

Autonomous Student Experiences in Outdoor and Adventure Education

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Abstract

This article explores the current state of knowledge regarding the use of autonomous student experiences (ASE) in outdoor and adventure education (OAE) programs. ASE are defined as components (e.g., solo, final expedition) in which participants have a greater measure of choice and control over the planning, execution, and outcomes of their learning. The article discusses the importance of ASE in experiential education and reviews major findings and supporting evidence in the relevant literature. Outward Bound and the National Outdoor Leadership School are highlighted as OAE programs that incorporate evidence-based research into their course designs. The article concludes with an examination of existing gaps in the knowledge and a discussion of topics for future ASE research.

Keywords

autonomy, final expedition, solo, independent student travel, autonomous student experiences, student-led trip

This article explores the current state of knowledge regarding the use of autonomous student experiences (ASE) in outdoor and adventure education (OAE). In this article, ASE are defined as experiences in which participants have a measure of choice and control over the planning, execution, and outcomes of their learning. This topic is timely and important to the experiential education field, which has traditionally used ASE for personal growth and group development. The value of these experiences has

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been called into question due to concerns about risk and liability. Furthermore, it has been suggested that similar outcomes could be achieved with participants having less autonomy. Thus, OAE leaders are constantly making decisions about how much autonomy or supervision is beneficial and appropriate.

A wide range of autonomous experiences are used in formal and non-formal education. Internships, practica, service learning, and self-directed studies provide students with opportunities to work more independently of the teacher. In OAE, ASE often include major course components, such as solo, final expedition, and personal challenge events. ASE can also include smaller opportunities for autonomy such as setting goals, taking responsibility, making decisions, serving as leader-of-the-day, and facilitating group discussion (Sibthorp, Paisley, & Gookin, 2007). ASE often sequence toward greater autonomy during the course. For example, participants might sit alone for an hour several times before experiencing day-long solos, or they might navigate as a group to several shorter destinations prior to embarking on a longer final expedition. Regardless of scale, ASE have been used by numerous organizations under the assumption that they empower participants to face challenges and promote personal growth.

This article primarily focuses on two major ASE used in OAE—the solo and final expedition. These components have received increased attention in the literature because of their documented impact on course outcomes and risk-management concerns. *Solo* is a period of time during which participants are intentionally placed alone for the purposes of “reflection, self-reliance, resourcefulness and confidence building” (North Carolina Outward Bound School [NCOBS], 2007, p. 79). *Final expedition* (aka autonomous student expedition or independent group travel) is a student-led experience that allows a group to take responsibility for itself while using orienteering skills to navigate to pre-determined destinations (Sibthorp, Paisley, Gookin, & Furman, 2008).

This article will discuss the role of ASE in OAE and present major findings in the relevant literature. The authors will describe how Outward Bound (OB) and the National Outdoor Leadership School (NOLS), as national OAE leaders, have responded to these findings and to concerns over risk and liability. The authors understand that ASE are present in a wide range of programs beyond OB and NOLS. OB and NOLS are used as program models in this article because both have conducted evidence-based research and applied these results to ASE practice. The article concludes with an examination of existing gaps in the knowledge and topics for future research.

Importance of ASE to Experiential Education

Autonomous student learning is important to the field of experiential education due to its alignment with some philosophic tenets of the profession and cultural traditions related to the maturation of youth. Experiential education, formerly linked to progressive education, is “education of, by and for experience” (Dewey, 1938, p. 29). It is founded on the premise that students need authentic learning that results from active

involvement with carefully chosen, concrete activities, followed by opportunities for reflection and application (Kolb, 1984). These guided experiences enhance participant motivation and responsibility for the purpose of increasing knowledge, developing skills, and clarifying values through direct experience (Association for Experiential Education, 2013). It is a holistic philosophy, engaging participants “intellectually, emotionally, socially, politically, spiritually, and physically in an uncertain environment where the learner may experience success, failure, adventure, and risk-taking” (Itin, 1999, p. 93). Experiential education promotes connections between first-hand experiences and abstract concepts, thereby building character (James, 2009), developing critical thinking (Brookfield, 1996), and fostering civic development (Waldstein & Reiher, 2001).

