

The Pedagogic Value of Student Autonomy in Adventure Education

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Allowing students a sense of autonomy has long been considered an important pedagogical tool. This paper synthesizes the current literature on student autonomy from the education, youth development, and outdoor adventure fields and explores its value through an analysis of data from the National Outdoor Leadership School (NOLS). The results supported the two main hypotheses: Developmental outcomes are related to participants' perceptions of autonomy, and autonomous student expeditions (ASE) provide students with authentic and meaningful opportunities to experience autonomy during adventure education programs. A secondary analysis found that injury, evacuation, and near-miss rates were no different during ASEs than when students are accompanied by instructors. Despite these findings, the use of ASEs remains controversial. Implications for research and practice are discussed.

Keywords: Outdoor Adventure Education, Autonomy, Student Expedition, Youth Development, NOLS

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Much of the recent interest in adventure education programs has been in how they work, what makes them unique, and what, specifically, leaders and designers can do during such programs to enhance the potential developmental benefits for participants (e.g., Gass & Priest, 2006; Martin & Leberman, 2005; Sibthorp, 2003; Sibthorp, Paisley, & Gookin, 2007). One of the more promising variables seems to be providing genuine opportunities for student autonomy. This approach has been advocated, most generically, in social psychological theory (e.g., Deci & Ryan, 2002) and, more specifically, in the youth development literature (e.g., Witt & Caldwell, 2005) and in adventure education (e.g., Hough & Paisley, 2008; Sibthorp et al., 2007). The general purposes of this paper, then, are to synthesize the literature on student autonomy, both as an implementation and a design issue, as it might apply to adventure education and to augment this synthesis with analysis of data from the National Outdoor Leadership School (NOLS).

Background

The benefits of student autonomy (a student's belief that he or she has some sense of meaningful control) are widely supported in the educational literature (e.g., Black & Deci, 2000; Reeve, 2002). Most of these studies successfully demonstrate that teachers who support student autonomy in a traditional educational environment are more effective at fostering both academic and developmental outcomes including perceived competence, self-esteem, creativity, and conceptual understanding (Reeve, 2002). In a most general sense, autonomy-supportive *styles* are thought to include three main dimensions: (a) choice, (b) rationale provision, and (c) perspective-taking (Sheldon, Williams, & Joiner, 2003). *Settings* are considered autonomy-supportive when teachers are able to provide students some volition and/or choice in what occurs in the setting and process; an understanding of the reasons *why* they might want to learn about what is being taught (the rationale or content relevance); and a feeling that the teachers are able to understand and empathize with students' positions, perspectives, and challenges in understanding and applying the lesson's content (perspective-taking). Specific teacher behaviors might include asking for opinions, listening to answers, allowing others to talk, encouraging effort, and praising progress (Reeve, 2005).

While the concept of student autonomy is present in the youth development literature, which often focuses on settings other than traditional

education, another set of related terms is sometimes used. Notable among these are “opportunities for youth involvement” (e.g., Gambone, Klem, & Connell, 2002), the concept of “voice” (e.g., Ellis & Caldwell, 2005), and “youth empowerment” (Leffert, Benson, & Roehlkepartain, 1997). One key element in providing opportunities for youth involvement is that the opportunities be *meaningful*. Meaningful involvement can best be described as involvement that makes (or is perceived to make) an actual difference in some substantive way. While, fundamentally, what is meaningful is subject to the interpretation of the program participant, some distinctions may be more obvious. For example, most participants would not perceive a choice of what to have for lunch as “meaningful involvement.” However, most would likely consider being able to plan the content, timing, flow, and execution of a full day of programming to be meaningful.

Research conducted by the American Camp Association (ACA) on camp settings (2006) identified numerous strategies for increasing perceptions of youth involvement. These include: having campers participate in establishing rules and consequences, involving youth in decision making/planning, soliciting and using camper feedback, and involving campers as mentors/peer instructors. One of the main points of this line of research (ACA, 2006; Gambone et al., 2002) is that it advocates for a holistic approach to participant development, meaning that simply providing opportunities for youth involvement without other requisite supports (e.g., safety, food, shelter) is likely of little importance if it does not work in concert with the other facets of the program.

