

Beyond “The Outward Bound Process:” Rethinking Student Learning

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This article is based on a research study that explored the means by which students learn at Outward Bound Western Canada. For this study, data were collected from 92 students through questionnaires, interviews, and observation. Twenty-nine course components were found to influence course outcomes, including various aspects of course activities, the physical environment, instructors, and the group. Certain course components were found to be most influential in determining increases in students’ self-awareness, self-confidence, self-reliance, self-esteem, self-concept, motivation, self-responsibility, interpersonal skills, concern for others, and concern for the environment; while several course components impacted course outcomes in negative ways. The gender, age, and population of students were also found to play a role in determining the course outcomes students experienced and which course components caused those outcomes. The study is discussed in terms of how it supports, extends, and refutes existing adventure education theory, as well as in relation to contemporary theories on modernity. A model is proposed as an alternative to the well-known Walsh and Golins’ (1976) model of “the Outward Bound process” in consideration of the study’s findings and the need for a renewed commitment to compassion and service within Outward Bound.

Keywords: Outward Bound Process, Adventure Education, Outdoor Education, Service

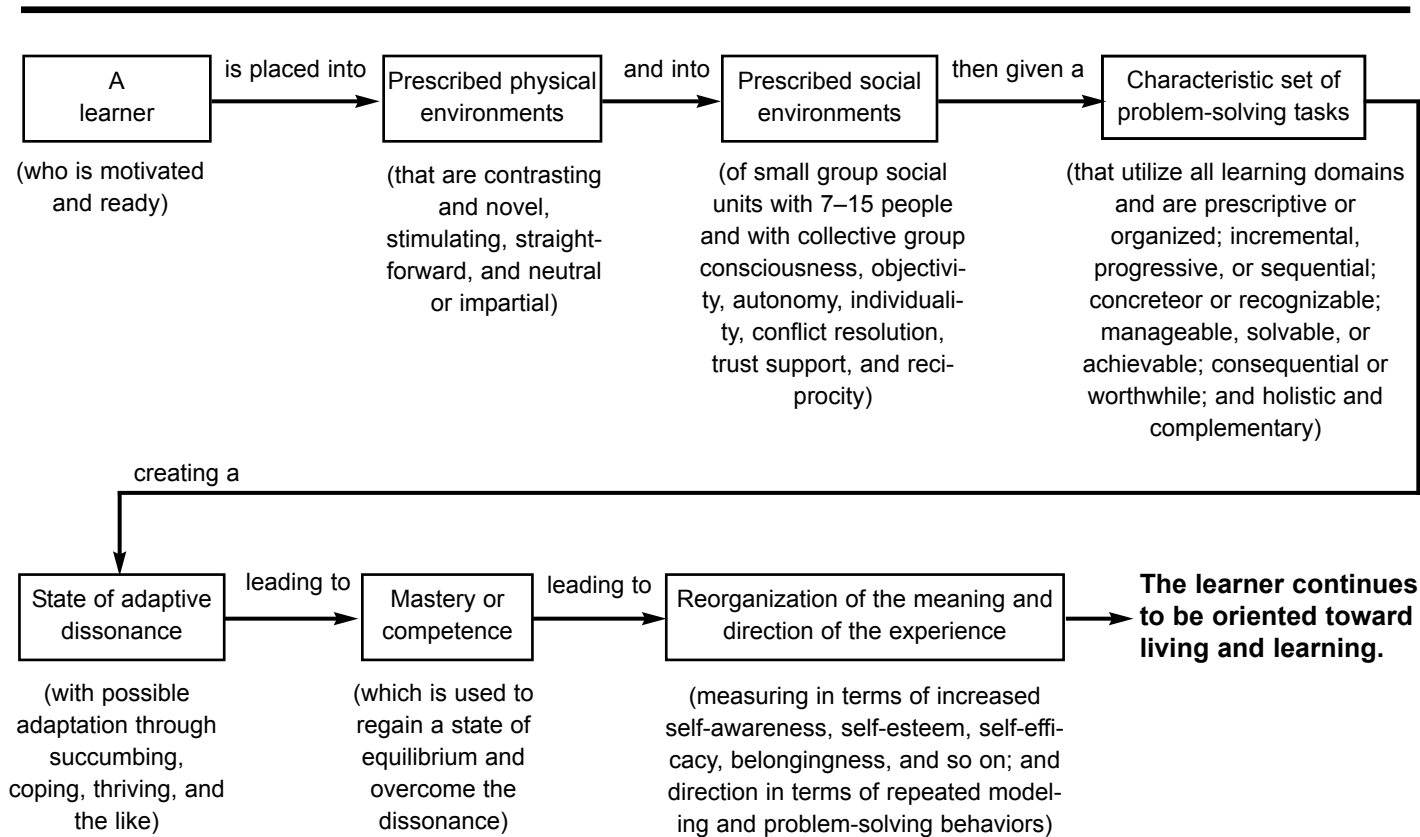
The title, *Beyond “The Outward Bound Process”* alludes to the dual emphases of this article. I first recount the findings from my recent research at a Canadian Outward Bound school and in doing so, work to extend our understanding beyond the insightful and popular model of “the Outward Bound Process” put forward by Walsh and Golins in 1976 (Figure 1). Second, I

suggest that perhaps our understanding can be further enhanced by looking beyond current students’ experiences to some possible influences modern society has had on Outward Bound courses. Pulling these two pieces together, I conclude by suggesting an alternative model of student learning on Outward Bound courses.

The first Outward Bound school was opened at Aberdovey, Wales in 1941. Named after the nautical term “outward bound,” which describes the journey of a ship outward from its home port into the adventures of the open sea, the school focused around activities such as land and sea expeditions, rescue training, and service to the community. To counteract what founder Kurt

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Figure 1. Walsh and Golins' (1976) model of the Outward Bound process (Priest & Gass, 1997, p. 140).



Hahn perceived as the declines of a diseased civilization (Hahn, 1960), courses emphasized the “four pillars” of physical fitness, self-discipline, craftsmanship, and service. These pillars were congruent with Hahn’s view of the foremost task of education: ensuring the survival of the qualities of “an enterprising curiosity, an indefatigable spirit, tenacity in pursuit, readiness for sensible self-denial, and above all, compassion” (Outward Bound Canada, 2001, p. 5). Today, the 50 or so Outward Bound schools around the world are overseen by Outward Bound International (OBI), whose mission “to help people discover and develop their potential to care for themselves, others and the world around them through challenging experiences in unfamiliar settings” (OBI, 2000), appears consistent with Hahn’s vision in its emphasis on individual growth and compassion.

