understand that you are busy, so I thank you, in advance, for taking the time to respond to my questionnaire.

Sincerely,

Lance Balkwill
Tilbury Area Public School

Reminders

Your answers are confidential.

You may choose to skip any questions.

Please return the questionnaire in the return envelope, regardless of amount completed, by May 3, 1996.

Please do not discuss this with anyone.

Thank you, I appreciate your involvement.

This package includes:

1. A three part survey
   a) Outdoor Education Questionnaire
   b) Vocational Preference Inventory, with answer sheet
   c) Educators Survey

2. A return envelope

APPENDIX H

Results of the Questionnaire

Figures show frequencies of responses for each variable.
Values are in percent.

PART A - BACKGROUND INFORMATION

Gender _51.8_ Male _48.2_ Female

Undergraduate Major _____

Age

_2.0_ 20-29 years
18.8_ 30-39 years
62.4_ 40-49 years
15.8_ 50-59 years
__0__ 60 years or over

Experience Teaching ELEMENTARY School

_1.8_ 1 - 3 years
11.6_ 4 - 7 years
_8.9_ 8 -11 years
_8.9_ 12-15 years
19.6_ 16-18 years
49.1_ 19 or more years

Present Teaching Assignment

Homeroom Subjects

18.2_ none	_3.6_ Junior Kindergarten	_1.8_ Kindergarten
_7.3_ Grade 1	_5.5_ Grade 6	_1.8_ Grade 3/4
_4.5_ Grade 2	_8.2_ Grade 7	_4.5_ Grade 4/5
_2.7_ Grade 3	_8.2_ Grade 8	_0.9_ Grade 5/6
_5.5_ Grade 4	__0__ Grade 1/2	__0__ Grade 6/7
_8.2_ Grade 5	_0.9_ Grade 2/3	_9.1_ Grade 7/8
_1.8_ Behaviour Modification		
_7.3_ Other _____		

Rotary Subjects

45.4_ none	_1.9_ Library	_9.3_ French
_5.6_ Art	__0__ Health	12.0_ Physical Education
_3.7_ Music		13.0_ Learning Resource Centre
_9.3_ other _____		

Experience Teaching or Supervising Outdoor Education Activities

Please indicate your experience in teaching or supervising outdoor education activities or programs in any capacity. (school, summer camps, canoeing, skiing . . .)

54.5_ none
20.0_ assistant instructor/supervisor on one to five occasions
6.4_ assistant instructor/supervisor on more than five occasions
_8.2_ head instructor/supervisor on one to five occasions
_9.1_ head instructor/supervisor on more than five occasions
_0.9_ full time outdoor education teacher
_0.9_ other _____

Qualifications in Outdoor Education

Please indicate your qualifications for teaching outdoor education.

89.1_ none
_3.6_ Outdoor Education Part I
(Ontario Teachers' Federation course)
__0__ Outdoor Education Part II
(Ontario Teachers' Federation course)
_0.9_ qualified outdoor education specialist
_6.4_ other _____

Other Related Qualifications

Please indicate the related qualifications for which you hold a CURRENT certificate.

_____ none
17.3_ Standard first aid or better
16.4_ CPR basic rescuer or better
11.8_ Swimming - Bronze medallion or better
_1.8_ Canoeing - Level _____
_5.5_ other _____ , _____ , _____

Personal Involvement in Outdoor Activities

Use the scale provided to indicate your personal involvement in the following activities (other than with students) for the current year AND for previous years for each item.
Please place a check mark on a line

	TIMES DURING THIS YEAR (Mar. 95 - Mar. 96)				TIMES IN PREVIOUS YEARS			
	0	1-5	6-10	>10	0	1-5	6-10	>10
Camping (at a campground)	76.4	15.5	2.7	5.5	32.7	32.7	10.0	24.5
Wilderness camping	95.5	4.5	0	0	77.3	14.5	5.5	2.7
Canoeing or kayaking	75.5	15.5	5.5	3.6	55.5	20.0	8.2	16.4
Hiking or birdwatching	48.2	38.1	9.1	10.9	30.9	32.7	12.7	23.6
Fishing or ice fishing	71.8	12.7	8.2	7.3	46.4	19.1	13.6	20.9
Boating or sailing	56.4	20.0	11.8	11.8	33.6	20.9	12.7	32.7
Skiing or snowshoeing	82.7	10.0	3.6	3.6	55.5	19.1	10.0	15.5
Golf or tennis	56.4	20.0	4.5	19.1	33.6	20.9	7.3	38.2

