Outdoor Adventure Education at Occidental College

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Occidental College
Senior Comprehensive Project
April 2006
Dedication

For my mom and dad, who taught me that I could do anything and go anywhere as long as I believed in myself.

For Peg and Ted Hope for teaching me how to believe in myself.
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Chapter 1: Introduction to the Problem

1.1 The Problem:

One of Occidental College’s institutional weaknesses is that it does not offer sufficient programs and services for students’ personal development outside the classroom; specifically, Occidental College does not have an institutionalized outdoor adventure education program. After freshman orientation, students are released to wander through their four years of classes and campus events. While there are leadership opportunities on campus – students can run for office in the student government, or they can apply to be a Resident Advisor or director of Programming Board – these experiences are not inherently educational. Moreover, few students take advantage of these experiences, graduating from Occidental with inadequate leadership experience, problem solving skills, communication skills, self-confidence, and self-efficacy.

1.2 A Solution

Unlike existing leadership opportunities at Occidental, an institutional outdoor adventure education program is educational by design. Such a program would incorporate well-planned, well-supported, and well-funded experience-based educational opportunities to help students develop interpersonal and intrapersonal skills, leadership and technical abilities, and an increased understanding of the natural environment. The proposed program’s mission and goals are consistent with the mission of the College: “To foster both the fulfillment of individual aspirations and a deeply rooted commitment to the public good.”¹ The program will also contribute to the holistic educational environment that Occidental College strives to create. By explaining the author’s personal experience at Occidental, outlining the

¹ http://www.oxy.edu/x2640.xml -- Occidental College Website (viewed April 3, 2006)
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contemporary literature dealing with this topic, and analyzing the benefits and methodologies of outdoor adventure education, this paper seeks to provide a solution to the gaps in Occidental’s current pedagogy.

1.3 Purpose

The purpose of this research project is to design an outdoor adventure education program for Occidental College’s Office of Student Life. As this program matures, academic credit may be offered for participation in specific programs.

1.4 My Stake:

I participated in numerous outdoor education programs during my middle and high school years. My current personality and career goals are a direct result of my experiences in these programs. Throughout my time at Occidental, I was keenly aware of the lack of opportunities to engage in organized, school-sponsored adventures into the outdoors. In response, I organized the Outdoor Adventure Club. I wanted to offer students a chance to experience their natural environment in fun and constructive ways, while simultaneously engaging in activities beneficial for the mind, body and spirit. I quickly realized that I could not meet the demands of the campus community, as they were beyond my organizational and structural means.

Despite my unsuccessful first attempt to bring the benefits of outdoor education to Occidental, I am committed to further efforts, as I believe such education acts as a catalyst for personal, communal, and social growth. When, in the fall of 2003 more than 180 students registered for the Outdoor Adventure Club, I knew that I could not develop programs to meet all of their needs. Many students who participated in the programs that were created did not believe the programs were educational in nature. Because students were more engaged in the
educational aspects of the programs later in the year, I believe their initial disengagement was partially due to my lack of programming experience.

My career as a service worker, through which I strive for social and environmental justice, is rooted in my experience with outdoor education and adventure travel. I believe that students who engage in these types of activities are more inclined to social service and social justice work. My personal experiences have proven to me that participation in outdoor adventure programs help students increase their self-confidence and self-efficacy, thus improving social networks and communities. Skilled individuals and strengthened communities are the building blocks of a just society and the framework of a more equitable world.

1.5 Methods

The methods I employed for this project include secondary data collection, interviews, and surveys. The secondary data I collected informed my literature review, which included a review of 1) the field of outdoor adventure education, 2) experiential education theory, 3) outcomes of participation in outdoor education programs, 4) leadership theory and practice, and 5) the relevance of outdoor adventure education to higher education. My sources included books that discussed leadership theory, programming in the outdoors, and the facilitation of different types of groups in the outdoors, as well as scholarly articles from journals, magazines, and organizations. These articles included studies of the effects of outdoor education on different groups and types of individuals. The interviews I administered were guided by general goals rather than specific sets of questions. I interviewed my client, Earic Peters, the Associate Dean of Student Life several times throughout the academic year.
The survey I employed was designed to assess students’ current involvement in different outdoor activities, as well as their attitudes, beliefs and values surrounding outdoor education.

1.6 Outline

The aim of this paper is to build a case for the development of an outdoor adventure education program at Occidental College. The first three chapters explain the general benefits of outdoor adventure education. More specifically, chapter 2 will be a literature review that situates outdoor adventure education in the broader fields of outdoor education, experiential education, and adventure experience. Chapter 3 will be a discussion of the participant outcomes of outdoor adventure education. Chapter 4 will include a description of leadership theory and an analysis of four styles of leadership. The two subsequent chapters will prove the applicability and benefits of outdoor adventure education in various educational settings. More specifically, chapter 5 will describe the benefits of outdoor adventure education in mainstream education and special education. Chapter 6 will detail the benefits of outdoor adventure education in higher education, paying particular attention to its applicability at Occidental College. Chapter 7 will discuss the current climate of Occidental College students surrounding outdoor adventure education, which will include results of a recent study. Chapters 8 and 9 will propose a method for implementing an outdoor adventure program at Occidental College, and specific policy recommendations that will aid the implementation process. Finally, Chapter 10 will offer concluding arguments for the creation of an outdoor education program at Occidental College.
Chapter 2: Literature Review

2.1 Introduction

Outdoor adventure education combines elements of many different philosophies and pedagogies to create an educational experience like none other. Its outcomes have been studied and evaluated by dozens of researchers and practitioners. Outdoor education and experiential education are two related but distinct pedagogies that contribute to outdoor adventure education’s unique and powerful educational style. The literature review will begin by introducing the reader to the field of outdoor adventure education – what it is and what it is not. By introducing outdoor adventure education as the area of overlap among outdoor education, experiential education, and adventure experience, the reader will gain a clearer picture of what outdoor adventure education is.

2.2 Outdoor Education

Outdoor education, as defined by the Outdoor Institute, is “the use of experiences in the outdoors for the education and development of the ‘whole person.’”2 Outdoor education is not associated with one specific field, but focuses instead on the holistic growth of the individual. This definition contrasts sharply with Wilderdom’s definition of outdoor education: “An experiential method of learning by doing, which takes place primarily through exposure to the out-of-doors.”3 Wilderdom’s definition emphasizes the location in which the learning takes place, as opposed to its impact on the individual. For Wilderdom, a third grade class that takes a field trip to a lake to learn about watersheds is engaging in outdoor

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2 The Outdoor Institute, quoted by: Wilderdom - a project in natural living & transformation
http://www.wilderdom.com/definitions/definitions.html
3 Wilderdom - a project in natural living & transformation
http://www.wilderdom.com/definitions/definitions.html
education. The broadest definition of outdoor education is education that takes place in, about, and for the benefit of the outdoors. This definition allows for the greatest flexibility and innovation in outdoor education as it does not imply a specific method of teaching, only that teaching and learning must take place outdoors.

2.3 Experiential Education

While outdoor education emphasizes the location of learning and teaching, experiential education emphasizes a pedagogy based on experience. Thus, experiential education can occur in a classroom and outdoors; it relies on a specific educative process, not a location. An example of experiential education would be to have a math class learn about fractions by evenly cutting and distributing 4 apples around a class of 12 students. The students would then read about and reflect on the importance of sharing and equality. An example of outdoor education would be to have the same math class learn about fractions in the schoolyard. The teacher would talk about real world applications of fractions, like the fraction of the earth that is covered by pavement, but she may still utilize a textbook. In the first example, the students are experiencing and reflecting on the fractions and their real world applications. In the second example the students are reading and hearing about the importance of fractions, but they are not experiencing and synthesizing the material into their lives.

When outdoor education and experiential education combine, the benefits of both pedagogies form one exceptionally holistic educational system. An example would be to have the same math class as before go to a local apple orchard to learn about fractions. The students would pick a few apples, and evenly cut and distribute them among their peers. They would then engage in a discussion about nutrition and sharing. They would talk about the
fraction of their diet that should consist of fresh fruits and vegetables, while at the same time learning about where they come from and how they grow. Their lesson would teach them about fractions, while at the same time teach them about the real world. Their experience would affect more than just their understanding of fractions. It would challenge them to think about where food comes from, and why it is important to eat nutritional foods. The learning that takes place is experientially based, but is brought about by experiential education.

2.3.1 Experiential Learning vs. Experiential Education

Although the terms ‘experiential learning’ and ‘experiential education’ are often used interchangeably, they refer to very different concepts. Learning is “the act, process, or experience of gaining knowledge or skill.” More than a cause or effect, it is a process by which an individual enhances her understanding of the world. Education, on the other hand, incorporates a series of techniques to create an environment in which a student can learn. Thus, we can say that experiential learning is the act or process of gaining knowledge or skills through an experience. Experiential education employs techniques that cause a student to experience something in a way that sets the learning process in motion.

