

EFFECTS OF MODIFIED PROGRAM SYSTEMS ON PARTICIPATION IN OUTDOOR EDUCATION AND CROSS-COUNTRY SKIING

Chandler Bowen, Crosscut Mountain Sports Center, Bozeman, MT, July 2024

BACKGROUND

Access to outdoor education and activities like cross-country skiing provide a suite of mental and physical health benefits to participants. Barriers like race and ethnicity, financial status, disability, lack of knowledge and exposure, and other factors can prevent certain groups from accessing these opportunities. Creating more inclusive and equitable programs can offer the benefits of these activities to a more diverse audience.

CONTEXT

Where: Crosscut Mountain Sports Center, Bozeman, MT

What: Crosscut's Ski Education Program

Who: Local students in grades 1-12. The target group consisted of five 5th grade classes.

RESEARCH QUESTIONS

- Do modified program systems effect participation in Crosscut's Ski Education Program?
- What are the effects of participation in the Ski Education Program?

METHODOLOGY

Modified program systems including prioritized registration and a clear scholarship system were designed and implemented during Ski Education Registration. These systems prioritized Title-1 schools and increased scholarship opportunities. Benefits to participation were measured through pre- and post-surveys for students, individual teacher interviews, and instructor observations.

DATA ANALYSIS

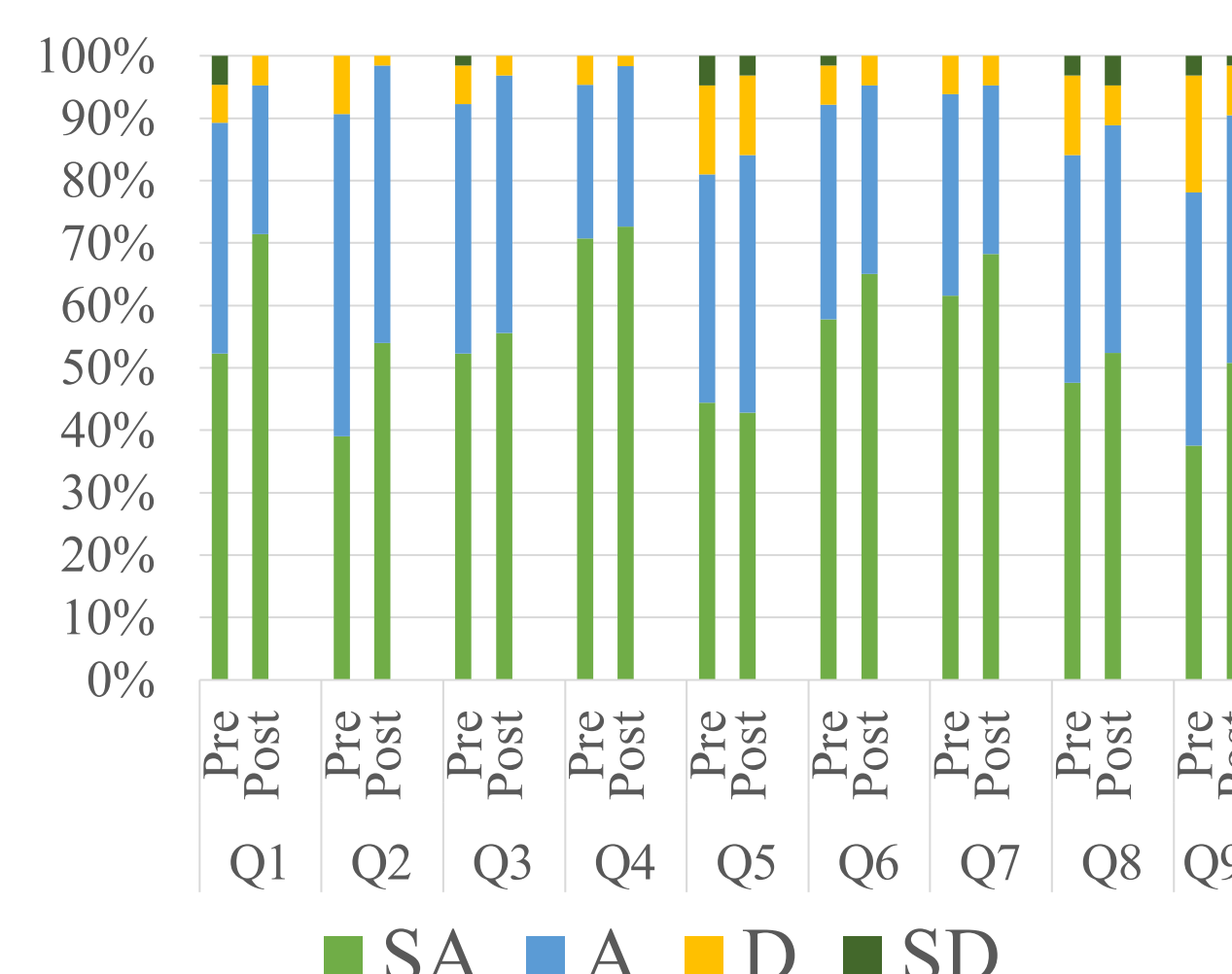


Figure 2. Changes in frequency of Likert scores for Self-Reflection related questions in the Pre and Post Student Surveys, (N=65). Positive changes in self-belief and confidence in trying new things were most significant, though all questions increased the number of Strongly Agree ratings post participation.

