

AN ASSESSMENT OF THE TEXAS OUTDOOR ADVENTURES EDUCATION PROGRAM

Conducted for the Dallas Ecological Foundation

by Responsive Management

2013

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Responsive Management National Office

Mark Damian Duda, Executive Director Martin Jones, Senior Research Associate Tom Beppler, Research Associate Steven J. Bissell, Ph.D., Qualitative Research Associate Andrea Criscione, Research Associate Patrick Doherty, Research Associate Gregory L. Hughes, P.E., Research Associate Amanda Ritchie, Research Associate Carol L. Schilli, Senior Statistician Tim Winegord, Survey Center Manager Alison Lanier, Business Manager

> 130 Franklin Street Harrisonburg, VA 22801 Phone: 540/432-1888 Fax: 540/432-1892 E-mail: mark@responsivemanagement.com www.responsivemanagement.com

Acknowledgments

Responsive Management would like to thank Scot McClure of the Dallas Ecological Foundation for his input, support, and guidance on this project, as well as the instructors who worked closely with us to administer the student and control surveys in their classrooms for their support and continued commitment to the success of this project. We also appreciate the numerous students who took the time to complete a survey for this assessment.

EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Dallas Ecological Foundation to assess the outcomes of the Texas Outdoor Adventures Education program. This assessment measures students' interest and participation in outdoor recreation activities, attitudes toward wildlife and habitat conservation, and satisfaction with specific program elements. The assessment was conducted for the program in general and for six specific sporting units: Hunter Education; Angler Education; Archery; Boating Safety Education; Camping, Outdoor Cooking, or Orienteering and GPS; and Sporting Clays or Other Sport Shooting.

The study entailed a web-based assessment survey of the students, both prior to and after their participation in the program. Responsive Management worked closely with the Dallas Ecological Foundation to implement a Web-based survey that was user-friendly and easily accessible. Web-based surveys are an excellent survey method to use when the sample consists of *known* respondents with Web access, as would be found in a setting in which all potential respondents were known and had guaranteed Internet access through their classroom.

The survey questionnaire was developed cooperatively by Responsive Management and the Foundation, based on the research team's extensive experience in outdoor and conservation education assessment. Responsive Management's research associates then computer coded the survey, and its professional interviewers conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey. During Responsive Management's internal review of the questionnaire, each interviewer completed the survey several times using many different answer sets to ensure the accuracy of phrasing, flow, and skip patterns. The research team submitted draft questionnaires and worked collaboratively with the Foundation to develop additional questions or make revisions to the surveys as necessary to meet the goals and objectives of the assessment. This design process ensured that the survey questionnaires met the exact needs of the Foundation.

The total pre-program survey size was 4,957 students and the total post-program survey size was 1,560 students. Also, it was possible to match 699 students between the pre- and post-program surveys; this population was used to make direct comparisons for certain questions.

The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management.

ASSESSING THE HUNTING EDUCATION UNIT

PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Hunter Education OAEP unit (79% of the total survey population) were asked if they had prior hunting experience: 32% had been hunting with a rifle or shotgun and 11% had been bow hunting, while 65% had never hunted before.

Those who have hunted before (n=1,403) were asked about their frequency of participation: 29% of respondents had hunted a lot, 57% had hunted a little, and 12% do not hunt at all. Of this same group, 66% had hunted in the past year and 33% had not.

Those who have hunted before were also asked to rate their skill level: 30% considered themselves beginners, 47% considered themselves intermediate, and 17% considered themselves advanced; the remaining 7% were unsure of their skill level.

Regardless if they have been hunting before, students planning to take the Hunter Education OAEP unit (n=3,939) were asked if they have gotten any hunting equipment in the past year; a combined 34% either purchased equipment themselves or had equipment purchased for them. Also, within the past year, 7% purchased a license themselves and 10% had a license purchased for them, while a large majority of the students, 79%, had not gotten a license.

Students planning to take the Hunter Education OAEP unit (n=3,947) were asked to rate their knowledge on a number of hunting topics. The percentages who said they knew "a lot" about the following topics are: hunting safety (45%), hunting ethics (41%), hunting in general (23%), hunting opportunities (22%), hunting equipment (20%), and hunting methods (19%).

PRE- AND POST-PROGRAM COMPARISONS

For each OAEP unit there were two survey questions in which a direct comparison could be made between pre- and post-program survey populations (n=699): "How interested are you in [sport]?" and "How likely are you to [participate in sport] in the next year?"

This comparison showed a slight decrease in hunting interest following participation in the Hunter Education OAEP unit. This contradicts the following question, which showed a small increase in students' likelihood to go hunting, not to mention the highly favorable ratings given to Hunter Education and all the other OAEP units.

Other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of hunting or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.

Because the Hunter Education OAEP unit had the most attendance, the comparison question "How interested are you in hunting?" was evaluated more closely. Demographic breakdowns

related to grade in school or type of residential area did not reveal any substantial differences, but a gender cross-tabulation showed that more females than males lost interest after participating in Hunter Education. Whenever possible, recruitment and retention programs should strive to include instructors that share common demographic traits with participants in the program. For this assessment it is not known if the instructors were predominantly male, but the issue may be worth investigating.

POST-PROGRAM SURVEY

Following completion of the Hunter Education OAEP unit, participating students (n=1,205) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Hunter Education participants have gone hunting, purchased equipment, and/or purchased hunting licenses since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone hunting, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all hunting categories, ranging from 97% for hunting safety to 89% for hunting opportunities.
- ➤ When asked about their interest in hunting, 32% of students said the OAEP made them a lot more interested, 35% said it made them a little more interested, and 26% said their interest remained about the same. Only 4% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,205 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.
- When asked about their hunting skills, 33% of students said they got a lot better after taking the course, 36% said they got a little better, and only 7% said they were not at all better.
- When asked about confidence in their hunting skills, 59% of students said they were more confident after taking the course, 29% said they were about the same, and only 3% said they were less confident.

ASSESSING THE ANGLER EDUCATION UNIT

PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Angler Education OAEP unit (62% of the total survey population) were asked if they had prior fishing experience: 80% had been freshwater fishing, 32% had been saltwater fishing, and 15% had done neither.

Those who have gone fishing before (n=2,624) were asked about their frequency of participation: 28% of respondents had gone fishing a lot, 62% had gone fishing a little, and 9% do not fish at all. Of this same group, 74% had gone fishing in the past year and 26% had not.

Those who have gone fishing before were also asked to rate their skill level: 38% considered themselves to be beginners, 43% considered themselves intermediate, and 15% considered themselves advanced, with the remaining 4% unsure of their skill level.

Regardless if they have gone fishing before, students planning to take the Angler Education OAEP unit (n=3,084) were asked if they have gotten any fishing equipment in the past year; a combined 54% either purchased equipment themselves or had equipment purchased for them. Also, within the past year, 6% purchased a license themselves and 10% had a license purchased for them, while a large majority of the students, 80%, had not gotten a license.

Students who planned to take the Angler Education OAEP unit and who have gone fishing before (n=2,622) were asked to rate their knowledge on a number of fishing topics. The percentages who said they knew "a lot" about the following topics are: fishing safety (52%), fishing ethics (48%), fishing in general (41%), fishing opportunities (39%), fishing equipment (37%), and hunting methods (34%).

PRE- AND POST-PROGRAM COMPARISONS

In making a direct comparison between pre- and post-program survey populations (n=699), the survey showed a slight decrease in fishing interest following participation in the Angler Education OAEP unit.

A second question about the students' likelihood to go fishing in the next year shows very little net movement following course participation. These comparisons appear to contradict the highly favorable ratings given to Angler Education and all the other OAEP units.

Other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of fishing or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.

POST-PROGRAM SURVEY

Following completion of the Angler Education OAEP unit, participating students (n=1,076) were asked to evaluate the course. The feedback to all course elements was very favorable, as discussed below.

- A substantial number of Angler Education participants have gone fishing, purchased equipment, and/or purchased fishing licenses since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone fishing, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all fishing categories, ranging from 96% for fishing in general to 90% for fishing opportunities.
- ➤ When asked about their interest in fishing, 33% of students said the OAEP made them a lot more interested, 34% said it made them a little more interested, and 27% said their interest remained about the same. Only 4% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,076 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.
- When asked about their fishing skills, 34% of students said they got a lot better after taking the course, 43% said they got a little better, and only 10% said they were not at all better.
- When asked about confidence in their fishing skills, 55% of students said they were more confident after taking the course, 35% said they were about the same, and only 3% said they were less confident.

ASSESSING THE ARCHERY UNIT

PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Archery OAEP unit (73% of the total survey population) were asked if they had prior archery experience: 58% had participated in archery before and 41% had not.

Those who have participated in archery before (n=2,090) were asked about their frequency of participation: 26% had participated a lot, 60% had participated a little, and 12% do not participate at all. Of this same group, 67% had participated in archery within the past year and 32% had not.

Those who have participated in archery before were also asked to rate their skill level: 44% considered themselves to be beginners, 42% considered themselves intermediate, and 11% considered themselves advanced; the remaining 3% were unsure of their skill level.

Regardless if they have participated in archery before, students planning to take the Archery Education OAEP unit (n=3,622) were asked if they have gotten any archery equipment in the past year; a combined 22% either purchased equipment themselves or had equipment purchased for them.

Students planning to take the Archery OAEP unit (n=3,622) were asked to rate their knowledge on a number of archery topics. The percentages who said they knew "a lot" about the following topics are: archery safety (40%), archery in general (25%), archery equipment (23%), archery methods (22%), and archery opportunities (18%).

PRE- AND POST-PROGRAM COMPARISONS

In making a direct comparison between pre- and post-program survey populations (n=699), the survey showed virtually no change in archery interest following participation in the Archery Education OAEP unit.

In addition, the following question shows a decrease in student's likelihood to participate in archery in the next year. This appears to contradict the highly favorable ratings given to the Archery OAEP unit.

As shown elsewhere, other OAEP units reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of archery or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.

POST-PROGRAM SURVEY

Following completion of the Archery OAEP unit, participating students (n=1,178) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Archery students have participated in archery and/or purchased archery equipment since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the preprogram survey asked if the participant has *ever* participated in archery, whereas the postprogram survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all archery categories, ranging from 97% for archery safety to 85% for archery opportunities.
- ➤ When asked about their interest in archery, 48% of students said the OAEP made them a lot more interested, 31% said it made them a little more interested, and 16% said their interest remained about the same. Only 3% said the program made them less interested;

the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,178 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.

- When asked about their archery skills, 54% of students said they got a lot better after taking the course, 36% said they got a little better, and only 6% said they were not at all better.
- When asked about confidence in their archery skills, 68% of students said they were more confident after taking the course, 25% said they were about the same, and only 3% said they were less confident.

ASSESSING THE BOATING SAFETY EDUCATION UNIT

PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Boating Safety Education OAEP unit (65% of the total survey population) were asked if they had prior boating experience: 67% had been boating with a motorized boat, 50% had been boating with self-powered craft (such as a canoe, kayak, or rowboat), 24% had been boating with a sailboat, and 20% had never been boating.

Those who have gone boating before (n=2,563) were asked about their frequency of participation: 23% of respondents had gone boating a lot, 59% had gone boating a little, and 16% do not go boating at all. Of this same group, 69% had gone boating in the past year and 30% had not.

Those who have gone boating before were also asked to rate their skill level: 47% considered themselves to be beginners, 31% considered themselves intermediate, and 11% considered themselves advanced, with the remaining 11% unsure of their skill level.

Regardless if they have been boating before, students planning to take the Boating Safety Education OAEP unit (n=3,201) were asked if they have gotten any boating equipment in the past year; a combined 22% either purchased equipment themselves or had equipment purchased for them. Also, within the past year, 12% of students had received certifications and 82% had not.

Students planning to take the Boating Safety OAEP unit (n=3,201) were asked to rate their knowledge on a number of boating topics. The percentages who said they knew "a lot" about the following topics are: boating safety (36%), boating opportunities (24%), boating in general (24%), boating navigation (22%), and boats and boating equipment (19%).

PRE- AND POST-PROGRAM COMPARISONS

In making a direct comparison between pre- and post-program survey populations, the survey showed a slight decrease in boating interest following participation in the Boating Safety Education OAEP unit.

Also, the following question shows virtually no change in students' likelihood to go boating in the next year. These results appear to contradict the highly favorable ratings given to Boating Safety Education.

As shown elsewhere, other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of boating or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.

POST-PROGRAM SURVEY

Following completion of the Boating Safety Education OAEP unit, participating students (n=1,082) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Boating Safety Education participants have gone boating, purchased equipment, and/or completed boating safety certification since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the survey asked. For example, a question in the pre-program survey asked if the participant has *ever* gone boating, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all boating categories, ranging from 96% for boating safety to 89% for boating opportunities.
- ➤ When asked about their interest in boating, 26% of students said the OAEP made them a lot more interested, 35% said it made them a little more interested, and 28% said their interest remained about the same. Only 8% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,082 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.
- ➤ When asked about their boating skills, 28% of students said they got a lot better after taking the course, 37% said they got a little better, and only 13% said they were not at all better.
- When asked about confidence in their boating skills, 48% of students said they were more confident after taking the course, 37% said they were about the same, and only 4% said they were less confident.

ASSESSING THE CAMPING, OUTDOOR COOKING, OR ORIENTEERING AND GPS UNITS

PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Camping, Outdoor Cooking, and/or Orienteering and GPS OAEP units (87% of the total survey population) were asked if they had prior experience with the following outdoor activities: gone camping overnight (62%), participated in outdoor cooking (61%), gone camping for a day (59%), gone hiking (58%), and participated in orienteering (26%), with 13% stating they had done none of these.

Those who have gone camping before (n=3,032) were asked about their frequency of participation: 24% of respondents had gone camping a lot, 62% had gone camping a little, and 12% do not go camping at all. Of this same group, 59% had gone camping in the past year and 39% had not.

Those who have gone camping before were also asked to rate their skill level: 34% considered themselves to be beginners, 41% considered themselves intermediate, and 19% considered themselves advanced, with the remaining 6% unsure of their skill level.

Regardless if they have been camping before, students planning to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units (n=4,297) were asked if they had gotten any camping equipment in the past year; a combined 41% either purchased equipment themselves or had equipment purchased for them.

Students planning to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units were asked to rate their knowledge on a number of camping topics. The percentages who said they knew "a lot" about the following topics are: camping safety (39%), camping in general (33%), outdoor survival in general (31%), camping equipment (29%), camping opportunities (29%), and orienteering or navigating using a GPS (18%).

PRE- AND POST-PROGRAM COMPARISONS

In making a direct comparison between pre- and post-program survey populations (n=699), the survey shows a slight decrease in interest following participation in the Camping, Outdoor Cooking, and Orienteering and GPS OAEP units.

This contradicts the following question, which shows a small increase in students' likelihood to go camping in the next year, not to mention the highly favorable ratings given to these units.

As shown elsewhere, other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of camping or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.

POST-PROGRAM SURVEY

Following completion of the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units, participating students (n=1,129) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Camping, Outdoor Cooking, or Orienteering and GPS participants have gone camping and/or purchased camping equipment since taking these courses. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone camping, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all camping categories, ranging from 92% for outdoor survival in general to 78% for orienteering or navigating using a GPS.
- ➤ When asked about their interest in camping, 31% of students said the OAEP made them a lot more interested, 33% said it made them a little more interested, and 28% said their interest remained about the same. Only 4% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,129 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.
- ➤ When asked about their camping skills, 32% of students said they got a lot better after taking the course, 43% said they got a little better, and only 10% said they were not at all better.
- When asked about confidence in their camping skills, 49% of students said they were more confident after taking the course, 39% said they were about the same, and only 4% said they were less confident.

ASSESSING THE SPORTING CLAYS OR OTHER SPORT SHOOTING EDUCATION UNIT

PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Sporting Clays or Other Sport Shooting OAEP unit (26% of the total survey population) were asked if they had prior sport shooting experience: target shooting with a rifle (50%), target shooting with a handgun (39%), skeet shooting (27%), trap shooting (26%), and shooting sporting clays (24%), with 38% stating they had done none of these.

Those who have gone sport shooting before (n=814) were asked about their frequency of participation: 39% of respondents had gone shooting a lot, 48% had gone shooting a little, and 12% do not go shooting at all. Of this same group, 73% had gone shooting in the past year and 25% had not.

Those who have gone shooting before were also asked to rate their skill level: 30% considered themselves to be beginners, 38% considered themselves intermediate, and 29% considered themselves advanced, with the remaining 2% unsure of their skill level.

Regardless if they have gone shooting before, students planning to take the Sporting Clays or Other Sport Shooting OAEP unit (n=1,291) were asked if they had gotten any shooting equipment in the past year; a combined 49% either purchased equipment themselves or had equipment purchased for them.

Students planning to take the Sporting Clays or Other Sport Shooting OAEP unit were asked to rate their knowledge on a number of shooting topics. The percentages who said they knew "a lot" about the following topics are: shooting safety (52%), shooting ethics (42%), shooting in general (40%), firearms and shooting equipment (37%), shooting methods (36%), and shooting opportunities (32%).

PRE- AND POST-PROGRAM COMPARISONS

In a direct comparison between pre- and post-program survey populations, the survey showed a minor shift from "a little" to "a lot" when students were asked about their interest in shooting.

The second comparison question showed an increase in students' likelihood to go shooting in the next year.