2.3.2 Experiential Education Philosophy

Experiential education is a philosophy that can be employed in virtually every educational context. The following passage describes the philosophy and the desired outcomes of experiential education:

“Experiential education is a holistic philosophy, where carefully chosen experiences supported by reflection, critical analysis, and synthesis, are structured to require the learner to take initiative, make decisions, and be accountable for the results, through actively posing questions, investigating,
experimenting, being curious, solving problems, assuming responsibility, being creative, constructing meaning, and integrating previously developed knowledge. Learners are engaged intellectually, emotionally, socially, politically, spiritually, and physically in an uncertain environment where the learner may experience success, failure, adventure, and risk taking. The learning usually involves interaction between learners, learner and educator, and learner and environment. It challenges the learner to explore issues of values, relationship, diversity, inclusion, and community.”

Experiential education, then, involves more than immersing a student in an experience. It also incorporates the reflection on, and analysis and synthesis of the experience into the student’s behavior. The focus is not learning a specific piece of knowledge via an experience, but rather the development of the learner’s ability to approach new and diverse situations, and to react based on her analysis of the situation.

The essence of experiential education is to teach one how to learn. Through repetition of the “experience, reflection, analysis, and synthesis,” stages of the learning process will become engrained in the learner. Thus, when an individual approaches a new situation or problem, she will know how to react. She will reflect on the experience; analyze the experience in its educational context; and then meaningfully synthesize what she has learned with her pre-existing knowledge.

2.3.3 Outdoor Adventure Education

Outdoor adventure education is “education that relies on adventure experience as a catalyst for personal and interpersonal growth,” which could include increased self-efficacy or the acquisition of new skills. Interpersonal growth refers to the improvement of social skills, communications skills, problem solving skills, and conflict management skills within a group.

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5 Itin, Christian M.  *Reasserting the philosophy of experiential education as a vehicle for change in the 21st century*. 1999: 97

Personal growth can involve “using the challenges of wilderness living and travel to develop greater self-confidence. It can also involve using the aesthetic beauty of natural environments as a source of spiritual enrichment. Or it can involve teaching individuals to use adventure sport to maintain a healthy, active lifestyle.”

Outdoor adventure education employs an experiential pedagogy to educate participants about outdoor adventure skills. It includes total immersion into a set of adventure activities, reflecting on and analyzing these activities, and a synthesis of the total adventure experience. An outdoor adventure backpacking program might formally include teaching map and compass reading, backcountry cooking and health management, and “leave no trace” camping ethics. Participants would also learn about informal issues, such as interpersonal dialogue and problem solving skills, personal hygiene and health, and personal confrontations with their comfort zone.

The benefits associated with this type of program are long-lasting and transferable to other situations. According to James Neill, the “evidence suggests that participants experience additional growth on returning to their home environments… Overall this shows that outdoor education effects last well beyond the immediate buzz.” Neill not only states that these effects are long-lasting, but that the benefits associated with participation in outdoor education programs increase over time. As a participant reengages with her everyday routine, the interpersonal skills learned on the adventure program are applied to her everyday routine. For example, her newly improved communication skills could help her earn a promotion in an office setting, or resolve a conflict in her family. Regardless of the situation, it is clear that the personal and interpersonal growth that occurs on an adventure program is very beneficial.

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to every participant’s daily life. This is one of the major benefits of outdoor adventure education, which combines positive aspects of both outdoor and experiential education. The proposed project combines all of these kinds of education through a combination of outdoor location and holistic learning that lasts beyond the initial experience.

![Diagram showing the relationship between Outdoor Education, Experiential Education, and Outdoor Adventure Education.]

**Figure 1: Locating Outdoor Adventure Education (Jacob Dubail).**

### 2.4 Conclusion

The benefits of outdoor adventure education would improve the Occidental College community. By providing students with opportunities to challenge their comfort zone and their conceptions of wilderness, to develop interpersonal and problem solving skills, and to improve self-confidence and self-efficacy, Occidental College will become a healthier and more attractive community.
Chapter 3: Participant Outcomes of Outdoor Adventure Education

3.1 Introduction

Outdoor adventure education programs have the potential to affect students in a plethora of ways that would benefit the Occidental College community. An abundance of programs help students develop self-confidence and self-efficacy, which are both part of a student’s self-system. Many of the same programs focus on developing students’ leadership abilities, social skills, and group dynamics. For example, the mission of the National Outdoor Leadership School (NOLS) “is to be the leading source and teacher of wilderness skills and leadership.” Other programs make it their aim to improve students’ environmental awareness. For example, Outward Bound “inspires and develops leadership, compassion, responsibility, respect for the environment and commitment to serve through adventure-based wilderness experiences.” Occidental College would be a better place if every student possessed each of these skills and abilities. Following is an analysis of supporting and opposing research.

3.2 Development of Self-Systems

Various researchers have summarized the effects of an assortment of outdoor adventure education programs on an individual’s self-systems. Self-systems “generally refer to a body of knowledge and beliefs that an individual holds about herself and it is developed through experience and comparison with others. The related terms of self-concept and self-esteem can be defined, respectively, as ‘an individual’s perception of him or herself including personal abilities, appearance, and performance’ and the judgments and attitudes one holds

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9 [http://www.nols.edu/about/values.shtml](http://www.nols.edu/about/values.shtml) -- The National Outdoor Leadership School website viewed 4/24/06
10 [http://www.cerrobs.org/about/philosophy/index.shtml](http://www.cerrobs.org/about/philosophy/index.shtml) -- Costa Rica Outward Bound website viewed 4/24/06
about him or herself.”

Self-efficacy is another element in the complex set of self-systems. It is defined by Bandura as “personal judgments of one’s abilities and capability to act in situations that may be novel, unpredictable and potentially stressful (such as wilderness tripping).”

Kellert states that individuals who participate in Outward Bound and NOLS programs experience significant changes in their life; these include an increased interest in school, dedication to physical and mental fitness, and positive behavioral changes. Propst and Koesler found that participation in an outdoor adventure trip increased levels of self-efficacy both immediately and one-year after the course. Neill and Richards state that outdoor education programs positively affect participants’ self concept and personality, which includes self-efficacy, self-understanding, independence, confidence, emotional stability, maturity and locus of control. Locus of control is “a personality construct that assesses how people attribute their success and failure outcomes.”

While many studies cite scientifically acquired data regarding the effects of outdoor experiences on self-systems, we must look more carefully at the specific programs that have been studied. As Ewert states, “any conclusions about the effects of the wilderness experience on a construct as complex as the self-system are bound to be vulnerable to

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16 Hans, Tracy Allison. A Meta-Analysis of the Effects of Adventure Programming on Locus of Control. 2000: 3
questions of validity and comprehensiveness of the variable set.”\textsuperscript{17} It is clear that different outdoor education programs have different goals and objectives; research shows that some outdoor adventure programs are more effective than others. Thus, we must be careful not to assume that every outdoor adventure program will lead to desired changes. Hattie states that, “Adventure programs can obtain notable outcomes and have particularly strong lasting effects. It is clear, however, that adventure programs are not inherently good. There is a great deal of variability in outcomes between different studies, different programs, and different individuals.”\textsuperscript{18}

This research definitively shows that carefully-chosen and well-facilitated outdoor adventure programs are the best way to improve participants’ self-systems. Within the context of higher education, the growth of a student’s self-system is essential for their success in academia, and the ‘real world.’ If a student has a low self-efficacy and locus of control throughout her college career, she may not feel integrated into the college community. Thus, she may leave the college or achieve less than optimal results from the time she has invested in education. Bean and Eaton state that, “We believe that as academic and social self-efficacy increase, academic and social integration also increase… Students who have an internal locus of control are likely to act in such a way as to achieve academic or social successes… Academic integration plays an integral role in the retention and graduation of students.”\textsuperscript{19} Therefore, colleges should develop more programs, such as outdoor adventure education programs to improve students’ self-systems and their college experiences.

\textsuperscript{17} Ewert, Alan et al. \textit{The Effects of Wilderness Settings on Organized Groups: A State-of-Knowledge Paper}. 2000: 17
\textsuperscript{19} Bean and Eaton. \textit{The Psychology Underlying Successful Retention Programs}. 2001: 77
3.3 Improvement of Group Dynamics and Participant Social Skills

The body of research regarding changing group dynamics and social skills of participants in outdoor adventure education programs is much smaller than that regarding self-systems. Ewert states that, “despite the importance and popularity of the issues associated with group dynamics, there have been relatively few systematic studies done under the rubric of organized groups in wilderness settings.” He continues, “What studies have been done have usually demonstrated increases in communication between group members, increased trust and willingness to take risks and increased group identity.”

Neill and Richards conducted extensive studies on the effects of wilderness settings on group functioning. They conclude that outdoor adventure education programs positively affect participants’ interpersonal and leadership skills. Hattie, Marsh, Neill and Richards analyzed 96 studies to determine the various effects of outdoor adventure education programs of participants. Their results also show a significant increase in leadership and interpersonal skills. Leadership skills include conscientiousness, decision making, teamwork, organizational ability, time management, and values and goals. Interpersonal skills include behavior, cooperation, interpersonal communication, relating skills, recidivism and social competence. Thus, it is apparent that researchers are beginning to agree on a specific set of skills and abilities that outdoor adventure programming affects. This rubric provides a standard for researchers to evaluate program effectiveness across the board.

