

A Historical Review of Outdoor Leadership Curricular Development and the Future With Action Research

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Abstract

This article is a call for research to be conducted on how to adequately design and evaluate outdoor leader preparation programs (Sugerman, 1999). The profession of outdoor leadership has been slow to examine effective ways of assessing the development of student knowledge, disposition, and performance that inform instructional practice and student learning in outdoor leader preparation programs and what are effective instructional practices (Crosby, 2000; Kime, 2008; Phipps & Claxton, 1997). This article provides (a) a historical overview of what has transpired in outdoor leadership curricular development from the past to the present and (b) a methodology to begin to explore evaluation/assessment practices and instruction.

KEYWORDS: *Outdoor leadership, action research, instructional practice*

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This article is a call for research to be conducted on how to adequately design and evaluate outdoor leader preparation programs (Sugerman, 1999). As Berman and Berman (2009) stated, "...The field of outdoor education lacks an empirically-based method for organizing a curriculum" (p. 3). Most of the research on outdoor leadership curricular development comes from the early 1980s and is focused around professional competencies (Buell, 1981; Green, 1981; Priest, 1984; Priest, 1986; Swiderski, 1981). More recent studies have implemented these competencies within the context of college-level classes or field studies (Mitchell, 1998; Railoa, 1986, 1996). Since that time, core competencies have been revisited several more times (Berman & Berman, 2009; Martin, Cashel, Wagstaff, & Breunig, 2006; Raiola & Sugerman, 1999); however, as Berman and Berman (2009) stated, "Although many strategies of curriculum development and organization have been presented, there is still a notable lack of research in this area" (p. 5).

The History of Outdoor Leadership Competency for Curricular Development

The evolution of understanding what it takes to develop well-rounded outdoor leaders has been discussed for many years. Buell (1981) stated the need for a comprehensive list of competencies for outdoor leaders. Buell organized a list of 235 competencies in 12 competency categories that an outdoor leader should possess. A survey found 153 to be important for entry into the field of outdoor education, while 40 more should be acquired through experience. In a similar attempt at developing a foundational understanding of outdoor leadership, Swiderski (1981) developed another list of crucial competencies. The list was compiled through literature reviews, manuals on the subject, interviews, and past experiences. Out of the research, 48 key competencies emerged as important in the role of an outdoor leader. Green (1981) used the Delphi technique to collect data from 61 Pacific Northwest-based outdoor leaders. The research started with 176 topics or competencies felt to be directly related to outdoor leadership. By the completion of the study, Green retained 35 topics that were believed to be essential components of a college-level outdoor leadership course. In another attempt to categorize competencies, Priest (1984) explained that to be an effective outdoor leader there must be a balance between five basic types: (a) activity and safety skills, (b) organizational skills, (c) instructional skills, (d) group counseling skills, and (e) experienced-based judgment. Priest (1986) also examined the approaches to outdoor leader development on a global scale that included five countries: Australia, Canada, Great Britain, New Zealand, and the United States. From the survey, competencies were ranked in order of importance, resulting in yet another topic list considered to be foundational knowledge for outdoor leaders.

Priest (1987) then conducted a meta-analysis of all the earlier works looking at outdoor leadership competency (Buell, 1981; Green, 1981; Priest, 1984, 1986; Raiola, 1986; Swiderski, 1981), providing the first conclusive study of the work done. From this analysis, 12 core competencies were offered (Table 1).

TABLE 1

Outdoor Leadership Competencies Necessities Research Synopsis

1) Technical Skills	7) Flexible Leadership Style
2) Safety Skills	8) Experienced-Based Judgment
3) Environmental Skills	9) Problem-Solving Skills
4) Organizational Skills	10) Decision-Making Skills
5) Instructional Skills	11) Effective Communication
6) Facilitation Skills	12) Professional Ethics

Note: Priest, 1987

These previous studies set the foundation for what topics should be covered when designing the curriculum for outdoor leader preparation programs. Since the contribution of these competencies, only a few studies have examined instructional practice in relation to competencies. Raiola (1986) conducted a study focused on the curriculum within outdoor leadership and how to apply it to a classroom setting. A panel consisting of five outdoor leadership experts and seven students majoring in outdoor recreation at Unity College was established. Each panel member was given a list of 30 objectives that would effectively guide a student through outdoor leadership training. The surveys were then tabulated, and each objective was scored. When an objective received a score of 80% or higher, it was considered fundamental to the curriculum design of an outdoor leadership class. To confirm the curriculum effectiveness, Raiola (1986) used a pilot study to examine the validity of these objectives. The pilot study involved an actual student outdoor leadership course developed from the objectives. The course was divided into three sections: an introductory field experience, a semester class, and a final expedition. The total course consisted of 55 hours of class time and 23 days in the backcountry. Throughout the course, students were required to fill out evaluations on their experiences. From these evaluations, Raiola (1986) determined that students experienced an increase in self-competence when placed in the backcountry and in designated leadership roles.