PART B - OUTDOOR EDUCATION ACTIVITIES INVOLVING STUDENTS

Use the scale provided to indicate how much you involve, and have involved, your students in the following activities.
Use one check for current year AND one check for previous years for each item.
Please place a check mark on a line

	TIMES DURING THIS SCHOOL YEAR				TIMES IN CAREER - ALL PREVIOUS YEARS			
	0	1-5	6-10	>10	0	1-5	6-10	>10
Nature walks on school property	60.0	32.7	5.5	1.8	31.8	38.2	9.1	20.9
Nature walks off school property	73.6	25.5	0	.9	31.8	43.6	7.3	17.3
Camping	97.3	2.7	0	0	80.0	14.5	2.7	2.7
Canoeing	99.1	0.9	0	0	90.9	5.5	0	3.6
Kayaking	100	0	0	0	99.1	0	0.9	0
Cross-country skiing on school property	99.1	0.9	0	0	91.8	7.3	0	0.9
Cross-country skiing off school property	97.3	2.7	0	0	95.5	2.7	0.9	0.9
Orienteering on school property	85.5	14.5	0	0	60.0	30.0	3.6	6.4
Orienteering off school property	95.5	4.5	0	0	71.8	20.9	3.6	3.6
Field trips to natural settings with a guide	77.3	21.8	0.9	0	24.5	52.7	13.6	9.1
Field trips to natural settings without a guide	87.3	12.7	0	0	55.5	30.9	6.4	7.3
Field trips to Provincial parks	84.5	14.5	0.9	0	39.1	48.2	8.2	4.5
Science lessons outdoors	50.9	40.9	2.7	5.5	20.0	40.0	14.5	25.5
Math lessons outdoors	64.5	33.6	0	1.8	37.3	33.6	10.9	18.2

	TIMES DURING THIS SCHOOL YEAR				TIMES IN CAREER - ALL PREVIOUS YEARS			
	0	1-5	6-10	>10	0	1-5	6-10	>10
Technology lessons outdoors	78.2	20.9	0	0.9	72.7	15.5	6.4	5.5
Geography lessons outdoors	72.7	15.5	6.4	5.5	57.3	20.0	9.1	13.6
History lessons outdoors	90.0	10.0	0	0	70.9	18.2	4.5	6.4
Language lessons outdoors (English or French)	71.8	25.5	2.7	0	45.5	20.9	19.1	14.5
Physical education lessons outdoors such as hiking & cycling (excluding competitive or team sports)	66.4	17.3	6.4	10.0	46.4	23.6	8.2	21.8
Arts lessons outdoors (visual, music, drama)	62.7	34.5	2.7	0	32.7	37.3	12.7	17.3
Guidance lessons outdoors	97.3	2.7	0	0	97.3	0.9	0.9	0.9

PART C - OPINION QUESTIONS

Please use the scale provided to respond as accurately as possible regarding your feelings about the following statements. Please mark ON a line.

1) I have the experience to provide students with positive outdoor education outcomes.

6.4	45.0	35.8	12.8
strongly agree	agree	disagree	strongly disagree

2) I have participated in many outdoor activities, therefore I could teach them.

7.3	37.6	46.8	8.3
strongly agree	agree	disagree	strongly disagree

3) I feel that I am not qualified to teach outdoor education.

10.2	39.8	43.5	6.5
strongly agree	agree	disagree	strongly disagree

4) I am aware of the Board policy on outdoor education.

3.7	26.2	49.2	20.6
strongly agree	agree	disagree	strongly disagree

5) I know where to get the documents and materials needed to teach outdoor education.

3.8	37.7	50.0	8.5
strongly agree	agree	disagree	strongly disagree

6) If I want to take my class on an outdoor education excursion my supervisor will approve it.

10.5	75.8	12.6	1.1
strongly agree	agree	disagree	strongly disagree

7) Administrators generally do not want teachers to involve their classes in outdoor activities.