This was the only OAEP unit that showed positive results on both of these comparison questions. However, it should be noted that only 11% of the post-program survey population (that is, 177 out of 1,560 students) took the Sporting Clays or Other Sport Shooting OAEP unit, compared to participation in the other units ranging from 77% for Hunter Education to 69% for Angler Education. Also, the other post-program survey questions reflected much more favorable ratings than these comparison questions for all the OAEP units.

POST-PROGRAM SURVEY

Following completing of the Sporting Clays or Other Sport Shooting OAEP unit, participating students (n=177) were asked to evaluate the course. The feedback was very favorable, as discussed below.

A substantial number of participants have gone shooting and/or purchased shooting equipment since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone shooting, whereas the post-program survey asked about participation *since finishing the program*.

- An overwhelming majority of students claimed they learned "a lot" or "a little" about all shooting categories, ranging from 93% for shooting safety to 85% for shooting opportunities.
- When asked about their interest in shooting, 47% of students said the OAEP made them a lot more interested, 28% said it made them a little more interested, and 16% said their interest remained about the same. Only 3% said the program made them less interested.
- When asked about their shooting skills, 42% of students said they got a lot better after taking the course, 31% said they got a little better, and only 13% said they were not at all better.
- When asked about confidence in their shooting skills, 49% of students said they were more confident after taking the course, 36% said they were about the same, and only 6% said they were less confident.

GENERAL PROGRAM FEEDBACK

ATTITUDES TOWARD HUNTING, SHOOTING, AND FISHING IN GENERAL

The survey provided a pre- and post-program comparison of attitudes toward hunting, shooting, and fishing. As with the individual sporting categories, comparisons were only made when students could be matched between the pre- and post-program surveys (n=699). There was very little change in approval percentages, due to the already high approval ratings shown for each sport.

- 72% of students who participated in the OAEP either strongly or moderately approve of hunting, while only 7% strongly or moderately disapprove.
- 74% of students strongly or moderately approve of sport shooting, while only 5% strongly or moderately disapprove.
- 80% of students strongly or moderately approve of fishing, while only 5% strongly or moderately disapprove.

KNOWLEDGE OF STATE FISH AND WILDLIFE AGENCY

Before participating in the OAEP, all the surveyed students (n=4,957) were asked to rate their knowledge regarding conservation issues:

- > 71% of the students said they knew a lot or a little about conservation.
- ▶ 67% said they knew a lot or a little about fish and wildlife management.

- > 57% said they knew a lot or a little about outdoor or natural resource stewardship.
- 55% said they knew a lot or a little about the government agency that manages hunting, fishing, and wildlife in their state.

On one knowledge-related question, a direct comparison could be made with students who matched between the pre- and post-program surveys (n=699). The percentage of students who could correctly name their state wildlife agency greatly increased following participation in the OAEP. The percentage of students who could correctly identify the government agency that manages hunting, fishing, and wildlife in their state increased from 38% to 63%, and the percentage who named an essentially correct derivation of the agency increased from 6% to 10%. Likewise, the percentage of incorrect answers decreased from 33% to 17% and the percentage who did not know the answer decreased from 22% to 10%.

Following their participation in the OAEP, all the surveyed students (n=1,560) were asked to rate how much they learned about conservation issues:

- ➤ 58% of the students said the OAEP taught them a lot about conservation and 31% said it taught them a little, while only 5% said it taught them nothing at all.
- ➢ 59% said the OAEP taught them a lot about fish and wildlife management and 32% said it taught them a little, while only 4% said it taught them nothing at all.
- ➢ 50% said the OAEP taught them a lot about outdoor or natural resource stewardship and 35% said it taught them a little, while only 6% said it taught them nothing at all.
- ➤ 52% said the OAEP taught them a lot about the government agency that manages hunting, fishing, and wildlife management in their state and 35% said it taught them a little, while only 6% said it taught them nothing at all.

MEMBERSHIP IN OUTDOOR RECREATION CLUBS

The students were asked if they belonged to any clubs that participate in outdoor activities, both prior to and since participating in the OAEP.

- Before participating in the OAEP, 16% of the surveyed students (n=4,957) said they belonged to clubs or groups that participate in outdoor activities, such as hunting, shooting, fishing, archery, camping, or hiking, while 76% did not.
- Of the same pre-program survey, 27% of students said they had been in hunting, shooting, fishing, archery, camping, or hiking programs other than the OAEP, while 65% had not.
- After participating in the OAEP, 13% of the surveyed students (n=1,560) said they have joined a club or group that participates in outdoor recreational activities, while 80% have not.

ATTITUDES TOWARD SCHOOL PERFORMANCE

Students were asked a series of questions related to school performance. Comparisons were made for the students who matched between the pre- and post-program surveys (n=699).

In general the survey reflected minor shifts in ratings following the OAEP, with several responses showing a shift of about 5% from "good" to "excellent".

- The pre- and post-program comparison reflects a minor decrease in school attendance, with students claiming they are never absent decreasing from 24% to 23% and students claiming they don't miss very many days at school decreasing from 59% to 53%.
- When asked to describe their grades at school, students stating their grades are good decreased from 52% to 46%, but students stating their grades are excellent increased from 16% to 20%.
- The comparison showed very little change when students were asked to rate their ability to complete their school work. The response of "excellent" increased from 41% to 42% and the response of "good" decreased from 40% to 38%.
- The comparison indicated a positive influence from the OAEP (that is, a shift from "good" to "excellent") when students were asked to rate their ability to participate in sports and physical activities. The response of "good" decreased from 31% to 25% and the response of "excellent" increased from 44% to 49%.
- Likewise, the comparison reflected a shift from "good" to "excellent" when students were asked to rate their ability to develop friendships with other students. The response of "good" decreased from 36% to 30% and the response of "excellent" increased from 47% to 54%.
- The results also shifted from "good" to "excellent" when students were asked to rate their ability to maintain good relationships with their teachers. The response of "good" decreased from 38% to 32% and the response of "excellent" increased from 48% to 55%.
- The comparison reflected a similar positive influence from the OAEP when students were asked to rate their ability to stay out of trouble. The response of "good" decreased from 33% to 28% and the response of "excellent" increased from 54% to 58%.
- The survey reflected a positive shift when students were asked to rate their ability to get good grades. The response of "good" decreased from 48% to 43% and the response of "excellent" increased from 35% to 43%.
- There was little change when students were asked to rate their likelihood of going to college, although the percentages were already high. The response of "very likely" increased from 74% to 76% and the response of "somewhat likely" decreased from 20% to 16%.

PROGRAM RATINGS

Following completion of the OAEP, participating students (n=1,560) were asked to evaluate the program as a whole by responding to questions about specific program elements.

- The survey asked about 10 program elements, and students ranked all of the program elements highly. In fact, more than half of all students who participated indicated that they like each of the program elements "a lot". Some of the highest rated elements included: the teacher or instructor; the program's ability to prepare students to hunt, fish, shoot, camp, or go boating on their own or with family; the usefulness of the information taught; and the quality of the information taught.
- An overwhelming majority (more than 90% of participating students) indicated that they liked each of the 10 program elements "a lot" or "a little".
- The majority of students (65%) said that the program was just about the right length. Otherwise, students more often said the program was too short (21%).
- The majority of students (70%) said that there was about the right number of other students in the program. Otherwise, students more often said there were too many (16%).
- When asked about the level of difficulty, 79% of students indicated the level of difficulty was about right, 9% indicated the information taught was too easy, and 5% said it was too hard.
- The majority of students (68%) indicated that they had about the right amount of opportunities to practice what they were learning. Otherwise, more students said there were too few opportunities (21%) than said there were too many (4%).

CONCLUSIONS

The post-program survey (n=1,560) showed the OAEP to be highly popular. Ratings for each individual sporting unit and the OAEP in general were very high. For example, the post-program question "Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in HUNTING?" received the following responses: 32% a lot more interested, 35% a little more interested, 26% about the same, and only 4% less interested. This feedback was typical for all the sporting units. Likewise, the survey asked students to evaluate 10 overall program elements, and the students ranked all the program elements highly. A majority of students liked all program elements "a lot" or "a little". OAEP evaluations of the instructors, quality of information, program duration, classroom size, and opportunities to practice the sport, among many other program aspects, all received high ratings from the students. Also, pre- and post-program comparisons indicated a small (typically about 5%) shift from "good" to "excellent" when students were asked to rate their ability to participate in sports

or physical activities, to develop friendships with other students, to maintain good relationships with their teachers, to stay out of trouble, and to get good grades.

Within each sporting unit, two questions were appropriate for a pre- and post-program comparison: "How interested are you in [sport]?" and "How likely are you to [participate in sport] in the next year?" For each sporting unit except Sport Shooting, which had a much lower participation rate, one or both of these comparisons showed a slight (typically about 5%) decrease following participation, in apparent contradiction to the highly positive ratings discussed above. This may indicate that some students lost interest after experiencing the level of effort, expense, or other factors required to participate in the given activity. Also, interest levels were very high at the outset.

Because the Hunter Education OAEP unit had the most attendance, the comparison question "How interested are you in hunting?" was evaluated more closely. Demographic breakdowns related to grade in school or type of residential area did not reveal any substantial differences, but a gender cross-tabulation showed that more females than males lost interest after participating in Hunter Education. The percentage of males who stated they were not at all interested in hunting only increased from 4% to 7%, but females giving that response increased from 16% to 27%.

Whenever possible, recruitment and retention programs should strive to include instructors that share common demographic traits with participants in the program. Research has shown that in numerous activities, participants are most comfortable learning from and emulating the actions of those they consider to be like themselves. For this assessment it is not known if the instructors were predominantly male, but the issue may be worth investigating. Programs that are able to match participant and instructor backgrounds and demographics will encourage not only feelings of trust and security but an overall sense of identification—the feeling that an activity is not dominated by a particular type of person or group, but is rather an inclusive atmosphere that provides a sense of belonging.

TABLE OF CONTENTS

Introduction and Methodology	
Participation in the Texas Outdoor Adventures Education Program	5
Assessing the Hunting Education Unit	6
Pre-Program Survey	6
Pre- and Post-Program Comparisons	19
Post-Program Survey	22
Assessing the Angler Education Unit	32
Pre-Program Survey	
Pre- and Post-Program Comparisons	44
Post-Program Survey	46
Assessing the Archery Unit	57
Pre-Program Survey	57
Pre- and Post-Program Comparisons	68
Post-Program Survey	69
Assessing the Boating Safety Education Unit	79
Pre-Program Survey	79
Pre- and Post-Program Comparisons	91
Post-Program Survey	92
Assessing the Camping, Outdoor Cooking, or Orienteering and GPS Units	103
Pre-Program Survey	
Pre- and Post-Program Comparisons	115
Post-Program Survey	116
Assessing the Sporting Clays or Other Sport Shooting Unit	126
Pre-Program Survey	
Pre- and Post-Program Comparisons	
Post-Program Survey	
General Program Feedback	
Attitudes Toward Hunting, Shooting, and Fishing in General	
Knowledge of State Fish and Wildlife Agency	
Membership in Outdoor Recreation Clubs	
Attitudes Toward School Performance	
Levels of Physical Activity	
Program Ratings	
Conclusions	
About Responsive Management	

INTRODUCTION AND METHODOLOGY

This study was conducted for the Dallas Ecological Foundation (hereinafter referred to as the Foundation) to assess the outcomes of the Texas Outdoor Adventures Education program. Specifically, this assessment measures students' interest and participation in outdoor recreation activities, attitudes toward wildlife and habitat conservation, and satisfaction with specific program elements.

The Foundation has a mandate to progressively address many of the most pressing wildlife and habitat conservation issues facing the world today. The Foundation's mission is to serve as a grant and funding medium for public and youth education and wildlife and habitat conservation programs worldwide. In addition, the Foundation funds scientific and biological studies benefiting both game and non-game species throughout the world and promotes conservation education and outdoor skills primarily for youth by conducting and supporting a wide range of educational initiatives. The Foundation's website has posted the following Mission Statement:

- To fund and promote the teaching of outdoor life skills by conducting and supporting a wide range of educational initiatives, primarily utilizing our youth programs.
- To fund and promote the conservation of wildlife and our world's ecology.
- To fund and promote scientific and biological studies of the wild animals of the world, in an effort to provide a sound basis for scientific evaluation of the management of those animals and their habitat.
- To provide funding and cooperative support to other charitable, educational, and governmental organizations pursuing the same or similar goals of our foundation.

Young people have more influences vying for their time than ever before, and as a consequence much of today's youth have become disconnected from the land. Based upon tried and true conservation principles, the Outdoor Adventures Education Program (OAEP) was designed to reach students from ages 12 to 18 and expose them to all facets of the outdoors. The OAEP gives students the opportunity to reach beyond the typical classroom experience and features a curriculum that includes hunter education, fishing, camping, orienteering, boater safety, archery, and sport shooting. All the teacher training is provided by the Foundation.¹

This study entailed a web-based assessment survey of the students, both prior to and after their participation in the program. Responsive Management worked closely with the Foundation to implement a Web-based survey that was user-friendly and easily accessible. Specific aspects of the research methodology are discussed below.

WEB-BASED ASSESSMENT SURVEY

Appropriately designed Web-based surveys are methods of public opinion polling where a known group of potential respondents are invited to participate in completing a Web-based survey, and their responses are submitted electronically by means of the Internet. Web-based

¹ Source: http://www.dallasecologicalfoundation.org/

surveys are an excellent survey method to use when the sample consists of *known* respondents with Web access, as would be found in a setting in which all potential respondents were known and had guaranteed Internet access through their classroom. In this case, a Web-based survey is the best method for surveying participants in the Outdoor Adventures Education program for several reasons:

- It provides an opportunity for all students to complete the pre- and post-surveys at the same time, resulting in standardization and consistency in survey completion.
- Students have immediate access to online systems for survey completion.
- Students can be carefully monitored during survey completion and immediate response can be provided to answer questions or offer additional assistance.
- As a long-term assessment tool, the Web-based survey can be frequently revisited and easily revised to accommodate changes in the curriculum or to assess additional outcomes.

Web-based surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

QUESTIONNAIRE DESIGN

The survey questionnaire was developed cooperatively by Responsive Management and the Foundation, based on the research team's extensive experience in outdoor and conservation education assessment. Responsive Management's research associates then computer coded the survey, and its professional interviewers conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey. During Responsive Management's internal review of the questionnaire, each interviewer completed the survey several times using many different answer sets to ensure the accuracy of phrasing, flow, and skip patterns. The research team submitted draft questionnaires and worked collaboratively with the Foundation to develop additional questions or make revisions to the surveys as necessary to meet the goals and objectives of the assessment. This design process ensured that the survey questionnaires met the exact needs of the Foundation.

SURVEY SAMPLE

The total pre-program survey size was 4,957 students and the total post-program survey size was 1,560 students. Also, it was possible to match 699 students between the pre- and post-program surveys; this population was used to make direct comparisons for certain questions.

The following table shows the basic demographic data of program participants.

Demographic Characteristics		Percent of Sample
Gender	Male	61
	Female	39
Ethnicity	White/Caucasian	54
	Hispanic/Latino	33
	Black/African-American	7
	Native American	5
	East Asian	4
	South Asian	2
	Middle Eastern	2
	African (NOT African-American)	1
	Native Hawaiian	1
	Did not answer	4
Type of residential area	Large city	15
	Suburb or just outside of a	
	large city	37
	Small city or town	31
	Farm	3
	Rural area not on a farm	5
Grade in school	6th	5
	7th	20
	8th	23
	9th	19
	10th	14
	11th	10
	12th	8

Demographic Characteristics of Program Participants, Pre-Program Survey

The total sample size on several questions is less than 4,957 (pre-program) or 1,560 (post-program) because the survey asked some questions only of specific respondents in the survey. In particular, this was done when a follow-up question did not apply to some respondents. For instance, only those who participated in Hunter Education were asked follow-up questions about that unit.

DATA ANALYSIS

The analysis of data was performed using Statistical Package for the Social Sciences as well as proprietary software developed by Responsive Management.

On questions that asked respondents to provide a number (e.g., number of minutes active each day), the graph shows ranges of numbers rather than the precise numbers. Nonetheless, in the

survey each respondent provided a precise number, and the dataset includes this precise number, even if the graph only shows ranges of numbers.

ADDITIONAL INFORMATION ABOUT THE PRESENTATION OF RESULTS IN THE REPORT

In examining the results, it is important to be aware that the questionnaire included several types of questions:

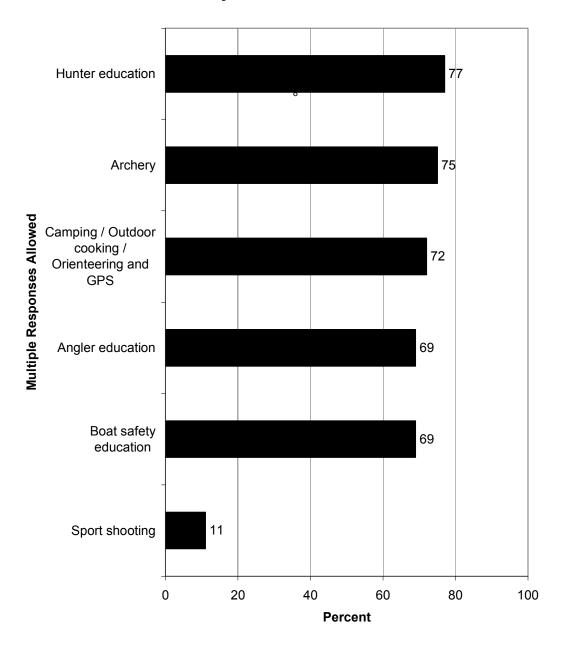
- Open-ended questions are those in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Single or multiple response questions: Some questions allow only a single response, while other questions allow respondents to give more than one response or choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Scaled questions: Many closed-ended questions (but not all) are in a scale, such as "a lot"-"a little"-"not at all".
- Series questions: Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

Most graphs show results rounded to the nearest integer; however, all data are stored in decimal format, and all calculations are performed on unrounded numbers. For this reason, some results may not sum to exactly 100% because of this rounding on the graphs. Additionally, rounding may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when "a lot" and "a little" are summed to determine the total percentage in support).