Similarly, youth “voice” is defined as the “perception that one’s opinions are heard and respected by others” (Ellis & Caldwell, 2005, p. 281). Through their work on teen recreation programs, Ellis and Caldwell posit that youth voice can generally be fostered in two ways: (a) by allowing participants to initiate, design, and participate in activities of their own choice, and (b) by having access to adults in the program who listen to and respect youths’ opinions. Both of these suggestions are fully consistent with the results of the ACA study described above. Further, Ellis and Caldwell highlight the relationship between voice and “youth empowerment,” which is, perhaps, most commonly known from the Search Institute’s Developmental Assets Model (Leffert et al., 1997). Empowerment is considered an external asset (existing in youths’ environments) that involves providing youth with meaningful, age-appropriate roles where they can feel useful in their families or communities. Empowerment also includes instilling in youth beliefs that they can make decisions, contribute in their families, and that they are valued by adults. Despite the various descriptors and definitions, it is clear that experiences that provide students with opportunities for meaningful involvement and decision making can provide both educational and developmental benefits, notably for youth.

Much of this literature and theory regarding autonomy or empowerment has found its way into the outdoor and adventure education fields (e.g., Hough & Paisley, 2008; Hyde-Hills, 1998; Kimball, 1991; Wilson, 1995). For example, the notion of “challenge by choice” (cf., Priest & Gass, 1997), central to many adventure programs, commonly involves encouraging participants to self-select and self-regulate their levels of involvement in program activities—which is the essence of empowerment. More specifically, several studies have focused on the role of an empowering process in the achievement of a variety of developmental outcomes, including self-efficacy (Sibthorp, 2003); life effectiveness (Sibthorp & Arthur-Banning, 2004); and leadership, communication skills, and outdoor skills (Sibthorp et al., 2007).

Empowerment or autonomy can occur during adventure education depending upon how a program is implemented and/or how it is designed. Leaders who implement programs by allowing choice, providing their rationale for decisions, and taking on students’ perspectives are able to foster autonomy-supportive environments (cf., Sheldon et al., 2003). In the adventure education literature, Priest and Gass (1997), when discussing different teaching styles, note that “consulted,” “automated,” and “shared” styles, which are characterized by student participation, are accepted and expected styles in adventure education. Recent studies by Hill and Sibthorp (2006) and Ramsing and Sibthorp (2008) examined the role of autonomy-supportive camp staff at camps for youth with diabetes and found that campers who reported more autonomy-supportive camp staff also reported higher levels of competence. Thus, how leaders or instructors implement outdoor or adventure programs remains critical to fostering student autonomy or empowerment.

In addition to implementation practices, participants can also be empowered by specific course components and design features (which must still be successfully implemented). Some of the more common empowering course components or design features in adventure education include “leader-of-the-day” practices, on-program goal setting by participants, and student-led expeditions (Gookin & White, 2006). Leader-of-the-day practices commonly involve a participant taking on a leadership role within his or her group and assuming some level of responsibility for group goal setting, daily activity selection, and the format and flow of a specified period of time (i.e., one or, sometimes, multiple days). On-program goal setting usually involves cooperatively and collectively establishing and articulating expectations and desires for the group as a whole and can also include the open articulation of individual goals. Student-led expeditions are used in several formats, but usually involve the course participants planning and implementing a portion of the course without direct leadership or oversight from the instructional team.