According to many prominent educators and psychologists, the progression to adult independence is viewed as essential to human maturity (Bandura, 1997; Freire 1970; Heath, 1994; Peck, 1978; Rotter, 1954). Experiential education serves as a vehicle for personal empowerment by enabling students to take charge of their own lives. These essentials are briefly elaborated on to establish their connection to autonomous learning.

According to Heath (1994), maturing persons develop accurate self-knowledge that can be differentiated from the opinions of others. Research has demonstrated that OAE often enhances self-awareness and understanding (e.g., Cason & Gillis, 1994; Hattie, Marsh, Neill, & Richards, 1997; Sibthorp, 2003) through challenging outdoor situations, whereby individuals confront fears, expand competencies, and strengthen identity.

Maturing persons develop a belief in their capability “to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3). Such self-efficacy is often described as self-confidence and is gained by increasing personal competency that influences subsequent motivation and choices. Many studies support outdoor program participation as a means to increased self-efficacy (Hattie et al., 1997; Paxton & McAvoy, 1998; Sibthorp, 2003).

Maturing persons also accept problem-solving responsibility (Peck, 1978) and make self-directed choices based on an internal (vs. external) locus of control (Rotter, 1954). Experiential learning facilitates this growth by setting students free from a directive and controlling teacher. Freire (1970) describes this education as humanizing, as it is characterized by creative freedom and collaborative problem solving:

Students, as they are increasingly posed with problems relating to themselves in the world and with the world, will feel increasingly challenged and obliged to respond to that challenge. . . . Problem-posing education affirms [them] as beings in the process of *becoming*. (Freire, 1970, pp. 68, 72)

Empowerment is central to experiential education, particularly OAE, and is supported by many studies. For example, Hans’ (2000) meta-analysis on locus of control showed that students were significantly more internally controlled as a result of participation in OAE.

In summary, ASE represent one expression of experiential education philosophy and provide maturing experiences for many participants. Studies demonstrate that ASE rank highly in their contribution to personal and group growth when compared with other OAE components, even over a lifetime (Daniel, 2003; Gassner & Russell, 2008).

Salient ASE Literature

There has been a rise in ASE research in recent years, surrounding such fields as experiential learning, adventure education, study-abroad programs, service learning, and formal education. This section will discuss the literature on risk and ASE, student autonomy, structured autonomous experiences, positive youth development, and ASE in OAE.

Risk and ASE

Risk and uncertainty have long been considered foundational in adventure education for promoting personal growth and group development (A. W. Ewert & Garvey, 2007; Miles & Priest, 1999; Priest & Gass, 1997). Risk can create stress, uncertainty, and dissonance—all elements of OAE experiences with which the participants must contend (Luckner & Nadler, 1997; Priest & Gass, 1997; Schoel, Prouty, & Radcliffe, 1988). The risk is perceived to be higher on ASE during periods when the instructors are less involved.

The role of risk in OAE has received recent attention from those affirming its importance (Taniguchi, Freeman, & Richards, 2005) and others questioning its educative value (Berman & Davis-Berman, 2005; Brown & Fraser, 2009). Historically, program components like the final expedition and solo considered risk to be critical to the experience. However, some recent models of ASE propose that limited autonomy is itself “adventurous” enough for most participants without a heightened sense of risk (Berman & Davis-Berman, 2005). In addition, research on accidents in outdoor education indicates that certain participants (adolescent males, for example) and certain environmental conditions (including weather) demand heightened supervision levels (Brookes, 2011). Currently, most of the literature supports the role of risk in adventure education, including the role of ASE. However, some program managers are working within tighter limitations of ASE due to the growing protectiveness of parents and their intolerance to perceived negative consequences (Schimelpfenig, 2007).