Finally, some graphs pertain to more than one section of the report, so these graphs are discussed in more than one section of the report. In these instances when the graph is discussed in more than one section, the graph is only shown in one section with a call-out in the other section indicating where the graph is located.

PARTICIPATION IN THE TEXAS OUTDOOR ADVENTURES EDUCATION PROGRAM

The figure below shows which Outdoor Adventures Education Program (OAEP) units the survey respondents actually participated in during their previous semester. The post-program survey population was 1,560.

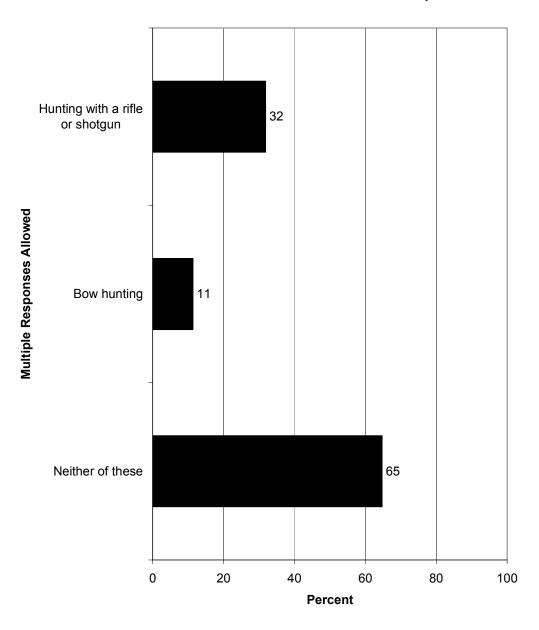


Which Outdoor Adventures Education Program units did you take last semester?

ASSESSING THE HUNTING EDUCATION UNIT

PRE-PROGRAM SURVEY

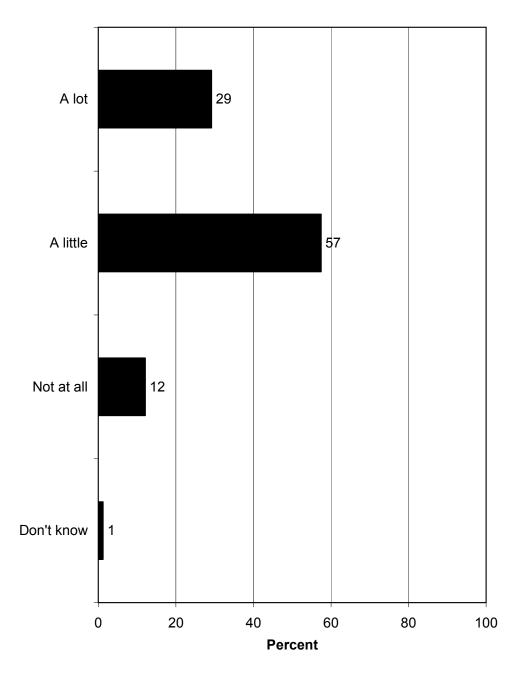
Before the program, students who indicated they planned to take the Hunter Education OAEP unit (79% of the total survey population) were asked if they had prior hunting experience. As shown in the figure below, 32% have been hunting with a rifle or shotgun and 11% have been bow hunting, while 65% have never hunted before.

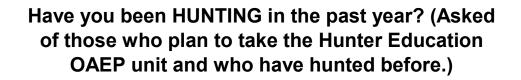


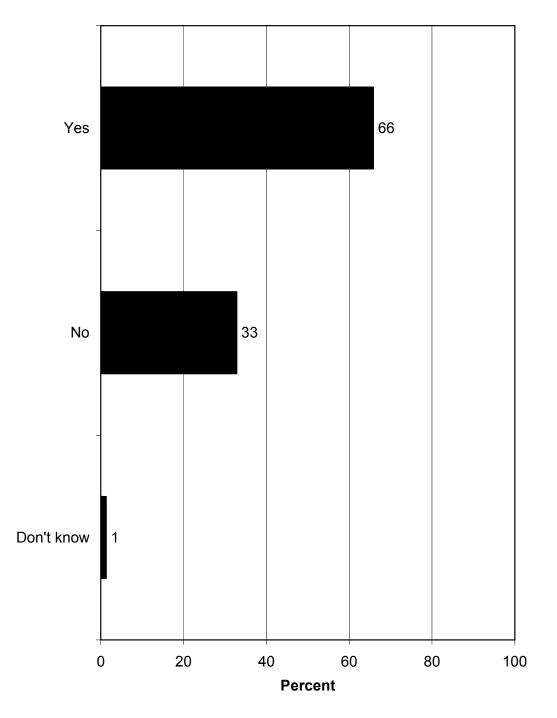
Have you ever been...? (Asked of those who plan to take the Hunter Education OAEP unit.)

Those who have hunted before (n=1,403) were asked about their frequency of participation. The figure below shows that 29% of respondents have hunted a lot, 57% have hunted a little, and 12% do not hunt at all. Of this same group, 66% have hunted in the past year and 33% have not, as shown on the next page.

Do you HUNT a lot, a little, or not at all? (Asked of those who plan to take the Hunter Education OAEP unit and who have hunted before.)

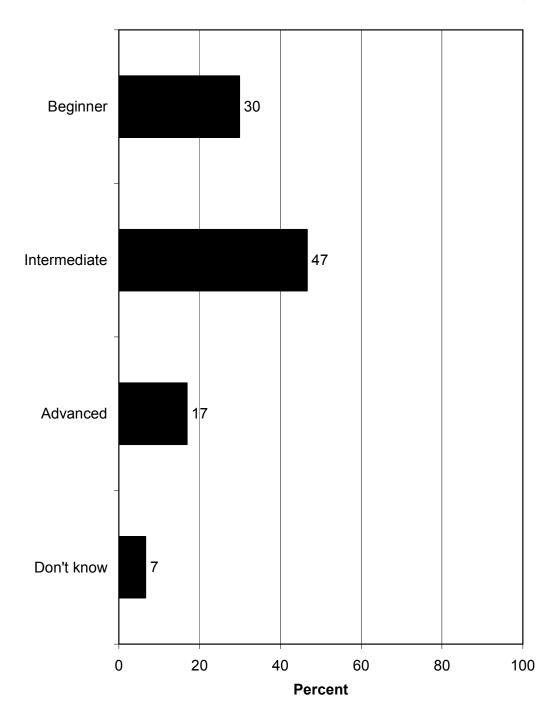






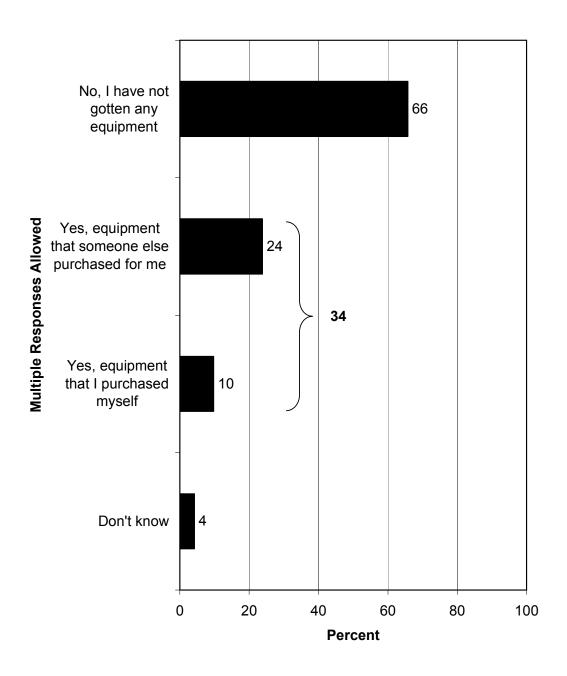
Those who have hunted before were also asked to rate their skill level. As the figure below demonstrates, 30% considered themselves beginners, 47% considered themselves intermediate, and 17% considered themselves advanced; the remaining 7% were unsure of their skill level.

How would you rate your skill as a HUNTER? (Asked of those who plan to take the Hunter Education OAEP unit and who have hunted before.)



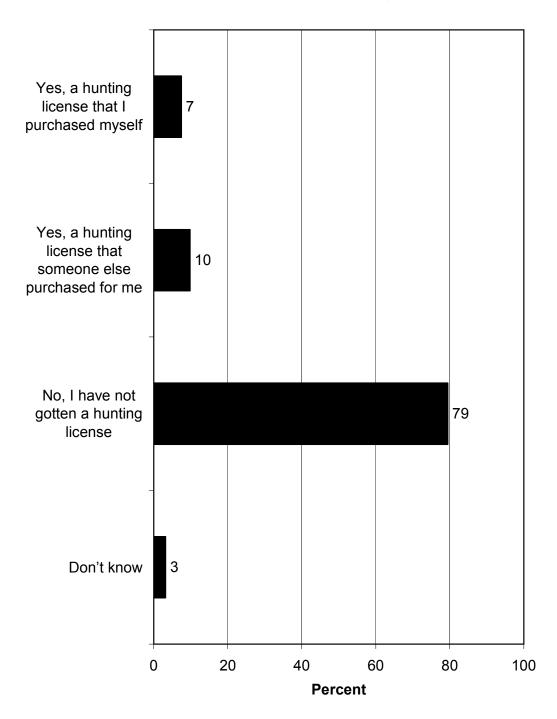
Regardless if they have been hunting before, students planning to take the Hunter Education OAEP unit (n=3,939) were asked if they have gotten any hunting equipment in the past year; a combined 34% either purchased equipment themselves or had equipment purchased for them.

Have you gotten any HUNTING equipment in the past year? (Asked of those planning to take the Hunter Education OAEP unit.)

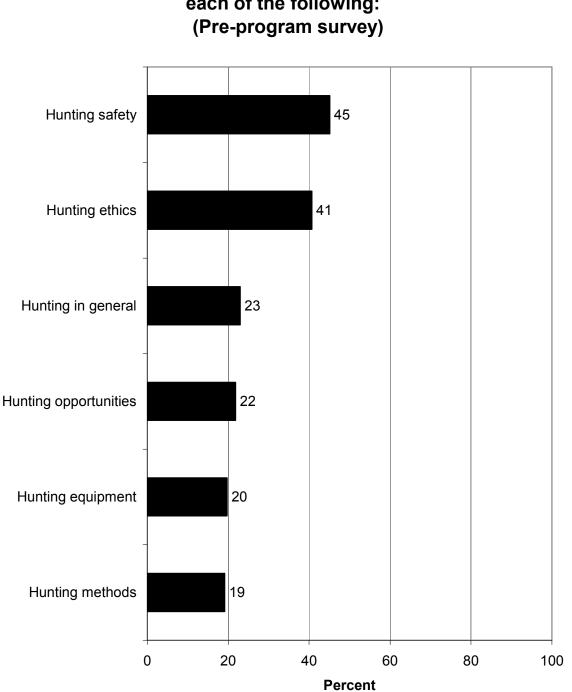


The previous group was also asked about hunting licenses. Within the past year 7% purchased a license themselves and 10% had a license purchased for them, while a large majority of the students, 79%, have not gotten a license.

Have you gotten a HUNTING license in the past year? (Asked of those planning to take the Hunter Education OAEP unit.)



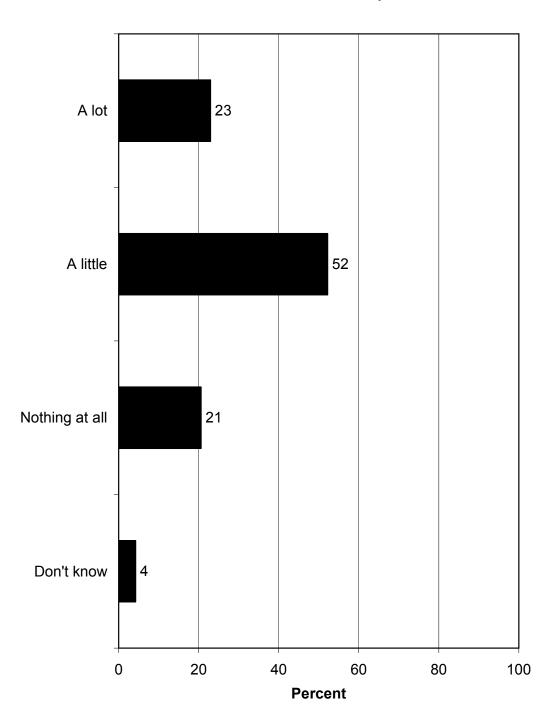
Students planning to take the Hunter Education OAEP unit (n=3,947) were asked to rate their knowledge on a number of hunting topics. The figure below shows the percentages who indicated they knew "a lot" about each of the topics. As shown, nearly half knew a lot about hunting safety and hunting ethics prior to the course.



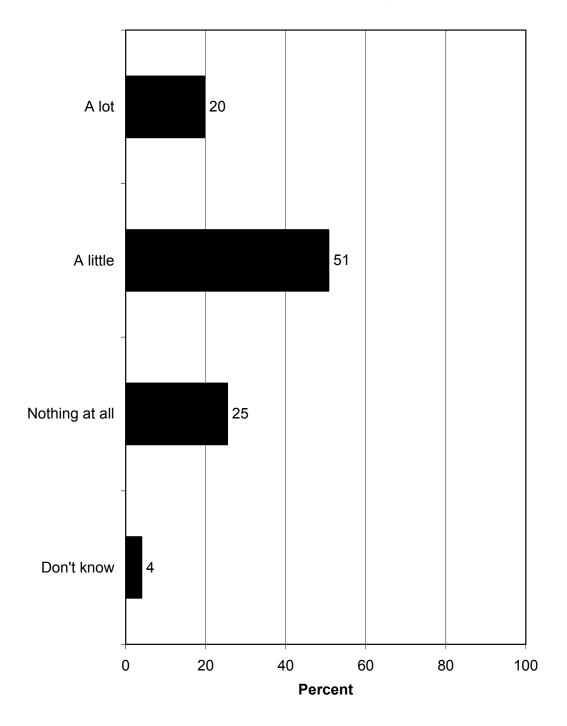
Percent who indicated they knew "a lot" about each of the following:

The next six charts show the results of each question related to hunting knowledge, in which the students were asked to indicate if they knew a lot, a little, or nothing at all about the various hunting topics prior to taking the Hunter Education OAEP unit.

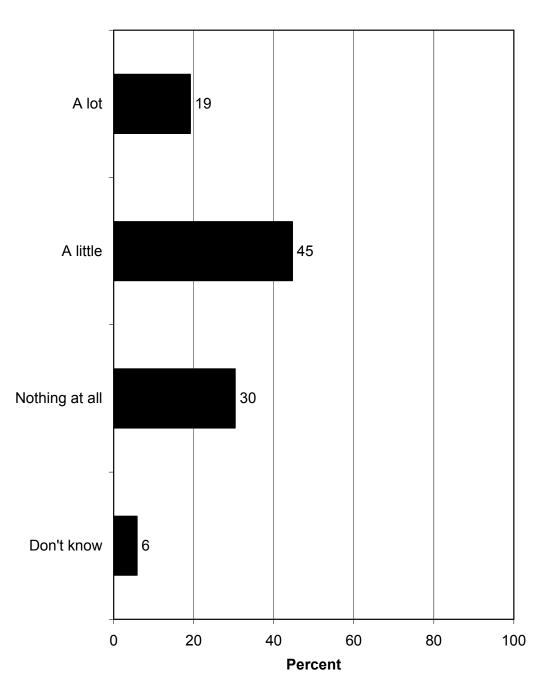
How much do you know about hunting in general? (Asked of those planning to take the Hunter Education OAEP unit.)

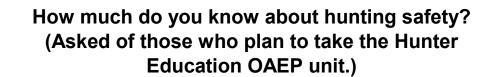


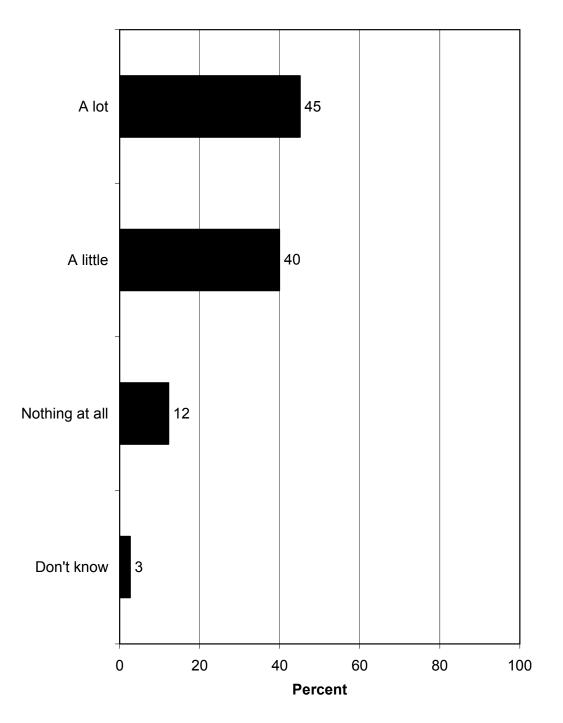
How much do you know about hunting equipment? (Asked of those who plan to take the Hunter Education OAEP unit.)