0	17.3	70.2	12.5
strongly agree	agree	disagree	strongly disagree

8) Anyone who takes students on outdoor excursions is at risk of being sued.

10.6	58.7	26.9	3.8
strongly agree	agree	disagree	strongly disagree

9) Going on long walks in the outdoors is interesting.

37.3	59.1	2.7	0.9
strongly agree	agree	disagree	strongly disagree

10) I think the woods are full of unpleasant things.

0.9	1.8	54.5	42.7
strongly agree	agree	disagree	strongly disagree

11) In my spare time, I would rather stay indoors.

0.9	16.7	59.3	23.1
strongly agree	agree	disagree	strongly disagree

12) I enjoy being outdoors.

45.0	49.5	5.5	0
strongly agree	agree	disagree	strongly disagree

13) Outdoor education involves only wilderness excursions.

0.9	0.9	71.8	26.4
strongly agree	agree	disagree	strongly disagree

14) I like to read books on outdoor education.

5.8	33.7	52.9	7.7
strongly agree	agree	disagree	strongly disagree

15) Outdoor education does not fit into the language arts curriculum.

0	2.8	72.9	24.3
strongly agree	agree	disagree	strongly disagree

16) Many subjects can be integrated and taught using outdoor education methods.

23.4	72.9	3.7	0
strongly agree	agree	disagree	strongly disagree

17) Outdoor education is just an excuse to play outside.

0	2.7	63.6	33.6
strongly agree	agree	disagree	strongly disagree

18) I know of courses teachers can take to improve their outdoor education skills.

4.7	50.9	35.8	8.5
strongly agree	agree	disagree	strongly disagree

19) Administrators encourage teachers to take advantage of our many natural resources.

1.9	37.5	57.7	2.9
strongly agree	agree	disagree	strongly disagree

20) I can use the school yard as an outdoor education setting.

16.5	78.0	4.6	0.9
strongly agree	agree	disagree	strongly disagree

21) Teachers should have extra insurance before teaching any outdoor education lessons.

4.0	24.8	68.3	3.0
strongly agree	agree	disagree	strongly disagree

22) Administration would discourage a field trip to a local woodlot.

1.0	7.6	77.1	14.3
strongly agree	agree	disagree	strongly disagree

23) I would have to take my class on a field trip to teach outdoor education.

1.9	11.4	75.2	11.4
strongly agree	agree	disagree	strongly disagree

24) I do not need to worry about legal ramifications of teaching outdoor education.

0	14.7	62.7	22.5
strongly agree	agree	disagree	strongly disagree

PART D - OTHER FACTORS

Have there been any significant personal, political, or other events that may have affected your involvement in outdoor education with your students?

_29.1_ Yes _62.7_ No

Comment_____ see comments in Part E _____

_____

PART E - COMMENTS

Please express your thoughts about outdoor education, this survey, or anything that may be useful in interpreting these results.

_____

_____ see Appendix J_____

_____

APPENDIX I

Tables of Correlation Coefficients

Table I_1

Two-tailed Correlations between Current Student Involvement and the Independent Variables within the School Climate Model.

School Climate Variables	n	Correlation Coefficient
Awareness	112	.47***
Administrative support	112	.29**
Legal liability perception	112	.11

*p < .05. **p < .01. ***p <.001.

Table I_2

Two-tailed Correlations between Current Student Involvement and the Independent Variables within the Burnout Model.

MBI Subscales	n	Correlation Coefficient
Emotional exhaustion	107	-.01
Depersonalization	107	-.12
Personal Accomplishment	107	.26**

*p < .05. **p < .01. ***p <.001.

Table I_3

Two-tailed Correlations between Current Student Involvement and the Independent Variables within the Personality Type Model.

Personality Type Variables	n	Correlation Coefficient
Realistic	100	.12
Investigative	100	.26**
Artistic	100	.12
Social	100	-.08
Enterprising	100	-.07
Conventional	100	-.09
Self-control	100	-.17
Masculinity-femininity	100	-.01
Status	100	-.03
Infrequency	100	-.04
Acquiescence	100	.13

*p < .05. **p < .01. ***p <.001.

Table I_4

Two-tailed Correlations between Current Student Involvement and the Independent Variables within the Personal Background Model.