Over the last several decades there has been considerable exploration of the learning or “outcomes” that students experience as a result of Outward Bound courses. Indeed, many studies have suggested that students are affected by courses in the ways that the mission

statement above indicates. How or why those outcomes are achieved has been a less popular topic for inquiry, especially that of an empirical nature. It is here that the work of Walsh and Golins (1976) has had a significant impact. In the most thorough model of the process through which Outward Bound students learn to-date, they suggest the “learner is placed into [a] unique physical environment and into [a] unique social environment, then given a characteristic set of problem solving tasks [creating a] state of adaptive dissonance to which [the learner] adapts by mastery, which reorganizes the meaning and direction of the learner’s experience” (Walsh & Golins, 1976, p. 16). In short, Walsh and Golins define “the Outward Bound process” as including the seven elements of the learner, the prescribed physical environment, the prescribed social environment, the characteristic problem solving tasks, a state of adaptive dissonance, and the transfer of new learning.

It is this conception of the process through which students learn that is included in the 2001 Outward Bound Canada staff manuals and is provided as a basis

for understanding adventure education by many contemporary sources (e.g., Priest & Gass, 1997). Since Walsh and Golins' (1976) germinal work, some have explored aspects of this process theoretically (e.g., Kiewa, 1994; Kimball & Bacon, 1993; Luckner & Nadler, 1997; Schoel, Prouty, & Radcliffe, 1988) or through research (e.g., Conrad & Hedin, 1981; Dyson, 1995; Hattie, Marsh, Neill, & Richards, 1997; Meyer & Wegner, 1998; Riggins, 1985; Witman, 1995). However, a concatenation of these sources indicates our understanding is far from thorough (McKenzie, 2000a). Many theorized aspects of students' experiences on Outward Bound courses have not yet been explored through empirical research, while others may remain unidentified as a result of the lack of inductive qualitative research on this topic. Indeed, many researchers and practitioners have indicated a need for further research on the means by which outcomes are achieved (e.g., Allison & Pomeroy, 2000; Ewert, 1989; Flor, 1991; Gillis & Thomsen, 1996; Gillet, Thomas, Smok, & Mclaughlin, 1991; Hattie et al., 1997; Kolb, 1991; Meyer & Wenger, 1998; Thomas, 1985; Warner, 1984). More comprehensive research on this topic would enable us to move towards confirming, refuting, or extending Walsh and Golins' theoretical model of the Outward Bound process. It was with this aim that the current study was conceived.

Methods

Research Design

Outward Bound Western Canada (OBWC)¹ was chosen as the research site for the study. OBWC courses vary in length from 7 to 36 days, are tailored for specific populations such as adults, youth, "female survivors of abuse" (Women of Courage), and "youth at risk" (Vista), and at the time of the study, were all set in the Coast Mountains of British Columbia. Students are grouped in patrols of up to 10 with two instructors, for courses that include multiple days of backpacking/mountaineering, rock climbing, a one to three day solo experience, a final expedition, a 10 kilometer run, and on longer courses, a one day service project in the community.

To explore the means through which OBWC course outcomes are achieved, I developed five research questions: (a) which course components contribute to positive outcomes? (i.e., rock climbing, wilderness setting, etc.), (b) which course components contribute to which positive course outcomes? (i.e., increased self-concept, concern for others and the environment), (c) which course components negatively affect course outcomes?, (d) how do the characteristics of students influence course outcomes? (i.e., gender, age, population), and (e) how do the characteristics of students influence the

impact that various course components have on course outcomes?

Research Methodology

This was an exploratory study that attempted to illuminate the means through which OBWC course outcomes are achieved and to interpret the findings in order to contribute to theory and practice. These objectives identify the study as fitting within the parameters of an interpretive case study approach. According to Merriam (1991), the case study approach can be used:

when description and explanation (rather than prediction based on cause and effect) are sought, when it is not possible or feasible to manipulate the potential causes of behavior, and when variables are not easily identified or are too embedded in the phenomenon to be extracted for study. (pp. 7-9)

The description of this research as a case study was helpful in ensuring the inclusion of "thick description" in the results (Denzin, 1989). Thick description can be viewed as being important for three reasons. First, it captures more of the meanings that are present in a sequence of experience than "thin description" does. This can result in a heuristic study in which "previously unknown relationships and variables can be expected to emerge" (Stake, 1981, p. 47; cited in Merriam, 1991, p. 13). Second, it enables "judgments of transferability" by providing sufficient information to allow the reader to make comparisons to another setting (Lincoln & Guba, 1985, p. 359). Third, it creates the conditions for thick interpretation in which a "system of analysis and understanding that is meaningful within the worlds of lived experience" is constructed (Denzin, 1989, p. 101).

Data Collection

To gather the breadth and depth of data desirable for this study, data were collected from 92 OBWC students between June and October of 1999 using a questionnaire, interviews, and researcher observation of group discussions. The questionnaire used in the study included a quantitative matrix that required students to indicate the impact that various course components had on several course outcomes, using a scale that ranged from a highly negative impact (-5) to a highly positive impact (+5) (Section A), as well as a series of qualitative open-ended questions (Section B). The 28 course components included in the matrix were carefully chosen to represent the components mentioned in the theoretical and research literature as potentially influencing adventure education course outcomes. The categories of outcomes were chosen to match OBWC objectives at the time, as well as to represent many of the outcomes associated with adventure education in the literature. They included "self-concept" (defined as including self-confidence and

Table 1. Average Impact of OBWC Course Components on the Course Outcome of Self-concept as Reported by Students