Field experiences are considered an essential component of outdoor leadership education. Field experiences are the catalyst for growth and development of leadership skills. Direct first hand experiences in taking on the leadership role at different points throughout the course allowed the students to become aware of their own competence and move toward increasing their skill, refining their judgment, and strengthening their base of knowledge as leaders. (Raiola, 1986, p. 93)

Raiola (1996) monitored the curriculum through 10 cycles, each 1 year in length for 10 years. Analysis of pre- and post-course competency-based questionnaires led to the discovery of nine competencies suggested as preferred content of outdoor leadership curriculum. Raiola (1996) went further than previous studies by offering a definition and topic list for each competency. Raiola's (1986, 1996) integration of outdoor leadership competencies into a collegiate course was the first attempt to

document curricular effectiveness. The study was limited to a single college course. Not all programs use this same structure, and therefore, many questions regarding best practices for outdoor leader development remain.

Mitchell (1998) analyzed current curricula and their effectiveness and the aspects missing within the accepted applications of outdoor leadership curricula. The questions Mitchell asked are "How is leadership taught?," "Can leadership be taught?," and "What comprises outdoor leadership curriculum?" When trying to answer these questions, Mitchell found that outdoor leadership education does not have a clear and consistent vision in the form of teaching methodologies, curriculum, and assessment. Mitchell hypothesized that the outdoor leadership curriculum being provided by most preparation programs focuses more on the hard skills and the logistics of running outdoor leadership preparation programs. With a focus on the above areas, skills vital to outdoor leaders are being left out of the educational cycle. Mitchell referred to these as meta-skills, including communication skills, group perception skills, and decision-making abilities.

Mitchell (1998) used several different approaches to gather outdoor leadership curriculum data: a literature review, interviews with representatives from the industry, curriculum experimentation, and a survey project. Based on his analysis, Mitchell offered practical solutions to the problems within outdoor leadership education. Throughout the research, Mitchell found that the topic of meta-skills was constantly omitted from outdoor leadership curricula. Interviews with senior outdoor educators proved that most believed that meta-skills are learned through time and experience and are the foundation of outdoor leadership. Meta-skills receive little or no attention in the outdoor leadership curriculum because of the difficulty of transmitting this information to students.

The idea of not helping new outdoor leaders develop their meta-skills and expecting them to learn the skills while on the job is not only very unprofessional but also, potentially dangerous. In no way should the effort of designing an outdoor leadership curriculum be construed as an effort to homogenize and standardize outdoor leadership. This is an effort to help outdoor leadership educators explore new ideas and improve what they teach and offer their students. (Mitchell, 1998, p. 52)

Mitchell strongly believes outdoor leadership curricula need to incorporate meta-skills in a manner that is reasonably consistent and highly effective.

In an effort to demonstrate that previous curriculum studies have made little impact, Sugerman (1999) examined the curricula for outdoor leadership in higher education. The study looked at 15 four-year academic degree programs in outdoor leadership within the United States. The schools were contacted and were asked to send information regarding title of degree, educational department it was under, total credits required, course titles, and course descriptions. From this information, a percentage of credits directly related to outdoor leadership were determined for each program. The courses from all schools were arranged into similar categories: technical skills, interpersonal skills, emergency skills, teaching methods, leadership, theory, and administration. Within these categories, like courses were recorded, and the number of schools requiring courses in that category were tabulated.

The results of the study found no agreement on what to title the degree. There was also a great variance in what department the degree program was located. Degree programs ranged from 46 to 86 credits, and the outdoor leadership-specific courses for each program fell from 22.2% to 86.8% of the total number of required courses. From the analysis, technical skills seemed to form the backbone of many of the programs. Seven of the schools had some kind of interpersonal courses. Every school surveyed required an emergency first aid course at different levels, six schools taught teaching methods courses, 14 schools had some form of a leadership course, all schools offered basic theory courses, and 15 had some form of administration courses. "The major conclusion of the study is that there is no clear consensus on outdoor leadership training in the college and university academic setting" (Sugerman, 1999, p. 6).