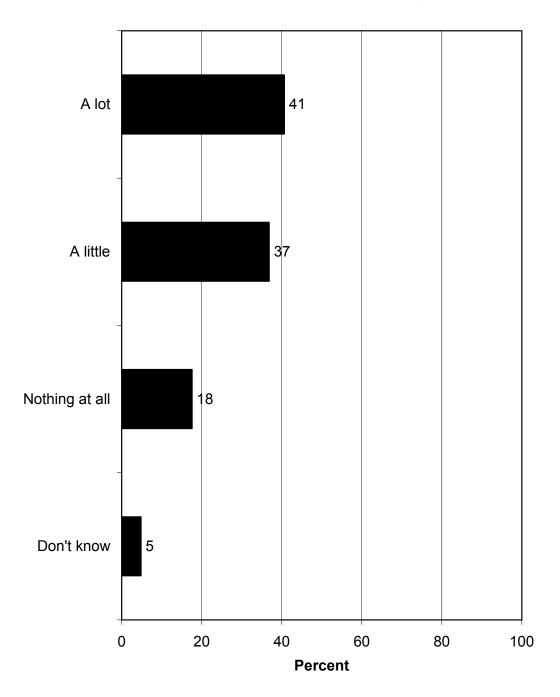
How much do you know about hunting methods? ("methods" refer to different ways or techniques for hunting) (Asked of those who plan to take the Hunter Education OAEP unit.)

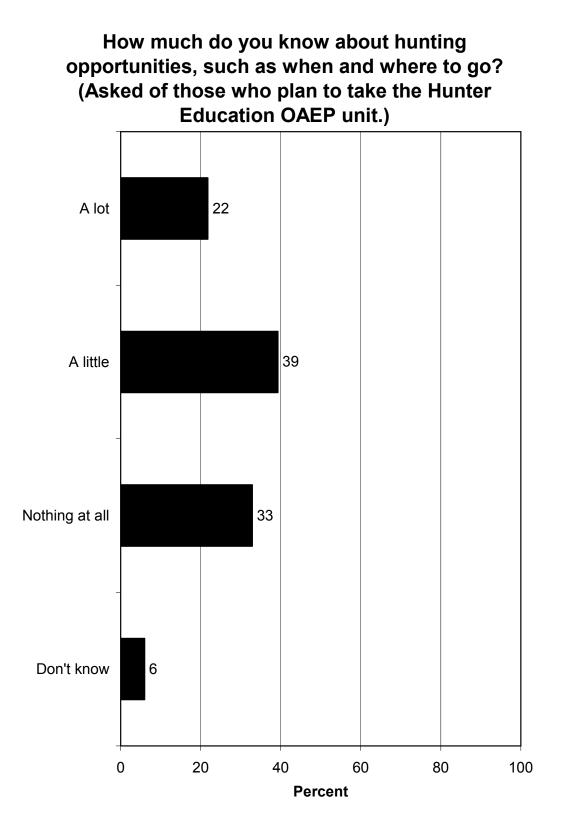






How much do you know about hunting ethics? ("ethics" refer to appropriate and considerate behavior) (Asked of those who plan to take the Hunter Education OAEP unit.)



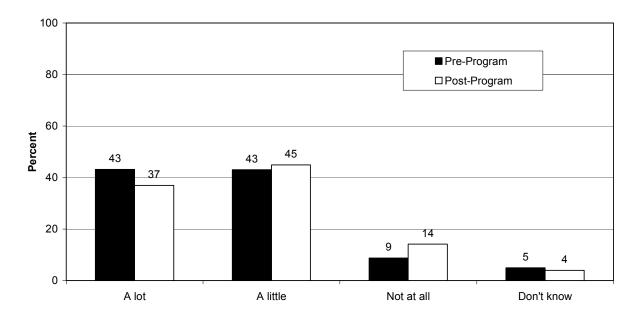


PRE- AND POST-PROGRAM COMPARISONS

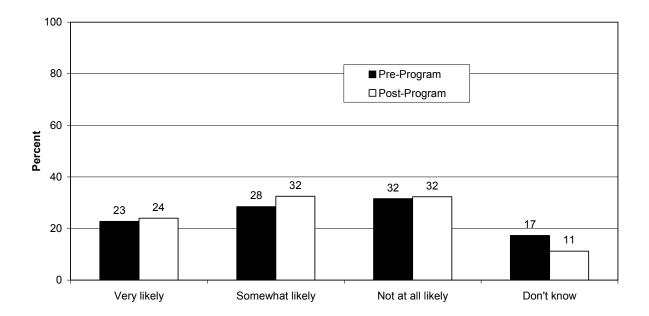
For each OAEP unit there were two survey questions in which a direct comparison could be made between pre- and post-program survey populations (n=699): "How interested are you in [sport]?" and "How likely are you to [participate in sport] in the next year?"

The figure below shows a slight decrease in hunting interest following participation in the Hunter Education OAEP unit. This contradicts the following graph, which shows a small increase in students' likelihood to go hunting, not to mention the highly favorable ratings given to Hunter Education and all the other OAEP units as shown in later sections.

As shown later, other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of hunting or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.

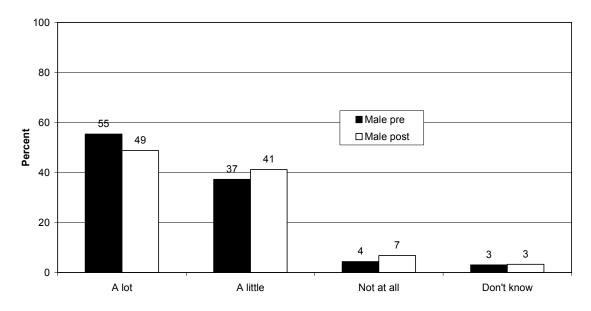


How interested are you in HUNTING? (Asked of those who took the Hunter Education OAEP unit.)



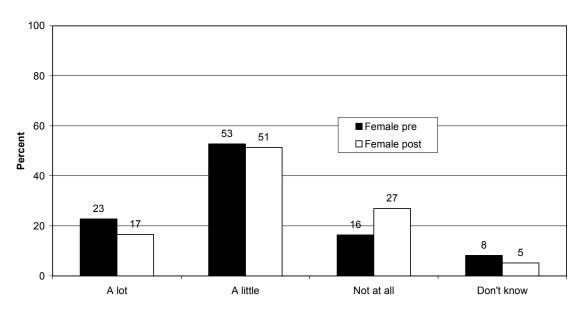
How likely are you to go HUNTING in the next year? (Asked of those who took the Hunter Education OAEP unit.)

Because the Hunter Education OAEP unit had the most attendance, the comparison question "How interested are you in hunting?" was evaluated more closely. Demographic breakdowns related to grade in school or type of residential area did not reveal any substantial differences, but a gender cross-tabulation showed that more females than males lost interest after participating in Hunter Education, as shown on the next page. Whenever possible, recruitment and retention programs should strive to include instructors that share common demographic traits with participants in the program. For this assessment it is not known if the instructors were predominantly male, but the issue may be worth investigating.



How interested are you in HUNTING? (Asked of those who took the Hunter Education OAEP unit.)

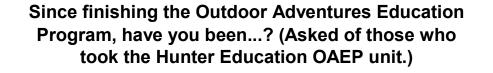
How interested are you in HUNTING? (Asked of those who took the Hunter Education OAEP unit.)

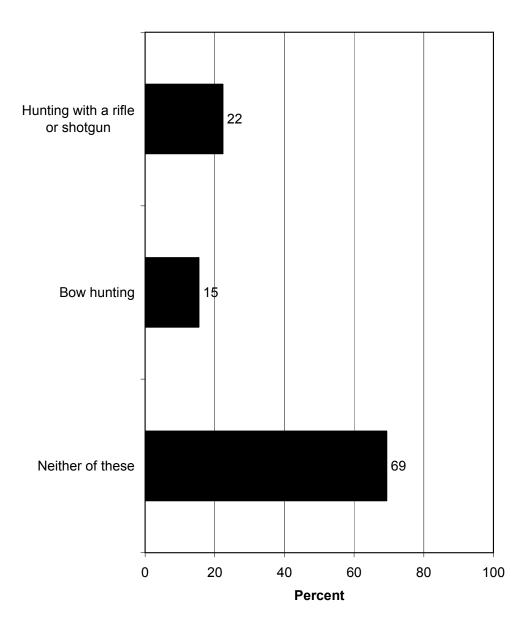


POST-PROGRAM SURVEY

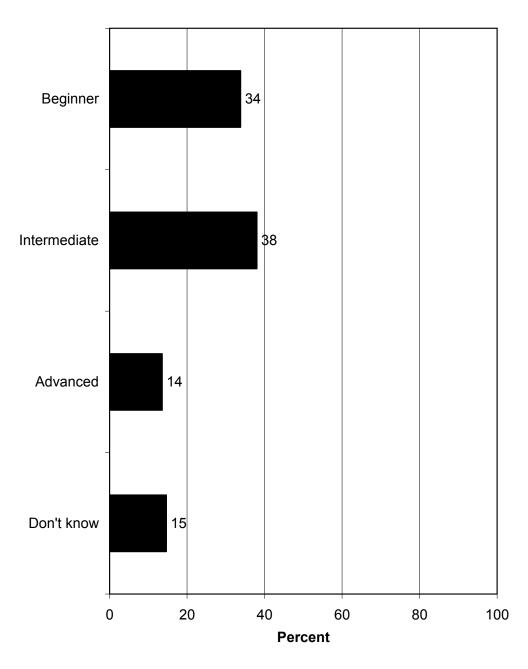
Following completion of the Hunter Education OAEP unit, participating students (n=1,205) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Hunter Education participants have gone hunting, purchased equipment, and/or purchased hunting licenses since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone hunting, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all hunting categories, ranging from 97% for hunting safety to 89% for hunting opportunities.
- When asked about their interest in hunting, 32% of students said the OAEP made them a lot more interested, 35% said it made them a little more interested, and 26% said their interest remained about the same. Only 4% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,205 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.
- When asked about their hunting skills, 33% of students said they got a lot better after taking the course, 36% said they got a little better, and only 7% said they were not at all better.
- When asked about confidence in their hunting skills, 59% of students said they were more confident after taking the course, 29% said they were about the same, and only 3% said they were less confident.

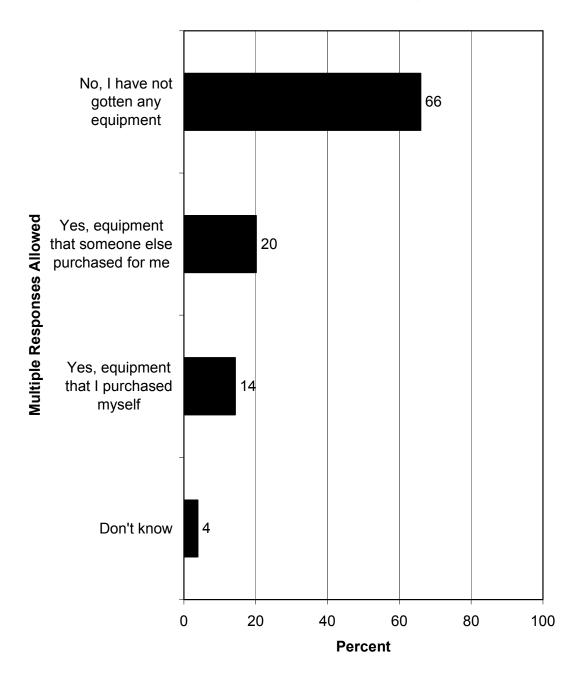




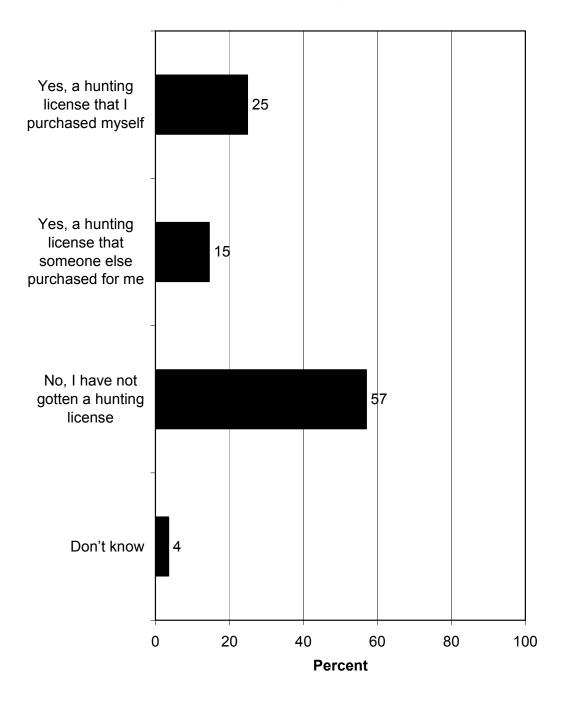
How would you rate your skill as a HUNTER now? (Asked of those who took the Hunter Education OAEP unit and have hunted since finishing the OAEP.)

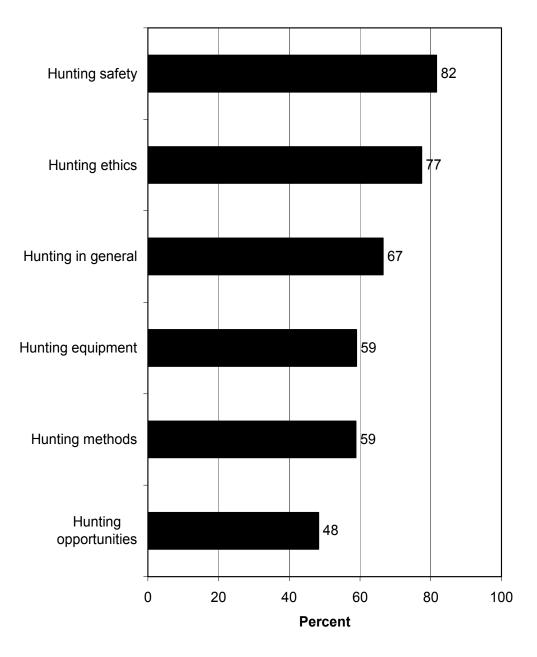


Since finishing the Outdoor Adventures Education Program, have you gotten any HUNTING equipment? (Asked of those who took the Hunter Education OAEP unit.)

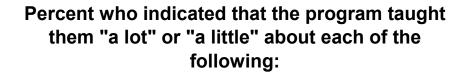


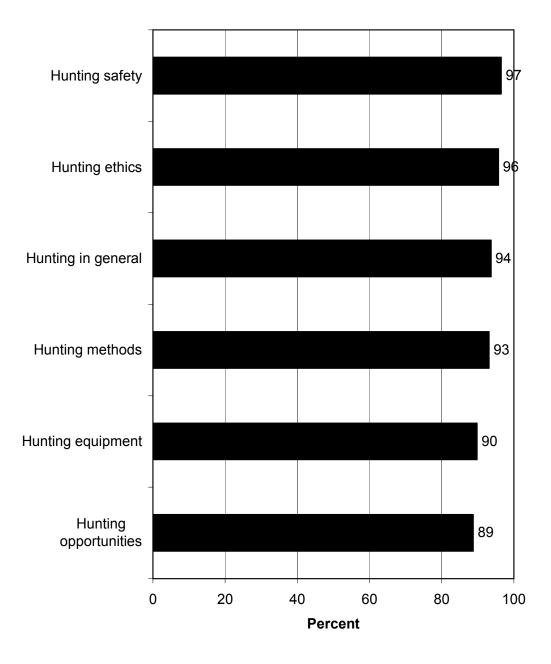
Since finishing the Outdoor Adventures Education Program, have you gotten a HUNTING license? (Asked of those who took the Hunter Education OAEP unit.)



