



Evaluation Report: Evaluation of the Environmental Education Program at the New Jersey School of Conservation

N.J. Smith-Sebasto and H. Semrau. (2004) Evaluation of the Environmental Education Program at the New Jersey School of Conservation. *The Journal of Environmental Education*, 36 (1): 3-18.

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Program Profile	
Program Description:	The New Jersey State School of Conservation was founded in 1949. It is located in Stokes State Forest on a 240 acre tract. The program serves elementary and middle-school students in New Jersey Schools. The curriculum is taught by both the school's staff and teachers from visiting schools who receive training by NJSOC's staff. The four curricular areas include environmental sciences, humanities, outdoor pursuits and social sciences. All NJSOC lessons are linked to Workplace Readiness Progress Indicators and New Jersey Core Curriculum Content Progress Indicators. NJSOC is a longstanding program whose efforts have reached a large number of people. Since 1963 there have been 500,000 student participants and 50,000 teacher participants. The evaluation described here was the first one to analyze the effectiveness of NJSOC programming in addressing affective, cognitive and conative environmental education goals.
Program Goals:	<p>·Affective: "To develop in participants a sensitivity and awareness concerning the Earth and the problems that threaten life on the planet."</p> <p>·Cognitive: "To facilitate participants' self-examination of their roles in contributing to environmental improvement."</p> <p>·Conative: "To utilize an active problem solving approach to provide students with the skills necessary to play productive roles in improving the quality of life."</p> <p>From NJSOC. See http://csam.montclair.edu/njsoc/mission.html</p>
Program Funding:	Montclair State University and the state of New Jersey
Program Links:	http://csam.montclair.edu/njsoc/
Evaluation Profile	
Evaluation Goals & Questions:	<p>The evaluation studied the effect of seven NJSOC lessons taught over a four day, three night period to three different school groups of sixth grade students. The evaluation examined affective, cognitive and conative outcomes. The main study questions included:</p> <ul style="list-style-type: none"> · Do New Jersey School of Conservation programs change the attitudes of selected participants toward the environment? If so, what is the cause? If not, what is missing? · Based on the study of seven lesson plans in the New Jersey School of Conservation curriculum, are the three selected mission objectives being met? If these objectives are not being met how can the program be improved based on evaluation findings?

Evaluation Methods:	<p>The evaluation design included both a pretest and a posttest, with only half the students from each school completing the pretest so that the evaluators could examine whether the participants were sensitized to the test instrument. Researchers used the Children’s Attitudes Towards the Environment Scale (CATES) to measure changes in the students’ attitudes towards the environment. The reliability of the evaluation instruments had already been established.</p> <p>Each test item was coded into one of the three domains (affect behavior, beliefs), and then coded into one of the five test themes (conservation, animal rights/animal protection, nature appreciation, pollution, recycling.) An overall score was given to each student by summing across the three domains. A t-test and a one-way ANOVA were used to determine whether taking the pretest had an effect on the posttest results. Across the three schools, it was found that students were not sensitized to the pretest instrument.</p> <p>The evaluators used a matched-pairs analysis to examine if posttest means for all three schools were improved compared with pretest means.</p> <p>A qualitative analysis was also conducted to examine each of the lesson plans in relation to one of the program’s mission objectives.</p>
Evaluation Instruments:	<p>A complete set of instruments are available in the following article: Musser, A., & Malkus, A. (1994). The children’s attitudes toward the environment scale. <i>Journal of Environmental Education</i>, 25 (3), 22-26.</p>
How were results used?	<p>The results were used to inform further research on other mission objectives and other NJSOC lessons. The evaluators also recommended that other grade levels attending NJSOC should be studied as well as public versus private schools and urban versus rural schools.</p> <p>Recommendations to improve lesson plans were devised, for example including time for reflection on ways to improve the environment in connection with the lessons. To the knowledge of the evaluator, however, recommendations for improving the lessons were not implemented by NJSOC.</p>
Evaluation Cost:	<p>There were few costs for the evaluation. A graduate student assistant from Montclair State University conducted the study as a thesis project. She received a tuition and fees waiver for her assistantship. The paper for the printing of the students’ thesis was paid for by the principle evaluator.</p>
Evaluation Insights:	<p>What worked well? “Clear communication with a representative of the organization being evaluated. We worked closely with a representative of the school district and established a very clear protocol that all parties understood.”</p> <p>What could have been done differently? The study was conducted over 5 years ago and so it was difficult for the evaluator to recall what he and the graduate student would have liked to have done differently. Three more graduate students have evaluated the program at the NJSOC. In those studies, they evaluated:</p> <ol style="list-style-type: none"> 1) the effects of adding a pre-, post-, and/or pre- and post-trip intervention on the educational efficacy of the program 2) the students' perceptions of their experience 3) the students' perceptions of their experience six months after. <p>There was also a study conducted solely by the author which investigated the perceptions of teachers involved with the residential EE program. These studies were conducted in light of the needs identified by the evaluation reviewed</p>
Profile information provided by:	<p>Dr. Nicholas J. Smith-Sebasto, Associate Professor, Montclair State University</p>

Profile prepared by:	Caitlin Gilson, Graduate Student, University of Michigan
Posted on:	February 2008



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