While most of these approaches to fostering student autonomy or empowerment are not very controversial, unaccompanied student-led expeditions (also referred to as autonomous student expeditions, student-led expeditions, final expeditions, or independent student group travel) are increasingly being questioned as viable pedagogical practices (e.g., Davidson, 2004). For example, based on data from programs for school-age participants, Davidson (2004) states that such unaccompanied activities can pose significant risks and that the removal of supervision is not justified pedagogically, legally, or morally. Courses involving unaccompanied, student-led expeditions take empowerment to its extreme and, thus, it could be argued that such expeditions instill a great sense of autonomy but expose students to unnecessary risk compared to the potential benefits. While still widely used, especially by some of the oldest and largest outdoor education programs (e.g., Outward Bound, NOLS), and certainly well-intentioned and potentially pedagogically valuable, most of the evidence supporting the use of this practice is anecdotal.

Given the controversial nature of autonomous student expeditions (ASE), which is the term that, perhaps, best captures the intent of incorporating such events into adventure education programs, this paper seeks to examine the relative value of ASE as a potentially empowering course component in terms of learning outcomes and the potential for physical harm. As such, the data-based portion of this paper has three specific aims: (a) to determine if ASE is related to developmental outcomes on NOLS youth courses; (b) to determine if empowerment, in general, is related to developmental outcomes on NOLS youth courses; and (c) to examine the potential physical risks of using ASE in adventure education.

Methodology

Data were collected from 1,229 youth participants on 130 expeditionary courses run by NOLS from June 2005 to August 2006. While these courses ranged in content from wilderness adventure courses to river rafting courses, they all targeted both leadership and outdoor skill development. As much of the work on student autonomy has stemmed from the youth development literature, the sample was constrained to course participants who were 21 years old or younger. This delimitation also excluded a variety of NOLS courses that have minimum age requirements of 21 years or older to enroll.

Data were collected using the students' perceptions of learning on the NOLS Outcome Instrument (Sibthorp, Paisley, Gookin, & Ward, 2005). Based on NOLS course objectives, this instrument measures perceived gains in leadership (12 items; $\alpha = .84$) and outdoor skills (5 items; $\alpha = .82$) using a retrospective pretest/posttest format (see Howard et al., 1979). Students' perceptions of personal empowerment were measured by the

Characteristics of the Experience Scale (Sibthorp, 2001: 3 items; $\alpha = .83$). A two-item lie scale was also included. Specific data about the courses were also collected from the instructor teams, including whether the courses involved ASE and, if so, for how many days.

After data were cleaned and screened in Statistical Package for the Social Sciences (SPSS) 14.0, difference scores were calculated by subtracting the retrospective pretest from the posttest scores, which is appropriate for calculating change or growth when using a retrospective pretest (Howard et al., 1979). Hierarchical Linear Modeling (HLM) version 6.0 (Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2004) was used to analyze the data. In each model, Level 1 was the participant level and included the participant-level predictor of primary interest to the research question: personal empowerment (PE). Level 2 was the course level and included the predictor of number of days of ASE. Initially, null models, which included no predictor variables at either level, were analyzed for each of the two outcome variables: leadership and outdoor skills. If a significant amount of variance was attributed to the course level, the predictors and cross-level interaction terms were then added to the models. In the interest of parsimony, non-significant predictors were removed from the models prior to final reporting in the results section. All models also included a residual variance (e.g., u_{1j}) for the variability of the regression slopes (e.g., b_1). However, if these predictor variables did not explain a significant portion of the variance, they were subsequently constrained to zero by removing them from the model (Raudenbush & Bryk, 2002).

To begin to determine whether unaccompanied student expeditions are of greater risk to the participants than while they are “accompanied” by leaders, we examined the injury and evacuation statistics (a second data set) for a subset of NOLS courses. We selected the 2005–2006 Wind Rivers Wilderness (WRW) courses, run in the summer months in the Wind River Range of Wyoming, for this analysis because this course type remains the most frequently run course and is the NOLS “standard” design for a 30-day wilderness backpacking course. The vast majority of these courses are a subsample of the previous analysis but offer several advantages when comparing injury, evacuation, and near-miss reports across courses. First, they are run out of a single branch and, thus, have an established cultural norm for incident reporting (comparisons between branches would be less appropriate). Second, these courses all involve the same activities and operate in the same general terrain (the Wind River Range). As such, differences in incident reports by activity or terrain would not influence the data comparisons. On the instructor forms designed for this study, instructors reported that, on average, 6.25 days of each 30-day course utilized ASE in some form.