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Each of the benefits listed above is only relevant to the broader educational system if the participants can apply these skills to their daily lives, and if the benefits are long lasting. College life is very demanding and requires students to do more than complete homework assignments in a timely fashion. Students are expected to register for their own classes, manage their time effectively in the face of a rigorous academic schedule and social life, and work in groups on various tasks. If a student has not learned skills like cooperation, interpersonal communication, and time management, she may fail at one or more responsibilities. The reality of college life underlines the need for colleges to develop more outdoor adventure education programs to improve students' leadership and interpersonal skills, as well as their ability to handle the challenges of higher level education.

3.4 Growth of Environmental Awareness

While there is general consensus as to the individual benefits of outdoor adventure education, researchers disagree about the effects of such education on environmental awareness and conservation ethics. Numerous studies conclude that there is a relationship between outdoor adventure education and increased environmental awareness. James Miller states that, “Evidence shows that people who establish personal connections with natural areas are more highly motivated to protect such environments.” Some, though not all, outdoor education programs work to foster connections between participants and the natural environment. Another study, conducted by Gillett, is summarized by Ewert. The title and focus of Gillett’s study is the effects of wilderness camping and hiking on the self-concept and environmental attitudes of twelfth graders. He states “they found… significant change in

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23 Miller, James R. *Biodiversity conservation and the extinction of experience*. 2005: 431
environmental knowledge in the experimental group.”24 Kellert found that participation in three wilderness-based programs (Outward Bound, NOLS and the Student Conservation Association) produced a stronger commitment to conservation and the environment.”25

Despite the affirmative results of this research, not all outdoor adventure education programs foster connections between participants and the natural environment.

The following two paragraphs address the work of researchers who concluded that outdoor adventure programs do not improve, but undermine environmental awareness. Nancy Watzman says that outdoor recreation not only harms the environment, but that these programs are one of the greatest threats to the environment.26 The activities and programs she cites, however, involve off-road vehicles. These include snowmobiling, and off-roading with all-terrain and four-wheel drive vehicles. Clearly, there is a delineation between off-roading for an afternoon in a wilderness area, and a group of backpackers or rock climbers practicing leave-no-trace ethics in a wilderness area. While Watzman’s analysis offers insight into the politics and problems surrounding outdoor recreation, her conclusions should not be used to cast a bad light on all outdoor pursuits. Her argument provides more reason for outdoor educators to explicitly endorse environmental education throughout their programs.

Coley Hughes and Cheryl Estes’s study of the influence of environmental education on environmentally responsible behaviors of undergraduate students looked at environmental curriculum inside and outside of the classroom. They concluded that “Research comparing traditional versus nontraditional classroom instruction has yet to bring forth any compelling

26 Watzman, Nancy. Playground or Preserve? - negative environmental effects of outdoor recreation. 2001
results to assist in delineating which methodology is more effective in producing environmentally responsible behaviors…The findings of the present study did not find that one teaching method was significantly better for increasing overall environmentally responsible behaviors in college students than the other.”

The problem with Hughes’s study is that the ‘non-traditional’ outdoor education group only spent one night in the outdoors practicing leave-no-trace ethics. They did not spend every class period in the outdoors, nor did they participate in an outdoor adventure program. Steven Simpson states that short-term experiences “are relatively ineffectual in changing the environmental ethics of the participants.”

Thus, a multi-day experience is preferable. Furthermore, the curriculum and teaching style of a specific course is crucial to the effectiveness of environmental education.

A study published by Bruce Matthews and Cheryl Riley entitled “Teaching and Evaluating Outdoor Ethics Education Programs” provides a further challenge to the research of Waltzman, Estes, and Hughes. This study is critical of traditional educational techniques as a means to affect ethical behavior. Matthews and Riley conclude that the following have not worked in bringing about ethical, behavioral change in students: “lectures, excessive moralizing, external(ly) derived codes of ethics/conduct, adults setting the ethics agenda, and teachers/leaders as authoritarian figures.”

Instead, they believe that “to change behavior, we must focus on ownership and empowerment. Ownership of an issue is critical to responsible environmental behavior. If we can make it personal and pertinent and help students realize that their actions can make a difference in their world, we have a much better chance of

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27 Hughes, Coley S. and Estes, Cheryl A. *The Influence of Environmental Education on Environmentally Responsible Behaviors of Undergraduate Students in a Traditional and Nontraditional Setting.* 2005: 1
29 Matthews, Bruce E. and Riley, Cheryl K. *Teaching and Evaluating Outdoor Ethics Education Programs.* 1995
30 Matthews, Bruce E. and Riley, Cheryl K. *Teaching and Evaluating Outdoor Ethics Education Programs.* 1995: 17
affecting their attitude and behavior.”31 This conclusion is pertinent to teaching environmental ethics and awareness. When an individual’s attitude about her ability to positively affect the environment improves, combined with an increase in their knowledge about environmental ethics, their behavior will also improve. This logic is emphasized by Matthews and Riley’s knowledge-attitude-behavior change model that holds “that an increase in knowledge will lead to a change in attitude which will in turn influence behavior.”32

Matthews and Riley’s research clearly supports outdoor adventure education as a means to affect environmental awareness and conservation. This connection is highlighted by their statement that “environmental knowledge and attitudes have been frequently evaluated when attempting to determine the effect of outdoor education programs on the development of environmental responsibility.”33 Evaluating the efficacy of outdoor adventure programs extends beyond impacting environmental responsibility to understanding the relationship between education and leadership.

3.5 Conclusion

A well-planned and well-executed outdoor adventure education program at Occidental College would have the same positive outcomes on its participants as many other programs have had before it. Students would be more interested in their education, more interested in campus life, more environmentally aware, and they would earn better grades. Leadership is another benefit and foundational aspect of outdoor adventure education, but it requires more in depth analysis, as there are many leadership theories that could be applied to outdoor adventure education.

31 Matthews, Bruce E. and Riley, Cheryl K. Teaching and Evaluating Outdoor Ethics Education Programs. 1995: iv
32 Yerkes, Rita and Haras, Kathy. Outdoor Education and Environmental Responsibility. 1997: 2
33 Yerkes, Rita and Haras, Kathy. Outdoor Education and Environmental Responsibility. 1997: 2
Chapter 4: Leadership

4.1 Introduction to Leadership Theory

Leadership is a phenomenon that has existed for all of human history. It is an essential part of our survival, and an essential aspect of outdoor adventure education. But what is it? Peter Northouse states that, “leadership is a process whereby an individual influences a group of individuals to achieve a common goal.”34 This definition is only half correct. While a leader influences a group toward a common goal, a leader also interacts and builds relationships with the group. Bruce Martin offers a more complete definition. “Leadership is both intentional, aiming toward the accomplishment of particular goals and outcomes, and interactional, involving relationships between two or more individuals in a particular situation.”35 Martin’s definition implies that leadership is not delegated solely to one group member, but that everyone in a group can be a leader at different times.

Simply defining leadership, however, is not sufficient if our goal is to understand what leadership is, and how it works. Various theorists, researchers, and practitioners offer a multitude of leadership theories. The following analysis of a variety of these theories will help deepen our understanding of different approaches to facilitating an outdoor adventure program that fosters leadership development for its participants.

4.2 Leadership Theory

Leadership theories fall into two general categories: transactional leadership and transformational leadership. Most early theories of leadership fit into the transactional group, while transformational leadership has only gained momentum in the end of the twentieth

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century. The difference between these two categories of leadership is evident in “what leaders and followers offer one another.”

Martin states that transactional leadership “applies to leaders who are task oriented and able to direct their groups in specific ways to accomplish finite goals. Transactional leaders work to gain their group’s compliance through various approaches: offering rewards, [or] threatening punishment.” A few theories of leadership that apply to this category include the trait approach, the skills approach, and the situational approach. These will be discussed below.

Whereas transactional leadership emphasizes the one-way exchange between the leader and the led – where a leader leads a group to a goal – transformational leadership emphasizes a two-way exchange among leaders and followers. In doing so the transformational leader inspires various characteristics within the group and herself: the followers put the group’s needs before their own; the leader adapts her style of leadership according to what she hears, sees and senses from the followers. Martin states that, “Transformational leaders must consider the need to develop themselves, the circumstances of the leadership situation, and their followers, transcending the needs of any given moment in time and considering what is important for the present and the future. The transformational leader must also seek to satisfy the followers’ higher needs by engaging the “full person” of the follower.” Leadership theories that fit into this category include servant leadership and feminist leadership theory. Servant leadership theory will be discussed at the end of this chapter.

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4.2.1 Trait Approach

The trait approach to transactional leadership is one of the earliest. Northouse offers a succinct definition: “The trait perspective suggests that certain individuals have special innate or inborn characteristics or qualities that make them leaders, and it is these qualities that differentiate them from nonleaders.”[39] This approach is sometimes referred to as the ‘Great Man Theory’ or ‘natural leader theory’, because the characteristics of the leader are innate, not learned or developed.

The strengths of the trait approach are that it is the most straightforward approach to understanding leadership because it only focuses on the leader and her traits. In addition, due to its long history this approach is supported by nearly a century of research, whereas many other theories only have a few years worth of supportive research.

Criticisms of this approach abound. Despite a century of research, there is no definitive list of leadership traits. Furthermore, this theory discounts the importance of situational leadership, and does not discuss the outcomes of leadership on group members. Perhaps the largest problem associated with this style of transactional leadership is that it excludes a large percentage of the population from being leaders.