Rank	Course Component	M	N	SD
1	Achieving individual success	4.52	81	.79
2	Being physically challenged	4.43	80	.90
3	Taking responsibility for yourself	4.27	81	1.27
4	Learning new skills	4.17	80	1.21
5	Setting and achieving goals	4.17	81	1.27
6	Having leadership responsibilities	4.04	78	1.27
7	Instructors' feedback	3.89	80	1.36
8	Adapting to an unfamiliar environment	3.86	80	1.33
9	Trying out new behaviors	3.84	74	1.51
10	The wilderness setting	3.84	80	1.60
11	Instructors as role models	3.70	80	1.77
12	Choosing level of involvement in activities	3.67	79	1.49
13	Instructors' personalities	3.60	80	1.59
14	Solo	3.56	81	1.37
15	Achieving group success	3.55	77	1.46
16	Relationships with other group members	3.53	1	1.61
17	Reflection	3.51	81	1.82
18	Instructors' expectations	3.42	81	1.84
19	Course-end run	3.21	77	2.01
20	Problem solving as a group	3.17	77	1.33
21	Informal conversations	2.95	81	1.87
22	Being scared before or during activities	2.87	77	2.35
23	Service project	2.82	55	1.69
24	Attitudes of other group members	2.70	81	2.00
25	Structured discussions/debriefings	2.54	81	1.82
26	Relying on other group members	2.53	81	1.87
27	Talking about home during the course	1.84	79	2.30
28	Failing to achieve success	.33	66	2.29

self-reliance), "motivation" (defined as the desire to learn and achieve), and "interpersonal skills" (defined as including cooperation and communication). The outcomes of "concern for others" and "concern for the environment" were taken out of the matrix and addressed in open-ended questions in Section B of the questionnaire after a pilot study revealed the matrix to be too time consuming to complete. Questionnaires were distributed to 160 students on a range of course types. Of the 81 returned questionnaires, 45 were completed within one day to two months of students participating in their course and were returned

by surface mail. The remaining 36 questionnaires were completed by youth students in the final days of their courses to ensure an adequate return rate from the 15 to 18-year-old age range.

As an instructor at OBWC, I was able to conduct formative interviews with 20 youth students while they were on course. Summative telephone or e-mail interviews were conducted with 11 graduates of a range of genders, ages, and populations who had participated in an OBWC course between 1992 and 1998. Verbatim jotted notes were also made from the group discussions of four different course types (35 students).

Results

I have chosen to present the results of the study in one article in order to enable a more comprehensive look at the means by which course outcomes are achieved and, despite space limitations, have endeavored to provide some measure of “thick description” by including a sampling of students’ comments (see also McKenzie, 2000b). I have also included counts which represent groupings of qualitative “units of information” that, using the constant comparative method of data analysis outlined by Maykut and Morehouse (1994), contributed

to my interpretation of the findings. Triangulation of the various sources of quantitative and qualitative data collected from students was used to develop a picture of the means through which OBWC course outcomes are achieved. The results are organized according to the research questions.

Course Components and Positive Course Outcomes

Quantitative rankings of course components’ impacts on the outcomes of self-concept, motivation, and interpersonal skills (Tables 1-3) were triangulated with the various sources of qualitative data from students

Table 2. Average Impact of OBWC Course Components on the Course Outcome of Motivation as Reported by Students

Rank	Course Component	M	N	SD
1	Achieving individual success	4.40	81	1.00
2	Learning new skills	4.28	80	1.16
3	Instructors’ personalities	4.21	80	1.14
4	Instructors as role models	4.20	80	1.31
5	Being challenged physically	4.13	80	1.11
6	Instructors’ feedback	4.09	80	1.07
7	Having leadership responsibilities	3.95	78	1.44
8	Taking responsibility for yourself	3.93*	81	1.56
8	Adapting to an unfamiliar environment	3.93*	80	1.25
10	The wilderness setting	3.91	80	1.60
11	Choosing level of involvement in activities	3.63	79	1.67
12	Instructors’ expectations	3.62	81	1.74
13	Achieving group success	3.58	77	1.48
14	Setting and achieving goals	3.47	81	1.67
15	Trying out new behaviors	3.42	74	1.79
16	Reflection	3.37	81	1.98
17	Course-end run	3.19	77	1.67
18	Problem solving as a group	3.16	77	1.64
19	Relationships with other group members	3.15	81	1.86
20	Solo	3.10	81	1.69
21	Structured discussions/debriefings	2.84	81	1.76
22	Being scared before of during activities	2.79	77	2.33
23	Attitudes of other group members	2.75	81	1.97
24	Service project	2.73	55	1.64
25	Informal conversations	2.72	81	1.93
26	Relying on other group members	2.58	81	1.92
27	Talking about home during the course	1.86	79	2.46
28	Failing to achieve success	1.52	66	2.46

* Denotes a tie

Table 3. Average Impact of OBWC Course Components on the Course Outcome of Interpersonal Skills as Reported by Students

Rank	Course Component	M	N	SD
1	Problem solving as a group	4.14	77	1.01
2	Achieving group success	4.08	77	1.27
3	Having leadership responsibilities	3.94	78	1.29
4	Relationships with other group members	3.90	81	1.63
5	Instructors' personalities	3.84	80	1.55
6	Relying on other group members	3.80	81	1.54
7	Instructors as role models	3.66	80	1.76
8	Adapting to an unfamiliar environment	3.55	80	1.59
9	Service project	3.51	55	1.60
10	Instructors' feedback	3.50	81	2.03
11	Setting and achieving goals	3.47	81	1.67
12	The wilderness setting	3.43	80	1.81
13	Informal conversations	3.41	81	1.86
14	Trying out new behaviors	3.38	74	1.94
15	Being challenged physically	3.34	80	1.76
16	Learning new skills	3.28	80	1.73
17	Choosing level of involvement	3.23	79	2.01
18	Instructors' expectations	3.16	81	2.03
19	Taking responsibility for yourself	3.12	81	1.85
20	Attitudes of other group members	3.11	81	2.07
21	Achieving individual success	2.96	81	2.12
22	Structured discussions/debriefings	2.85	81	1.65
23	Being scared before or during activities	2.55	77	2.23
24	Talking about home during the course	2.16*	79	1.65
24	Reflection	2.16*	81	2.15
26	Course-end run	1.71	77	2.11
27	Solo	1.54	81	1.90
28	Failing to achieve success	1.39	66	2.53

* Denotes a tie

to address the first research question: Which course components contribute to positive course outcomes? Twenty-nine aspects of courses, or “course components” emerged from the data as having an influence on course outcomes. These components can be placed in five groupings, with qualitative data (counts of students’ comments relating various course components to positive course outcomes) included in parentheses. The groupings are listed in the approximate order of their impact on course outcomes, as suggested by the data. **Qualities of course activities** found to influence course outcomes include achieving success (34), challenge

(36), learning new skills (13), being responsible for oneself (12), and having fun (5). For example, a 54-year-old female graduate explained, “A couple of weeks ago I was in emergency surgery and I actually thought about the course. I thought, remember those days when you thought you couldn’t take another step?...So, even six years later, and hopefully a lot longer, it is something that I seem to be drawing on.” **Specific course activities** found to influence course outcomes include backpacking/mountaineering (23), the solo (47), rock climbing (21), having leadership responsibilities (13), camp set-up and cooking (10), the course-end run (11), group discussions

(14), games and initiative activities (10), the service project (3), and the final expedition (3).