Martin et al. (2006) offered another model for outdoor leadership focusing on a set of core competencies. The text *Outdoor Leadership* is designed around these eight core competencies believed to be essential for outdoor leader preparation. These core competencies were developed using the collected efforts of most of the studies already described (Martin et al., 2006).

More recently Berman and Berman (2009) conducted a study using a multidimensional scaling approach to examine potential similarities of different outdoor leadership competencies. The Wilderness Education Association's (WEA) 18-point curriculum model used by WEA prior to 2010 describes the competencies used for training outdoor leaders. The study used the scorings of similarities between competencies provided by 24 WEA instructors. The results indicated five dimensions of similarity. These curricular dimensions included time, movement and progress, risk/safety, reacting to one's surroundings, and deliberation versus intuition.

The WEA, founded in 1978, states its mission to "promote the professionalism of outdoor leadership through establishment of national standards, curriculum design, implementation, advocacy, and research driven initiatives" (WEA, 2012a). This updated mission first appeared in the association's strategic plan published in 2008. Since 2008 the WEA has released several documents that have outlined a process for organizations to become accredited to offer outdoor professional preparation programs. "The WEA has adopted...a curriculum based upon Six Educational Components. Each of the Six Educational Components have definitions that provide the structure for the specific student learning outcomes within each component" (WEA, 2012b). The six educational components and their definitions are provided in Table 2.

Since its inception, the WEA has been involved in certifying outdoor professionals. The WEA stated that certified outdoor professionals:

...are able to teach others to use and enjoy the wilderness with minimum impact; safely lead others in the wild outdoors; exercise good judgment in a variety of outdoor environments and conditions; and demonstrate a basic standard of outdoor knowledge and experience. WEA claims that their certification allows potential employers, parents of youth on organized outdoor programs, insurance companies, wild lands administrators, and others interested in wild land protection to know that certified trip leaders have been trained in decision making, safety, and conservation. (Cockrell & LaFollette, 1985, p. 42)

TABLE 2

WEA Outdoor Professional Educational Components

Judgment:

The act of integrating previously learned information with situational factors to arrive at a decision. This concept is the umbrella from which each student learning outcome within the educational components is to be assessed.

- **Outdoor living:** The specific outdoor skills that are essential to individual and group sustainability in the backcountry
 - **Planning and logistics:** The knowledge, skills, and abilities to design, implement, and prepare outdoor expedition trips a minimum of 7 days long
 - **Leadership:** The ability to accurately self-assess and possessing those essential skills concerning or involving relationships between people; the ability to effectively implement a decision
 - **Risk management:** A structured approach to manage actual risk, emotional risk, and perceived risk through risk assessment, utilization of management and instructional resources, and development and execution of emergency protocols
 - **Environmental integration:** The concepts that embody ecological and cultural literacy along with the cooperative planning and management skills needed to ensure preservation of resources, through personal connections, for past, present, and future generations
 - **Education:** The ability to know and implement theories and practices of teaching, processing, and transference
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The concept of individual certification has not been accepted across the profession because it is believed to be too difficult to assess meta-skills, such as judgment, and then base a certification on those qualities (March, 1980). Wade (1983) was the first to suggest accreditation as an alternative to individual certification. The majority of outdoor leadership professionals surveyed supported the idea of accreditation over certification (Bassin et al., 1992; Cockrell & Detzel, 1985). Although there has been general consensus that the profession should move in this direction,

There are no nationally accepted standards from the professional field of outdoor education that dictate what should be taught in a leadership development program. Neither is there an accrediting body that standardizes outdoor leadership curriculum. The Association for Experiential Education accredits outdoor programs based on safety and organization, not based on curriculum. (Sugerman, 1999, p. 80)

The WEA (2012a) is the first organization to attempt to bring curriculum accreditation to the outdoor education profession even though this discussion has been evolving since the early 1980s. In WEA's guidelines for accreditation, the evaluation of the applicant's curriculum to validate their ability to effectively deliver the student learning outcomes is identified. Outdoor professional preparation programs lack

examples of how to conduct such evaluations, as well as the needed assessment tools and methodologies due to the lack of research on instructional practice (Crosby, 2000; Kime, 2008; Phipps & Claxton, 1997).