From standard incident/accident reporting practices required by NOLS, injury and evacuation statistics for all WRW courses conducted during 2005 and 2006 were also available and were reported as either having occurred on ASE or during “normal” accompanied portions of the course. Given these two pieces of information, Chi-square tests were run to compare the actual numbers of injuries, evacuations, and reported near-misses to those expected given the proportion of unaccompanied and accompanied time on WRW courses.

Results

The sample was 65% male, 82% Caucasian, and had an average age of 17.8 years (range 13–21), which is typical of NOLS students 21 or younger. Forty-nine percent of the participants had previously participated in a program they considered similar to their NOLS course. Approximately 2% of the sample was removed from the analysis because respondents’ improvement scores on the lie scale were elevated above the a-priori cut-off (2 points on the 8-point scale). The screened data were then read into HLM 6.0.

Both of the null, or empty, models showed an appreciable and significant ($p < .01$) amount of variance attributable to course (Level 2) differences. The intraclass correlations were .11 for the leadership outcome variable and .15 for the outdoor skills outcome variable, indicating that between 11 and 15 percent of the variance in the outcomes could be attributed to course differences. Personal empowerment (PE) was then added as a Level 1 (participant level) predictor for each of the two models and days of ASE was added as a Level 2 (course level) predictor. The cross-level interaction term was also added to see if there was a significant interaction between PE and days of ASE.

For the leadership variable, both PE ($t = 2.68, p < .01$) and ASE ($t = 2.87, p < .01$) were significant predictors. The cross-level interaction was not significant ($p > .05$). Thus, higher levels of reported PE and more days of ASE significantly predicted greater reported gains in leadership.

For the outdoor skills variable, both PE ($t = 3.39, p < .01$) and ASE ($t = 4.30, p < .01$) were significant predictors. Again, the cross-level interaction was not significant ($p > .05$). As with leadership, a higher level of reported PE and more days of ASE significantly predicted greater reported gains in outdoor skills.

As we considered ASE to be a course design feature, as opposed to an implementation process, that likely only represents one specific approach to empowering students on course, we decided to run an additional analysis to examine the relationship between ASE and PE. Days of ASE can predict empowerment: Participants who experienced more days

of ASE on their courses reported higher levels of empowerment ($t = 2.57$, $p < .05$) than those with fewer days.

In comparison to these gains in leadership and outdoor skills, and to determine if ASE was more “risky” than “normal” accompanied activities, we examined injury, evacuation, and near-miss data from all 2005–2006 WRW courses. The data in this second set are reported for all courses and include information regarding whether the reported incident occurred during accompanied or unaccompanied time, making it possible to compare incident rates between unaccompanied and accompanied portions of the courses. As the total numbers of incidents, evacuations, and near-misses were relatively small for the 2-year sample, it is not surprising that none of the actual numbers were statistically different (using a Chi-squared test) than what one might expect to see by chance alone ($p > .10$). However, inspection of the actual rate of incidents for each of these two sections of a course shows that the incident rates do not appear to be greater during the unaccompanied portions of the course (see Table 1).

Table 1
Injury, Evacuation, and Near-Miss Rates for 2005–2006 WRW Courses

	Accompanied*	Unaccompanied*
Injury	1.40	0.56
Evacuation from injury	0.98	0.28
Near-miss	1.19	0.56

* Rates are reports/1,000 program days; sample included 17,887 program days over 2005–2006.