Aspects of **the physical environment** found to influence course outcomes include the wilderness setting (50), the unfamiliarity of the environment (0), and the weather (8). A 45-year-old female graduate explained, "Civilization has too many advantages and too many artificial things that we put in place to build barriers between people. But the wilderness just strips that all away." Aspects of **instructors** found to play a role in determining course outcomes include instructors' expectations (14), instructors as role models (19), instructors' feedback (7), instructors' competence (2), and the formal curriculum presented by instructors (45). Finally, aspects of **the group** found to influence course outcomes include working as a group (37), interacting with other group members (combined quantitative components of "relationships with other group members" and "attitudes of other group members") (39), relying on other group members (34), taking care of others (19), and trying new behaviors (4).

Course Components and Specific Positive Course Outcomes

Based on the quantitative data reported in Tables 1 through 3, and the counts of students' qualitative comments relating various course components to positive course outcomes (included in parentheses throughout the following section), relationships were found that address the second research question: Which course components contribute to which positive course outcomes?

According to the quantity of qualitative comments, the course component that led to the greatest increases in students' self-awareness was the solo (27). An 18-year-old female graduate explained, "Sitting in the solo...I wrote letters to my parents and to the people I thought I'd hurt in my life...When you're all alone you are forced to think a little more and think a little harder about things." Based on both the quantitative and qualitative data, increased self-awareness was also achieved through relying on other group members (7), interacting with other group members (6), working as a group (2), backpacking and mountaineering (3), the wilderness environment (2), instructors as role models (4), group discussions (2), and the final expedition (1). Closely related to increased self-awareness, the qualitative data suggested that the course component of the wilderness setting (6) resulted in students feeling more alive and peaceful. For example, students' comments included: "The mountains and forests were so invigorating," "I feel real in the outdoors."

According to both data sets, the course components which resulted in the greatest increases in students' self-confidence, self-reliance, self-esteem, and self-concept

were the closely linked components of achieving individual success (46) and challenge (19). A 28-year-old Women of Courage student wrote, "Trying and then succeeding made me realize it's all about mental attitude. We can do so much if we believe we can or even if we just try anyway."

Other course components that ranked high for their impact on self-concept in the quantitative data include being responsible for oneself, learning new skills, setting and achieving goals, and having leadership responsibilities. In the qualitative data, other course components that are described as playing an important role in achieving increases in students' self-confidence, self-reliance, self-esteem, or self-concept are mostly activities that provide opportunities for challenge and achieving individual success. These course components include: backpacking/mountaineering (10), solo (8), rock climbing (8), learning new skills (6), the course-end run (11), the weather (6), taking care of others (4), having leadership responsibilities (6), the service project (3), group discussions (2), camp set-up and cooking (2), and the final expedition (2).

The data were less conclusive with regard to the course components that led to increases in motivation. In the quantitative data, the course components that were ranked by students as causing the greatest increases in their motivation were achieving individual success, learning new skills, instructors' personalities, instructors as role models, being challenged physically, and instructors' feedback. In the qualitative data, the course component that students discussed most often as increasing their motivation was the solo (15), as it gave them time to reflect on what they wanted to change in their lives. A 31-year-old female graduate from 1993 wrote, "The solo—a highlight for me—allowed me personal time to sort through emotions brought on by my recent divorce. It also gave me time to reflect on my life's successes and new goals." Instructors' feedback (6) and instructors as role models (6) were also reported as contributing to increased motivation in the qualitative data. A 21-year-old male graduate said, "[My instructors] made me think about things that I never have before. They were both inspirational—what they did and what they've done."

The qualitative data indicated that the course components of learning new skills (6) and rock climbing (3) cause a number of students to do, or to desire to do, the new skill again following their course. Thus, the development of new, healthy pastimes seems to be another outcome some students achieve as a result of their course.

A course outcome that emerged out of the qualitative data was becoming a more responsible individual. The course component that was linked with achieving this

course outcome was being responsible for oneself (8). For example, a 19-year-old male student explained that “the strongest positive impact on me was that I had to do many things on my own, and I will be able to take those memories home with me to do many things at home on my own that I haven’t done before.”

The quantitative and qualitative data suggested that interacting with other group members (15), working as a group (14), and instructors as role models (6) are the course components that lead to the greatest increases in interpersonal skills.

In the qualitative data, other course components that were found to increase interpersonal skills include challenge (5), games and initiative activities (8), rock climbing (trust) (3), having leadership responsibilities (leadership skills) (3), relying on other group members (2), and backpacking/mountaineering (1).

According to the qualitative data, the course components that have the greatest impact on students’ concern for others are working as a group (22) and taking care of others (15). An 18-year-old female graduate explained, “[The course] definitely...got me a little more sensitive about people and my surroundings. It taught me...to look at people to make sure that everything’s okay or if they can be helped.” The wilderness setting (8), camp set-up and cooking (8), having leadership responsibilities (4), formal curriculum presented by instructors (3), and the final expedition (2) were also found to influence students’ concern for others.

The qualitative data suggested that the formal curriculum presented by instructors (37) and the wilderness setting (26) are the course components that have the greatest impact on students’ appreciation of, and concern for, the environment. A 17-year-old female student wrote, “Learning about the fragile environment and experiencing its beauty, it’s hard not to be concerned about it. I wanted to do my best to leave no trace of my presence.” Instructors as role models were also found to

increase students’ concern for the environment (6).