4.2.2 Skills Approach

While the trait approach focuses on a leader’s innate characteristics, the skills approach focuses on a leader’s skill set. One model used in this approach is the Skills Model, developed by Mumford and colleagues: “The model is characterized as a capability model because it examines the relationship between a leader’s knowledge and skills (i.e.,

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capabilities) and the leader’s performance.” 40 This approach differs from the trait approach because a leader’s skills can be learned and developed over time, which suggests that many individuals have the capability to become great leaders. “Rather than emphasizing what leaders do, the skills approach frames leadership as the capabilities (knowledge and skills) that make effective leadership possible” 41.

The strengths of this approach include that instead of focusing on the “great men of history”, the skills approach stresses the importance of developing a particular skill set. Leadership is thus accessible to everyone as it is based on the development and learning of new leadership skills. This approach provides a structure that allows leadership to be taught as a curriculum focusing on a particular skill set, such as problem solving, conflict resolution, and teamwork.

There are criticisms, however, of the skills approach. This model does not explain how any set of skills will affect performance. In actual leadership, the implementation of a skill set is just as important as the skills themselves. Additionally, this model was developed by observing 1,800 military officers, and the feasibility of implementing this model in different settings has not been adequately tested.

4.2.3 Situational Approach

The situational approach was developed by Paul Hersey and Ken Blanchard. Situational leadership focuses on leadership in situations, not on specific behaviors of a leader in every situation. Northouse states, “The basic premise of the theory is that different situations demand different kinds of leadership. From this perspective, to be an effective

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40 Northouse, Peter G. *Leadership: Theory and Practice*. 2004: 4
leader requires that an individual adapt her style to the demands of different situations.\textsuperscript{42} In essence, situational leadership requires leaders to change their style according to their followers’ competencies and needs. Effective leaders, then, are those who can recognize and adapt to those needs and competencies.

A major strength of this approach is that it is straightforward and intuitive. Some followers require a lot of direction – one-way communication about tasks and goals – whereas some followers require a lot of support – two-way communication that involves discussion, clarification and problem-solving. This approach emphasizes the concept of leader flexibility. If a leader does not understand the needs of her followers, she cannot adapt accordingly.

A criticism is that this model leaves all decision-making regarding the amount of support the leader will provide solely to the leader’s judgment. Thus, if the followers’ competency and needs are misunderstood, the leadership may be inappropriate. Moreover, the manner in which competency is defined in different settings will have various outcomes on the group. For example, defining an individual’s rock climbing competency is fairly clear; there are specific skills that an individual can or cannot do, such as belaying, lead climbing a 5-12, and tying a figure 8 knot. When a leader has to define a group’s competency regarding interpersonal dialogue, the task can become much more difficult. There is no specific set of skills that a leader can use to judge a group’s ability to communicate effectively. There are tendencies for which to be aware, such as open-mindedness and active listening, but these are very difficult to individually quantify. Therefore, if a leader inaccurately judges the communication dynamics of the group as very healthy when in reality they are not, the leader

\textsuperscript{42} Northouse, Peter G. \textit{Leadership: Theory and Practice}. 2004: 87
will not be as active in developing healthy interpersonal skills. As a result, the group may disintegrate, and interpersonal relations may become unhealthy.

4.2.4 Servant Leadership

Robert Greenleaf developed the servant theory of leadership in 1970 in an essay titled “The Servant as Leader.” Believing that the word serve is inappropriately associated with a negative connotation, his work focuses on combining the ideas of service and leadership. Greenleaf asks if the ideas of servant and leader can be “fused in one real person, in all levels of status or calling.” Martin continues by stating, “One who acts as a servant first is always searching, listening, and not only believing, but expecting that there is hope for the future… The practice of servant leadership theory manifests itself in an ethic of care whereby the leader, who is a servant first, ensures that other people’s greatest needs are being met.”

Greenleaf states that this approach “differs from other leadership approaches by eschewing the common top-down hierarchical style, and instead emphasizing collaboration, trust, empathy, and the ethical use of power.” At its core, the individual is a servant first, making the conscious decision to lead; her motivation is to lead because she wants to better serve her followers, not because she desires increased power. The objective of servant leadership is to enhance the growth of involved individuals, and facilitate greater teamwork and personal involvement.

The strength of servant leadership is that leaders do not lead from an authoritative throne. Instead, a servant leader leads from the “nexus of a web of interpersonal

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43 www.wikipedia.com – the free encyclopedia.
46 www.wikipedia.com – the free encyclopedia.
relationships," states Marie Brown, an educational researcher. A servant leader does not exert artificial power over her followers. She is challenged to develop clout within the group so as to emerge as a legitimate leader.

Servant leadership is commonly criticized because it is one of the newest and least researched styles of leadership. Therefore, there is virtually no research to support or oppose the theory of servant leadership. Northouse states that it lacks support from “published, well-designed, [and] empirical research.” Only time, implementation, and research will illustrate the value of servant leadership.

4.3 Conclusion

A transformational servant style of leadership would be the most appropriate style of leadership for an outdoor adventure education program at Occidental College. Because outdoor adventure programs are about more than achieving a short-term goal – climbing to the top of a hill – leadership should advance the long-term goals of the group while accomplishing the short-term goals. In addition, while the strengths of other styles of leadership are applicable in certain situations, servant leadership is the most applicable style all of the time. Open-mindedness, compassion, and teamwork are ideals that should be fostered not only in the outdoors, but also on a college campus and in society. Thus, an outdoor adventure education program that incorporates a transformational servant style of leadership should be developed at Occidental College. Now that we know what the benefits of outdoor adventure education are, we need to discuss why these benefits are important to our educational system.

48 Northouse, Peter G. Leadership: Theory and Practice. 2004: 245
Chapter 5: Applicability of Outdoor Adventure Education

5.1 Relevance in Mainstream Education

Outdoor adventure education offers benefits to students in every educational system. The benefits for students with behavioral problems and underdeveloped communication skills are discussed below. Rachel Bedard asserts that “Moderate effect sizes in favor of wilderness programs were found with respect to enhancing self-esteem/self-concept, improving interpersonal skills, and promoting behavior changes.” Keith Russell supports this claim maintaining, “A literature review examining [Outdoor Behavioral Healthcare] outcomes related to self-concept, interpersonal skills, substance abuse, criminal recidivism, and behavioral and emotional symptoms indicates positive OBH outcomes.” Outdoor adventure education and therapy programs make possible the reintegration of formerly disorderly students into the mainstream educational system.

The most significant difference between classroom learning and experiential learning is the way in which a subject is presented. Stimulus in outdoor adventure programs excites multiple senses at once, which allows the learner to more efficiently engage the stimulus through their sense of choice.

5.1.1 Multi-Sensory Learning

While most classroom lessons stimulate only one human sense, students require stimulation of multiple senses to fully engage the material being presented. Furthermore, every student does not learn equally well from the same sense. For example, a visual learner and an auditory learner will not learn equal amounts of information from a lecture that is

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Dubail, 29

primarily auditory. One major benefit of experiential education is that it accommodates the diversity of learning styles by consistently stimulating multiple senses. We can learn from one source of stimulus, such as hearing, but if we see, hear, and feel what we are learning, we can assimilate the new knowledge much more efficiently. James Miller states that “the natural world is the most information-rich environment that people will ever encounter.”51 Because there is a plethora of sounds, sites, smells, textures, temperatures, climates, and emotions for people to experience in the natural world, every person can learn something new from every location. If an individual is open to learning, and implements some form of the experiential learning model (experience, reflection, critical analysis, and synthesis), that individual will learn something new.

5.2 Special Education

Research shows that outdoor adventure programs hugely benefit youth with learning disabilities, such as Attention Deficit Disorder (ADD). Edward Lappin tells us that “positive behavioral changes among behavior disordered students have been reported.”52 Judith Kennison adds, “Children with Attention Deficit Disorder (ADD) are ‘learn by doing’, trial and error learners. This characteristic makes them excellent candidates for experiential learning.” She continues, “Children with ADD are seekers of stimulation. They are biologically driven to look for the novel and interesting.”53 Because the natural environment is the most information-rich environment that people will ever encounter, structured outdoor educational programs provide perfect opportunities for students with ADD to engage in their

52 Lappin, Edward.  *Outdoor Education for Behavior Disorder Students*.  1984: 1
53 Kennison, Judith A.  *Therapy in the Mountains*.  1995: 123
education.54 Their learning, and excitement about learning, can then be transferred to the classroom. Thus, outdoor adventure education programs are an effective addition to special education programs. Outdoor adventure education programs are also applicable to students in higher education.

5.3 Importance to Higher Education

Outdoor adventure education is, and will be, increasingly important to institutions of higher education in the twenty-first century. In order to graduate a very high percentage of students, every college and university must offer services that increase student engagement with and ownership of the college. If students are not excited about their institution, they will not remain in that institution for four or more years. Furthermore, a student’s excitement about her institution is only long-lasting if she is engaged in the institution. Thus, the institution must provide opportunities for students to connect with the college or university. Gass says that “Some universities have used wilderness orientation programs to reduce attrition; some to insure a more positive transition to college life; while others provide such a program as a means to acquaint incoming students to the school’s outing program.”55 Occidental’s outdoor adventure education program could be used for all of these reasons and more, as it would support the students, and the college’s mission of service and commitment to the public good. Occidental’s mission statement states that “Service may be the ultimate object of a liberal education. There is no higher purpose in life than committing oneself to

54 Miller, James R.  *Biodiversity Conservation and the Extinction of Experience.*  2005: 433
55 Gass, Michael A.  *The Value of Wilderness Orientation Programs at Colleges and Universities in the United States.*  1983: 4
helping others.” Following is a review of literature that describes the importance of college outdoor adventure education programs.

