

Emerging Attitudes: A Preliminary Analysis of Environmental Education Programs at Bradford Woods Outdoor Center

“The purpose of life, after all, is to live it, to taste experience to the utmost, to reach out eagerly and without fear for newer and richer experiences.”
— Eleanor Roosevelt

Benefits and outcomes studies can reveal valuable evaluative information pertaining to the camp experience by investigating the discourse between agency expectation and actualization. The purpose of this three-phased study was to provide analytical research of the outdoor environmental education programs administered at Bradford Woods, Indiana University’s Outdoor Center. This phase of the study (Phase II) indicated the valuable themes chosen for the development of a proper questionnaire as well as the differences in socio-psychological attitudes of campers before and after the program. In addition, this study demonstrated the value of utilizing a mixed-method approach in an investigative process in order to offer other camps unique and worthy information about participant experiences.

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Theoretical Context

Outcome-based research not only focuses on the program, it also looks for differences or changes in participants. McNamara (2006) suggests that a thorough outcome analysis will reveal program benefits and impacts to clients. Questionnaires tap into the behaviors of a population using sampling, question design, and data collection methodologies to discover a specific purpose (Fowler 2002). Ultimately, this will assist in improving current programs as well as potentially helping other camps of its kind.

Methods

During the instrument development phase (Phase I), the Bradford Woods Research Team (BWRT) conducted a qualitative study to determine the salient outcomes of the environmental education experience at Bradford Woods. Ten individuals representing a host of different stakeholders (i.e., fifth grade participants, principals/administrators, parents/guardians, teachers, and Bradford Woods’ instructors) were interviewed to gain their perspectives regarding the Bradford Woods experience. An analysis of the data identified the following themes: a) differences in stakeholders; b) social interactions; c) environmental stewardship; and d) learning processes. Within each theme, several key findings emerged: 1) while each stakeholder may have shared a personal perspective, all identified the Bradford Woods experience as a unique, fun, and enriching educational experience. In particular, the non-formal educational setting was highly valued; 2) there were effects of varying degrees of social interaction and peer dynamics on perceived outcome; 3) collective importance on environmental responsibility and stewardship

were emphasized by all stakeholders; and 4) reflections on and effectiveness of learning/instruction processes with structured and unstructured program activities were discovered. The themes and findings provided the BWRT with identified outcomes that both supported existing literature in environmental education and provided direction for the development of the Bradford Woods Program Benefits and Outcomes Survey (Phase II). Data were collected from fifth grade students in their school classrooms one week prior to participation in the Bradford Woods program and again one week following the experience. A total of fifty-four matched surveys were obtained and used in the analysis.

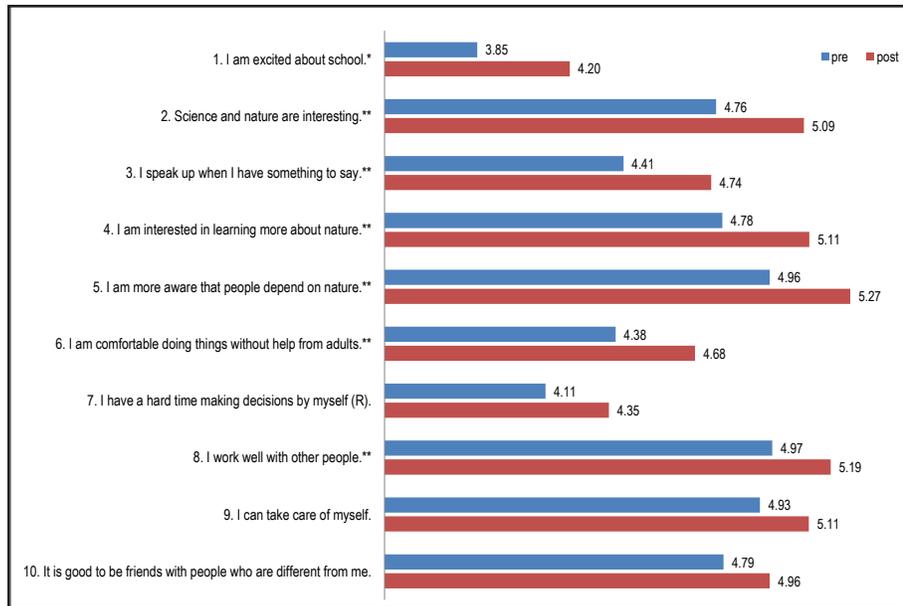
Findings

The following findings were obtained from preliminary analysis of data collected from students at a participating elementary school. A significant increase in mean scores for the following seven items was found:

- I am excited about school.*
- Science and nature are interesting.*
- I speak up when I have something to say.*
- I am interested in learning more about nature.*
- I am aware that people depend on nature.*
- I am comfortable doing things without help from adults.*
- I work well with other people.*

The majority of the remaining items, while not statistically significant, showed an increase in mean scores, indicating a shift in a positive direction. Interestingly, students indicated significantly greater agreement with one item, “being outside makes me uncomfortable.” While reasons for this are not

Top 10 Positive Changes in Socio-psychological Attitudes Resulting from the 2- to 3-day Bradford Woods Environmental Education Program



Note: N = 54 (the 5th grade students in Central Elementary School, IN); Data was collected March, 2008; Scale range was 1 to 6: (1 = "Strongly Disagree," 2 = "Disagree," 3 = "Disagree a little," 4 = "Agree a little," 5 = "Agree," and 6 = "Strongly Agree."); (R) indicates the item is reversely coded; ** p < .05, * p < .10.

explicitly known, it may be that students experienced poor weather conditions while they were at Bradford Woods. Perhaps, more likely is that students mismarked the item, interpreting stronger agreement as an indication that they were comfortable being outside. This issue will be addressed in future data collection with the item being rephrased to read, "I am comfortable being in the outdoors." The research team anticipates collecting a minimum of four hundred questionnaires from more than eight schools participating in the program.

Conclusion

An investigative inquiry was necessary in discovering and understanding the benefits and outcomes of environmental education camp programs. Through this study's process and discovery of what an agency expects its participants to gain may be far from what is actually manifesting. Therefore, participant accounts of the camp experience provide valuable information regarding both perceived and actual outcomes. The American Camp Association's 2009 conference theme, The Power of the

Experience, complemented the efforts made by the Bradford Woods Research Team in advancing camp research about individual experience and by establishing a foundation for future research possibilities at the Bradford Woods outdoor center. The accounts given by the participants contributed to the study by revealing benefits and outcomes, which in turn, provided a deeper understanding to the phenomena of the camp experience.

Practical Applications

This study is unique to other environmental education research in that it acknowledges the ideas and views of a diverse group of stakeholders. This holistic approach offers a broader platform for discovery through personal investment in the camp experience at Bradford Woods. Our intention is to increase program quality by analyzing these data and providing a clear account of what occurs prior to the experience, as well as discovering what has actually occurred after the experience. Are there significant differences in the pre and post testing, and if so why?

There are also practical applications for other camps from this research.

Outcome studies help an agency learn what participants are actually receiving from the program versus what an agency expects its participants to learn. Camps must first acknowledge the ideas and views of the stakeholders who can offer a broader platform for discovery through personal investment. The accounts given by participants reveal benefits and outcomes, which in turn, provide deeper understanding to the phenomena of the camp experience. Analyzing data and providing a clear account of what occurs prior to the experience as well as discovering what has actually occurred after the experience will increase program quality. Gaining participant accounts of the camp experience through outcome studies provides valuable information regarding both perceived and actual outcomes, lends credibility to the camp program, and allows for future funding possibilities. Finally, these findings can help directors make the case to perspective parents and funders that camp programs produce measurable changes in children and other participants in outdoor programs.

References

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- McNamara, C. (2006). *Field Guide to Non-Profit Program Design, Marketing and Evaluation*, 4th Edition. Minneapolis, MN: Authenticity Consulting, L.L.C.

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