Finally, the qualitative data indicated that a number of course components indirectly contribute to positive course outcomes by helping to maximize the effectiveness of other course components, by increasing students’ motivation while on the course, or by facilitating the processing and transference of new information. Instructors’ expectations (14), feedback (6), and competence (2) were found to play an important role in helping to maximize the effectiveness of other course components. Interacting with other group members (2), relying on other group members (2), pleasant weather (2), and having fun (3) were found to increase students’ motivation while on course. A 15-year-old male student wrote, “I think that the aspect which had the most positive impact was the friendships I made here. I was always having fun which kept me motivated and my confidence high.” The solo (4) and group discussions (7) were also found to facilitate the processing and transference of new information. For example, a 38-year-old male student responded to a question about what aspect of the course had had the strongest positive impact on him with, “I’d have to say the solo experience. Reflecting on everything that had been achieved so far and knowing I could complete the course.”

Course Components that Negatively Affected Course Outcomes

Frequency counts of students who rated course components as having a “negative impact” on them (-1 to -5) in the quantitative data (see Table 4), and counts of students’ comments relating various course components to course outcomes (included in parentheses below), suggested that a number of course components negatively affected the outcomes that some students experience as a result of their course. These data address the third research question: Which course components negatively affect course outcomes? Course components that were

Table 4. Frequency Counts of Students who Rated Specific OBWC Course Components as Having a “Negative Impact” on Specific Course Outcomes

Course Component	Self-concept	Motivation	Interpersonal Skills
Course end run	3		
Being scared before or during activities	5	4	
Failing to achieve success	23	10	11
Problem solving as a group		3	
Relying on other group members		4	
Talking about home during the course	5	8	3
Attitudes of other group members	4	4	5

Note: Only those course components that three or more students felt had a negative impact on them are included. Total sample size was 81.

found to have a direct, negative impact on students' self-concept, motivation, and interpersonal skills include: failing to achieve success (5), the course-end run (3), and working as a group (21). For example, a 38-year-old female student explained, "As a loner, it was hard having to spend 24 hours with women I didn't know and didn't choose. The lack of privacy had a negative impact on my interpersonal skills."

Course components that were found to directly limit the positive course outcomes students experienced include a lack of physical challenge (10), talking about home during a course (0), interacting with other group members (7), the attitudes of other group members (7), and instructors' expectations (10) and personalities (2). For example, a 35-year-old female graduate from 1997 explained, "I worked so hard to get there and then some combined factors of how the course unfolded left me feeling a little disappointed. I was really there to push the envelope and unfortunately it didn't turn out to be that sort of trip." Course components that were found to indirectly limit the positive outcomes that students experienced, by decreasing their energy or motivation for their course, include the weather (18) and a lack of adequate food (5).

The Influence of Students' Characteristics

The quantitative and qualitative data also address the fourth and fifth research questions. These questions are: How do the characteristics of students (including gender, age and population) influence course outcomes and how do the characteristics of students influence the impact that various course components have on course outcomes?

Gender. To determine whether there were differences between the course outcomes experienced by females and males, descriptive statistics were run on the quantitative data. Means and standard deviations were calculated for females and males for the overall impact on self-concept, motivation, interpersonal skills, concern for others, and concern for the environment. The "overall impact (of the course) on self-concept" was calculated by finding the mean of the 28 course components' average impact on self-concept, and likewise for the outcomes of motivation and interpersonal skills. The "impact (of the course) on concern for others" and the "impact on concern for the environment" were calculated by finding the mean of ratings (on a -5 to +5 scale) given by students in Section B of the questionnaire. Independent samples *t* tests were then run to determine the statistical significance of the differences between the means of females and males for each of these five course outcomes.

The *t* tests suggested that females reported greater benefits from OBWC courses than males with the means

for overall impact on self-concept, motivation, and interpersonal skills all significantly higher for females than for males. However, despite the fairly even mix of females and males in the quantitative data sample (43:38), on average the females (mean age 31) were considerably older than the males (mean age 20).

To determine whether there were differences between the course components that contributed to the outcomes experienced by females and males, both the quantitative and qualitative data were examined. Descriptive statistics were run on the quantitative data to determine the means and standard deviations of females and males for the overall impact on the three course outcomes of each of the 28 course components tested. Independent samples *t* tests indicated a statistically significant difference between the mean impact on females and males for 20 out of the 28 course components. Independent samples *t* tests run for each of the five age groups found that each age group had between one and nine course components with a statistically significant difference between females and males. However, the course components with statistically significant differences were different for each age group, indicating that no course components were more effective for a particular gender.

The qualitative data were analyzed to determine the number of females and males who commented on each of the course components. Out of the 92 students who contributed qualitative data, 55% were female and 45% were male. In contrast to these proportions, a high number of the comments were made by females attributing positive course outcomes to the following course components: relying on other group members (31 out of 34 comments), rock climbing (18 out of 21 comments), taking care of others (12 out of 16 comments), and being physically or mentally challenged (26 out of 36 comments). Because a large proportion of the females are adults (84%) and a large proportion of the males are youth (64%), it is possible that these differences in the number of comments from females and males are a function of age rather than gender. However, relying on other group members is the only one of these four course components about which more adults (19 and older) made positive comments than youth (26 out of 34 comments were made by adults). These findings suggest that the course components of rock climbing, taking care of others, and challenge have more of an impact on females than they do on males.

Age. Both the quantitative and qualitative data were analyzed to determine whether students' ages influence the outcomes they experience and which course components cause those outcomes.

A series of one-way analyses of variance run using the data collected from females indicated statistically

significant differences between age groups for the overall impact of course on self-concept, motivation, and interpersonal skills. A Tukey post-hoc was then run to determine which age groups were responsible for these differences. The post-hoc showed no significant difference between age groups for overall impact of course on self-concept, but did indicate that females over 40-year-olds experienced a statistically significantly higher impact on their motivation and interpersonal skills than females in the 15 and 16-year-old age group.

The one-way analyses of variance run for females also indicated a statistically significant difference between age groups for 6 of the 28 course components tested. Statistically significant differences among age categories of female students were found for the overall impact of the solo, the wilderness environment, being challenged physically, relying on other group members, the attitudes of other group members, and instructors' personalities. A Tukey post-hoc was then run to determine which age groups were responsible for these differences, and indicated that differences between females over 40-years-old experienced a statistically significantly higher impact from the wilderness environment and relying on others than did females in the 15 and 16-year-old age group.