Discussion

In addition to a synthesis of literature, the purpose of this study was to examine the value of autonomy or empowerment, both as an implementation and a design issue. Autonomy is defined, for the purposes of this paper, as a student’s belief that he or she has some sense of meaningful control. Consistently, the literature (e.g., ACA, 2006; Sibthorp, 2003) and the results of this study support the continued and intentional inclusion of opportunities for student autonomy in adventure education. Fostering perceptions of ownership in and responsibility for the outdoor adventure programs seemed to increase students’ perceptions of development in leadership and outdoor skills. This variable, PE, appeared to be an important and potentially malleable factor that can be incorporated into adventure education program design and implementation.

More specifically, the empowering mechanism of ASE was an important predictor of students’ perceptions of learning. Autonomous

student expeditions can, it seems, play a critical pedagogical role in adventure education programs. This largely, and empirically, supports the arguments made by Allan (2005) and others that these approaches may be entirely appropriate for certain programs with specific goals of creating autonomous and self-reliant outdoor enthusiasts (outdoorsmen/women, outdoor leaders, users of the outdoors). Support for the use of ASE also echoes the work by Gassner, Kahlid, and Russell (2006), which found that the final expedition, a form of ASE, for Outward Bound Singapore students was the most meaningful component of the course regarding both their personal and professional lives. Further, these results support findings from a qualitative study in which NOLS students identified ASE as one of the most important ways in which they learned on course (Paisley, Furman, Sibthorp, & Gookin, 2008).

The contention that the risks from these approaches are not acceptable was not supported by the data in this study, which demonstrated that the injury rates during unaccompanied expeditions were not significantly different than the injury rates reported during the accompanied portions of NOLS courses. This similarity also held true for the number of near-miss reports and serious incidents requiring evacuation. While one might argue that reporting of near-misses and even injuries might be lower on ASE simply by transferring some of the reporting responsibilities to the course participants, who may be less equipped or less willing to report such events, reporting of evacuations is certainly more objective and verifiable. However, we speculate that minor incidents (e.g., overuse and athletic injuries) often occur during earlier portions of the courses when students are still acclimatizing to the basics of outdoor life, which might make the frequency of reported incidents greater during these early (accompanied) portions of a course. In addition, backcountry hazards and skill requirements are typically and consciously reduced, by design, during ASE. This could result in fewer notable incidents during ASE simply because of the fewer hazards and lower skill requirements during these portions of a course.

The authors believe that ASE are pedagogically valuable. In addition to “giving members of the group experience in leadership roles, conflict resolution, problem solving and other skills without reliance on an external leader” (Davidson, 2004, p. 5), they can provide a focal point for learning relevance much earlier in a course: If students know they will have to rely on their own skills rather than on the expertise of their instructors, focus on perfecting skills and techniques may increase out of perceived necessity. Such activities also are critical in the natural skill-building progression—where the need and opportunity for self-sufficiency increases over time. This is by absolutely no means to say that ASE should be taken lightly, utilized without prior proper planning, or that they are appropriate for all

outdoor education program goals and populations. However the removal of unaccompanied activities in programs hoping to foster capable and self-sufficient outdoor leaders requires very careful consideration.

Despite the relationship between ASE and PE, absence of instructors should not be automatically associated with autonomy support. Often it is the presence of the instructors that allows the central tenets of student autonomy (e.g., choice, rationale provision, and perspective taking) to occur with regularity for members of a group. It is likely that poorly functioning groups, left to their own devices, would not provide a sense of autonomy for all their members, as conflict, intra-group power struggles, and unproductive group norms would likely inhibit equitable opportunities for autonomy among the members of the group. However, these data do support the premise that some individuals associate ASE with greater autonomy and learning. For these students, this program design element is perceived as both productive and valuable.

Limitations

This study has several key limitations. Foremost, NOLS is a distinctive, expedition-based program designed to train outdoor leaders. Almost half of the students come to NOLS with some previous outdoor living experience, and they are actively looking to develop their outdoor skills. In addition, typical NOLS courses for youth involve 14 to 30 days in the backcountry. NOLS program participants may be markedly different than other adventure education program participants.