Some research has suggested that the absence of instructors may have little or no influence on the quality of student learning during unaccompanied program components, thereby resulting in the same sense of accomplishment at completion (Davidson, 2004). Davidson also asserted that the lack of supervision in student-led components can pose significant risks and that these risks cannot be justified pedagogically. He analyzed 1,908 reported incidents in 12 outdoor education centers (1996-2000) and concluded that the reports give “an indication that there is a much higher chance of a serious incident occurring if the level of supervision is removed or reduced” (p. 1). Whereas Gookin (2006) acknowledges that independent student travel is not very common in outdoor education due to concerns for participant safety, Gookin (2006) and Sibthorp et al. (2008) report that NOLS has had few incidents as a result of

independent student travel. A study at NOLS from a sample of 17,887 program days in 2005 and 2006 indicated that “the incident rates do not appear to be greater during unaccompanied portions of the course” (Sibthorp et al., 2008, p. 144).

Regardless of pedagogical or philosophical position, Brown and Fraser (2009) remind experiential educators that we need to examine “. . . the pedagogical opportunities afforded by creating situations for students to engage in activities which encourage them to make authentic decisions, to exercise individual and collective agency, and to take some responsibility for their actions” (p. 73).

The Value of Structured Student Autonomy

Research indicates that experiences that students perceive as meaningful empower them to engage more fully in the activity (Leffert, Benson, & Roehlkepartain, 1997). Such experiences include those in which students have some control over what to do, when to do it, and for what purpose. Students who are actively engaged beyond the classroom have unique opportunities to develop autonomy (Horwitz, 1989). The increased opportunities for autonomy resulting from ASE are pedagogically valuable and necessary in our culture (Sibthorp et al., 2008).

ASE afford students opportunities to engage deeply by providing a measure of control and choice that are not often experienced in their daily lives. The idea that autonomy leads to empowerment, which then results in personal growth, is relatively consistent in the literature. Furthermore, the value of student engagement and autonomy in experiential learning has been supported in a variety of fields (Eyler & Giles, 1999; Hattie et al., 1997; Horwitz, 1989).

Student Autonomy and Positive Youth Development

Gambone and Arbretton (1997) identified several core program elements that contribute to youth development: a sense of safety, challenging and interesting activities, a sense of belonging, supportive relationships with adults, involvement in decision making, leadership opportunities, and involvement in the community. These elements are often accentuated in experiential education settings, including many OAE programs. In addition, Gambone, Klem, and Connell (2002) and Witt and Caldwell (2005) have indicated that the dimensions of autonomy (e.g., responsibility, leadership development, self-reliance) are what many young people need to mature in contemporary culture. With respect to one of these dimensions, responsibility, a recent study concluded that giving youth increased responsibility promoted ownership, leadership opportunities, authentic decision-making opportunities, and a sense of belonging (Gambone, Yu, Lewis-Charp, Sipe, & Lacoe, 2006).

ASE in OAE

Research illustrates the importance of creating student-driven educational processes in adventure education programs (Kimball, 1991; Wilson, 1995). Student autonomy has

been foundational to OAE program design and development. Empowering program participants to take responsibility and make decisions has led participants to believe that they learned more (Sibthorp et al., 2007). Similarly, participants who had more days on a student-led expedition reported higher levels of empowerment (Sibthorp et al., 2008).

Research has documented the benefits of student autonomy in various outdoor programming contexts (Allan, 2005; Paisley, Furman, Sibthorp, & Gookin, 2008; Ramsing & Sibthorp, 2008; Sibthorp et al., 2008). Specifically, increased student autonomy can contribute to various outcomes, including increased self-efficacy (Sibthorp, 2003); life effectiveness (Sibthorp & Arthur-Banning, 2004); and leadership, communication skills, and outdoor skills (Sibthorp et al., 2007). Several studies with OB and NOLS have found that ASE provide valuable educational experiences that are not easily replicated with close instructor supervision (Bobilya, 2004; Daniel, 2003; Daniel, Bobilya, Kalisch, & Lindley, 2010; Sibthorp et al., 2008). In fact, Daniel (2003) found that the solo and final expedition were two major course components that played significant roles in the lives of participants of a wilderness experience program even 25 years after the experience. Minimizing instructor involvement during the final expedition has been found to increase self-reliance and self-awareness and enhance group development by encouraging greater group reliance, responsibility, and cohesion (Bobilya, Kalisch, & Daniel, 2013).