A Call to Action Research

The aforementioned research studies and models have determined what desired competencies make effective outdoor educators. All of the lists of competencies created share similar ideas about which important characteristics outdoor educators need to possess when entering the professional world. The next step in curricular development is to move beyond the desired results and begin to explore the route instructors should take with students to reach those outcomes and determine if the routes used are effective. Wiggins and McTighe's (2005) model for Teaching for Understanding describes curricular design as occurring in three stages:

Stage 1: Identify the desired results

Stage 2: Determine acceptable evidence

Stage 3: Plan learning experience and instruction

The outdoor education profession has identified the desired results, Stage 1, through studies of outdoor leadership competency and recently through the creation of educational components (Table 2) driven by student learning outcomes outlined in the WEA Accreditation Manual (Pelchat & Williams, 2009). Although these are strides to achieving coherence among outdoor professional preparation programs, more work needs to take place within Stages 2 and 3.

Research related to Stage 2, determining acceptable evidence (what should be assessed), and Stage 3, planning learning experiences and instruction, is limited (Crosby, 2000; Kime, 2008; Phipps & Claxton, 1997). There is a need to examine what are effective ways of assessing the development of student knowledge, disposition, and performance that inform instructional practice, achieve student learning, and inform the desired results and subsequent curriculum design. Instructional modifications should be based upon the richest sources of information possible. According to Patton (1990), the combination of the students' actions, words, and description of the course from within the working social context of the course in question is the first place to examine/investigate.

Action Research

Formative evaluation is a methodology for improving instructional resources and curricula (Bloom, Hastings, & Madaus, 1971; Cronbach, 1963; Scriven, 1967; Thiagarajan, Semmel, & Semmel, 1974). It entails asking questions such as "What is working?," "What needs to be improved?," and "How can it be improved?" on an ongoing basis (Worthen & Sanders, 1987). Black and Wiliam (1998) also add that teachers and their students undertake effective formative evaluation. If formative evaluation is the key to systematic instructional practice development, then it is equally arguable that action research is the natural development for and from rigorous formative evaluation (George & Cowan, 1999). "Action research studies yield findings that are likely to provide much information of use in formative evaluation;

and methodologies that are used or developed in such studies lend themselves to adaptation for routine use in formative evaluation” (George & Cowan, 1999, p. 21). Action research lends itself to answering curricular questions that can be conducted in real time with the teacher as the researcher (McKernan, 1996). With the teacher at the center of the research, immediate results can be implemented and continually reevaluated until the desired result is achieved.

When defining action research, Huang (2010) believes “action research represents a transformative orientation to knowledge creation in that action researchers seek to take knowledge production beyond the gate-keeping of professional knowledge makers” (p. 93), allowing knowledge users to have a stake in the process. “Action researchers do not readily separate understanding and action, rather we argue that only through action is legitimate understanding possible; theory without practice is not theory but speculation” (Huang, 2010, pp. 93–94). Outdoor leader educators argue that without legitimate experience education is not possible; theory without experience is not theory but speculation. These two parallels are why action research and outdoor leader education is an intuitive match for further curricular and instructional development.

Action Research Credibility

Stringer (2007) states that credibility is the fundamental issue within action research approaches. Credibility is centered on the issue of trust between the subjects and the researcher, and without this trust, they may not commit in a way that will lead to a well-developed inquiry. There are specific components necessary to facilitate the development of the needed trust with the subjects that lead to credibility. The first component (Stringer, 2007) is prolonged engagement. Programs that offer extended backcountry experiences have students as a captive audience for large periods of time. The second component (Stringer, 2007) is persistent observation. Again, extended backcountry experiences where the instructors live in isolated environments with the students partnered with great field note-taking ability cover this area well. The third component (McTaggart, 1997; Olsen, 2004; Stringer, 2007) is triangulation; the points of view of each instructor, matched with the students’ self-reflection, provide the triangulation need for validity. The fourth component (Stringer, 2007) needed to develop trust is member checking. This is the process where a student checks with peers and instructors to see if the feedback they received is accurate. The fifth component (Stringer, 2007) is participant debriefing, which occurs daily in most outdoor leadership programs. The sixth component (McTaggart, 1997; Stringer, 2007) is diverse case analysis. Each outdoor leadership course that goes into the backcountry is made up of an entirely new group of individuals. The individuals drive the directions of these experiences, which make them rich with the potential for diverse analysis. The final component (McTaggart, 1997; Stringer, 2007) is referential adequacy, which is the process of archiving information that can be used to compare current content with that of the past. When investigating these components, we found that the process of training outdoor leaders was intuitively designed using an action research philosophy because all of the components are easily addressed.

Action Research Stages

Action research involves process-oriented methodologies that are designed to empower all participants in the educational process. Participants are frequently

described as stakeholders in the educational process. The stakeholders include the students, instructors, curriculum developers, and educational researchers. In effect, the stakeholders are everyone on whom the study impinges. This process addresses the concerns presented by Schumann, Paisley, Sibthorp and Gookin (2009) that “voices of students are lacking” in the area of student learning outcome-based research. The process of action research is cyclical and proceeds in distinct stages. Figure 1 is representative of the action research process.

