## Assessing the Impact of a WEA Outdoor Leadership Course

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Keywords: wilderness education, means-end theory, 3E form, wilderness program outcomes **Introduction** 

Program assessment data are presented that identify course components and associated outcomes among participants of an 11-day Wilderness Education Association (WEA) outdoor leadership course. The purpose of this study was threefold: 1) to identify course outcomes based on curriculum components, 2) explore any differences between American and Japanese students, and finally, 3) identify differences between participants seeking outdoor leader or outdoor educator certification levels. This course was held in the Appalachian Mountains of Virginia for U.S college students and Japanese outdoor educators. The Experiential Education Evaluation Form (3E Form) was administered to eleven participants, 4 American and 7 Japanese. The 3E Form (Okamura, n.d.) is based on means-end theory, which has historically been used to identify important attributes of a service such as benefits and outcomes. Researchers have applied means-end theory as a way to assess outdoor adventure program benefits and outcomes (Goldenberg, McAvoy, & Klenosky, 2005; Goldenberg, Klenosky, McAvoy, & Holman, 2004; Pronsolino, 2009).

## Method

The 3E Form was made available to students once the course ended. Students were provided a URL to access the form from any electronic device. Students were encouraged to respond to the form a minimum of three times. The 3E form allowed course instructors to collect outcome data by asking a series of questions called laddering. Respondents self-identified important outcomes associated with their course experience. Initial responses led to a second set of questions and finally a third set of questions resulting in more meaningful response.

Questions used in this study focused on curriculum components and course activities. This 11-day outdoor leadership course included the following: 1) Leave No Trace Trainer curriculum, 2) Teaching methodology using an experiential learning technique call SPEC, 3) Leader of the day experience (LOD), 4) Wilderness first aid (WFA), 5) Hiking/Backpacking, 6) Basic outdoor living skills instruction, 7) Lesson plan preparation and student teaching experience, 8) Leadership theory, and 9) Night rescue scenario. A tenth component was added based on the learning experience associated with the unseasonable cold weather and ending the field experience one day earlier than scheduled.

## **Results and Discussion**

Twenty-nine ladders resulted; ten generated by American students and 19 from Japanese students. Using a cut off level of 2 responses, figure 1 demonstrates potential relationships of interest. The students' exposure and practice of experiential teaching/learning using SPEC became Intrapersonal and Self-Awareness Experience and Fun and Interesting Experience to develop Leadership. LOD became Intrapersonal and Self-awareness Experience and Develop New Knowledge and Skill to develop Leadership. LNT became Environmental Awareness Experience and Develop New Knowledge and Skill to develop "Environmental Integration."

A chi-square analysis was conducted to explore the differences between American student responses (n=9) and Japanese student responses (n=19). No statistically significant findings appeared. However a descriptive trend appeared that the Japanese students were more

affected by SPEC and LNT on Leadership and Environmental Integration respectively. This seems likely compared to the American students who have had prior exposure to these curriculum components compared to the Japanese. This conclusion was also supported in a prior evaluation of a WEA Professional Workshop for Japanese outdoor educators held in July 2012, which identified the SPEC class as most impactful experience. The results showed that focus should be placed on SPEC and LNT during a WEA course for Japanese students.

A chi-square analysis of outdoor leader responses (n=14) compared to outdoor educator responses (n=11) yielded no significant statistical results. However, descriptive analysis portrays that exposure to SPEC had a greater effect on Leadership Development among students seeking outdoor leaders certification compared to students seeking outdoor educator certification. On the other hand, outdoor educator students

recognized the course more as an opportunity to gain new knowledge and skill. This is an interesting

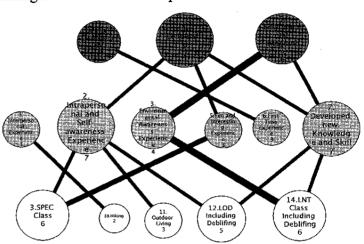


Figure 1. Hierarchical Value Map for WEA Participants With Cut off Level =2

observation based on the fact that students seeking outdoor leader status had significantly less outdoor experience compared to the more experienced students seeking the outdoor educator certification, which is a higher-level certification. Typically, WEA Outdoor Leader and Educator curricula and training methods are different. However when both levels are addressed on same course, we should intentionally target different goals for their respective development.

The small sample size and response rate affected the researchers' overall ability to determine any statistically significant results. However the observed trends of leadership development and environmental integration are encouraging. The overall purpose of the WEA course was to develop leadership skills and knowledge along with administering the LNT Trainer certificate. The continued use of the 3E Form on future WEA courses would help yield more definitive results and provide a convenient method to assess outcomes.

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