The solo has been found to be one of the most influential components in wilderness programs (Bobilya, 2004; Daniel, 2003; A. Ewert & McAvoy, 2000; McFee, 1993). Recent research has also shown the final expedition to be one of the most memorable and significant components from post-course surveys at OB Singapore (Gassner, Kahlid, & Russell, 2006), NOLS (Sibthorp et al., 2008), and Montreat College's Discovery Wilderness Expedition (Daniel, 2003). A recent study found that the top three most enjoyable characteristics of the final expedition at the North Carolina Outward Bound School (NCOBS) were autonomy, accomplishment, and teamwork (Bobilya et al., 2013). All of these characteristics have also been shown to be critical in positive youth development (Gambone et al., 2002). The most enjoyable characteristic of the final expedition was *autonomy*. The students welcomed the opportunity to complete the required tasks without instructor involvement (Bobilya et al., 2013).

Ward (2012) highlighted the importance of uncertainty when the instructors were less involved on an outdoor leader course. Similar to Sharpe's (2000) results, significant learning on an outdoor trip often occurs during unstructured time when students feel a greater sense of autonomy. Williams (2012) found that solo participants constructed personally meaningful outcomes when they were allowed to do so. The role of the instructor(s) in structuring intentional opportunities for free time and some level of uncertainty is important for participant growth. In fact, Ward (2012) found that these unplanned and uncertain experiences where the participants took increased responsibility were often crucial to their development.

In summary, the majority of research on ASE suggests that they promote learning, personal growth, and group development. Therefore, it is not surprising that many OAE programs have been designed and modified as a result of these studies to strike a balance between appropriate amounts of supervision and autonomy.

Program Models That Use Evidence-Based Practices for ASE

OAE programs have utilized various forms of ASE for many years. In that time, anecdotal evidence, student evaluations, alumni testimonials, and an overall belief in their effectiveness have given managers adequate incentive to continue using ASE in their programs. Only recently have programs used evidence-based research to justify these student experiences. OB and NOLS are examples of evidence-based program models. Both have a strong tradition of including some form of ASE in their wilderness courses. Many OAE programs, including camps, adventure therapy programs, wilderness orientation programs, and retreat centers, use a variation of the NOLS or OB models for their ASE. In doing so, these programs seek to minimize risk while enhancing autonomous learning.

A goal of the NOLS curriculum is to “develop students as leaders who make decisions and lead without the direct guidance of their instructors” (Schimelpfenig, 2007, p. 4). Studies by Sibthorp et al. (2008) and Paisley et al. (2008) found that ASE on NOLS courses significantly correlated with student-reported increases in leadership skills, outdoor skills, and empowerment. The more opportunities students had to make decisions and practice dealing with actual situations alone, the more they reported their learning was enhanced.

NOLS ASE typically include three program elements: “leader for the day” and “final expedition” for their typical 30-day course, and “student leadership teams” for some of their semester-long courses (Gookin & Leach, 2008). These are all based on the supposition that students learn best when given opportunities to be responsible for their decisions. NOLS and OB instructors sequence toward independence throughout their courses. Students preparing to be the “leader for the day” are first engaged in a number of activities, classes, and experiences to give them the basic skills necessary to safely and comfortably exist in the terrain and group domains of each course. These skills include navigation, camping, first aid, hazard recognition, minimum impact, and fundamental technical skills. The selected “leader for the day” is briefed by the instructor as to the day’s destination, safety issues expected along the way, and how available the instructor will be throughout the day. The instructor allows the “leader for the day” to make decisions about the route, timing, group member roles, lessons to be covered that day, and so on. The instructor’s role is to be available in case of an emergency, to coach, and to debrief.