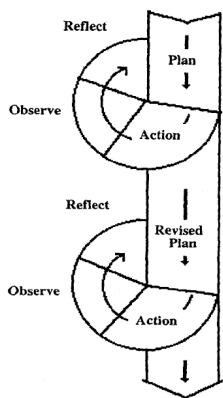


Figure 1. Action Research Protocol. From *The Action Research Reader*, by S. Kemmis & R. McTaggart, 1990, Copyright 1990 by Stephen Kemmis & Robin McTaggart. Reprinted with permission.

There are several essential elements, or steps, in action research design (Burnaford, Fischer, & Hobson, 2001; Burns, 1999; Cochran-Smith & Lytle, 1993; Freeman, 1998; Hartman, 1998; Hopkins, 1993; Kemmis & McTaggart, 1990; Mills, 2003; Stringer, 1996; Wallace, 2000). The first step is reconnaissance and the general plan. An exploratory posture is taken in this first step as an educational intervention is developed. For example, to examine the perceived effectiveness of a specific teaching methodology within a backcountry-based outdoor leadership experience, a schematic for how and when to use that methodology during each experience should be developed.

The second step is the action of action research; the planned action is carried out or begun. During this phase, the teaching methodology is used as it always has been. During the third step, observations are made and data are collected in as many representations as possible while the planned action is executed. To gather as many representations as possible, let the students make modifications to the teaching methodology after each use, taking into account physical safety considerations. Allowing the students to modify teaching emancipates them from traditional learning (Habermas, 1971). Documenting changes from both student and instructor perspective

through multiple methodologies ensures the ability to triangulate the information (Olsen, 2004). Methodologies currently used by outdoor leadership preparation programs include field notes, journals, interviews, and summative assessments.

The fourth step is analysis and reflection, which is the most time-intensive component. Analysis and reflection is best done through dissecting the data gathered in the third step by triangulating the observations of the two instructors and of the students. As patterns emerge from the data, they can be categorized into knowledge claims that inform the planning of the next action cycle. For example, if there was a common belief that arose through the various data gathering methodologies that a student experience was too stressful, the instructors could create and conduct an intervention. Then, the intervention would be assessed during the next action research cycle. The entire cycle repeats until a sufficient solution is achieved, leading to an enhanced teaching methodology.

Action research is interpretive in nature and leads to formative analysis (Torrance & Pryor, 2001). The evaluation continues while the experience is in progress. This feature allows the instructional practice to be changed or modified when it matters most, the moment the subjects need to be unbound from their existing preconceptions about the activities in which they are participating. Action research is experimental and collaborative (Sagor, 1992). Everyone is an active, knowing participant, and each cycle should inform each subsequent cycle. The instructor or curriculum developer may have a general idea or plan in mind at the beginning, but no one truly knows what will occur and what knowledge will be generated as a result of the action until the action is taken and analyzed through reflection and discourse. The collaborative nature of action research will also impact the study due to the reciprocal relationship between the instructors and subjects inherent in action research.

Conclusion

The profession of outdoor education has been slow to determine how to adequately design and evaluate outdoor professional preparation programs. Lists of competencies have been proposed from the early 1980s to the present day with little research conducted on integrating competencies into curricular, instructional, assessment design, and application. The lack of literature has led to the erratic development of outdoor leadership preparation programs, in both the academic and business arenas. Not until recently has any of the previously generated literature been used to develop a structure for curriculum evaluation within a professional association that has a mission to professionalize the industry. The WEA conducted a formal outdoor leadership curricular literature review that resulted in an accreditation system that includes six educational components that contain student learning outcomes that lead to outdoor educator certification. The WEA is the only organization to develop such a standard and has developed the vehicle to maintain the accreditation system. While this is a first step in designing curricula and programs, there is still much work to be done. It now becomes vitally important for outdoor education professionals to see if current instructional practices and assessment procedures produce students at the level indicated by the WEA's student learning outcomes. One way of examining practice is to use action research for formative evaluation. These types of studies will produce best practices within the field and help develop a common language that is found in

all successful professions. The profession needs to be purposeful in the approach taken, the language used, and the process from which tools are developed to measure student learning. Embracing the action research approach for curriculum, instructional, and assessment design will only strengthen the credibility of the outdoor professional education. This article is a call for research to be conducted within organizations that are currently managing outdoor professional preparation programs.

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