In addition to this limitation, other factors also limit the potential generalizability of these study results. The sample is a convenience sample from 2005–2006 and does not include historical incident and evacuation data. Some of the measures are self-reported perceptions, and are, therefore, subject to participants' biases. The hypotheses and analyses did not include potential mediator and moderator variables, which might be important in understanding how autonomy supportive approaches interact with other course factors.

Implications for Practice

Based on the literature and these results, we are comfortable with the idea that the intentional inclusion of autonomy in adventure programs can be developmentally beneficial to participants. A logical question then becomes "How, specifically, might such programs incorporate more opportunities for autonomy development?" We would suggest that student autonomy or empowerment can occur via implementation or design (or a combination of the two). However, each of these approaches can only be achieved through intentionality on behalf of the instructors of the curriculum design team. Further, as we have stated before (Sibthorp, Paisley,

& Hill, 2003), we believe that an effective leader (implementation) can overcome program design weaknesses, and that even an average leader can implement a well-designed program. While it may be a bit impractical, then, to consider these dimensions independently, we will discuss implications for program implementation and design in turn.

Beginning with implementation as a means to foster student autonomy, the specific teacher behaviors mentioned previously (e.g. asking for opinions, listening to answers, allowing others to talk, and encouraging effort [Reeve, 2005]) are all immediately translatable as leader behaviors in adventure education. It is also helpful to return to the notions of choice, rationale provision, and perspective-taking, or empathizing with students' positions, perspectives, and challenges (Sheldon et al., 2003) as relatively self-explanatory implementation guidelines for outdoor leaders.

Whenever possible, leaders should provide choices for students as a first step toward developing autonomy. Many decisions can be delegated to students, but it is the leader's responsibility to align the menu of choices with program goals. If a leader is too open-ended with student options and must decline some of the student choices, students may feel that the leader has reneged on a promise and will likely undermine the leader's efforts at autonomy support. Staff must walk a fine line between offering realistic decisions to students that do not jeopardize safety yet are meaningful in some significant way. By judiciously presenting specific options (and by selectively *not* offering other options), students retain a degree of empowerment.

Rationale provision in adventure education may take the form of an instructor team "thinking out loud." Typically, this practice involves a public discussion between members of an instructor team about a particular decision as if the group members were not there, essentially allowing students to be privy to the instructor decision-making process. As such, the reasons and motives behind a decision are transparent.

Finally, perspective taking is critical to fostering student autonomy and empowerment. For many instructors, outdoor skills and leadership have become second nature. Further, these instructors may not even recall how they learned the skills. The entire notion of skill progression is rooted in perspective-taking: How can a complex task be broken down into manageable steps in order to be most effectively taught to and rehearsed by students? It is this analysis that serves to remind skilled leaders of the *tabula rasa* they once were, and this perspective can reduce the tendency to overwhelm students with monumental tasks. If instructors lose the ability to empathize with their students' perspectives and skill levels, the instructors will struggle to create environments that support student autonomy.

In addition to these day-to-day implementation practices, certain design components can be incorporated into adventure education

programs a priori to provide opportunities to develop student autonomy. With respect to choice and perspective-taking, on-program goal setting, in which the goals of students help construct the overall goals of the course, can be used to shape the course in some fashion. For example, if students *choose* to focus on developing a certain skill, such as fishing or climbing, greater time can be allocated by the leader to practice these skills. The decision to incorporate formal goal-setting sessions during a program (for example at the close of each day to set goals for the next), is best made prior to the course, and these sessions should be thoughtfully and intentionally sequenced into the course design.