The second ASE course component is independent student travel (aka final expedition)—a mini expedition during which groups of four to five travel and live in the wilderness, unaccompanied by instructors. NOLS students are allowed to independently apply the skills, judgment, and leadership abilities developed during the course. This ASE is one of the most important elements of the NOLS experience for students, for they have opportunities to “display competencies necessary for wilderness travel, to better understand their abilities and limitations and to gain valuable experience upon which to further develop their self-awareness and judgment, and accomplish a realistic and achievable goal” (Schimelpfenig, 2007, p. 1).

OB and NOLS instructors specifically design the final expedition for each student group and support them in several ways. Although there are some environments and activities that are too technical to allow students to be free from direct instructor supervision, most NOLS and OB courses do include a final expedition. The two primary elements of the NOLS model are the instructors' (a) preparation of students for the experience and (b) supervision during the experience. NOLS has a checklist of strategies that cover these elements (Gookin, 2006). Prior to the expedition, the instructor determines the readiness of the group for independent travel and evaluates their competency in navigation, camping, first aid, hazard experience, and expedition behavior. Then, the instructor forms the group, assigns group roles, establishes emergency procedures, establishes (with the group) the route and travel plan the group will use, sets pre-arranged meeting sites and times, briefs students on in-camp boundaries and behaviors, and informs students how the instructor will supervise the group during the experience. OB uses a very similar strategy for preparing students.

"Student leadership teams" can be used as part of longer (80-day) semester courses rather than the typical 30-day NOLS course. Student teams take turns leading and teaching part of the course. In a pre-briefing, instructors meet with the team and give them a list of the topics they need to discuss prior to presenting a plan to the instructors. These topics include group location, travel routes, group goals and objectives, lessons to be taught (and by whom), group management and participation issues, challenges expected, and emergency procedures. During the student-led experience, the instructor's role is to monitor the group, take notes, and intervene should a hazardous situation arise. At the end, the instructors debrief the team and discuss what went well and what did not (Gookin & Leach, 2008).

OB and NOLS instructors supervising ASE must maintain a delicate balance among supervision, independence, and safety. Supervision that is smothering and highly visible seems to minimize the positive outcomes of the independent experience. Supervision that is completely detached from the group could be seen as irresponsible. OB and NOLS use a number of strategies for supervision depending on the group, terrain, weather, and specific hazard sites. One approach is to shadow a group, staying out of sight and/or sound as much as possible. Instructors can occasionally see the group (perhaps through binoculars). Another shadow method is to stay within an hour or two of travel from the group with the group knowing roughly where the instructors will be at most times. Another approach is for the instructor to check in with the group daily. The instructors may also meet the group at pre-arranged hazardous sites, such as a river crossing, glacier traverse, or dangerous trail. Instructors must be prepared to intervene if there is a safety issue. Finally, on OB courses, the instructors sometimes travel with the group but remain silent or answer a limited number of questions. Youth are never allowed to travel completely alone. NOLS recently revised its supervision policies for ASE to include more attention to pre-trip preparation of students, closer monitoring by instructors (especially at potential hazard sites), and having each student group carry a personal locator beacon or other communication device (Gookin, *in press*). At the end of the NOLS and OB ASE, the instructors debrief the group and encourage reflection on the lessons learned.

The challenge in any OAE program is to strike a balance between providing independence and appropriate supervision. The goal is to encourage students' ownership of their learning by giving them opportunities to make decisions and live with the consequences of those decisions within the bounds of safety.