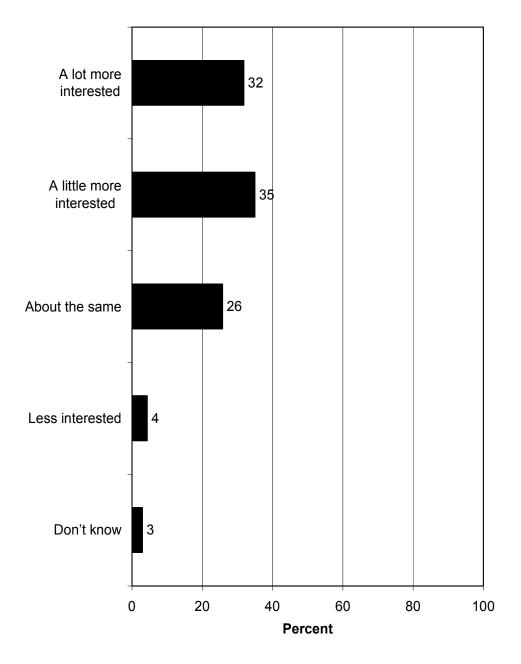


Percent who indicated that the program taught them "a lot" about each of the following:

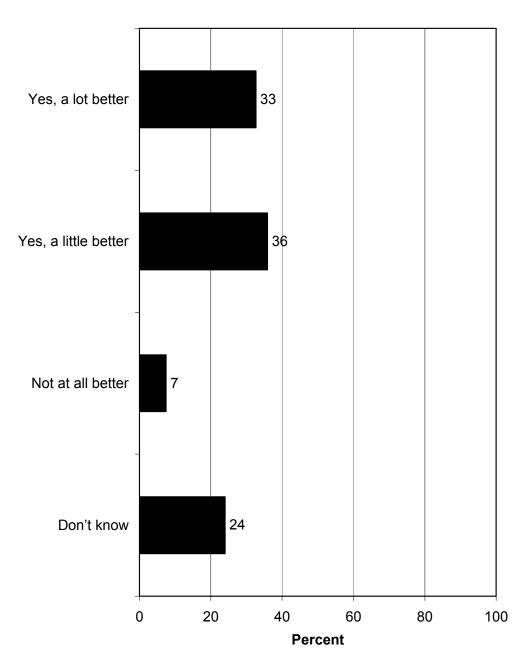




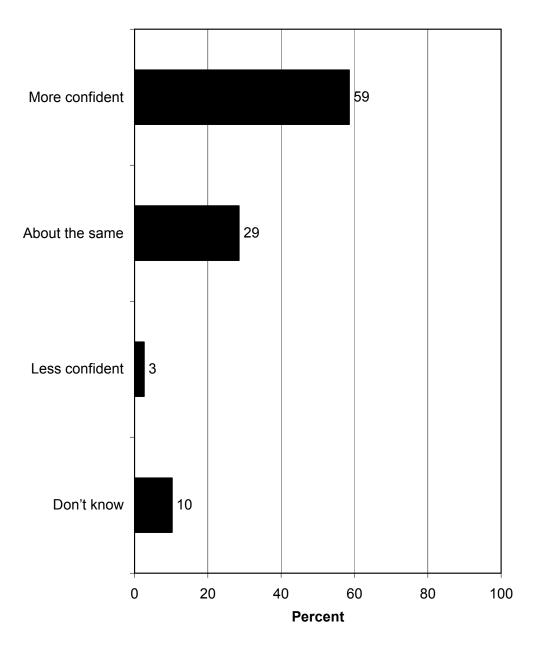
Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in HUNTING? (Asked of those who took the Hunter Education OAEP unit.)



Did your HUNTING skills get better while taking the Outdoor Adventures Education Program? (Asked of those who took the Hunter Education OAEP unit.)



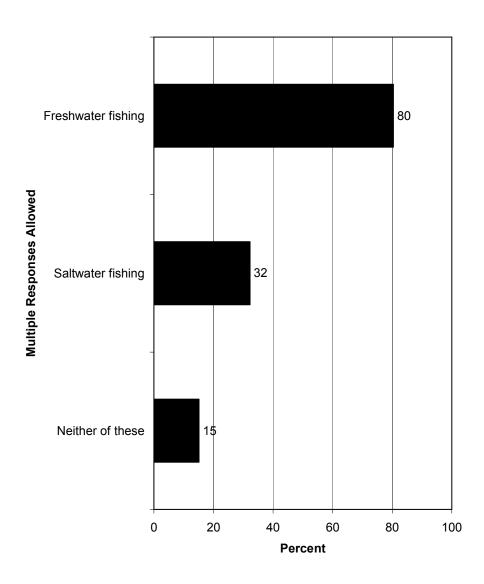
Do you feel more confident, about the same, or less confident about your HUNTING skills since you finished the Outdoor Adventures Education Program? (Asked of those who took the Hunter Education OAEP unit.)



ASSESSING THE ANGLER EDUCATION UNIT

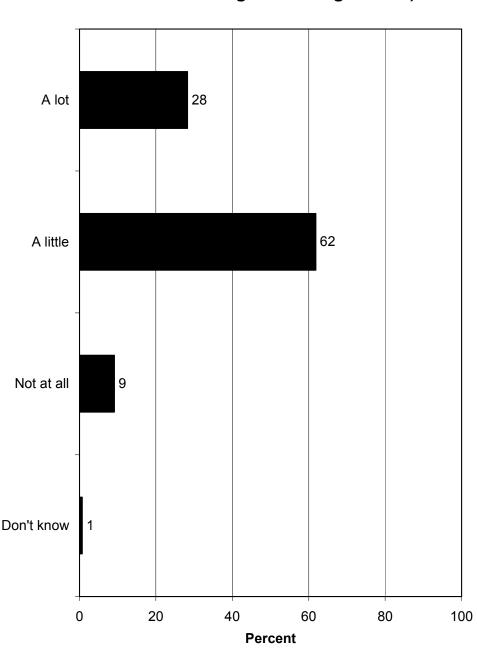
PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Angler Education OAEP unit (62% of the total survey population) were asked if they had prior fishing experience. As shown in the figure below, 80% have been freshwater fishing, 32% have been saltwater fishing, and 15% have done neither.

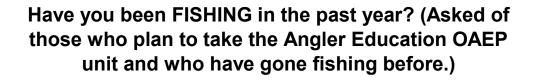


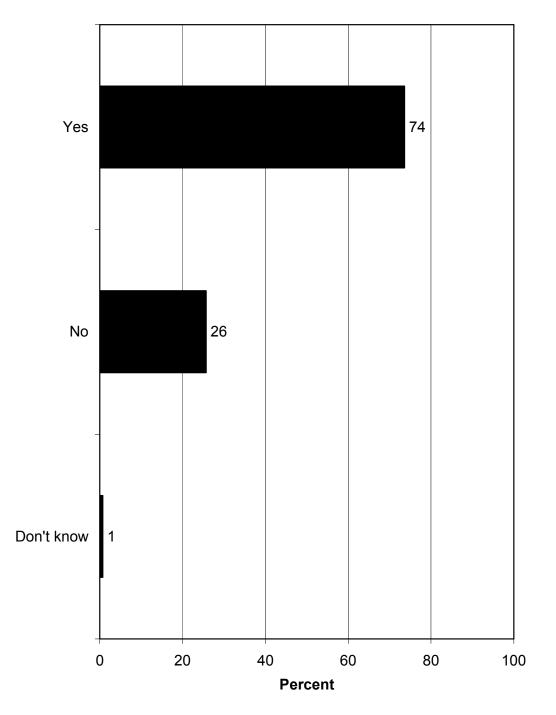
Have you ever been...? (Asked of those who plan to take the Angler Education OAEP unit.)

Those who have gone fishing before (n=2,624) were asked about their frequency of participation. The figure below shows that 28% of respondents have gone fishing a lot, 62% have gone fishing a little, and 9% do not fish at all. Of this same group, 74% have gone fishing in the past year and 26% have not, as shown on the next page.

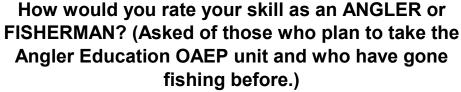


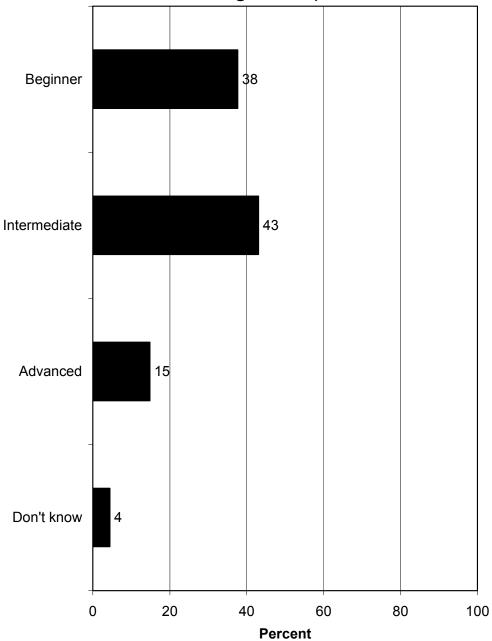
Do you FISH a lot, a little, or not at all? (Asked of those who plan to take the Angler Education OAEP unit and who have gone fishing before.)



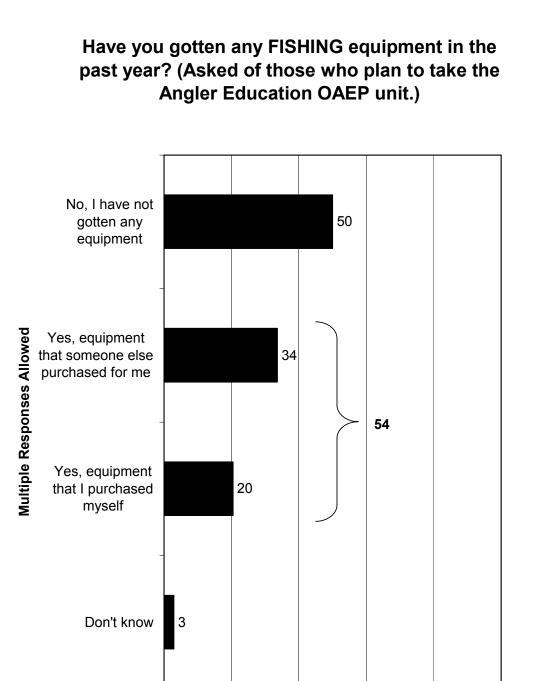


Those who have gone fishing before were also asked to rate their skill level. As the figure below demonstrates, 38% considered themselves to be beginners, 43% considered themselves intermediate, and 15% considered themselves advanced, with the remaining 4% unsure of their skill level.





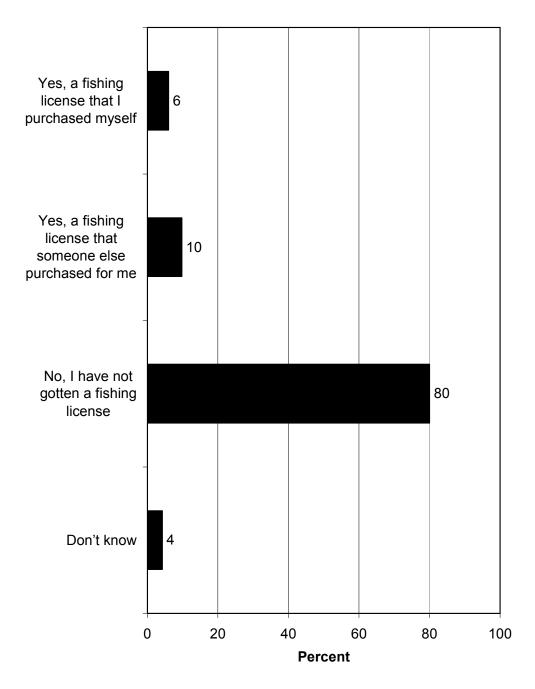
Regardless if they have gone fishing before, students planning to take the Angler Education OAEP unit (n=3,084) were asked if they have gotten any fishing equipment in the past year; a combined 54% either purchased equipment themselves or had equipment purchased for them.



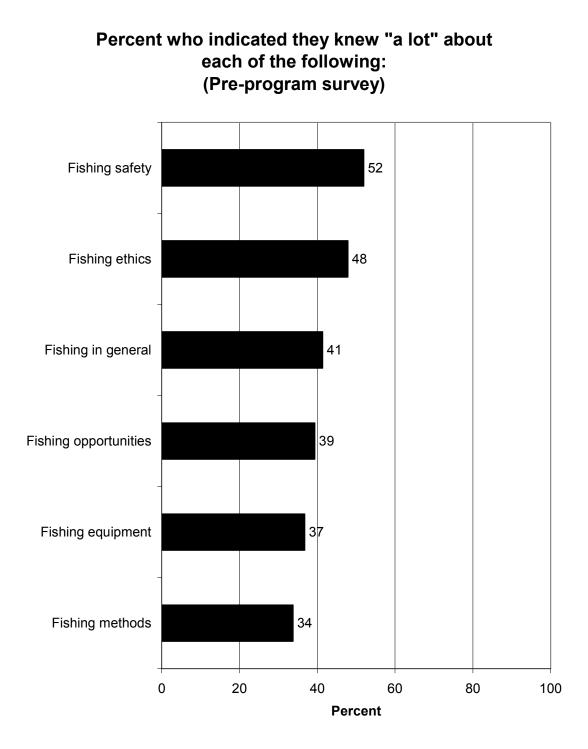
Percent

The previous group was also asked about fishing licenses. Within the past year 6% purchased a license themselves and 10% had a license purchased for them, while a large majority of the students, 80%, have not gotten a license.

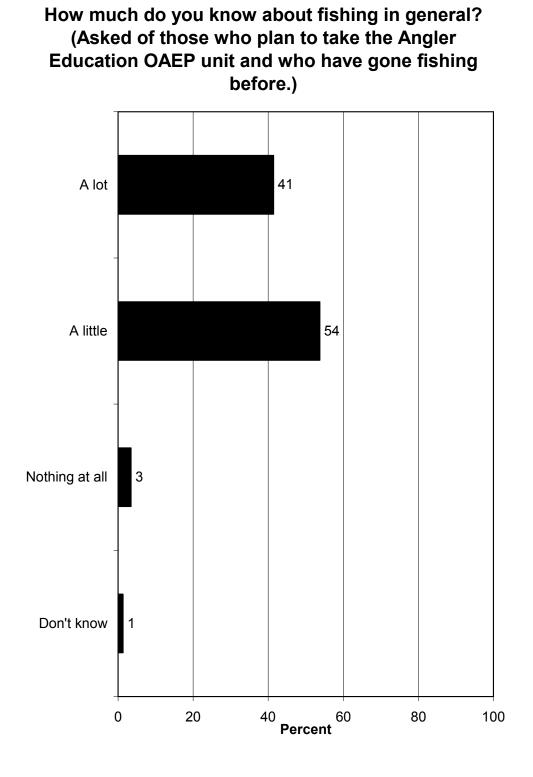
Have you gotten a FISHING license in the past year? (Asked of those who plan to take the Angler Education OAEP unit.)



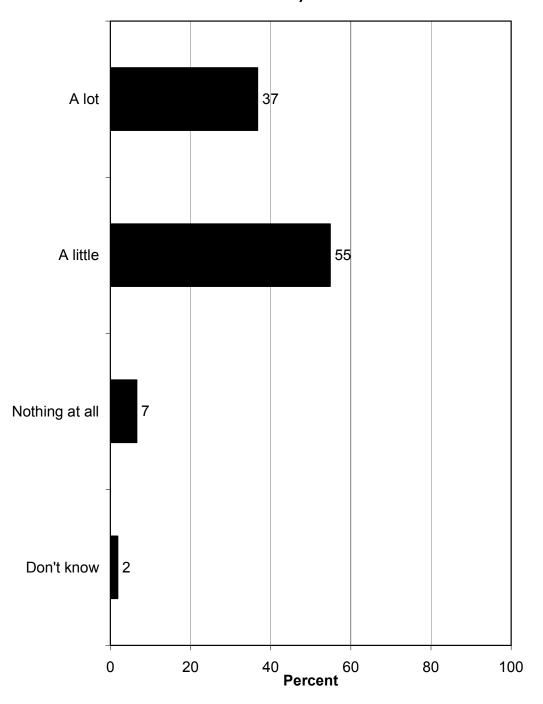
Students who plan to take the Angler Education OAEP unit and who have gone fishing before (n=2,622) were asked to rate their knowledge on a number of fishing topics. The figure below shows the percentages who indicated they knew "a lot" about each of the topics. As shown, about half knew a lot about fishing safety and fishing ethics prior to taking the course.

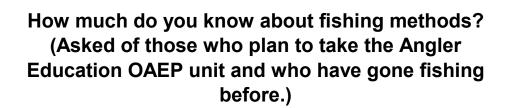


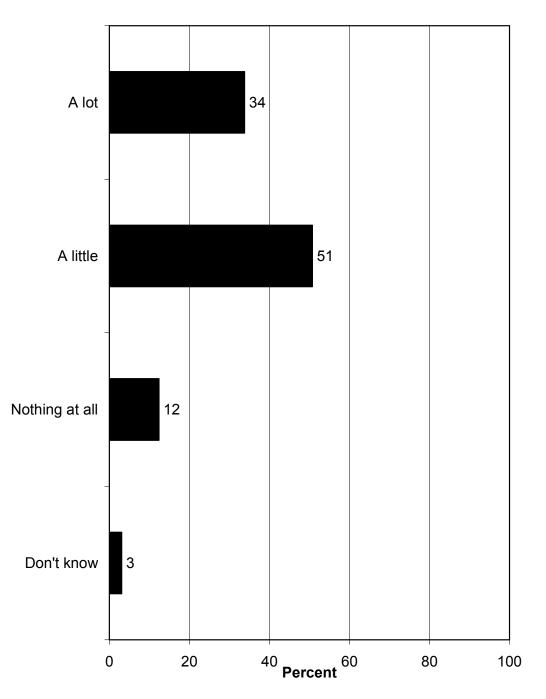
The next six charts show the results of each question related to fishing knowledge, in which the students were asked to indicate if they knew a lot, a little, or nothing at all about the various fishing topics prior to taking the Angler Education OAEP unit.

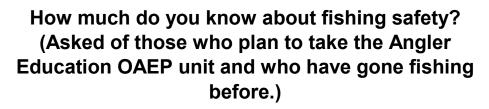


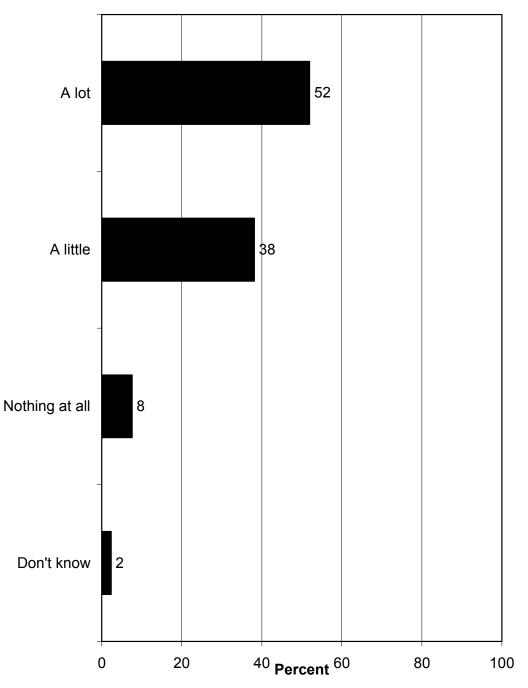
How much do you know about fishing equipment? (Asked of those who plan to take the Angler Education OAEP unit and who have gone fishing before.)



