Outdoor Place-Based Education, Minnesota Canoemobile Fall 2016

Evaluation Brief

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Evaluation Team:

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Outdoor Place-Based Education, Minnesota Canoemobile Fall 2016

Program Description

Canoemobile provides a continuum of experiences for youth and families. These experiences engage participants in a lifelong relationship with the outdoors, foster leadership and skill development, and encourage environmental awareness. Canoemobile achieves these goals through efforts and activities that intentionally engage underserved low and middle income youth and families.

Canoemobile collaborates with federal, state, and local partners to connect thousands of youth and adults of all backgrounds and abilities to outdoor education on local waterways. The Canoemobile is a fleet of six handmade, 24-foot Voyageur canoes that serve as a floating classroom. Wilderness Inquiry Outdoor Educators lead participants in fun and engaging water-based activities. Topics include water quality, ecosystem health, the geometry of bridges, local history, and more. Canoemobile engages youth to improve school performance, cultivates a stewardship ethic, and creates pathways to pursue educational and career opportunities in the outdoors.

The Canoemobile program seeks to:

- Engage thousands of underserved youth in outdoor education, conservation, and recreation.
- Introduce youth to experiential watershed education through water quality testing, insect netting, and stewardship activities.
- Increase academic achievement through placebased learning.
- Connect youth to educational and career opportunities across the outdoor sector.
- Provide resources, curriculum support, and professional development opportunities for teachers.
- Inspire the next generation of citizens to enjoy, explore, and protect public lands.

KEY FINDINGS

Canoemobile serves as a floating classroom that provides fun and engaging, water-based activities to connect youth of all abilities to the natural world through hands-on outdoor learning on local waterways in cities across America.

- Between September and October 2016, 20 Canoemobile trips occurred in central and northern Minnesota.
- Over 1,000 Canoemobile participants completed a 9-item post-trip survey.

The survey results show high levels of agreement across all survey items, and the most frequent response for all nine items was *strongly agree*. To highlight:

- 93% agreed that trip leaders were knowledgeable;
- 87% agreed that they had learned new skills;
- 86% agreed that contributing to their community is important; and
- 84% indicated they felt like they belonged on the trip.

In addition, respondents agreed that, as a result of the trip, they:

- made stronger connections to nature (82%),
- were more interested in protecting the environment (81%), and
- will think about the environment more often (80%).

Methods

In September and October of 2016, 20 Canoemobile trips occurred in central and northern Minnesota, serving 1,394 participants. Trip length ranged from 1.5 to 6.5 hours and included canoeing, watershed education, and additional experiential stations. The program staff who led the Canoemobile trips administered a post-trip survey to participants near the end of each trip. The survey consisted of nine items that asked participants to reflect on the effects that the experience had on them. Respondents were asked to indicate their level of agreement with each statement using a four-item scale ranging from *strongly disagree* to *strongly agree*. Valid surveys were obtained from 74% of the participants (1,033 of the 1,394 participants).

Findings

Participant Demographic Data

The number of participants on each of the 20 Canoemobile trips that occurred in fall 2016 varied greatly (from 9 to 140 participants), as did the number of survey respondents per trip (from 7 to 96).

As mentioned above, the Fall 2016 Canoemobile trips took place in central and northern Minnesota cities (e.g., Brainerd, St. Cloud, Thief River Falls) located in Congressional districts 6, 7, and 8 (see Figure 1) in addition to metro area schools. Fifty percent (50%) of the participants served were from Congressional district 6; 23% served were from the northern portion of Congressional district 7; and 26% served were from district 8. Based on information provided by the schools, overall 5% of the participants were students with disabilities and 29% were students of color.



Figure 1. Minnesota Congressional Districts

The majority of survey respondents (73%) were enrolled in grades 5-8, followed by 22% in grades 7-10 and 9-12. Less than 1% of survey respondents were enrolled in grades K-3 (see Table 1).

