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Leo McAvoy
University of Minnesota

Jim Roehl
University of Minnesota

John Rynders
University of Minnesota

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LEADER INTEGRATION COMPETENCIES AND STAFF TRAINING IN ADVENTURE PROGRAMS

Leo McAvoy, Jim Roehl, and John Rynders
University of Minnesota

BACKGROUND

Leadership competencies have long been a topic of interest in the business and management fields, from Fayol's (1949) position that leaders are born not made, to the position by Adair (1988) who holds that leaders can be developed in the realms of forecasting, planning, organizing, communicating, coordinating, supporting, and evaluating. The outdoor adventure field has also been very interested in leadership. A number of authors have identified outdoor leadership competencies (Buell, 1983; Ford & Blanchard, 1985; Phipps & Swiderski, 1990; Priest 1990; Priest & Gass, 1997; Richardson & Simmons, 1996; Swiderski, 1981). These competencies typically include technical skills (e.g. logistics, navigation, safety, activity skills), people skills (e.g. group interaction, individual development, motivation, teaching, conflict resolution), and the overarching skills of good judgment (Cain & McAvoy, 1990) and ethical behavior and decisions (Fox & McAvoy, 1995). A number of studies and texts have recommended curriculum components and methods to develop leadership competencies in students and leaders (Cain, 1985; Green, 1981; Koessler, 1994; McAvoy, 1980; Probst & Koessler, 1998; Raiola & Sugerman, 1999). These leadership development methods typically include lectures and materials to increase knowledge levels, use of scenarios and case studies, field practice under supervision, mentorship, reflection and feedback/evaluations.

Integrated adventure programs are those that include persons with and without disabilities participating together in planned adventure activities in remote wilderness-like settings (McAvoy & Lais, 1999). Integrated outdoor adventure programs show many positive outcomes for participants (Anderson, Schleien, McAvoy, Lais & Seligman, 1997). These integrated programs require an additional set of leadership skills due

to the increased range of abilities and expectations with a group that includes persons with and without disabilities (McAvoy & Lais, 1999; Schleien, McAvoy, Lais & Rynders, 1993). The literature contains a number of best practices for working with persons with disabilities in community based settings (Rynders et. al, 1993; Schleien, Ray & Green, 1997) and in outdoor adventure settings (Havens, 1992). Smith (1992) presented leadership requirements for working in adventure programs that had a therapeutic environment. Lais (2001) and McAvoy & Lais (1999) described programmatic elements recommended for integrated outdoor adventure programs.

Lais (2001) developed the "7 Steps to Integration" in the 1980s and has used these techniques to guide programs and staff training at Wilderness Inquiry based in Minneapolis, Minnesota. These steps are respect each person's dignity, open lines of communication, establish patterns for inclusive decision making, emphasize the value of effort and non-physical accomplishments, focus on group challenges and activities, delineate and delegate tasks, and develop symbiotic relationships among participants. These best practices are used by leaders to successfully integrate persons with and without disabilities on an outdoor adventure trip. Little study has been done regarding the actual competencies needed by leaders in integrated adventure programs, or on the most effective methods to increase or develop a leader's competency in accomplishing integration on an adventure trip. This study was designed to begin an exploration on these topics.

The purpose of this study was to test that competencies about inclusion were learned in staff training. Specifically, the study sought to identify the leadership competencies necessary

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for leaders in integrated outdoor adventure programs and to measure the effectiveness of a staff training addressing one of these competencies (the ability to apply integration strategies). This study was exploratory in nature and centered on one agency, Wilderness Inquiry, Inc. (WI) of Minneapolis, which is recognized as the foremost integrated outdoor adventure program in the country. The study focused on current staff of Wilderness Inquiry and on the approximately 30 new program staff that Wilderness Inquiry brings into the organization each summer. The study design used a literature review and three focus groups to identify the primary leadership competencies needed for leaders of integrated programs. A primary competency identified was "strategies for applying integration techniques to all levels of ability." A paper-pencil test was then designed to measure the effectiveness of Wilderness Inquiry's nine-day staff training in influencing the integration strategy knowledge of new staff. This test was administered to staff before and after training during the 2000 and 2001 summer trip seasons.