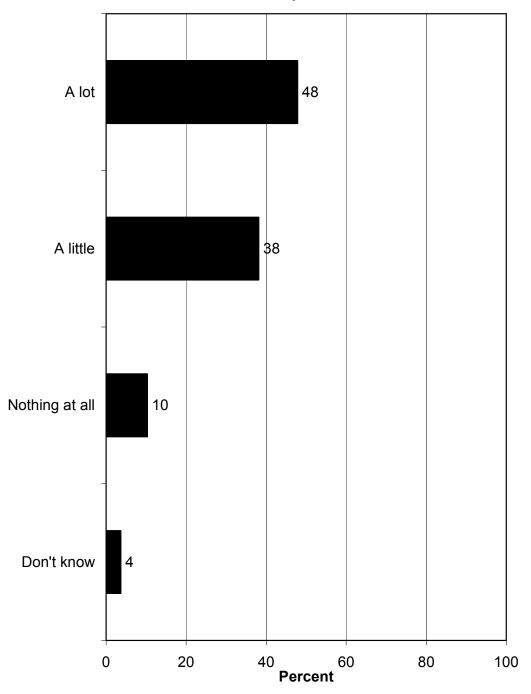


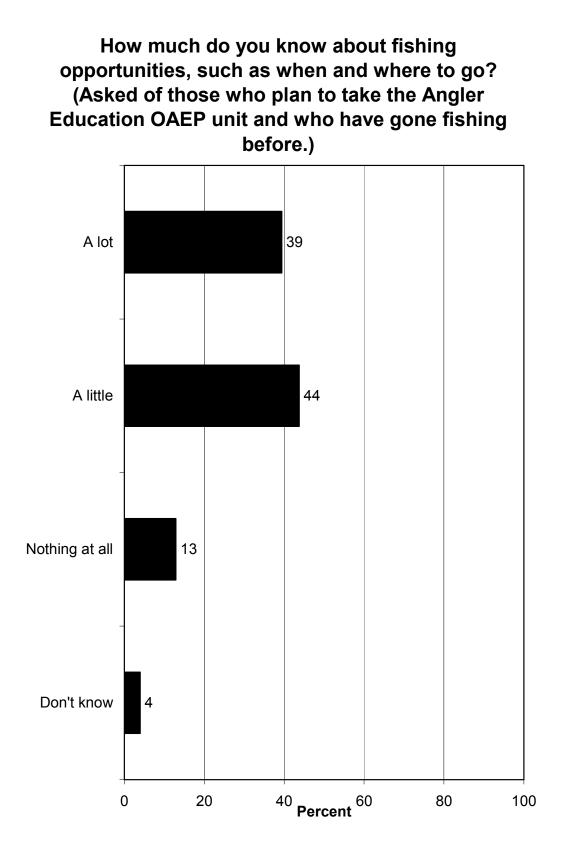






How much do you know about fishing ethics? (Asked of those who plan to take the Angler Education OAEP unit and who have gone fishing before.)

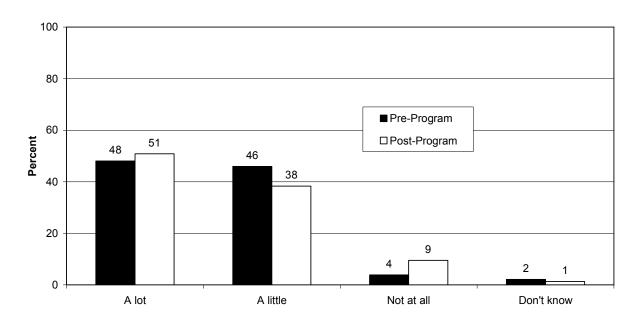




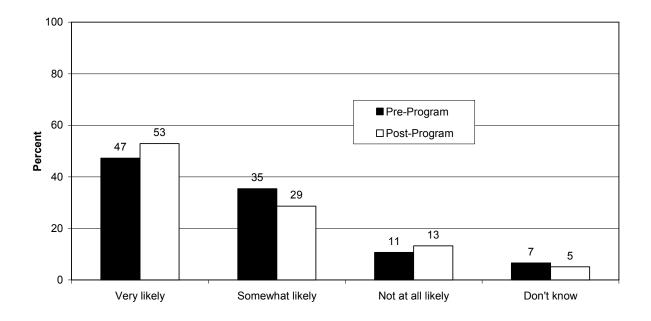
PRE- AND POST-PROGRAM COMPARISONS

In making a direct comparison between pre- and post-program survey populations (n=699), the figure below shows a slight decrease in fishing interest following participation in the Angler Education OAEP unit. A second question about the students' likelihood to go fishing in the next year shows very little net movement following course participation. These comparisons appear to contradict the highly favorable ratings given to Angler Education and all the other OAEP units as shown in later sections.

Other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of fishing or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.



How interested are you in FISHING? (Asked of those who took the Angler Education OAEP unit.)



How likely are you to go FISHING in the next year? (Asked of those who took the Angler Education OAEP unit.)

POST-PROGRAM SURVEY

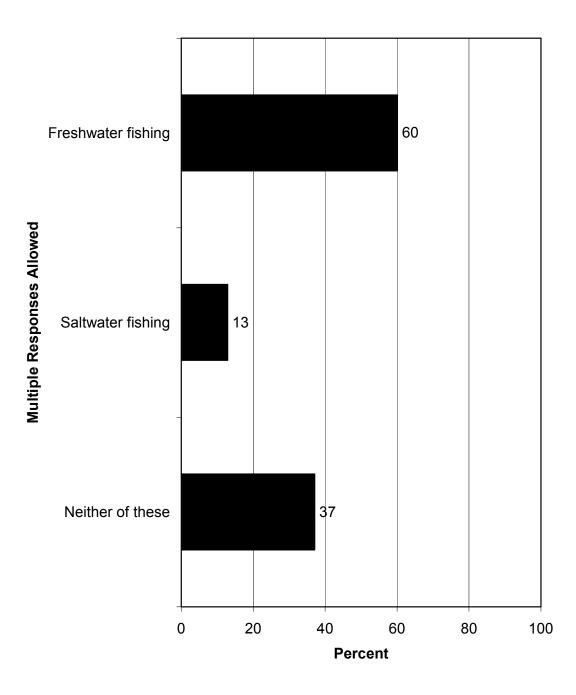
The following charts show survey results of the students who completed the Angler Education OAEP unit (survey population of 1,076). The feedback to all course elements was very favorable, as discussed below.

- A substantial number of Angler Education participants have gone fishing, purchased equipment, and/or purchased fishing licenses since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone fishing, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all fishing categories, ranging from 96% for fishing in general to 90% for fishing opportunities.
- When asked about their interest in fishing, 33% of students said the OAEP made them a lot more interested, 34% said it made them a little more interested, and 27% said their

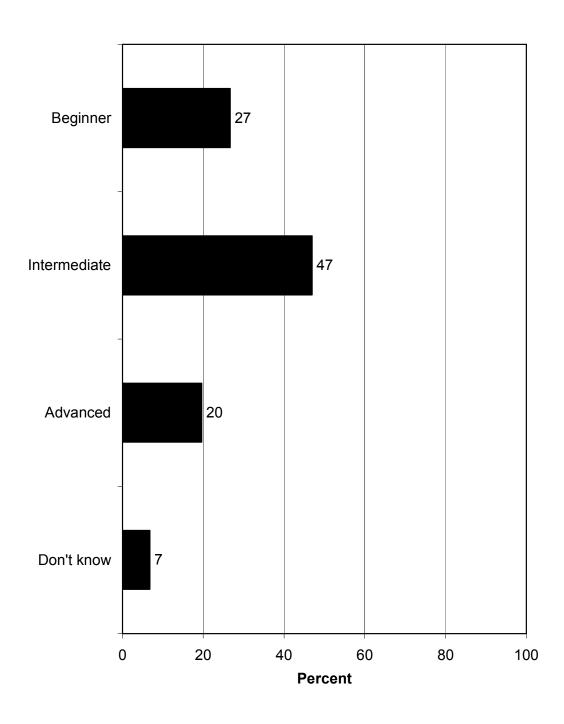
interest remained about the same. Only 4% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,076 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.

- When asked about their fishing skills, 34% of students said they got a lot better after taking the course, 43% said they got a little better, and only 10% said they were not at all better.
- When asked about confidence in their fishing skills, 55% of students said they were more confident after taking the course, 35% said they were about the same, and only 3% said they were less confident.

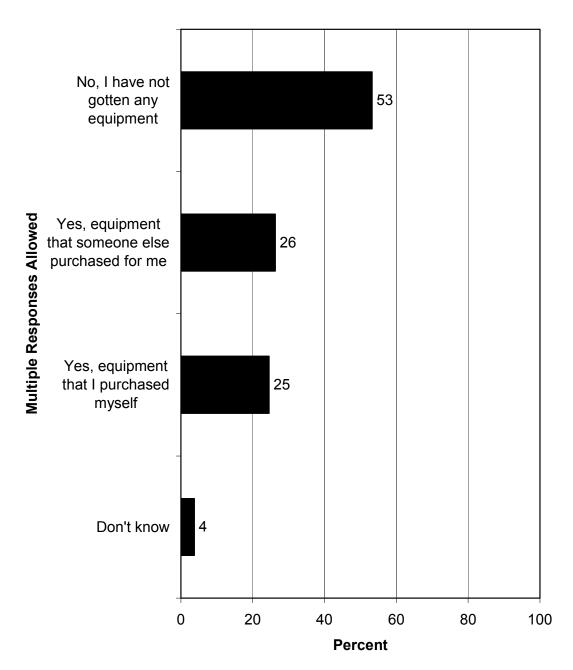
Since finishing the Outdoor Adventures Education Program, have you been...? (Asked of those who took the Angler Education OAEP unit.)



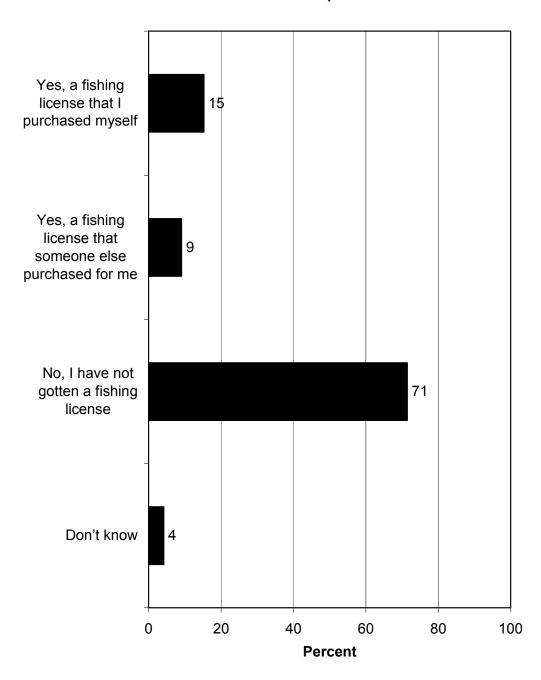
How would you rate your skill as an ANGLER or FISHERMAN now? (Asked of those who took the Angler Education OAEP unit.)

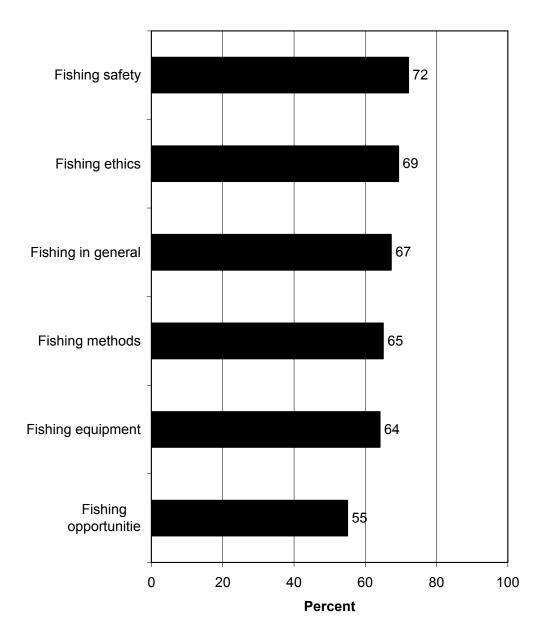


Since finishing the Outdoor Adventures Education Program, have you gotten any FISHING equipment? (Asked of those who took the Angler Education OAEP unit.)

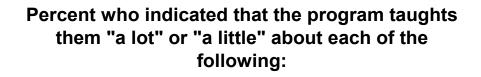


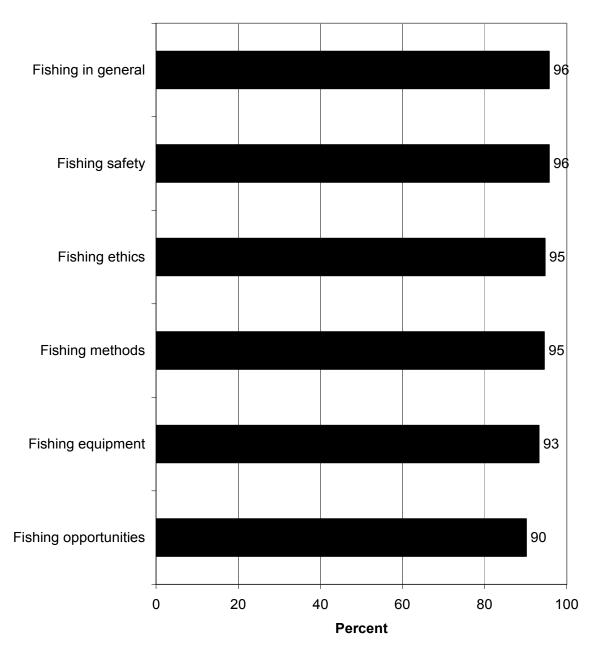
Since finishing the Outdoor Adventures Education Program, have you gotten a FISHING license? (Asked of those who took the Angler Education OAEP unit.)



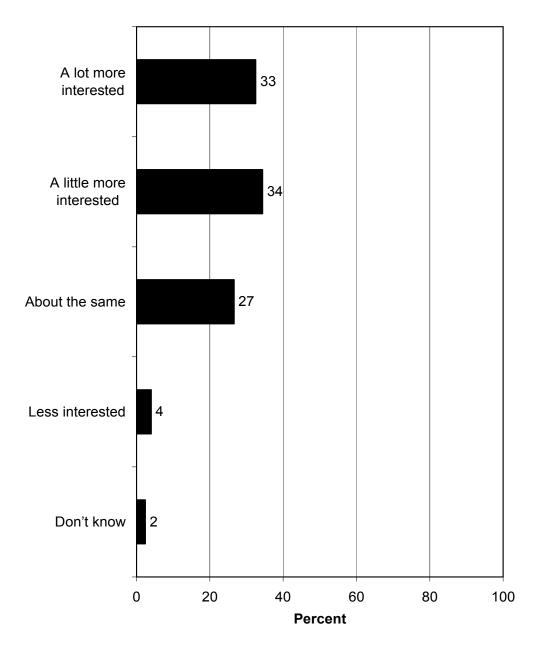


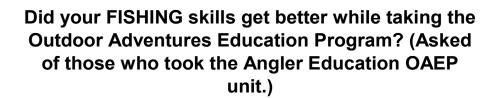
Percent who indicated that the program taught them "a lot" about each of the following:

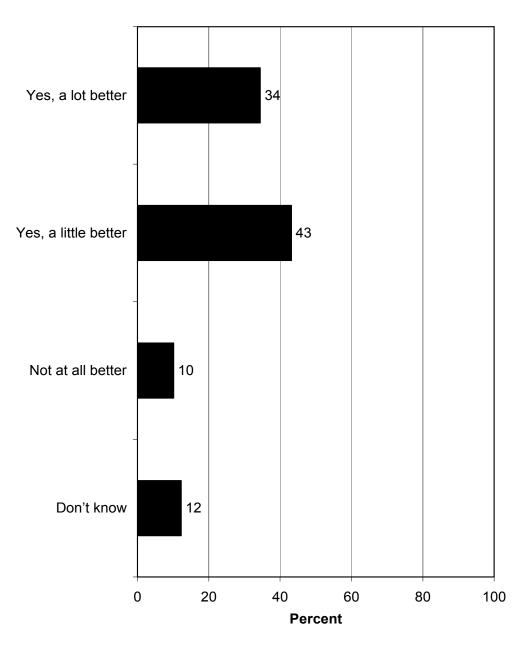




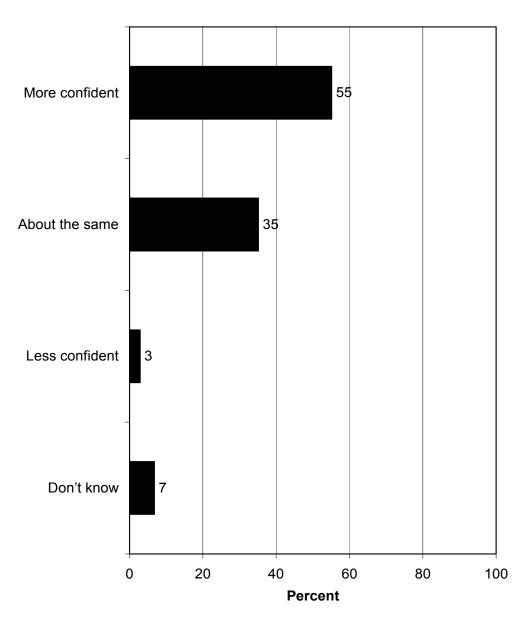
Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in FISHING? (Asked of those who took the Angler Education OAEP unit.)