Transfer of responsibility, another design mechanism, affords the program participants opportunities to take the perspective of the leaders/instructors, make meaningful choices, and formally explore the rationale behind leadership decisions. A leader-of-the-day (LOD) technique is a commonly used and well-recognized element of many adventure education programs. A student who is scheduled to be an LOD the following day typically meets with instructors the night before to determine potential objectives, and his or her duties may include route planning, briefing the day's activity, motivating peers, problem-solving, leading the group to the next campsite, and debriefing activities. As students internalize the notion that they are responsible for the group, the rationale for learning the scope of skills becomes clear. In the case of ASE, where the safety net appears to have been completely removed, despite the actual proximity of course instructors, this rationale becomes almost tangible.

Mechanically speaking, in terms of course design, ASE may be a key approach to fostering student autonomy or empowerment. One of the central themes in the literature related to student autonomy is the role of motivation and how to both capitalize on the intrinsic motivation of students and foster more internalized and integrated forms of motivation through autonomy-supportive instructional practices (Reeve, 2002). A critical aspect of this approach involves creating educational programs that are inherently engaging for students and that are perceived by them as relevant and useful. While many of the pedagogical approaches used in adventure education could be described in this manner and engaging students through their own inherent motives is certainly not new to experiential educators (cf. Dewey, 1938), ASE as a culminating event is a rather unique opportunity for providing student autonomy. As the students are involved in the planning, design, and implementation of these expeditions, they have true opportunities for meaningful involvement and making consequential choices. The preparatory phases of the course, leading to the final expedition, are immediately perceived as relevant and can be framed by the instructors as critical to both the opportunity to participate in and the success of the expedition phase.

Despite the pedagogical benefits, there are costs to employing a more autonomy-supportive model in adventure education. Two of the most obvious are the time it takes and the level of skill and judgment required of the leaders (both student and staff). There is evidence that autonomy-supportive educational strategies can be taught (Reeve, 2002). However, for programs that are unaccustomed to incorporating structures that support student autonomy, it will take time to allow instructional staff to incorporate both attitudes and teaching methods. Further, also in the context of time, the use of autonomy-centered approaches involves a sacrifice of efficiency in content delivery, but can be more effective for specific goals. Certainly, these processes require more work than directed or didactic instruction.

Instructor and student skill and judgment are essential. Students may be faced with having to make decisions in the face of circumstances with which they are unfamiliar or that are beyond the scope of their experience. Environmental variables such as whiteout conditions, a river in flood stage, or a rockfall event can lead to a decision that may not be prudent to a more experienced outdoor leader. Given these factors, instructors must plan thoroughly, well in advance, and then clearly communicate to students expectations for what to do if they encounter unfamiliar situations. Some instructors and students do not have the necessary foresight, judgment, and skill to make autonomy-supportive models work effectively without unreasonable risks.

At NOLS, an explicit checklist is provided to instructors as a tool for assessing whether a group is ready for ASE. Although the checklist is only meant as a guide to help assess student proficiency and readiness, such a tool is one way for a program to, by design, assist instructors with decisions about ASE. NOLS instructors are asked to evaluate the student group on a number of factors, including leadership, expedition behavior, experience with anticipated weather and hazards, decision-making capabilities, and general outdoor living skills. Further, instructors are encouraged to be creative with supervision strategies. "Shadowing," or remaining close to but unobserved by, the groups throughout the day and camping relatively nearby at night, and intentionally meeting the student group at hazards, such as a potentially corniced ridgeline or a river crossing are two potential supervision strategies that might be employed (for more information on NOLS' specific practices, see Gookin, 2006).

The way one student described the instructional strategy used by David Gray, a renowned recreation educator, epitomizes autonomy support or empowerment: "He would plant an idea, then it would become yours, then you did it, then he would compliment you for it" (Crompton, 2006). Certainly, turning some of the decision making and leadership of the course over to the students (planting an idea) is a proposition wrought with uncertainty. Students may make less-than-optimum

decisions at times, but, when operating under carefully designed parameters, the benefits of increased ownership and empowerment can outweigh the logistical inconveniences that arise because of them. For most programs, matching curriculum goals with available tools and techniques, of which student empowerment is one, will allow for the greatest student learning experiences.

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