METHODS

A list of integrated program leadership competencies was developed through a review of the literature, observation of leaders at work on an integrated program, three focus groups, and an expert panel. The literature review resulted in a preliminary set of competencies. A researcher accompanied a Wilderness Inquiry five-day winter dogsled adventure trip in northern Minnesota and systematically observed and recorded the leader competencies exhibited during the trip. Focus groups were conducted with Wilderness Inquiry senior leaders, Wilderness Inquiry administrative staff, and Wilderness Inquiry participants who had been on three or more trips. These three focus groups were conducted according to the Krueger's (1994) focus group model, each included six to eight people, and were audiotaped. Data from the trip observations and the focus groups were organized and qualitatively analyzed by reading the data, organizing it into preliminary categories, rechecking the data for fit, and synthesizing the data and cate-participant, but they also reviewed for accuracy, relevance, and understandability. After revision, the test was pilot tested with five newly hired

gories to create a preliminary set of primary and secondary leadership competencies. The results of this analysis were submitted to a panel of five experts who had expertise in adventure program leadership, inclusion, special education, and therapeutic recreation. This panel revised and validated the set of competencies. This resulted in a set of five primary competencies and 38 secondary competencies that fit within the five primary ones (see Table 1).

One of the primary competencies identified in this study was "ability to apply integration strategies to all levels of abilities and in varied situations." The next step in this research project was to determine how effective Wilderness Inquiry's nine-day staff training was in increasing new staff members' knowledge of integration strategies. The researchers in this study understood that literature indicates instruction coupled with "experience on the job" is the most effective way to develop outdoor leader competencies (Raiola & Sugerman, 1999). But, staff training is an integral part of most outdoor adventure and camp programs. Therefore, a first step in determining how to develop competencies is to analyze the impact of staff training. It was the purpose of this study to focus on this staff training element and to measure the effectiveness of staff training on one competency, that of integration strategies.

Lais' 7 Steps to Integration were used to develop an eight-item short answer instrument intended to test leader knowledge of integration strategies. A number of steps were taken to make the instrument as valid as possible, but the researchers realize there are limitations to this and any other instrument that asks for a narrative response from participants. First, the eight-item test was developed by the researchers in concert with two experienced administrators from Wilderness Inquiry (including Lais). The test was then reviewed by five experts in therapeutic recreation, inclusion, and outdoor leadership. A draft version of the test was then completed and reviewed by eight experienced leaders and administrators of Wilderness Inquiry. They not only answered the questions as would a research Wilderness Inquiry staff prior to staff training. Again, revisions were made to the test. Three senior administrators at Wilderness Inquiry, and

two university professors with expertise in adventure programs and inclusion, developed a list of "correct" responses for each question.

The test consisted of eight problem scenarios that a leader could be expected to encounter on an integrated adventure trip. Study participants were asked to indicate what they would do to solve the problem. An example of a question and elements of correct responses is given below:

Question 1: As a leader on a canoe trip with 12 participants, you have just encountered a 1/4 mile portage. The portage has a few protruding rocks and a short stretch of downhill. Your group consists of John who has a visual impairment, Sarah who is prone to seizures, Mary who has full use of her upper body and uses a wheelchair, and Larry who gets tired easily and has some difficulty walking on uneven terrain. The rest of the group has no apparent disabilities. How do you get the whole group across the portage?
Elements of Correct Response for #1:

- Facilitate highest and best involvement level of each participant
- Ask people what they would like to do, determine strengths based on observation of group
- Be less interested in speed/efficiency and more interested in having full participation by everyone
- Preserve dignity of person with disabilities
- Promote teamwork, everyone contributing and making it a positive experience
- Approach the task from a perspective of many small tasks, everyone can accomplish at least some tasks
- Subtly put people in pairs or trios with complementary (symbiotic) conditions and abilities