The qualitative comments of students indicated that some course components may have more of an impact on certain age groups. Out of the 92 students who contributed qualitative data, 62% were adults (19 and over) and 38% were youth (under 19). In contrast to these proportions, a high number of the comments were made by adults attributing positive course outcomes to the following course components: group discussions (16 out of 17 comments), the course-end run (9 out of 11 comments), relying on other group members (26 out of 34 comments), and the solo (36 out of 46 comments). A high number of youth indicated that being responsible for themselves had positively affected them (8 out of 12 comments). Because a large proportion of the adults are females (88%) and a large proportion of the youth are male (77%), it is possible that these differences are a function of gender, rather than age. However, relying on other group members is the only one of these five course components that either a high number of females or males made positive comments about (31 out of 34 comments were from females). These findings suggest that the course components of group discussions, the course-end run, and the solo had a greater impact on adults, and that the course components of being responsible for oneself had a greater impact on youths.

Population. At the time of the study, two of the types of courses offered by OBWC were "community courses:" the Women of Courage course for female survivors

of abuse and the Vista courses for youth at risk. These differed from the "public courses" in that they were restricted to specific populations and were fully sponsored. Both the quantitative and qualitative data were used to investigate whether being a part of a specific population affects course outcomes and the impact various course components have on course outcomes.

The independent samples *t* tests revealed no statistically significant differences in the course outcomes experienced by women on public courses and Women of Courage students. However, statistically significant differences were found between these two groups for the overall impact of several course components on course outcomes (i.e., relying on other group members, instructors' personalities, and instructors as role models). Independent samples *t* tests revealed no significant differences in the course outcomes experienced by youth on public courses and Vista youth. However, statistically significant differences were found between these two groups for the overall impact of several course components on course outcomes (i.e., adapting to an unfamiliar environment, being in a wilderness setting, and being challenged physically).

The qualitative comments of students indicated that some course components may have more of an impact on the Women of Courage and Vista populations. Out of the 92 students who contributed qualitative data, 19% were Women of Courage students and 9% were Vista students. In contrast to these proportions, a high number of comments were made by Women of Courage students attributing positive course outcomes to the following course components: relying on other group members (10 out of 34 comments), instructors as role models (5 out of 19 comments), and taking care of others (4 out of 16 comments). A high number of comments were made by Vista students regarding the positive impact of the following course components: the wilderness setting (7 out of 49 comments) and working as a group (5 out of 37 comments).

Discussion

Articulation with Existing Theory

The results of this study suggest that specific course outcomes are influenced by a combination of course components and characteristics of students. More explicitly, the five aspects of OBWC courses that were found to influence course outcomes are course activities, the physical environment, instructors, the group, and students' characteristics. This theoretical framework confirms much of the existing theory on the means by which adventure education outcomes are achieved. The results of this study also extend existing theory by providing a more detailed understanding of the relationships among course components, students'

characteristics, and course outcomes. Finally, in a few cases, the results appear to refute aspects of existing theory.

A number of theoretical and research sources (e.g., Conrad & Hedin, 1981; Iso-Ahola & Graefe, 1988; Walsh & Golins, 1976; Witman, 1995) have indicated that certain qualities of course activities are integral parts of achieving course outcomes. Challenge, the mastery of new skills, and achieving success are linked with positive course outcomes in the literature, as they are in this study. The findings of this study also support the literature's claims (e.g., Walsh & Golins) that outcomes are enhanced by challenges that increase incrementally and are holistic (e.g., physical and mental). This study extends theory by indicating that specific course outcomes are influenced by students having to be responsible for themselves and having fun, qualities of course activities that do not appear to be discussed in the literature.

The only specific activities mentioned in relation to course outcomes in the literature are physical activities such as rock climbing and canoeing (e.g., Marsh, Richards, & Barnes, 1986) and processing activities, such as group discussions (e.g., Priest & Gass, 1997). In addition to physical activities, this study clearly links activities such as the solo, leadership responsibilities, camp set-up and cooking, group discussions, the service project, and the final expedition with specific course outcomes. The solo in particular seems to play an important role in students' courses by providing time for reflection. In contrast to the theoretical literature, group discussions appeared to have little direct impact on course outcomes.

The physical environment is also discussed in the literature as contributing to course outcomes. Several theoretical sources indicate that an unfamiliar environment can help students develop their self-awareness and self-concept (e.g., Kimball & Bacon, 1993; Nadler, 1993; Walsh & Golins, 1976), a proposition that is supported by this study. These same sources, as well as a research study by Hattie et al. (1997), suggest that a wilderness setting provides additional advantages and can increase students' self-awareness, self-concept, self-responsibility, as well as facilitate their "personal restoration." This study confirms that students experience these outcomes from the wilderness environment, as well as feelings of peacefulness and invigoration. Walsh and Golins suggest that the outdoor environment encourages self-awareness and self-responsibility through its neutrality, or in other words, through its arbitrary and consequential rules and the absence of buffers usually provided by contemporary society. The findings of this study support this notion, as well as Walsh and Golins' proposal that the outdoor environment provides straightforward tasks that encourage mastery. The current study also indicates that a wilder-

ness setting can increase students' concern for others and the environment. No relationships between weather and course outcomes are identified in the literature, unlike the current study which found that weather can lead to increases in students' self-confidence and indirectly affect course outcomes by affecting students' motivation while on their course.

Multiple research studies have focused on aspects of instructors that influence course outcomes. A number of studies have identified relationships between course outcomes and instructors' expectations, interpersonal skills, and personalities (e.g., Bartley & Williams, 1988; Brackenreg, M., Luckner, J., & Pinch, K., 1994; Conrad & Hedin, 1981; Dyson, 1995; Hattie et al., 1997; Hendy, 1975; Hopkins, 1982; Hopkins & Putnam, 1993; Riggins, 1986; Thomas, 1985; Wood, 1978). The current study supports these findings and indicates that instructors' expectations, feedback, and personalities can increase students' self-concept, motivation, and interpersonal skills. This study extends existing theory by linking instructors as role models and the information provided by instructors with increases in students' self-awareness, self-confidence, motivation, interpersonal skills, concern for others, and concern for the environment.

A number of theoretical studies and a few research studies discuss a variety of influences of the group on the course outcomes that students experience (e.g., Chapman, McPhee, & Proudman, 1995; Conrad & Hedin, 1981; Gass, 1995; Hopkins & Putnam, 1993; Riggins, 1986; Walsh & Golins, 1976). The current study found that working as a group, interacting with other group members, relying on other group members, taking care of others, and trying new behaviors in the group setting can increase students' self-awareness, self-confidence, motivation, interpersonal skills, concern for others, and concern for the environment.