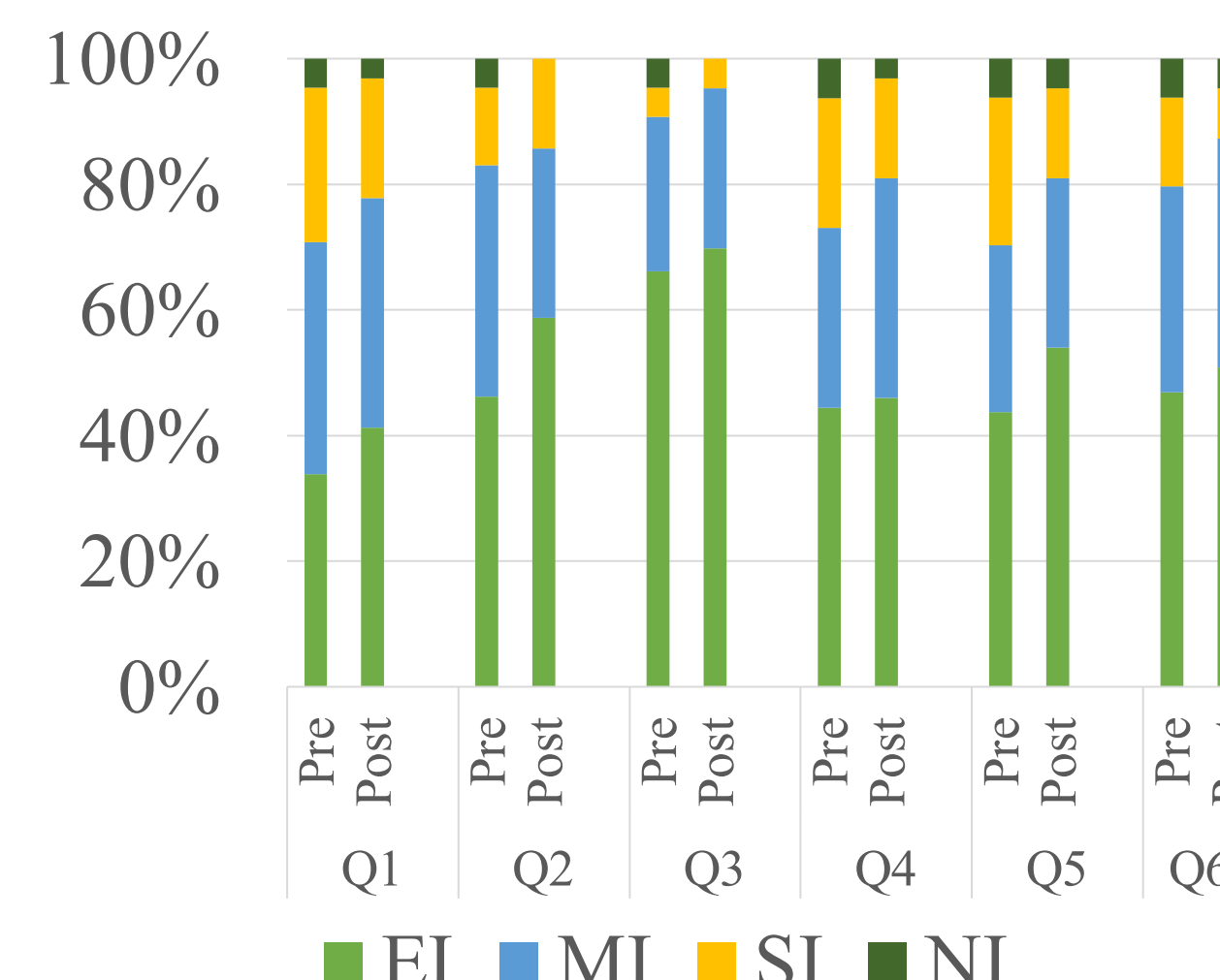


Figure 3. Changes in frequency of Likert scores for Learning Interest related questions in the Pre and Post Student Surveys, (N=65). All questions related to learning interests increased the number of Extremely Interested ratings post participation.