The eight-item short answer test was administered to 31 Wilderness Inquiry new staff in June of 2000 on the morning their nine-day staff training began, and again on the last afternoon of the training. These new staff members took the

test in a monitored area and were given 30 minutes to complete the test. The nine-day staff training included a three-day field component. During the staff training, integration strategies were taught using lecture, scenario and modeling methods. After the first year of use, the test was shortened to a six-item instrument (two questions were eliminated) because it was determined that 30 minutes was not enough time to fully respond to eight questions. In June of 2001 the revised test was administered to 28 Wilderness Inquiry new staff before and after the nine-day staff training that year as in the year before. The staff-training curriculum was the same as it was in 2000. A scoring system was developed to score each test by assigning scores to the narrative responses. Each test was scored independently by a recognized expert in adventure programs and by an expert in inclusion/special education. The responses to the questions were scored on a seven-point scale from zero to six, with six being a perfect score. An analysis of how the two scorers compared (inter-rater reliability) indicated they agreed on most scored items. Scores of the two evaluators were within two points of each other on 94% of the responses in 2000 and 90% in 2001. Test results were analyzed by means, S.D., and t-test on paired data for each year.

RESULTS AND DISCUSSION

The literature review, trip observation, and focus groups resulted in a set of five primary competencies needed in integrated programs, and an additional 38 competencies that fit within those five (Table 1). The following were the five primary competencies: ability to apply integration strategies to all levels of abilities and in varied situations (e.g. assess participants/situations/tasks, role model integration); service oriented leadership abilities (e.g. safety, judgment, service to participants); awareness of and ability to alter the activity (e.g. adapt trip to participants, break down tasks and assign appropriately); awareness of and ability to adapt to or alter the environment (e.g. match needs of environment with needs of participants, passion for wilderness and minimum impact); and awareness of and ability to use resources (e.g. awareness of variables and resources, knowledge of

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safety policies, ability to transmit safety to participants).

The results of the test administered to new staff members (31 staff in 2000 and 28 staff in 2001) before and after staff training indicated that the Wilderness Inquiry staff training was effective in significantly increasing new staff knowledge of integration strategies. Of a possible total score of 48 points in the year 2000 test, the mean on the pretest was 23.48 (SD 7.86) and the mean on the post-test was 34.94 (SD 6.73). On the pretest the minimum score was 7 and the maximum was 43. On the post-test the minimum score was 23 and the maximum was an almost perfect score of 47. The difference in pre to post-test scores for the year 2000 participants (31) was significant at the .0005 level, with an effect size of 1.57.

In 2001, 28 new staff were pretested on the first morning of staff training using the revised six-item test. The new staff then participated in the same nine-day staff training as did the participants in the year 2000 part of the study. The staff training included the same material as in 2000, and included a three-day field component. The post-test was administered at the end of the nine-day staff training. The 2001 test consisted of six of the original questions from year 2000, and each response had a possible score of zero to six. The responses were scored by the same two individuals who scored the year 2000 responses. Scores of the two evaluators were within two points of each other on 90% of the responses. Of a possible total score of 36, the mean on the year 2001 pretest scores was 22.14 (SD 5.64) and the mean on the post-test scores was 26.86 (SD 5.51). On the pre-test, the lowest and highest scores were five and 35. On post-test the lowest score was 14 and highest score was 35. The difference in pre- to post-test scores for the year 2001 participants was significant at the .0001 level, with an effect size of .85.

IMPLICATIONS

Integration strategies are best practices and techniques that have been developed through years of field application. These integration best practices do not necessarily come naturally to outdoor leaders. However, integration strategies can be taught to outdoor leaders, and training can influence leader knowledge of these integration strategies. In this present study, Wilderness Inquiry staff training was effective in significantly increasing new staff knowledge of integration best practice strategies. The set of leader competencies generated in this study (Table 1) can assist other programs in recruiting, hiring, developing, and evaluating outdoor leaders in integrated programs. In addition, the set of integration questions and correct responses generated as a result of this study can be used as training scenarios by outdoor adventure organizations in their integration training processes. Integration strategies should be part of staff training for a wide variety of outdoor adventure programs since inclusion of persons with and without disabilities is becoming the expected norm for all outdoor programs.