Table 1. Respondents by Grade Band*

Grade Band (<i>n</i> = 1,033)	Percent		
Grades K - 3	<1%		
Grades 4 - 8	4%		
Grades 5 - 8	73%		
Grades 7 - 10	11%		
Grades 9 - 12	11%		
Total	100%		

* Grade levels of students were combined into grade bands unless reported as a specific grade band (e.g., grades 4-8, 7-10).

Trip Outcomes

There were high levels of agreement across all survey items. The most frequent response for all items was *strongly agree*, and more than 75% of the respondents slightly or strongly agreed with all nine items. There was some variation in the percentages and strength of agreement across items. For example, 78% of respondents strongly agreed with Item 9, "Trip leaders were very knowledgeable," and another 15% selected *slightly agree* (93% agreement). Eighty-seven percent (87%) strongly or slightly agreed that they had learned new skills on the field trip (Item 1). Similarly, 86% agreed that it is important to contribute to their community (Item 7), and 84% felt a sense of belonging on the trip (Item 8). Respondents also indicated that, as a result of the trip, they had made stronger connections to nature (Item 2; 82% *strongly or slightly agree*), and that they were more interested in protecting the environment (Item 5; 81% *strongly or slightly agree*). Eighty percent (80%) of the respondents agreed that the trip made them think of the environment more often (Item 4; for all results see Table 2).

Table 2. Response Frequencies by Item

Survey Items	Strongly Disagree	Slightly Disagree	Slightly Agree	Strongly Agree
1. On this trip, I learned new skills. (n = 1,025)	5%	7%	40%	47%
2. Trip activities helped me make stronger connections to nature. (<i>n</i> = 1,022)	6%	13%	36%	46%
3. Because of this trip, I am more aware of my personal strengths. ($n = 1,010$)	8%	16%	38%	39%
4. Because of this trip, I will think about the environment more often. $(n = 1,019)$	7%	14%	39%	41%
5. Because of this trip, I am more interested in protecting the environment. ($n = 1,014$)	6%	12%	35%	46%
6. During this trip, I learned about jobs in the outdoors. ($n = 1,025$)	10%	16%	33%	42%
7. It is important to me to contribute to my community. ($n = 1,023$)	5%	10%	30%	56%
8. On the trip, I felt like I belonged. ($n = 1,018$)	7%	9%	28%	56%
9. Trip leaders were very knowledgeable. (n = 1,024)	4%	3%	15%	78%

Conclusions

The Canoemobile program serves as a floating classroom that provides fun and engaging, water-based activities to connect youth to the natural world through hands-on, outdoor learning on local waterways in cities across America. Between September and October 2016, 20 Canoemobile trips included an evaluation portion distributed to over 1,300 participants from central and northern Minnesota. Seventy-four percent (74%) of the participants completed a post-trip survey (n = 1,033 out of 1,394 participants).

Responses to questions regarding outcomes from Canoemobile events indicated that the program met goals of engaging youth and young adults across the entire range of objectives, and that activities focused on water quality and ecosystem health increased students' conservation ethic. There were high levels of agreement across all survey items, and the most frequent response for all nine items was *strongly agree*. Participants agreed that they had positive outcomes as a result of the trip. For example,

- 93% agreed that trip leaders were knowledgeable;
- 87% agreed that they had learned new skills;
- 82% agreed that trip activities helped them make stronger connections to nature.
- 80% agreed that because of the trip they were more interested in protecting the environment and will think about it more often.

Most participants indicated that, as a result of the trip, they: had made stronger connections to nature (82%), were more interested in protecting the environment (81%), and will think about the environment more often (80%). In addition, 77% of respondents indicated they have become more aware of their personal strengths, and 75% have learned about jobs in the outdoors.

Participants' survey responses strongly suggest that the Canoemobile is reaching a wide range of participants and having a positive impact on those participants. The results suggest that Canoemobile is meeting its primary objectives of engaging thousands of underserved youth in the outdoors; connecting youth to educational and career opportunities across the outdoor sector; and making great strides to inspire the next generation of citizens to enjoy, explore, and protect public lands.