Personal Background Variables	n	Correlation coefficient
Interest & Expertise	112	.51***
Undergraduate major	56	-.17
Past outdoor education teaching	112	.37***
Outdoor education qualifications	112	.20*
Age	103	-.17
Years of elementary teaching	112	-.14
Gender	112	
Past personal involvement	110	.30**
Current personal involvement	110	.40***
Past student involvement	110	.47***

*p < .05. **p < .01. ***p <.001.

APPENDIX J

Comments made by Subjects

Results of PART E of the Outdoor Education Questionnaire reporting comments made by subjects - arranged according to model.

Note * indicated general comment
+ indicates a positive comment
- indicates a negative comment

SCHOOL CLIMATE MODEL

* I would like to do more outdoor education. It's difficult to find the time to plan the activities.
* Life is busy, it's difficult to fit everything in.
* I am frustrated by the urban setting of my school's playground
* I would like more ideas for the primary grades.
* We need to get teachers out of their classroom.
* It should be a part of our daily life but not all teachers are prepared for this.
* Living in the county and teaching in the city opens your eyes to how little the primary children are exposed to nature and natural settings.

Awareness - positive

+ Outdoor ed. can change children's values.
+ Outdoor education in school provides valuable experiences for students who spent so much time in front of video games.
+ Children need to appreciate and care for our world for generation to come, understanding and enjoying the outdoors is a big part of this.
+ I have found children to be intrinsically motivated when involved in outdoor education. The quality of learning is superior to the class experience.
+ I think outdoor education is important and necessary to understand the environment and in turn try to protect and save as much of the environment as possible.
+ Fresh air is good. Exercise is great and non-threatening. Anyone can do it. Escape and relaxing.
+ Outdoor education is unquestionably valuable - though my background is not particularly related to outdoor education - my indoor activities are rejuvenated by exercise and the change of pace of outdoor activity. Physical energy increases mental energy.
+ If a program is structured and functions well it is due to the planning of those well qualified to do so. Others will be enticed by their expertise. The out-of-doors can be a fantastic resource base if the guidance, facilities and structured programs are in place and monitored by a staff in the know.
+ Many areas within an hour drive of Kent County offer a variety of experiences that would be far more beneficial than schools spending $3000 of students' money to see a play in Toronto.
+ The majority of students in our schools have had little or no exposure to many of the activities discussed in this survey. They are unlikely to get such experience from their families as more and more of them come from socio-economic backgrounds that cannot afford

such pleasures (in time or money). Consequently, respect for nature and natural surroundings is lost among an entire generation. As educators, we must ensure that our students, regardless of age, experience outdoor experiences. After all, what is more important in the development of a child, understanding and experiencing a marsh ecosystem or memorizing the facts on China?
+ Many meaningful learning situations can be achieved.
+ Excellent way to work on cooperation.
+ A very healthy and educational way to learn more of the ever-endangered environment - while having fun of course.
+ In theory and practice I strongly advocate the outdoor ed - hands on approach. There is no question as to its value.
+ Outdoor education is an area that educators can tap into outside the normal classroom environment. I have had to pleasure of taking students on an outdoor ed trip for eight years and have thoroughly enjoyed it.
+ Outdoor education can use 'unusual' settings to motivate students to be more involved.
+ Its sometimes an overlooked potential.
+ Education in the out-of-doors is an area of great importance and should be celebrated.
+ Great way to develop in children respect for the earth.
+ I feel outdoor education is a great way to teach many subject areas. Students love it.
+ I think outdoor education is very important for all students to experience.
+ Used as positive reinforcement, students can earn the privilege of going outdoors.

<u>Awareness</u> - negative

- Outdoor ed is OK but not for all students.
- Requires a great deal of planning. Sometimes more work goes into it than you get back.
- More in the area of physical education.
- Not having a home room has limited my chances to do a field trip involving outdoor ed.
- The kids generally enjoy it to varying degrees. Some kids would rather sit in front of a computer than exert themselves physically outside.
- Bear in mind I am no longer a 'homeroom' teacher.