Several theoretical and research sources have taken various perspectives on the relationships between the characteristics of students and course outcomes (e.g., Conrad & Hedin, 1981; Estes & Ewert, 1988; Ewert, 1989; Hattie et al., 1997; Witman, 1995). In the current study, student population was found to influence course outcomes, with "community course" students experiencing greater gains. Previous research suggests that wilderness-based adventure education programs cause adults to report greater positive course outcomes than youth (Conrad & Hedin; Hattie et al.), a finding which is supported by the results of this study. Unlike this study, the literature does not discuss whether the characteristics of students influence the impact the various course components have on course outcomes.

Finally, this study found that certain course components can decrease positive course outcomes or cause

students to experience negative outcomes. These course components include failing to achieve success, a lack of physical challenge, the course-end run, working and interacting with the group, instructors' expectations and personalities, the weather, and a lack of adequate food.

Beyond Current Practice

Although this research helps clarify the means by which Outward Bound courses are "working," my experiences as an instructor, as well as the results of this research, leave me wondering whether they are working in the ways we want. When I began instructing courses it seemed that what Outward Bound was best at, and therefore should focus on, was individual growth, or what I will call, "identity formation." Promoting compassion, or concern for others and the environment, seemed more on the periphery of what Outward Bound did. I think a number of things contributed to this perception, including the course activities (e.g., the time specifically allocated to solo versus service to the community), the staff manual, and the comments of students. Indeed, the design of the quantitative matrix in the questionnaire with its inclusion of the course outcomes of self-concept, motivation, and interpersonal skills, and its omission of those of concern for others and concern for the environment, reflects this previous bias.

However, the results of the qualitative data from this study seem to support the impression that perhaps what Outward Bound Western Canada is currently "best at" is identity formation. Out of the many hundred pieces of data collected from students and instructors, only 61 were regarding concern for others, and 74 were regarding concern for the environment. The notion that Outward Bound is moving away from its roots and an emphasis on compassion is not a new idea (e.g., Blenkinsop, 2001; Vokey, 1987). For example, Vokey suggests that, "there are indications that Outward Bound's espoused commitment to promoting compassion through service has not been matched at the level of practice in North American Schools" (p. 87). To begin to address the reasons for this shift from the original values of Outward Bound, and thus to gain a better understanding of the means by which students learn, it is helpful to look beyond Outward Bound to modern society and its influences.

Contemporary political scientist Charles Taylor (1991) uses the term the "malaises of modernity" to describe several features of society that people experience as a loss or a decline, including individualism and instrumental reason. Taylor suggests that the dark side of individualism is a "centering on the self, which both flattens and narrows our lives, making them poorer in meaning, and less concerned with others or society" (p. 4). The second malaise, instrumental reason, can be described as the kind of rationality we draw on when things that ought to

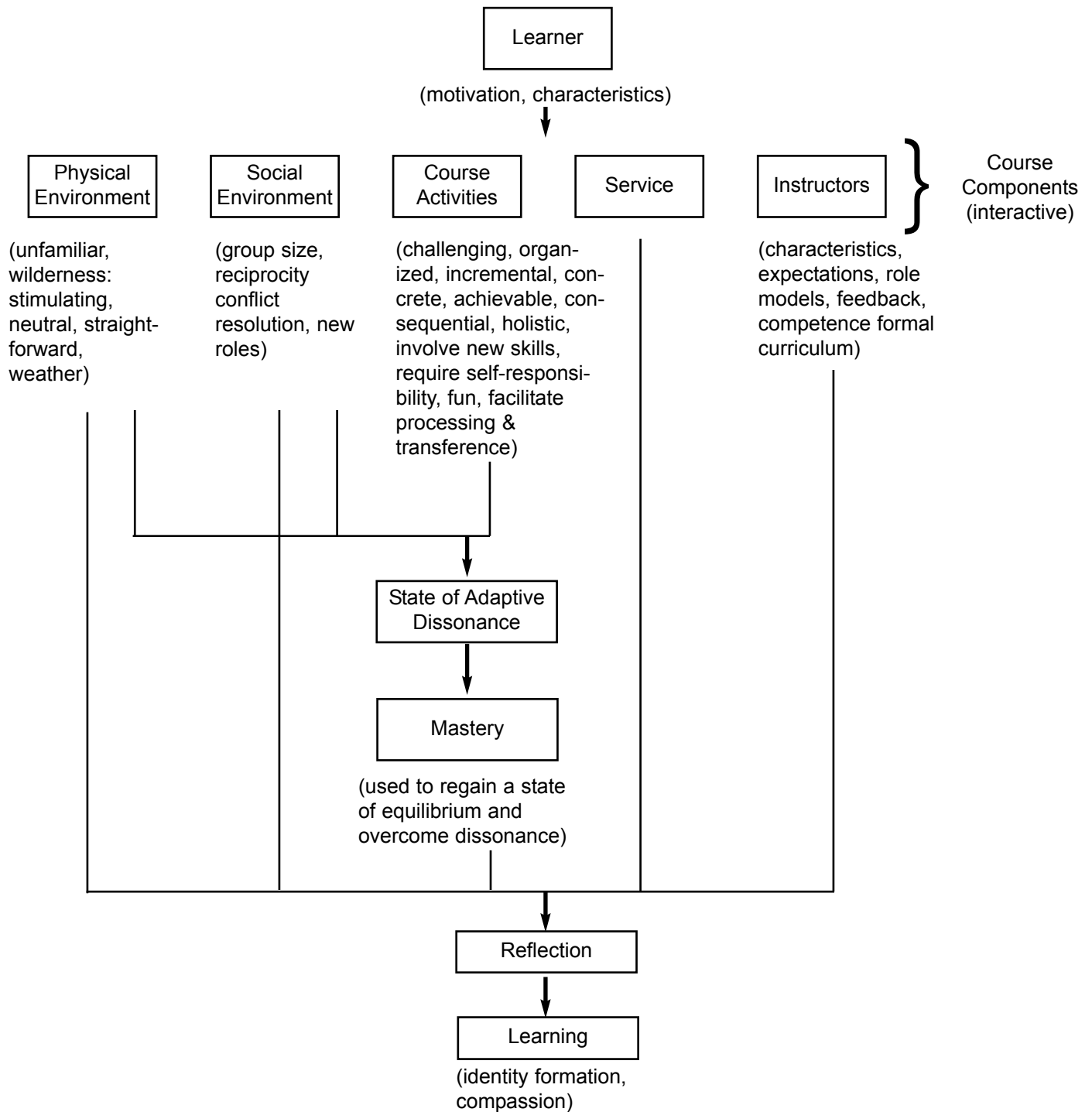
be determined by other criteria are decided in terms "cost-benefit" analysis (p. 5). In combination, these aspects of modern society have led to a widespread culture of self-fulfillment and narcissism, where individuals attempt to find meaning in their lives through "being true to themselves" and in the process, treat others and the rest of the natural world as instrumental to their self-fulfillment. Taylor, supported by the works of others (e.g., Borgmann, 1992; Frankl, 1984), advocates a culture of "authenticity" in which identity is constructed dialogically through interaction with others and where "horizons of significance" provide meaning.