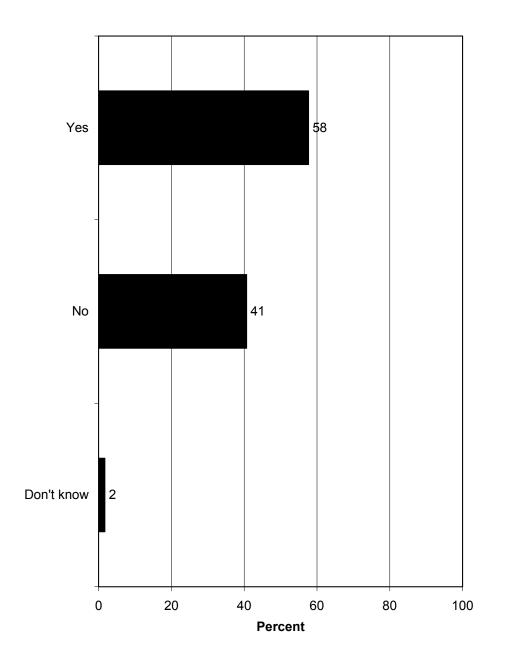
Do you feel more confident, about the same, or less confident about your FISHING skills since you finished the Outdoor Adventures Education Program? (Asked of those who took the Angler Education OAEP unit.)



ASSESSING THE ARCHERY UNIT

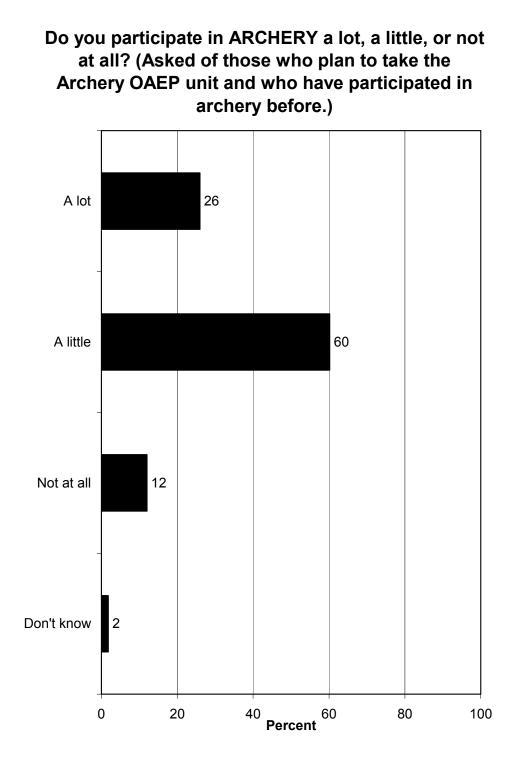
PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Archery OAEP unit (73% of the total survey population) were asked if they had prior archery experience. As shown in the figure below, 58% have participated in archery before and 41% have not.

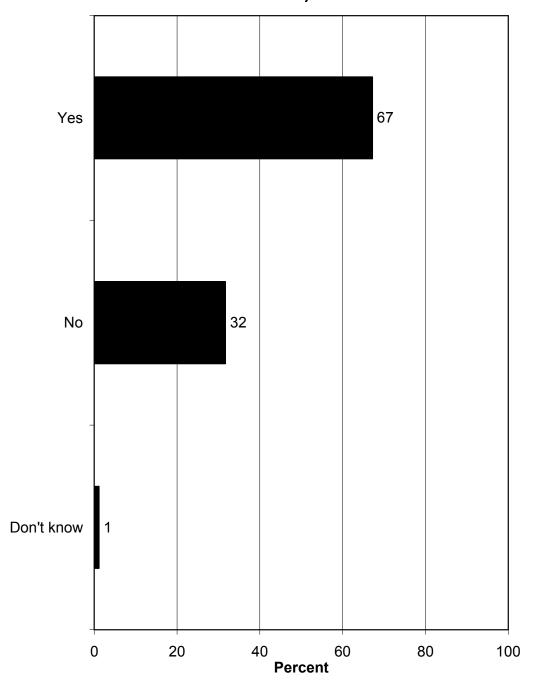


Have you ever participated in ARCHERY? (Asked of those planning to take the Archery OAEP unit.)

Those who have participated in archery before (n=2,090) were asked about their frequency of participation. The figure below shows that 26% have participated a lot, 60% have participated a little, and 12% do not participate at all. Of this same group, 67% have participated in archery within the past year and 32% have not, as shown on the next page.

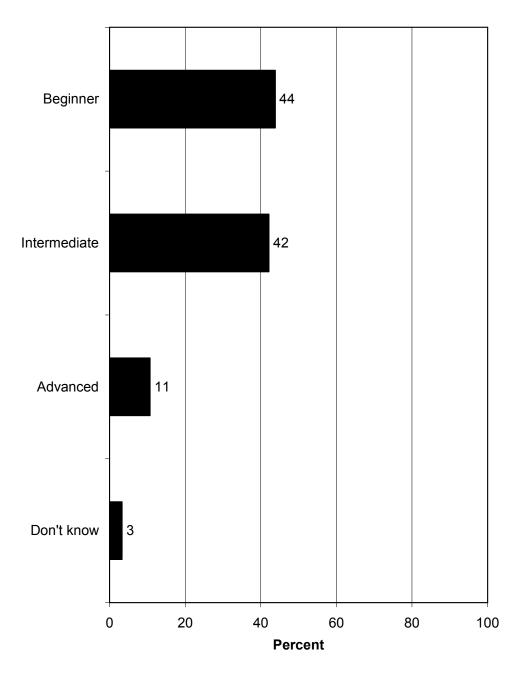


Have you participated in ARCHERY in the past year? (Asked of those who plan to take the Archery OAEP unit and who have participated in archery before.)

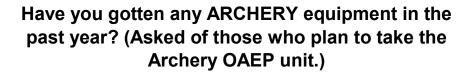


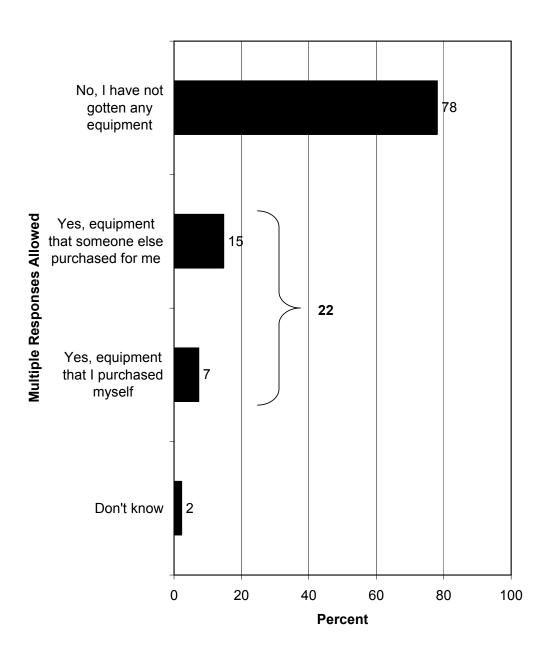
Those who have participated in archery before were also asked to rate their skill level. As the figure below demonstrates, 44% considered themselves to be beginners, 42% considered themselves intermediate, and 11% considered themselves advanced; the remaining 3% were unsure of their skill level.

How would you rate your skill in ARCHERY? (Asked of those who plan to take the Archery OAEP unit and who have participated in archery before.)

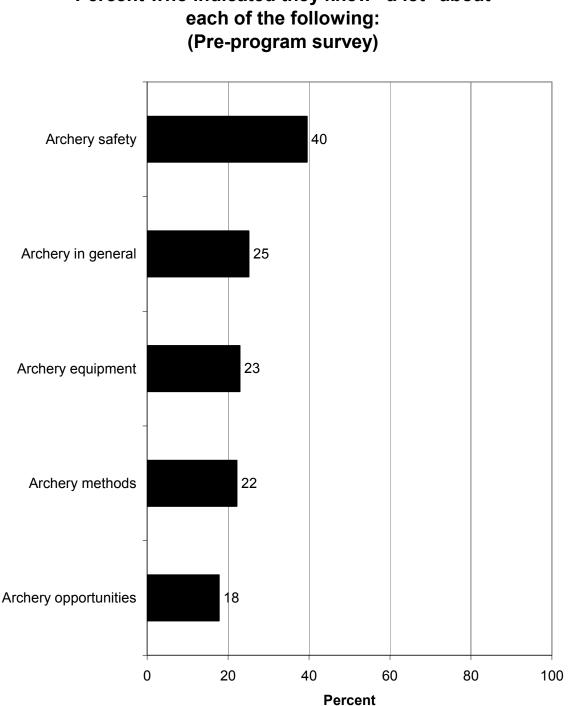


Regardless if they have participated in archery before, students planning to take the Archery Education OAEP unit (n=3,622) were asked if they have gotten any archery equipment in the past year; a combined 22% either purchased equipment themselves or had equipment purchased for them.



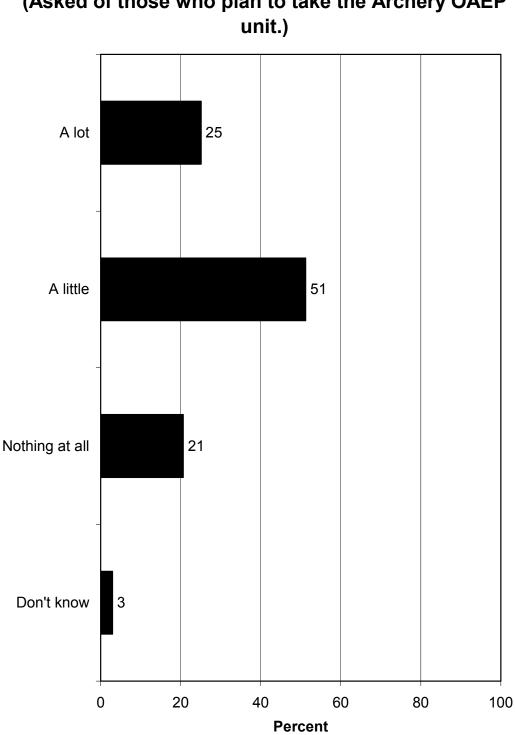


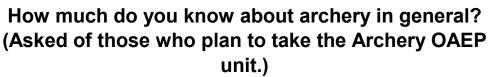
Students planning to take the Archery OAEP unit (n=3,622) were asked to rate their knowledge on a number of archery topics. The figure below shows the percentages who indicated they knew "a lot" about each of the topics. Less than half (40%) knew a lot about archery safety; the other topics were ranked substantially lower.

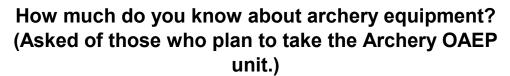


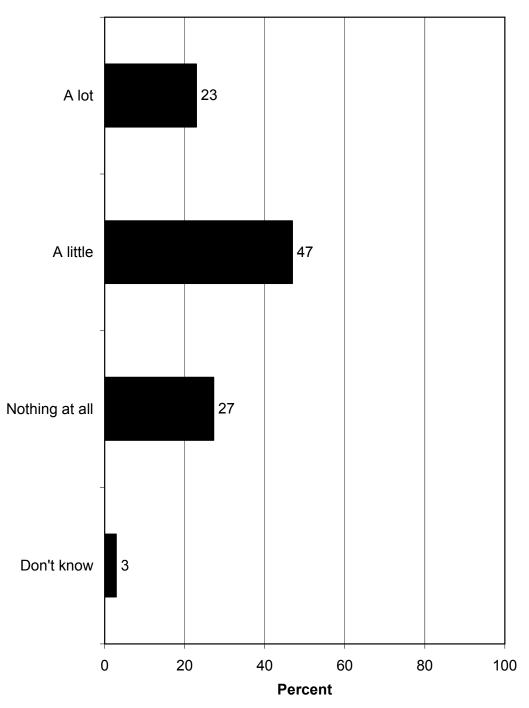
Percent who indicated they knew "a lot" about

The next five charts show the results of each question related to archery knowledge, in which the students were asked to indicate if they knew a lot, a little, or nothing at all about the various archery topics prior to taking the Archery OAEP unit.

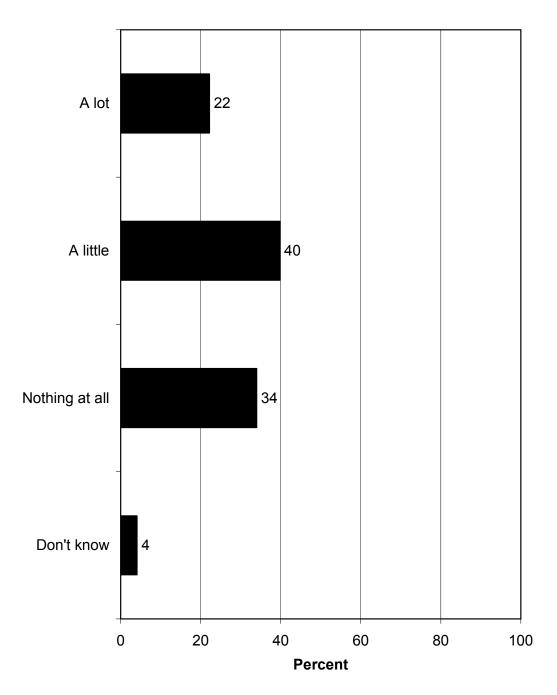


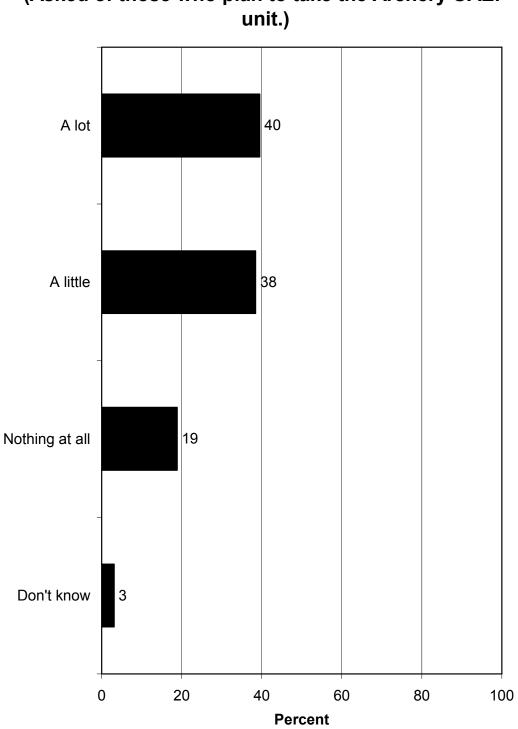




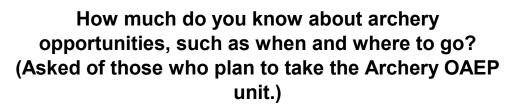


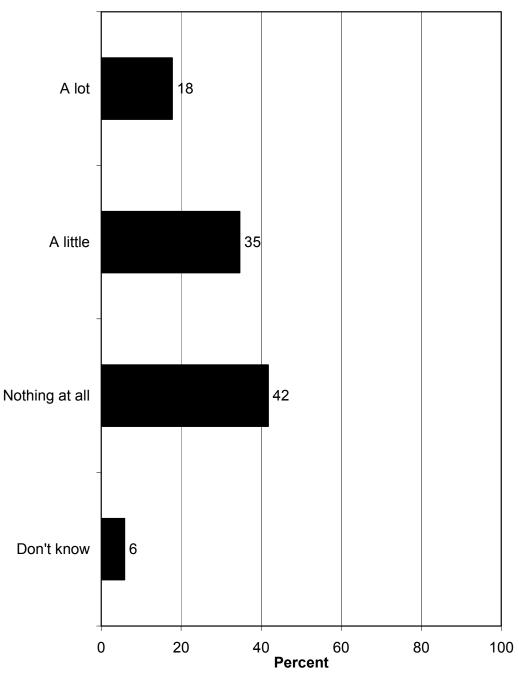
How much do you know about archery methods? ("methods" refer to different ways or techniques for practicing archery) (Asked of those who plan to take the Archery OAEP unit.)





How much do you know about archery safety? (Asked of those who plan to take the Archery OAEP unit.)