<u>Administrative support</u> - positive

+ When I was there, outdoor education was encouraged by the Toronto Board in their facility north of Toronto.
+ We easily could design an integrated curriculum

<u>Administrative support</u> - negative

- All the extra paperwork you have to do for the board.
- A recent move to a school where a one week trip to camp Tawingo

isn't permitted by administration
- Lack of administrative confidence
- My administrator has had a bad experience and it has evidently rubbed off.
- I coordinate a four-day outdoor ed program at Tawingo (Huntsville). The kids and parents think it's great. I really feel that the board and administration disapprove, which leads to general frustration.
- Administration has discouraged us from working outside.
- Kent board has no outdoor ed after teacher's college.
- Kent County Board does not have its own facility for promoting/teaching outdoor ed.
- Overnight trips area not allowed in our school
- Outdoor education does not seem to be stressed in the current curriculum. Also a time factor and lack of integration strategies.
- Outdoor ed "appears" less structured and may be viewed as an "extra".
- There have been many occasions when I've wanted to take students off the school yard for nature walks but I don't want the hassle of permission forms and supervisors.

Liability - positive

+ Risk is no greater than if students are in the gym

Liability - negative

- Overnight - responsibilities, i.e., social and legal.
- Legal implications/ramifications exist.
- Danger of water.
- Student behaviour.
- In this age of the fear of lawsuits, I'm not too keen on taking a class of 30 intermediate students into the outdoors unless there was a structured and supervised program available which was age appropriate.
- It's a valuable program that is undervalued and overlooked due to the great demands of the present curricula and the emphasis on being accountable.
- I enjoy the outdoors but don't always enjoy sharing it with students. The responsibility scares me.
- I'm not sure of the legalities involved in outdoor education
- I am not comfortable with unfamiliar woods without a guide.
- student allergies
- I enjoy the outdoors but am reluctant to take 30+ grade 8's out of the school.

Funding - negative

- Funding!
- Money
- Funding problems

- Cost for extended trip to Dorset.
- Social contract cuts, cuts in funding - Harris government.
- Cost of bussing.
- Lack of equipment.
- It will be cut dramatically with the cutbacks in funding.
- Funding is the key issue. Funding for curriculum, in-service and actual excursions. Board commitment is essential.
- money is always in question.

BURNOUT MODEL

* As you can see, I'm burning out. Society, parents, the board administrators no longer think of teachers as people.
* This is how I feel because of the assignment I have. How I feel varies with the type of students I have from year to year.
* I prefer not to complete this section.

PERSONALITY MODEL

* I prefer not to complete this section.

PERSONAL BACKGROUND MODEL

* I certainly thought more now about how I could effectively teach LRC subjects outdoors. Interesting ideas!
* I've never really thought about using outdoor ed in language, but I will now.

Interest & expertise

* I wish I was trained further how to do outdoor education - especially in the technology areas.
* I wish I had more skills in this area, then I would feel more confident
* I would benefit from a workshop.
* I participated in Project Wild during teachers' college, however I could use a refresher.

Interest & expertise - positive

+ I used to work for MNR. This has influenced my involvement in outdoor ed.
+ Family camping.
+ I enjoy nature and children appreciate things more in reality.
+ I have a great respect and love for the outdoors instilled in me by my father and extended family.

Interest & expertise - negative

- Knee surgery.
- Classroom management & procedural organization remain a problem for me - therefore I avoid non-traditional settings for fear that such a change would only compound the problem.
- If this is what you are interested in then fine. It doesn't interest me.
- Never given it any real thought before.
- It is probably a very valuable experience but it does not interest me personally.

VITA AUCTORIS

Lance Balkwill was born in 1965 and was raised in Kingsville, Ontario. He graduated from Kingsville District High School in 1984. From there he went on to the University of Windsor where he obtained the degree of Bachelor of Human Kinetics - Honours Kinesiology in 1988.

Lance obtained a Bachelor of Education degree from the University of Windsor in 1989. Since 1989 he has been employed as an elementary school teacher with the Kent County Board of Education.

He is a graduate of the National Outdoor Leadership School, Outdoor Educators Course, University of Utah, 1991 and holds instructors certificates from the Ontario Recreational Canoeing Association and the Ontario Wild Water Affiliation. With this research, he is completing a Master of Education Degree at the University of Windsor in 1996.