5.3.1 Student Retention

Occidental College’s graduation rate is 73%, according to the Registrar, Victor Egitto. Contrastingly, 90% of first-year students return to Occidental as sophomores. Thus, between the beginning of sophomore year and graduation day 17% of Occidental students drop-out or transfer. While this is similar to other college’s that are similarly ranked, it is still a problem. Williams College has an outdoor adventure education program, and their graduation rate and sophomore retention rate are 97% and 96%, respectively. Granted, Williams is a great school, and there are more factors than outdoor adventure education that are influencing their retention rates. Regardless, lowered retention rates are typically due to disengaged, underpowered students that do not feel a sense of ownership of their institution.

Thus, the retention of college or university students requires a sense of belonging to the campus community. Or, as Tinto states, “The success not only of retention programs but of education programs generally hinges on the construction of educational communities at the college, program, and classroom level which actively involve all students in the ongoing social and intellectual life of the institution.” Outdoor adventure education provides an effective strategy to more fully integrate students into their campus communities, a claim that is further supported by Tinto’s description of how to retain students in college:

“Student retention in the college and university setting requires the active engagement of every student in their learning process. When students feel

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http://www.oxy.edu/x2640.xml -- The Occidental College website viewed April 6, 2006
Author’s phone conversation with the Registrar, Victor Egitto, on April 5, 2006.
IBID
Tinto, Vincent. Leaving College: Rethinking the Causes and Cures of Student Attrition. 1993: ?
disengaged from the classroom, professors and curriculum, they are much more likely to leave the institution. When students are engaged with and immersed in the educative process, they will feel empowered and able to make decisions about their education. This will in turn make college an experience to be valued, rather than an obstacle to be overcome.”

Outdoor adventure education addresses the issues of engagement and empowerment. A simplified definition of experiential education is “learning by doing”; ‘engage’ is defined as “to attract and hold the attention of.” Therefore, when a student is learning a concept by doing it or paying attention to it, they are engaging in what they learn. Outdoor adventure education utilizes experiential education by presenting problems that students must solve, and students are free to choose whatever solution they feel is most appropriate. Thus, the students are empowered by the facilitators to engage and solve a problem through first-hand experience. The students can then transfer this empowerment back to their campus life through follow-up programs and positions of leadership, which will deepen students’ involvement with their campus community, ultimately raising retention rates.

5.3.2 Community Building and Civic Engagement

A student’s sense of community and belonging is not only an important factor in retaining and graduating that student, but also in improving the quality of her education. Judith A. Boss refers to this concept within the following quote:

“Harvard educational psychologist Howard Gardner has found that scholastic knowledge ‘seems strictly bound to school settings’, while outdoor education fosters ‘connected knowing,’ where education is part of, rather than separate from, life. Unlike classroom learning, outdoor education uses the student's

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61 Tinto, Vincent. *Leaving College: Rethinking the Causes and Cures of Student Attrition*. 1993: ?
62 [www.dictionary.com](http://www.dictionary.com) – the free online dictionary
whole environment as a source of knowledge. The community, rather than the classroom, is the context of learning.  

The ‘connected learning’ a student acquires links her to a community. When this education occurs in the context of a campus community, the student will become more involved in campus life. When the educational context is the city, state, or world, the student may become involved in corresponding political, social or environmental issues. Engagement is central to the success of college retention programs and to Occidental’s mission statement.

5.4 Effectiveness in Higher Education

It is now clear why outdoor adventure education is important in a higher educational context, but how effective is it in the setting of higher education? The following is a summary and analysis of various studies that describe the effects of outdoor adventure education on college-level retention, grade point average (GPA), self-system and group function, and environmental ethics.

5.4.1 Retention

Michael A. Gass conducted a study using freshman at the University of New Hampshire during their first two semesters in 1984. He concluded that the students that participated in the outdoor adventure program were more likely to remain in school. The experimental group showed a retention rate of 94%, whereas the control group produced a 69% retention rate. A 25% increase in a retention rate is not only significant, but monumental for a college. Occidental’s retention rate is 73%. With an increase of 25%, over 90% of students that enter Occidental would graduate from Occidental.

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64 Gass, Michael A. *The Effects of a Wilderness Orientation Program on College Students*. 1987: 5
5.4.2 Grade Point Average

In the same study, Gass found that the experimental group achieved a higher cumulative GPA than the control group. At the end of the first semester there was no significant difference in each group’s GPA. By the end of the second semester, however, the experimental group produced a GPA 0.3 points higher than the control group. The experimental group earned a 2.74, whereas the control group earned a 2.49. Raising the GPA of the student body is a goal of every college, and thus a substantial reason for all colleges to support outdoor adventure education programs.

5.4.3 Self Systems and Group Functions

The mission of Occidental College alludes to the importance of out-of-class education and development. Occidental’s mission is to “prepare students for leadership in an increasingly complex, interdependent and pluralistic world… [and] seeks to foster both the fulfillment of individual aspirations and a deeply rooted commitment to the public good.” Another study of Gass’ states that outdoor adventure education programs “have been shown to increase retention, and to positively impact interpersonal skills and relationships.”

5.4.4 Environmental Ethics

It is essential that colleges and universities continue to develop and improve programs that emphasize environmental ethics. The world is beginning to wake up to the fact that our natural resources are disappearing at an alarming rate, and that many are irretrievable. But society as a whole does very little to counter the culture of over-consumption and glutinous waste. Because institutions of higher education have the opportunity to educate students

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65 Gass, Michael A. *The Effects of a Wilderness Orientation Program on College Students*. 1987: 5
66 http://www.oxy.edu/x2640.xml -- The Occidental College website viewed April 6, 2006.
about environmental ethics, they should offer programs and courses with the goal of fostering a strong environmental ethic.

5.5 Conclusions

Outdoor adventure education will be an important improvement for Occidental College. The students that participate will take more ownership of the college, which means that more students will graduate with a higher grade point average. Because participants will have higher self-confidence and self-efficacy, they will be more prepared to, and confident about, entering the highly-competitive job market. Furthermore, students that participate in the outdoor adventure education program will exhibit behavior that is more environmentally responsible, which not only benefits Occidental College, but everyone on the planet. These students will return to their college community after participating in an outdoor adventure program ready to engage in leadership positions on campus, which will have a ripple effect in the community. More students will be exposed to more programs, and the progress will continue. The following chapter will illustrate the desire of students at Occidental College to implement such a program.
Chapter 6: Current Climate

A number of Occidental’s clubs, organizations, and departments utilize the outdoors in their programs and events, but they do not implement a structured curriculum. The Outdoor Adventure Club plans hiking, backpacking and rock climbing trips to local and nearby national parks. The Rotaract Club spent their Spring Break helping the Katrina relief effort. The Office of Residence and Greek Life plans a trip to Yosemite National Park every year, and the Geology department visits various national parks to conduct field research. While every outdoor event is valuable to the community, outdoor adventure education implements a more structured and methodical curriculum than current outdoor campus-sponsored events, and has the potential to bring greater benefits to Occidental. Through outdoor adventure education programs students can learn more effective methods to approach new situations and problems.

Results from a recent survey of the study body (n=50) illustrate the current campus climate surrounding outdoor adventure activities. The sample was selected at random by sitting in the academic quad during the lunch hour on a sunny Friday in April. Because not every student walks through the quad every day, there is a potential for sample bias. A larger sample size would have been beneficial, but time constraints did not permit it.

Eighty-two percent of surveyed students would like to see camping, hiking and/or backpacking offered if an outdoor adventure program were developed. And 77% of the respondents believe that they “would benefit from an outdoor adventure program,” while 89% of students surveyed believe that “the Oxy community would benefit from an outdoor
adventure program." While some students were neutral, no one “disagrees,” or “strongly disagrees” that an outdoor adventure program would benefit them or the Oxy community. These results show that an overwhelming number of Occidental students not only want an outdoor adventure education program, but they believe everyone would benefit from it.

Another interesting statistic is that 66% of respondents said that they never “engage in organized activities in the outdoors,” but everyone said that they engage in some sort of outdoor activity at least once a semester. “Organized activities” are defined as activities in the outdoors that are more organized than a few friends deciding to go hiking for an afternoon. The “organized activity” must have some formal, pre-planned structure for which the participant signs-up.

It is clear that students desire more opportunities to engage in outdoor adventure activities, especially hiking, camping and backpacking trips. While various clubs sporadically offer off-campus events, students need a structured program that helps them engage in meaningful activities in the outdoors.

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67 See appendix 1 for a copy of the survey
68 Author’s survey conducted March 20-27, 2006
Chapter 7: Implementation and Oversight

As we can now conclude, an unorganized and unsupported outdoor adventure program is not effective, but a waste of time and resources. Gass supports this claim by stating, “Although some studies… have found that [outdoor adventure education] programs positively affect outcomes like academic performance, Brinkerhoff and Sullivan (1982) concluded that most programs have little or no effect on retention. Green (1985) stated that this ineffectiveness is often related to the fact that most programs ‘are sloppily planned, loosely implemented, and underfinanced.’” 69 In order for an outdoor adventure education program to succeed at Occidental, it must have a clear implementation plan.

