

Graduate Student Research Day 2011

Florida Atlantic University

COLLEGE OF EDUCATION

Everglades Education: Analysis of the ‘Everglades on You Program’

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The following research seeks to identify the strengths and weaknesses of the ‘Everglades to You program’, and develop educational material to be used for this program in the future. The ‘Everglades to You’ program is delivered by the non-profit Arthur R. Marshall Foundation as an outreach program to classes who cannot afford a field experience. The methodology in this research began with an internal, formative, participant oriented evaluation. Quantitative evaluation data was collected in the form of teacher surveys for programs delivered from 2007 to 2010. Qualitative data was collected in the form of a personal interview with Marshall Foundation Education Manager Eric Gehring. Analysis of the data showed that 87% of teachers whose classes participated in the program rated the program content as excellent, and 98% of teachers surveyed would like to repeat the program in the future. Analysis of the data also showed that the program is in need of pre and post visit material, which closely aligns with Next Generation Sunshine State Standards and can function as a supplemental FCAT exercise. The additional material for the Everglades to You program is currently being created and will consist of grade level appropriate pre and post visit lessons. These lessons will also feature an interdisciplinary component, allowing instructors to teach across multiple subjects at once.

Everglades Education: An Evaluation of the Everglades To You Program

Rachel Scarafia

Capstone Study in Environmental Education

SCE6196

Do teachers feel that participation in the Everglades to You program is a positive experience for students?

Arthur R. Marshall
Foundation



Introduction

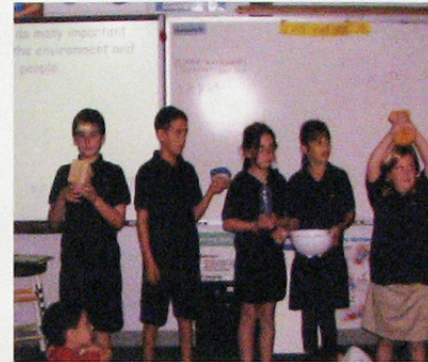
The Arthur Marshall Foundation was established in 1998 as a not for profit 501(c)(3) organization. The foundation works to develop future stewards of the environment by dedicating large amount of time and resources to environmental education. The Everglades to You program offers students an hour and a half Everglades experience without leaving the classroom. This program is specifically designed to engage students in schools that cannot afford to bus children to field trip locations, including all Palm Beach County Title 1 schools. The Next Generation Sunshine State Standards have been addressed for each grade level K-12, covering multiple science standards in the life sciences subject area. The program features age appropriate activities and consists of two lesson write ups, one for students Kindergarten through 5th grade, and one for students 6th through 12th grade.

Evaluation

The evaluation was internal, formative, with a participant oriented approach. The evaluation carried out by FAU student Rachel Scarafia, with assistance from Arthur Marshall Foundation education staff members Eric Gehring and Shannon Duffy, attempted to determine whether the Everglades to You program valued as a positive resource by participating teachers. The evaluation consists of quantitative and qualitative data. Quantitative data was supplied in the form of teacher surveys collected during the 2007-2011 school years. Because the current survey questions are not perfectly aligned with the evaluation question, only certain questions were used for analysis. Qualitative data was supplied by additional information from the teacher survey, and interviews with the education staff at the Arthur Marshall Foundation. For the quantitative data, descriptive statistics were calculated, reported in the results section of this paper, and stored for future evaluation. This analysis was conducted using Microsoft Excel. The qualitative data was transcribed and reviewed by the evaluator for trends and themes. The analysis of data was used as a base to further develop the Everglades to You program. In the following months, the new additions to the Everglades to You program will be evaluated using the same instruments, with an additional student quasi experimental time series design pre and post test.



Results



The teacher evaluations were used to determine 4 separate measures. These measures include: a rating of communication and organization for the program, a rating of grade level appropriateness, a rating in likelihood of repeating the program, and an overall rating of the program. There were a total of 57 completed surveys used for the analysis.

An interview was conducted with Education Director Eric Gehring to determine to needs for this program, and gain an understanding of the program from the presenters point of view. The interview showed a need for pre and post visit material to add to the program as more than a stand alone event.

Measure	Rating Scale	Average	Majority percentage
Communication	Low 1-5 High	4.83	85.9% rated communication excellent
Grade level appropriateness	Too easy 1-5 too difficult	3.27	75% rated perfectly appropriate
Likelihood of repeat	1=yes 2=no	1.01	98% would repeat the program
Overall rating	Low 1-4 high	3.86	85.9% rated the program overall as excellent

Discussion

The quantitative results show that the majority of participating teachers are pleased with the current program, and would choose to repeat this program in the future. Qualitative data shows a need for program material which engages the students before and after the program in the form of pre and post visit material. Research has also shown that stand alone events in the form of field trips and outreach programs will not become integrated into the learners thinking unless the information is integrated into multiple lessons or areas of the curriculum (Volk, 1996).

Pre and post visit material was created in the form of 15 minute lessons which integrate environmental concepts into other subject areas. Integrating Everglades information into the subject areas of math, language arts, and art caters to the multiple intelligences of inclusive classrooms and serves as a model for teachers for future lesson integration.