Emerging Paradigms in ASE

One emerging paradigm that has implications for ASE research involves a growing body of work that seeks to reevaluate the role of risk in adventure-based learning (Brown & Fraser, 2009; Wolfe & Samdahl, 2005). As discussed earlier, researchers have presented data supporting and contradicting the intentional use of unsupervised or minimally supervised OAE components. ASE studies have used a wide range of research designs, tools, and methodologies. These studies have utilized quantitative, qualitative, and mixed-method approaches. They have used surveys, focus group interviews, field notes, journal entry analysis, and other tools. Many studies have involved cross-sectional retrospective designs. More longitudinal studies are needed, but time and funding often are limiting factors. Quasi-experimental designs would be valuable for understanding how different course structures can influence outcomes, but many OAE programs are hesitant to allow research to take place on program participants for fear that it could intrude on their experience.

Gaps in the Knowledge and Areas for Future Research

Despite the recent rise in ASE studies, many significant gaps remain.

- *Instructor/group interactions.* More research is needed into the impact of changing the nature, type, and degree of interaction between instructors and the group. For example, to what extent do various instructor positions related to the final expedition (e.g., shadowing) affect student autonomy and learning? Comparative research is needed to determine whether the desired outcomes could be achieved with less autonomy and less risk.
- *Risk-growth relationship.* Some researchers cited previously have argued that OAE students need to be challenged less and made more comfortable to focus on the learning process. More research should be conducted into the balance between levels of risk and comfort and the relative roles they play in learning and growth.
- *Timing.* It is unclear when in the course ASE should occur. Most programs insert ASE in the latter part of a course because some studies (Bobilya, 2004; Paisley et al., 2008; Sibthorp et al., 2008) have suggested that foundational learning is needed before ASE due to safety concerns and to prepare the student for ASE.
- *Length.* It is unclear what is the optimum length of time for maximizing learning on ASE. Most ASE vary in length (1/2 day to multi-day) as determined by the length of the overall course.

- *Student relationships.* The role of student relationships should be examined in relation to the effectiveness of ASE. For example, to what extent does group cohesion influence the quality of these experiences, and how is the potential learning from ASE enhanced or undermined by group factors?
- *Role of larger community.* The rite of passage literature emphasizes the importance of the larger community after the individual or group challenge. The re-incorporation stage (Van Gennep, 1960) requires the community to celebrate ASE achievement. More research should be undertaken to examine current practices regarding this stage and whether this is a deficiency of ASE in outdoor programs. To what extent are post-program celebrations of student achievements key to positive ASE outcomes?
- *Generational influence.* Researchers need to explore whether there is a generational influence related to the effectiveness of ASE instead of assuming that what has worked in the past will be equally effective with today's youth. Brookes (2004) and others have called for examining current outdoor education programming principles in relation to the social and historical context in which they were created and considering whether they are still applicable to today's learners.
- *Cultural differences.* Research needs to be conducted on possible cultural differences regarding participants' interest in and preparation required for a solo experience. For example, Gassner and Russell (2008) found that participants in a program in Asia did not wish to be alone for a 2- to 3-day solo due to their more collectivist cultural backgrounds.
- *Privilege.* Traditional experiential programs and challenges (such as ASE) have, for the most part, been designed and facilitated by White privileged educators. Some scholars have stated that experiential education is often based on a White privileged context, including the activities, facilities, and spaces used (Rose & Paisley, 2012). Research is needed to determine the power differential that can exist between White experiential educators and minority/marginalized populations and how to address it in OAE.

Conclusion

The topic of ASE is both timely and important for a field that has long promoted the benefits of ASE and in a society that is growing more risk averse. Schimelpfenig (2007) cautions, "We operate in a climate, in both our profession and society, of growing intolerance to the adverse consequences of risk. Sociologists tell us that this present generation of parents is especially protective of and adverse to negative consequences, or even some discomfort, for their children" (p. 2). Today, some OAE programs are minimizing, modifying, or eliminating ASE primarily due to concerns over risk and liability. This trend is often driven by fear of litigation rather than what the ASE research reveals about the educational value and ways to minimize the actual risk involved. More research is needed to further understand the nature and impact of ASE and to better discern the optimal degree of student autonomy necessary for enhancing program outcomes.

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