The first step in the implementation process must be to gather substantial support from the administration. Deans, professors, and staff are all important. If they believe in the benefits of outdoor adventure education, their support will help generate an effective program. Without administrative support, Occidental’s outdoor adventure program will be under-funded and unsuccessful. Money is needed for this program. A director will need to be hired and paid a competitive salary with benefits. Equipment will also need to be purchased and stored. A small increase in students’ Associated Students of Occidental College (ASOC) contribution would help to decrease the financial load. Additionally, a portion of the Student Life budget could be diverted to support the formation and development of a program.

The second step toward implementing an effective outdoor adventure education program at Occidental must be to search for highly-qualified and highly-skilled professionals. The position of program director must be a full-time position that is filled by an individual with a great deal of knowledge and skill, as well as a substantial amount of experience.

69 Gass, Michael A. The Longitudinal Effects of an Adventure Orientation Program on the Retention of Students. 1990: 33 quoting Green, D. Student Retention Programs should be more than Self-Serving Scams. 1985: 96
Dubail, 39

working with college-aged students, outdoor programming and facilitation, administrative work, and evaluative research. The director’s knowledge and skills should be in adventure activities that will be of use and interest to the Occidental community. Without a qualified director, programs will not benefit students to their maximum capacity.

The third step must be to create a constitution to serve as the philosophical foundation of the program. It should include a mission statement, a statement of purpose, and broad organizational goals and objectives. The constitution should be written with the support of the program director, staff facilitators, and students. It will provide a common framework from which individual programs and activities can be developed, and be used to mediate disputes regarding programming and leadership style.

The efficiency of the implementation process depends, in part, on the oversight of the process. I propose that a small committee be formed to oversee the implementation of the program, by serving as an advisory council and/or executive board. Some of the administrative advocates who are identified in the first stage of the implementation plan should serve as committee members, along with a number of students. On this committee, every member will have equal power and authority to voice opinions and make decisions. Above all, this should be an organic process, whereby no one is in a position of complete control over the implementation process, as this program is to be designed for the benefit of everyone affiliated with Occidental College.
Chapter 8: Policy Recommendations

- Occidental College should build and support a student service that offers adventures in the outdoors:
  - The adventures should incorporate:
    - the experiential model of education,
      1. Without the use of this model, the programs and activities that students experience will not have as great an effect; students may not transfer their learning to their daily life; and students may be confused about the purpose of the educational experience.
    - a servant style of transformational leadership
  - The student service should develop programs that build:
    - student leadership,
    - students’ self-systems,
    - students’ environmental ethics, and
    - students’ commitment to the public good
      1. The sum of each of these goals results in the attainment of the Oxy mission statement: dedication to “a total educational experience” that “prepares them for leadership” and “a deeply rooted commitment to the public good.”
  - The student service should have:

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http://www.oxy.edu/x2640.xml -- Occidental College Website viewed April 6, 2006
- support from the administration,
- oversight from professional staff,
- support from student leaders,
- institutional funding, and
- institutional scholarships to lessen the financial impact on low-income students

Without support and dedication from the administration, the program will never be successful. With the direction of a professional who is trained in outdoor and experiential education, students will be afforded the opportunity to participate in adventure education of the highest quality. As students develop leadership skills in outdoor education, they will form a bridge between the student body, students’ needs, and the program. Without institutional funding, however, the quality of programming cannot be excellent. And because Oxy is dedicated to equity, scholarships will help to minimize the financial impact of program costs on students who require financial need.
Chapter 9: Conclusions

It is beyond the scope of this paper to outline specific activities that facilitators could use to bring about the desired effects for Occidental students. More research needs to be done by the program director and facilitators in order to create effective programs. This paper has outlined the philosophy that the director and staff should use to continue the development of this program. If the policy recommendations and implementation plan are followed, the director and facilitators will be fully capable of developing valuable programs that benefit the entire Occidental community.

The elements of challenge, risk, and educational structure in outdoor adventure education programs make them effective for developing leadership skills and self-systems. When environmental education becomes an added variable in the equation, participants’ environmental behavior also improves. But the most important outcome of outdoor adventure education is the participants’ understanding of learning. Without the elements of reflection, analysis and synthesis, individuals go through life without learning. The bottom line of outdoor adventure education is that the process of experience, reflection, analysis, and synthesis become an explicit learning process whereby the learner becomes overtly aware of it.

The benefits individuals acquire throughout outdoor adventure education programs are most effective when applied to their daily routines. The process of learning, the leadership skills, the communication skills, the technical skills, and the environmental awareness are only relevant if they become an established part of the participant’s daily life. It is far too easy to let the benefits dissipate over time. That is why a college or university setting is very effective for the long-term integration of these effects. Follow-up programs are much easier
to implement when all of the program participants live together and interact on a regular basis.

After students return to campus after a 10-day adventure, they should participate in follow-up programs that connect their learning to the community. These programs can include: day hikes, beach cleanups, community service projects, community-based internships, and involvement in student organizations and leadership roles. Outdoor adventure education serves as a philosophical model, if not a concrete model, for the development of a civically engaged and environmentally conscious society.
### Appendix 1: Sample Survey

**Hometown:**

**Age:**

**Year at Oxy:**

<table>
<thead>
<tr>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th or more</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Gender:**

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
</table>

I engage in activities in the outdoors:

<table>
<thead>
<tr>
<th>Never</th>
<th>Once a month</th>
<th>Twice a month</th>
<th>Once a week</th>
<th>Multiple times a week</th>
</tr>
</thead>
</table>

I engage in organized activities in the outdoors:

(organized means more than just two friends going on a hike, such as a club activity, ropes course, kayak/sail trips)

<table>
<thead>
<tr>
<th>Never</th>
<th>Once a month</th>
<th>Twice a month</th>
<th>Once a week</th>
<th>Multiple times a week</th>
</tr>
</thead>
</table>

I participate in a club that offers opportunities to be in the outdoors:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

I have participated in a Ropes Course:

<table>
<thead>
<tr>
<th>Never</th>
<th>Once</th>
<th>Twice</th>
<th>Thrice</th>
<th>Four or more times</th>
</tr>
</thead>
</table>

I personally benefited from my experience(s) in the Ropes Course:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

I would personally benefit from an outdoor program at Oxy:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

I feel that the Oxy community would benefit from an outdoor Adventure program:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

If Oxy developed an outdoor adventure program, what activities would you like to see offered?

Please describe your skill level in any outdoor activity with which you have experience (e.g. backpacking, rock climbing, kayaking, hiking, mountain biking, swimming, sailing)
Glossary

**Adventure Activity:** “An activity encountering risk, hazards or bold undertakings, in which hazards are to be met and the issue hangs upon unforeseen events.”[^71]

**Core Competency:** “proficiency at a task or activity that is central to a practice, in this case outdoor leadership.”[^72]

**Debriefing:** “can occur during or after an experience. The facilitator asks the group to reflect on their experience and to identify points of learning.”[^73]

**Ethic of Care:** “An ethic based on relationships. One person responds to another out of love or natural inclination.”[^74]

**Expedition Behavior:** “The effect you have on your companions; the effect can be positive or negative, motivating or distracting.”[^75] It “involves commitment to the group, a positive attitude, and cooperation to achieve a goal.”[^76]

**Facilitation:** “The process of moving a group or individual toward a desired outcome.”[^77]

**Frontloading:** “is prebriefing or setting the stage before an activity. The facilitator tells the group what they should learn from an experience in order to create focus and a reference point for the group.”[^78]

**Leisure:** “is nonwork activity into which people enter voluntarily for enjoyment. The ultimate goal of leisure activity is cultivation of the self. Leisure involves three elements: perceived freedom, intrinsic motivation, and a positive outcome.”[^79]

[^75]: http://www.nols.edu/publications/mntneeringbook/mntneeringelements.shtml
[^76]: http://www.nols.edu/courses/pdf/rockymtn/wmt_cd.pdf, page 3
Outdoor Education: “A teaching methodology that combines direct experience… and multisensory learning to teach through or for the out-of-doors. Outdoor Education is intended to supplement and compliment the indoor classroom rather than to replace it.”

Outdoor Leadership: “Practice of leading individuals and groups into natural settings on safe, enjoyable, and environmentally sound excursions.”

Recreation: “Form of leisure in which individuals exert energy through some form of physical activity.”

Risk: “is an integral part of adventure experiences. Without risk, there is no adventure; with too much risk, there is misadventure, which can possible result in injury or death. It is the outdoor leader’s responsibility to find a proper balance between too little risk and too much risk.”

Risk Management: “Systematic process of reduction the potential occurrence of an accident during an adventure experience.”

Self-Authorship: “the capacity for individuals to author, or invent, one's own beliefs, values, sense of self, and relationship with others”

Self-Concept: an individual’s perception of him or herself including personal abilities, appearance, and performance. “The individual’s self-concept has been demonstrated to be highly influential in his [sic] behavior and directly related to his general personality and state of mental health.”