The leadership competencies that emerged from this study (Table 1) include many of the competencies found in the literature for outdoor leadership in general. Priest and Gass (1997) summarized the results of a meta-analysis of six studies on leadership competencies. They listed 12 core elements of accepted outdoor leadership competencies. The leadership competencies identified by the participants in the current study include all of these core elements. The major difference in the competencies identified in this study as important for integrated groups focused on the leader's ability to respond to a greater degree of diversity in ability levels of participants. Leaders of integrated groups need to understand specific disabilities and be able to recognize the need to intervene to allow for full participation of all group members, regardless of the diversity of abilities. They need to be able to create the adaptations and flexibility that are necessary for leading these groups. Leaders of integrated groups need to be ready and willing to adapt trips, programs and activities of all group members. They need to be able to develop

TABLE 1
Integrated Program Leadership Competencies

<p>Ability to apply integration strategies to all levels of abilities and in varied situations</p> <ul style="list-style-type: none"> • ability to develop relationships with and influence participants • ability to role model integration • open-mindedness to other's thoughts, abilities, and beliefs <ul style="list-style-type: none"> • compassion • empathy • sense of humor • treat people equally • enjoy being with group/meeting new people • ability to inspire confidence and "follower-ship" amongst participants • ability to adapt participants and staff • awareness/knowledge of specific disabilities • ability to role model integration • ability to assess participants and staff <p>Awareness of and ability to adapt to or alter the environment</p> <ul style="list-style-type: none"> • meet the needs of the activity with need of group • familiarity of route and travel location • passion for wilderness <p>Awareness of and ability to adapt to or use resources</p> <ul style="list-style-type: none"> • knowledge of safety policies • knowledge of and ability to creatively adapt traditional and adaptive gear • ability to transmit safety to the participants 	<p>Service oriented leadership</p> <ul style="list-style-type: none"> • strong work ethic • developed sense of self awareness • developed sense of judgment • motivate/comfort/bribe/confront/encourage/reward participants • selfless service to participants • positive atmosphere/attitude • able to receive and give feedback • continued quest to improve skills and knowledge • flexible leadership style (situational leadership) • ability and willingness to accept responsibility for events of the trip • recognize safety issues • detail oriented organizational skills • ability to delegate to other trail staff • predict actions of group/individual before they happen • passion for opening people's eyes • maintain charisma and control in face of adversity <p>Awareness of and ability to alter the activity</p> <ul style="list-style-type: none"> • recognize skills of other leaders and group members • knowledge of basic WI systems • awareness of variables/resources available • proficiency in basic wilderness activities • adapt trip to participants
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trusting/communicative relationships with group members who may have very diverse abilities. They need to be able to model integration so the entire group understands how integration works in an outdoor adventure group situation. And, they need to understand the needs of all participants to allow for active participation on the part of all group members.

Staff training for integration strategies should be purposeful and focus specifically on

strategies leaders can use for anticipated circumstances. Training for integration should include presentation of the strategies along with experiential practice in how to apply the strategies. Experiential opportunities to apply integration strategies in staff training can include discussion of scenarios, role modeling, and role playing in the field while working with persons with disabilities.

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Additional research is needed to further validate the set of competencies developed in this study. The testing procedure explored in this study can assist other researchers and programs in assessing their staff training efforts and programs. These results only address "knowledge of" integration strategies, and not necessarily "ability to." However, as stated above, staff training (and the knowledge it can impart) is an important part of helping outdoor leaders develop the "ability to." Since it is well accepted in the outdoor adventure field that skill improvement comes from experience, a next step in researching this topic would be to not only do a pre- and post-test before and after staff training, but to also follow up with testing of the same leaders after one to two months spent in the field working integrated trips. This would provide information on knowledge level before and after formal training as well as knowledge level after field application of the integration strategies. A further line of research would be to assess actual integration behavior of leaders while in the field.

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