There are clear parallels between Taylor and Hahn's visions. In all of Hahn's educational endeavors, his foremost objective was, "to train citizens who would not shirk from leadership and who could, if called upon, make independent decisions, put right actions before expediency, and the common cause before personal ambition" (OBC, 2001). Through Outward Bound courses, students can be introduced to the notion, or reminded, that they are needed: They may gain a better understanding of the interconnectedness of everything and the intrinsic value of others and the rest of the natural world. And if compassion and service become a horizon of significance for students, their communities benefit and they themselves can become enriched through a greater sense of identity and meaning in their lives. However, a reduced commitment to emphasizing compassion and service on Outward Bound courses suggests that perhaps the organization has been influenced by the "malaises of modernity." Rather than following Hahn in attempting to "counteract the declines of a diseased civilization" (OBC) it seems our practice, and our "process," may be accepting, or even encouraging, those declines. Outward Bound's practice should reflect its educational objectives and with an international mission "to help people discover and develop their potential to care for themselves, others and the world around them" (OBI, 2000), it is time for a renewed commitment to compassion and service in our practice and process.

Towards Alternative Models of Outward Bound Learning

Vokey (1987) suggests that the creation of Walsh and Golins' (1976) model (Figure 1) of the Outward Bound process was particularly influenced by modern individualism and that its popularity further undermines the core Outward Bound value of compassion through service. Instead, we need alternative models of student learning that take into account, not only how Outward Bound courses are currently "working," but how we would like to see them work given our educational objectives. Rather than perpetuating practice that has evolved alongside society, these types of models could provide con-

Figure 2. Building on Walsh and Golins' (1976) Outward Bound process: An alternative model of student learning.



structive direction for the organization and help improve practice.

The model depicted in Figure 2 attempts to offer an alternative version of the ways through which learning takes place on Outward Bound courses, incorporating both the findings of this study and a renewed vision of compassion through service as a key component of Outward Bound courses. With some terms from this study adapted to match those of Walsh and Golins (1976), the five course components included in this model are: (a) the physical environment, (b) the social environment (i.e., the group), (c) course activities², (d) instructors, and (e) service. In comparing Figure 2 to Walsh and Golins' model, a number of differences become evident.

First, Figure 2 is different from Walsh and Golins' (1976) model in that it includes the component of "service." The findings of this study indicate that although learning related to compassion and service sometimes results from the course components of the physical environment, the social environment, course activities, and instructors; it is much more common for these course components to contribute to learning related to identity formation. If compassion is a key educational objective of Outward Bound, it needs to be addressed more significantly in our practice and therefore, the course component of service has been added to the model. How exactly this sort of shift in our thinking about "the Outward Bound process" would be effectively borne out in practice is a matter that requires further consideration.

Second, the two models are different in that course instructors have been added to Figure 2 as a component of student learning. Although Walsh and Golins (1976) emphasize the importance of instructors in their manuscript on the Outward Bound process, they were not explicitly included in their model. The results of this study indicate that instructors do play an important role in students' learning, and thus, the course component of instructors has been added to the model to reflect this influence.

Third, whereas Walsh and Golins' (1976) model represents all of students' learning as progressing through a linear "process" that includes adaptive dissonance and mastery, Figure 2 reflects the results of this study which indicate that not all learning on Outward Bound courses occurs in this way. For example, neither a concern for the environment inspired by experiencing a near pristine wilderness nor a development in interpersonal skills resulting from instructor role modeling would seem to include this progression. For this reason, I have linked all course components more directly with reflection and learning.

Fourth, the two models are different in that the brief explanations under many of the terms used in the model

have been changed to reflect the results of this study. The explanations used in Figure 2 build on Walsh and Golins' (1976) representation of the Outward Bound process by including aspects of their theory (as described in their manuscript, rather than as portrayed in Figure 1) that are supported or not addressed by this study. The explanations also reflect ways in which this study seems to have extended and refuted aspects of Walsh and Golins' theory.

Finally, in Walsh and Golins' (1976) model the learning process leads to "reorganization of the meaning and direction of the experience," whereas in Figure 2, I have suggested that the course components interact with the learner and, through reflection, can result in learning. This reflection may not be of a cognitive nature, but might also include forms of embodied interactions in which the learner "comes to know" through their senses (Bai, 2001).

By drawing on my recent research at Outward Bound Western Canada, prior work on "the Outward Bound process," and theories on modernity, this article has attempted to help move us beyond previous understandings of student learning on Outward Bound courses. I echo Walsh and Golins' (1976) concern that once an "idea is delineated, its ability to move out of that mold is decreased" and their desire that "this exploration...be taken as a starting point for further exploration" (p. 15). I look forward to further inquiry on the means by which students learn at Outward Bound and other adventure education organizations.

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Notes

- ¹ Since this study was conducted, Outward Bound Western Canada has merged with the Canadian Outward Bound Wilderness School and is now referred to as "Outward Bound Canada – Western Operations." For the purposes of this article, I have continued to refer to the research site as "Outward Bound Western Canada."
- ² Walsh and Golins' (1976) original term, "characteristic set of problem-solving tasks," has been replaced by "course activities" to reflect the findings of this study which indicate that a variety of course activities influence student learning and not only those that are centered around problem-solving (e.g., solo and service projects).

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