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80 Ewert, Alan. The Effects of Outdoor Adventure Activities upon Self-Concept. 1977: 8
85 Ewert, Alan. The Effects of Outdoor Adventure Activities upon Self-Concept. 1977: 7
**Self-Efficacy**: “Perception about what we can or cannot do. It is developed from direct and indirect experience.”

**Self-Systems**: generally refer to a body of knowledge and beliefs that an individual holds about themselves and it is developed through experience and comparison with others.

**Stress Activities**: “Activities which involve the utilization of apparent dangerous, risky, or uncomfortable situation. The risks or dangers involved are implied rather than real, in that, the student perceives danger while the instructor sees a controlled situation.”

**Task Behaviors**: “Behaviors that move a group toward accomplishing goals.”

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Dubail, 48

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Appendix 2: San Gorgonio Wilderness Adventure

A 10-day sample program for Occidental College Adventure Pursuits (OCAP)
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About San Gorgonio Wilderness Adventure

The San Gorgonio Wilderness Adventure is a 10 day program for Occidental College students. The program consists of a backpacking trip in the San Gorgonio Wilderness Area, and other camp activities (swimming, wilderness cooking, map and compass practice). The emphasis of the adventure is on backpacking skills, leadership development, and environmental ethics. The first day is an on-campus orientation. The next 8 days will be spent backpacking in the San Gorgonio Wilderness Area. The final day will be spent on campus debriefing and evaluating the program. Interspersed throughout the week are activities specifically chosen for their content on leadership and the environment. It is our hope that the participants will leave the program with 1) a stronger connection to nature, 2) confidence in their abilities to be a leader, and 3) an increase in their self-efficacy.

The San Gorgonio Wilderness Adventure is designed for students who want to develop and improve their leadership abilities, backpacking skills, and knowledge of the natural environment. A maximum of 12 students will be accepted to the program. There will be no discrimination against race, ethnicity, gender, religion, creed, sexual orientation, or financial limitations. The only prerequisite for participation in the program is an interest in spending time with a group in a wilderness area.

Mission, Goals, and Objectives of San Gorgonio Wilderness Adventure

Mission Statement: To develop student leadership on campus, in society, and around environmental issues through adventure education in the outdoors.

Purpose Statement: To foster world citizens who are motivated to work for the benefit of the world, its environment and its citizens.
Goal 1: Offer challenging activities that promote the development of student self-confidence and self-efficacy.

- Offer a long backpacking adventure that includes high to moderate levels of perceived risk.
- Provide the opportunity to climb one high-elevation mountain peak.
- Challenge students to complete a high ropes course.
- Offer the opportunity to complete a solo experience in the wilderness.

Goal 2: Provide opportunities for participants to develop leadership skills.

- Challenge students to take leadership roles during the high ropes course.
- Offer students a chance to set routes and lead hikes.
- Provide opportunities for students to teach different skills to their peers.

Goal 3: Help students develop an informed environmental ethic.

- Stimulate intellectual thought about the meaning of environment.
- Work with students to develop an understanding of the complex eco-systems through which they are traveling and in which they are living.
- Challenge students to think about nature and how they relate to it.

Goal 4: Challenge students to transfer their learning back to the campus community.

- Stimulate interactive dialogue about leadership on campus.
- Stimulate interactive dialogue about responsible environmental behavior in society.
Complete Task Description List

Pre-Program Tasks

1. Develop Program
   - Decide on target audience
   - Make goals and objectives
   - Develop a Risk Management plan
   - Make an itinerary of the activities
   - Make a “glitch plan”
   - Make a list of equipment and supplies used/needed
   - Decide on program starting and ending dates
   - Apply for wilderness permits
   - Develop an evaluation questionnaire for participants and facilitators

2. Budget
   - Estimate the costs of:
     - Equipment
     - Supplies
     - Food
     - Transportation
     - Permits
     - Facilitator fees
     - Advertising and Promotion
     - Other miscellaneous costs
   - Determine a reasonable participant fee for the program
3. Facilitators

- Determine the qualifications needed for facilitators
- Send out a notice to qualified individuals
- Hire and Train leaders

4. Promotion

- Develop an advertising strategy
- Design, print and distribute advertisements

5. Registration

- Design a registration form
- Decide criteria for participation (who is accepted?)
- Compile a participant confirmation packet

6. Equipment and Supplies

- Assess the quality and quantity of current supplies/equipment currently
- Purchase new supplies, where necessary
- Clean and repair equipment, if necessary
- Plan meals

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RUN PROGRAM!!

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Post Program Tasks

1. Evaluation

- Distribute evaluation on the last day of the program
- Collate and analyze results
Sequencing Rational

The sequence of activities for this program was chosen for a specific reason. There is a gradual increase in the level difficulty throughout the duration of the program. The end of the tenth day will include a de-escalation of difficulty and stress.

As the group grows and develops, the activities in which it engages will increase in difficulty. This will facilitate the improvement of technical skills, leadership skills, and self-confidence.

The first day’s activities will include low-risk, group forming activities designed to develop the comfort level of group members. The following day, the group will participate in a low-ropes course on campus. These activities are devised to build trust and communication within the group. The backpacking portion of the adventure will begin on the third day after a short drive to the wilderness area.

The activities on the trail will be a mixture of leadership development, technical skill practice, and environmental activities. Each of the activities will build on skills and knowledge from the previous activities.

The level of emotional safety and exploration will follow the sequencing plan as well. For example, activities like the solo and the ropes course are done early in the week to promote self-awareness and interpersonal dialogue. As the program progresses, group functioning will improve, and programs will become more effective on intrapersonal and interpersonal development. With a carefully chosen sequence of activities, the facilitators will be more likely to achieve the program goals.
Adventure Itinerary

Saturday, August 5, 2006: Day 1

11:00am  Students arrive on the Occidental campus
12:00pm  Lunch in Sycamore Glen
1:00pm  Introductions and Ice-breaker games
2:00pm  Rules, expectations, goals
2:30pm  Low Ropes-Course
7:00pm  Dinner in Sycamore Glen
8:30pm  Backpack packing seminar/workshop

Sunday, August 6, 2006: Day 2

7:00am  Wakeup
7:30am  Breakfast in Residence Hall
8:00am  Drive to San Gorgonio Wilderness Area
10:00am  Begin hiking **5.7 miles to Limber Pine Bench Trail Camp**
1:00pm  Lunch on trail and group check-in
1:30pm  Seminar on Leave No Trace backcountry ethics
2:00pm  Continue hiking to Limber Pine Bench Trail Camp
6:30pm  Arrive at Limber Pine Bench Trail Camp and setup camp
7:00pm  Divide and complete camp duties
7:30pm  Dinner at Limber Pine Bench Trail Camp
8:15pm  Debrief the day

Monday, August 7, 2006: Day 3

7:00am  Wakeup
7:30am  Breakfast and camp breakdown
8:15am  Begin hiking **5 miles to Trail Fork Springs Trail Camp**
10:00am  Map and compass seminar/workshop
10:30am  Snack on trail
12:00pm Seminar on local flora and fauna
1:30pm Lunch on trail
2:00pm Arrive at Trail Fork Springs Trail Camp
2:30pm Leadership seminar/workshop
3:00pm Prepare for solo experience
3:30pm Begin solo experience

Tuesday, August 8, 2006: Day 4

10:00am Students return to Trail Fork Springs Trail Camp
10:30am Debrief of solo experience
11:30am Begin hiking 5 miles to Dollar Lake Trail Camp
1:00pm Lunch on Trail
1:30pm Identify flora
5:30pm Arrive at Dollar Lake Trail Camp and setup camp
7:00pm Dinner in camp
7:30pm Debrief the day
8:00pm Hike around Dollar Lake

Wednesday, August 9, 2006: Day 5

7:00am Wakeup and Breakfast
7:45am Breakdown camp
8:30am Begin hiking 7.6 miles to South Fork Campground
10:30am Workshop on environmental ethics
11:30am Snack on trail
1:30pm Lunch on trail
4:00pm Arrive at South Fork Campground and setup camp
4:45pm Seminar/workshop on National Parks in America
6:00pm Dinner in camp
7:00pm Debrief day
Thursday, August 10, 2006: Day 6

7:00am  Wakeup
7:30am  Breakfast in camp
8:30am  Begin hiking **7.7 miles to Fish Creek Trail Camp**
10:30am  Nature in the city seminar and workshop
11:15am  Snack on trail
1:30pm  Survival in the wilderness seminar/workshop
2:00pm  Lunch on trail
4:30pm  Arrive Fish Creek Trail Camp and setup camp
5:15pm  Stream eco-system seminar/workshop
6:30pm  Dinner in camp
7:00pm  Debrief day

Friday, August 11, 2006: Day 7

7:00am  Wakeup
7:30am  Breakfast in camp
8:30am  Begin hiking **5.6 miles to Big Tree Trail Camp**
10:30am  Wilderness habitat seminar/workshop
11:15am  Snack on trail
1:30pm  Lunch on trail
4:00pm  Arrive at Big Tree Trail Camp and setup camp
6:00pm  Dinner in camp
7:00pm  Debrief day