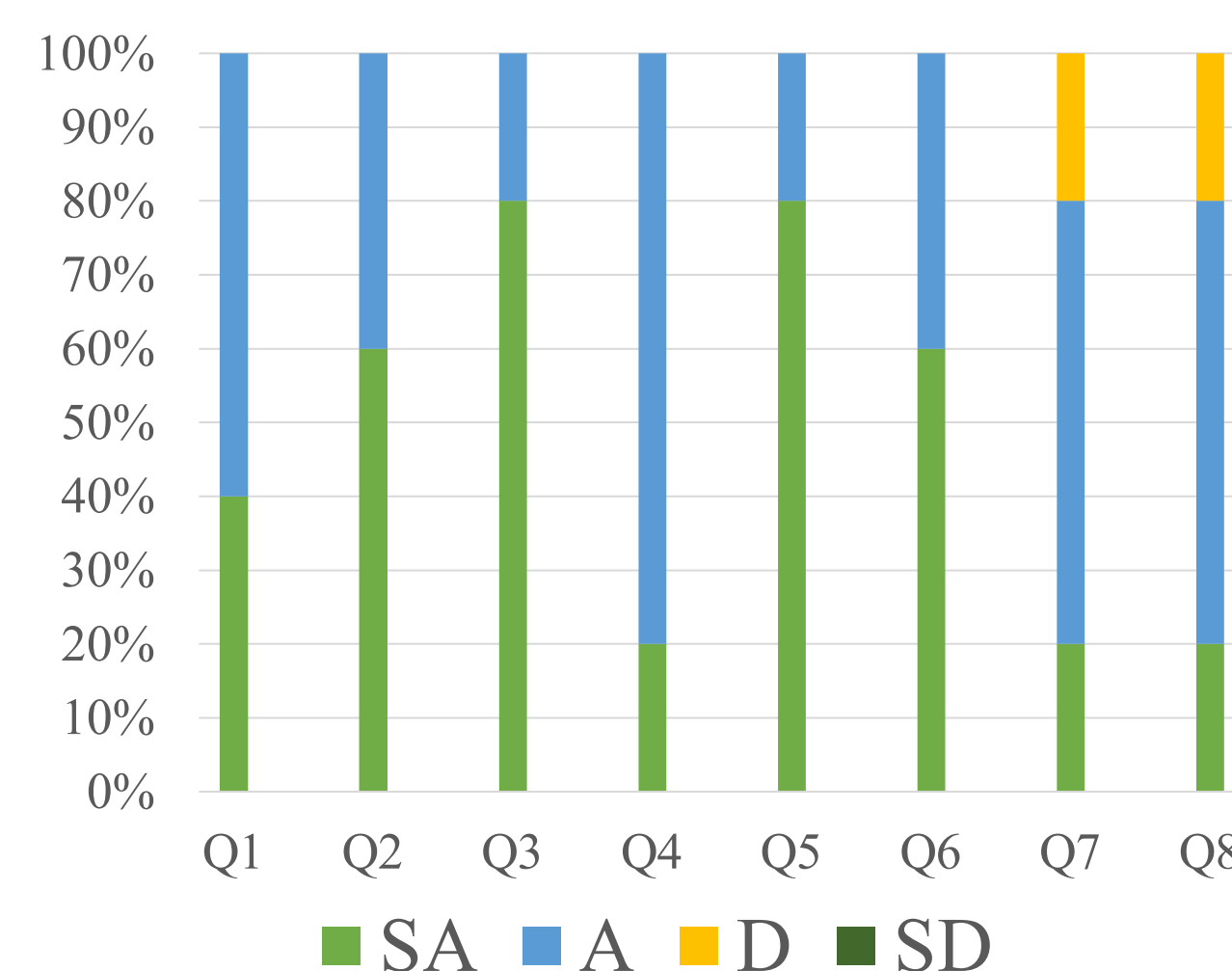


Figure 4. Instructor Observations of perceived benefits to students due to participating in Ski Education, (N=5). Q3 and Q5, the class seemed excited to try something new, and the class seemed to enjoy being outdoors, both had an 80% rating for Strongly Agree.

Student quotes:

"I enjoyed the fun activities and all of the green fresh nature."
"Going down the hills are the most exciting for me. But I also like experiencing the woods."

Instructor quotes:

"Many students were comfortable in this space due to previous participation which allowed them to challenge themselves more on harder trails, they were nervous for some trails but gained confidence throughout the day."

Teacher quotes:

"While we live in this recreation mecca, many students – mostly low-income students - have not been exposed to what the mountains and parks have to offer."
"We are a Title I school with students who could not go if it wasn't for the scholarships."

RESULTS

- Participation of Title 1 students increased by 47% from the previous year.
- Scholarship money awarded increased by 48% from the previous year.
- Increases in the Likert scale ratings of strongly agree and extremely interested increased across statements related to self-reflection and learning interests post participation.
- Teachers from Title 1 schools stated that the modified systems impacted their confidence in securing a program date and the ability for all of their students to attend due to financial assistance.

CLAIMS - EVIDENCE – REASONING

- Modified program systems had an impact on participation in the Ski Education program as evidenced by teacher statements and the increase in the number of Title 1 students registered. The scholarship opportunities and early registration made the program more approachable and accessible for teachers and their students.
- Outdoor education and cross-country skiing offer various benefits to participants including increased self-belief and confidence to try new things. Title 1 school teachers in this study mentioned many of their students never having skied or spent time in surrounding mountains and forests. Changing systems and making improvements to programs is necessary to offer these benefits to lower income schools and their students.