Saturday, August 12, 2006: Day 8

7:00am  Wakeup
7:30am  Breakfast in camp
8:30am  Begin hiking **5.6 miles to San Gorgonio Mountain Trail Camp**
11:15am  Snack on trail
1:30pm  Lunch on trail
4:30pm  Arrive San Gorgonio Mountain Summit 11,502 feet
5:15pm  Setup camp
6:00pm  Dinner in camp
7:00pm  Debrief day

Sunday, August 14, 2006: Day 9

7:00am  Wakeup
7:30am  Breakfast in camp
8:30am  Begin hiking 8 miles to Vivian Falls Picnic Area
11:15am  Snack on trail
1:30pm  Lunch on trail
3:00pm  Arrive at Vivian Falls Picnic Area and drive to Oxy
5:30pm  Arrive at Oxy
6:00pm  Feast on campus
7:30pm  Debrief experience

Monday, August 15, 2006: Day 10

8:00am  Wakeup
8:30am  Breakfast
9:00am  High Ropes-Course at Oxy
1:30pm  Lunch on campus
2:30pm  Debrief experience
3:00pm  Evaluations
3:45pm  Wrap-up
Supplies and Equipment

Group:

- 3 tents (1 per group of 4 students)
- 3 stoves (1 per group of 4 students)
- 3 sets cooking utensils (pot, pan, strainer, large spoon, spatula)
- 3 water containers (3 gallons per group per meal time)
- Water purification devices
- Tarps to cover cooking area (depending on weather report)
- Bear canisters or equivalent

Personal:

Very important items

- Footwear: A good sturdy pair of hiking boots. These must be broken in to your feet and need to be sealed with a waterproofing treatment. A pair of Gore-Tex boots is highly recommended. Your selection of boots may mean the difference between a very enjoyable trip and a very uncomfortable trip.

- Pack: A 3000 to 4000 cubic inch will hold everything for the trip. Internal frame packs are recommended for their comfort and balance when hiking. The pack should have padded shoulder straps, and a padded waist belt.

- Sleeping Bag: Most summer trips are warm and a bag rated to about 25°F will be plenty warm. Use a stuff sack to reduce the volume of the bag.

- Sleeping pad: A 3/4 length Ultralight thermarest is the best pad. Bring a Thermarest repair kit to fix any leaks.

Clothing: Avoid cotton wherever possible. Cotton keeps moisture close to the body, which can cause discomfort, and in extreme cases, hypothermia.
• **Head**
  o Wool hat – must cover ears
  o Wide-brim hat – for sun protection

• **Upper Body**
  o Lightweight long undershirt
  o Midweight long undershirt
  o T-shirt
  o Fleece jacket
  o Rain jacket

• **Lower Body**
  o Long underwear bottom
  o Hiking pants – light-weight, quick drying fabric
  o Swimsuit
  o Rain pants

• **Feet**
  o Sock liners -- thin polyester is recommended. Two or three pair is recommended. A liner sock and outer sock combination is most comfortable and will help prevent blisters.

  **Note:** One clean pair per day is recommended to help prevent blisters. They can be washed in camp and dried on the trail during the day while strapped to the top of your pack.

  o Outer socks: Two or three pair of a wool / polyester blend is recommended. Just like sock liners, a liner sock and outer sock combination is most comfortable and will help prevent blisters. Ones with extra padding in the heel and under the ball of the foot are a little more comfortable.

  **Note:** One clean pair per day is recommended to help prevent blisters.
Food Needed

Breakfasts:

- Oatmeal – ½ cup per person per day = 16.5 lbs
- Black Tea – 1 bag per person per day = 0.66 lbs

Lunch and Snacks:

- Energy Bars – 1 bar per person per day = 22.5 lbs
- Fruit Leather – 1 per person per day = 6.25 lbs
- Fruits and Nuts – 1 cup per person per day = 37.5 lbs
- Peanut Butter – 2 oz per person per day = 18.75 lbs
- Gatorade Powder – 3 oz per person per day = 28.12 lbs

Dinner:

- Pasta – 1 cup per person per day = 28 lbs
- Instant Soup – 3 tsp per person per day = 0.75 lbs
- Instant Beans – 3 oz per person per day = 28.12 lbs
- Tuna (canned) – 1/2 can per person per day (3 oz) = 28.12 lbs
- Herbal Tea – 1 bag per person per day = 0.5 lbs

- Packaging – approximately 2 pounds = 2 lbs

191.27 lbs total
12.75 lbs/person

Every student will be responsible for carrying a portion of the group gear, including tents, stoves, pots and pans, and food and water. The amount a student must carry is dependent on their capabilities. Gear can always be moved from one person to another on the trail.
Description of Facilities

Wilderness areas do not have facilities for human comfort. By definition, a wilderness area does not accommodate a luxurious human living arrangement. A wilderness area is a “region where the land is left in a state where human modifications are minimal.”¹ And according to outdoors.org, “Designated by Congress, this land is a protected area where no roads or permanent structures may be built. No logging or mining is allowed, and vehicle use is strictly limited. Most forms of recreation are allowed.”² Therefore, water must be collected and filtered from streams, and food and shelter must be carried from the city.

A trip to a wilderness area does not, however, have to be uncomfortable. Established trail campsites line the trails, and moss acts as a great mattress. Modern tents are extremely waterproof and trap body heat to provide a warm, dry sleeping arrangement. Plus, food always tastes better in the backcountry. So, while you will not see a shower for 8 days, you will experience a place rarely visited by humans.

¹ [www.wikipedia.com](http://www.wikipedia.com)
² [www.outdoors.org/conservation/wmnf/wmnf-glossary.cfm](http://www.outdoors.org/conservation/wmnf/wmnf-glossary.cfm)
Risk Management Plan

Risk is an important part of outdoor adventure experience. Without risk, there is no adventure; with too much risk, there is misadventure. While an adventure into any wilderness area presents a variety of risks, there are ways to minimize the potential for accidents. An accident is an “undesired event resulting in an injury or a loss of some sort.” Accidents typically occur when human and environmental dangers arise from risks taken. Human dangers originate in people who venture into the outdoors. According to Bruce Martin, “They might include a lack of proficiency in a particular activity, a lack of preparation for the activity or the environment, poor decision-making skills, and a lack of judgment.” Environmental dangers, on the other hand, originate in the natural environment. These could include weather, terrain, and wildlife. When human and environmental dangers overlap, accidents become more likely. For instance, if a backpacker enters a wilderness area where bears are present without the proper knowledge of tying a bear bag, the potential for an accident greatly increases. If another backpacker enters the same wilderness area, but knows how to protect herself from bears, the potential for an accident is greatly reduced. The perceived risk, however, of encountering a bear in the wilderness creates an atmosphere of adventure.

One of the responsibilities of our facilitators is to understand the potential risks and environmental dangers presented by entering a wilderness area. When the risks and dangers are understood, facilitators can prepare themselves and the participants so as to mitigate the real danger. All danger cannot, and should not, be eliminated. Environmental dangers, like weather, cannot be controlled by humans. Facilitators must read the weather report and decide whether or not to enter the wilderness area.

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3 Dubail, Jacob. *Outdoor Adventure Education at Occidental College.* 2006: Glossary
5 *IBID*
not to enter the wilderness area, but they cannot stop rain or snow. If they could, there would be no more adventure. When human dangers are minimized, environmental dangers pose less potential for accidents to occur. Therefore, facilitators must assess their participants' competencies and preparedness before entering a wilderness area. Our facilitators are servant leaders; they are not authoritarian figures. Their job is to ensure the safety of the adventure participants while leading them through an educational program.

An adventure in the San Gorgonio Wilderness Area presents a variety of risks. These risks include bears, access to fresh water, rapidly changing weather, and access to emergency medical response. Through intensive preparation by highly skilled facilitators, each of these dangers can be transformed into perceived risks. ‘Perceived risks’ help to create an atmosphere of adventure from which participants learn and grow, but they do not pose a significant accident potential.

Encounters with bears rarely result in accidents, but they do present a great deal of danger. To minimize the real danger that bears pose, our facilitators must teach the students about proper bear safety. This includes how to tie a bear bag, and what to put into the bear bag.

The risk of running out of drinkable water is a real risk, but its accident potential can be easily lessened. There are many streams, lakes, and rivers from which water can be collected and filtered. Our facilitators must be familiar with the San Gorgonio Wilderness Area in order to plan and ration drinkable water. An eight-day supply of water cannot be carried. Therefore, the group must utilize the streams and rivers they encounter to insure their supply of fresh water.

Weather can change very rapidly, and bad weather does present a multitude of risks. For example, students can become sick and hurt themselves on the trail. In order to minimize the
dangers of bad weather, facilitators must ensure that the students are prepared for many types of weather.

If a participant hurts themselves, our facilitators must be prepared to respond to the situation. The facilitators must be Wilderness First Aid (WFR) certified. Therefore, if a participant becomes seriously injured, our facilitators will know how to stabilize the student to eliminate the risk of death. Then, the group can assess the situation and transport the student to safety.

The risks associated with programming in a wilderness area do not undermine the educational value of outdoor adventure education. Students that enter wilderness areas with trained facilitators have a unique opportunity to learn wilderness survival, among other skills. To learn how to react to unfamiliar, rapidly changing situations is an important life skill; and the wilderness is a perfect place to learn it. But the risks involved are real, and sometimes life threatening. A thorough risk management and emergency response plan is an essential piece of any successful outdoor adventure education program.