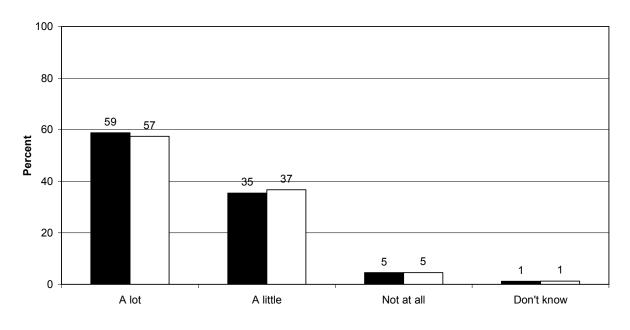




PRE- AND POST-PROGRAM COMPARISONS

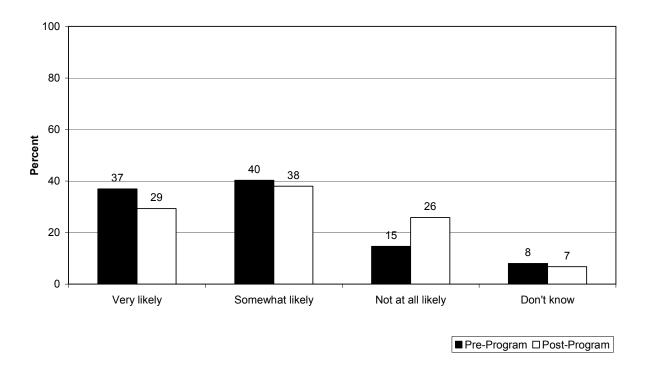
In making a direct comparison between pre- and post-program survey populations (n=699), the figure below shows virtually no change in archery interest following participation in the Archery Education OAEP unit. In addition, the following question shows a decrease in student's likelihood to participate in archery in the next year. This appears to contradict the highly favorable ratings given to the Archery OAEP unit as shown later in the report.

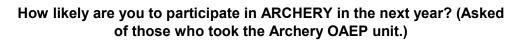
As shown elsewhere, other OAEP units reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of archery or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.



How interested are you in ARCHERY? (Asked of those who took the Archery OAEP unit.)

■Pre-Program □Post-Program





POST-PROGRAM SURVEY

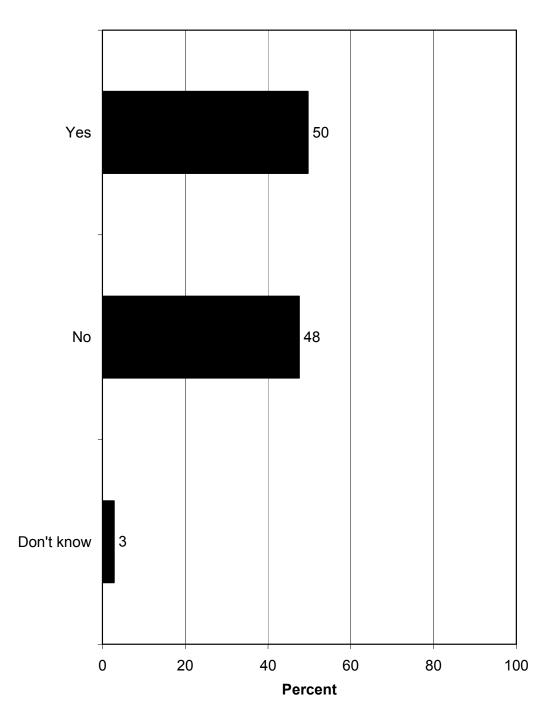
Following completion of the Archery OAEP unit, participating students (n=1,178) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Archery students have participated in archery and/or purchased archery equipment since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the preprogram survey asked if the participant has *ever* participated in archery, whereas the postprogram survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all archery categories, ranging from 97% for archery safety to 85% for archery opportunities.
- When asked about their interest in archery, 48% of students said the OAEP made them a lot more interested, 31% said it made them a little more interested, and 16% said their interest remained about the same. Only 3% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,178 students who

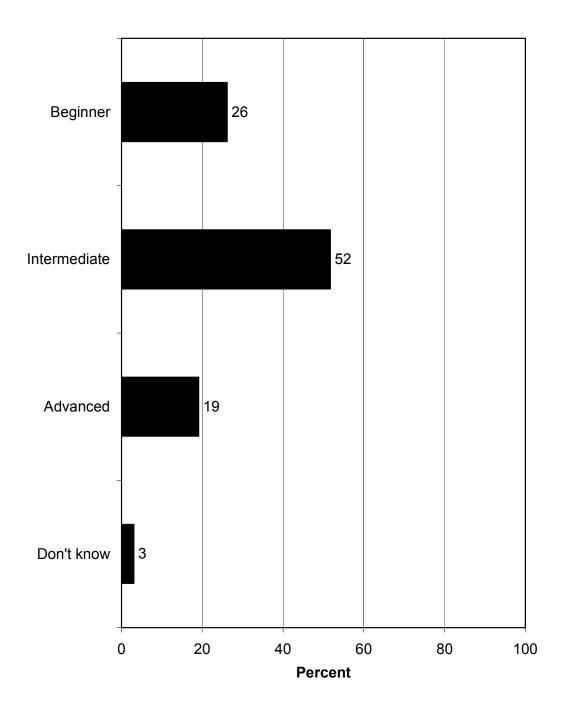
participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.

- When asked about their archery skills, 54% of students said they got a lot better after taking the course, 36% said they got a little better, and only 6% said they were not at all better.
- When asked about confidence in their archery skills, 68% of students said they were more confident after taking the course, 25% said they were about the same, and only 3% said they were less confident.

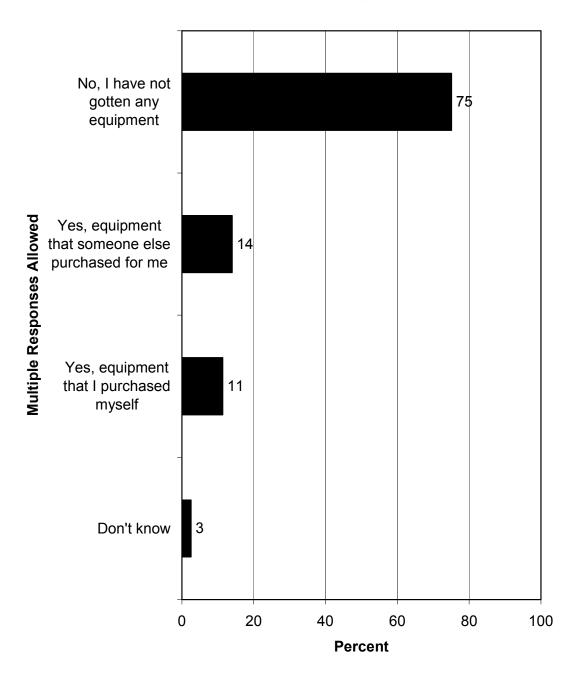
Since finishing the Outdoor Adventures Education Program, have you participated in ARCHERY? (Asked of those who took the Archery OAEP unit.)

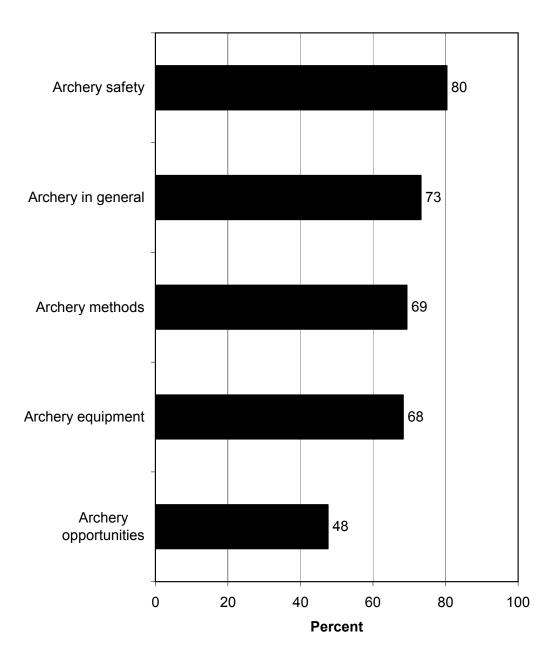


How would you rate your skill in ARCHERY now? (Asked of those who took the Archery OAEP unit.)

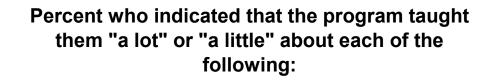


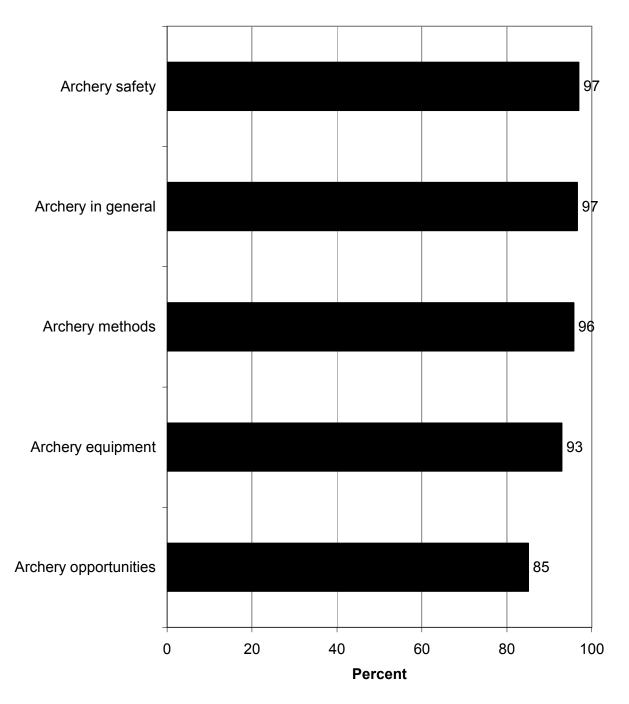
Since finishing the Outdoor Adventures Education Program, have you gotten any ARCHERY equipment? (Asked of those who took the Archery OAEP unit.)



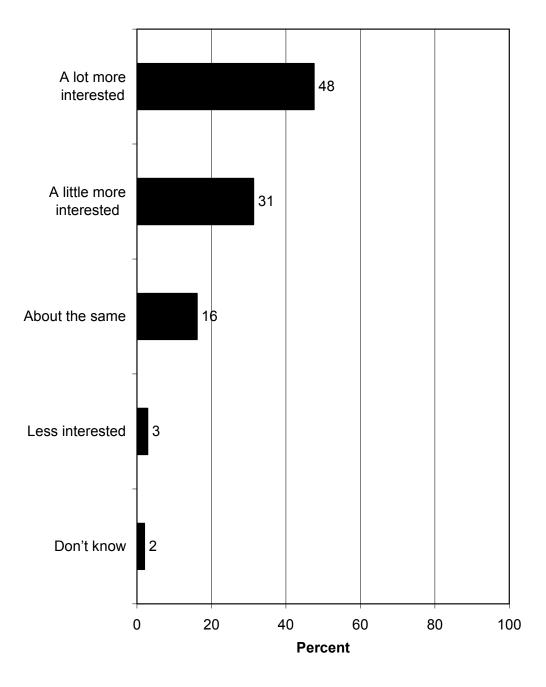


Percent who indicated that the program taught them "a lot" about each of the following:

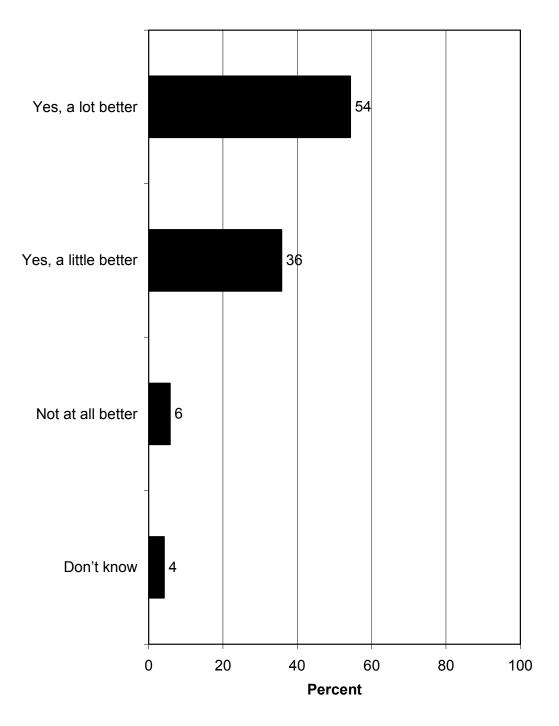




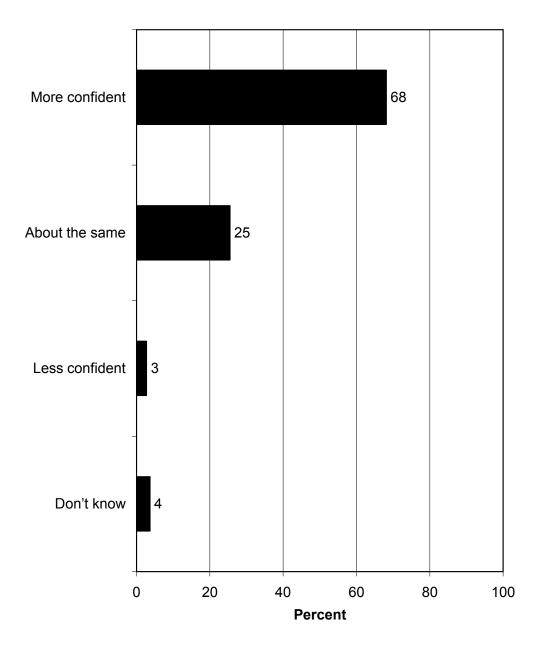
Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in ARCHERY? (Asked of those who took the Archery OAEP unit.)



Did your ARCHERY skills get better while taking the Outdoor Adventures Education Program? (Asked of those who took the Archery OAEP unit.)



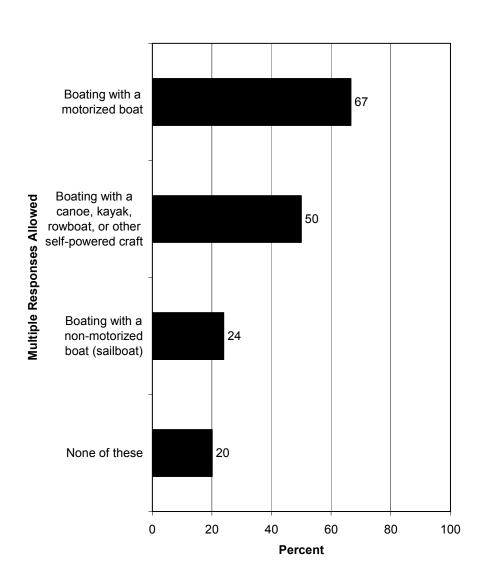
Do you feel more confident, about the same, or less confident about your ARCHERY skills since you finished the Outdoor Adventures Education Program? (Asked of those who took the Archery OAEP unit.)



ASSESSING THE BOATING SAFETY EDUCATION UNIT

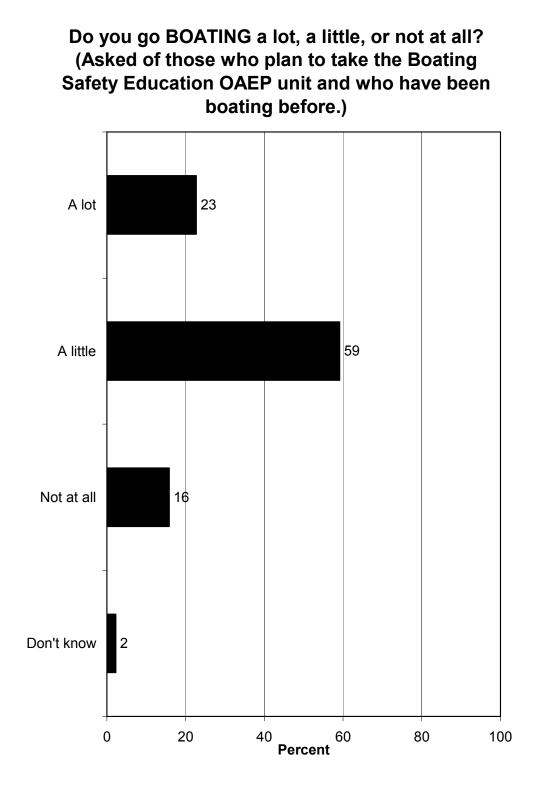
PRE-PROGRAM SURVEY

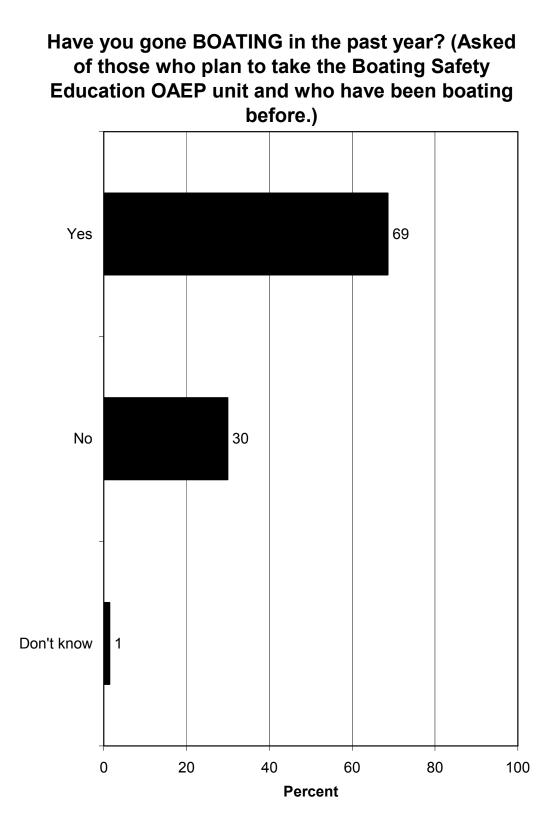
Before the program, students who indicated they planned to take the Boating Safety Education OAEP unit (65% of the total survey population) were asked if they had prior boating experience. As shown in the figure below, 67% have been boating with a motorized boat, 50% have been boating with self-powered craft (such as a canoe, kayak, or rowboat), 24% have been boating with a sailboat, and 20% have never been boating.



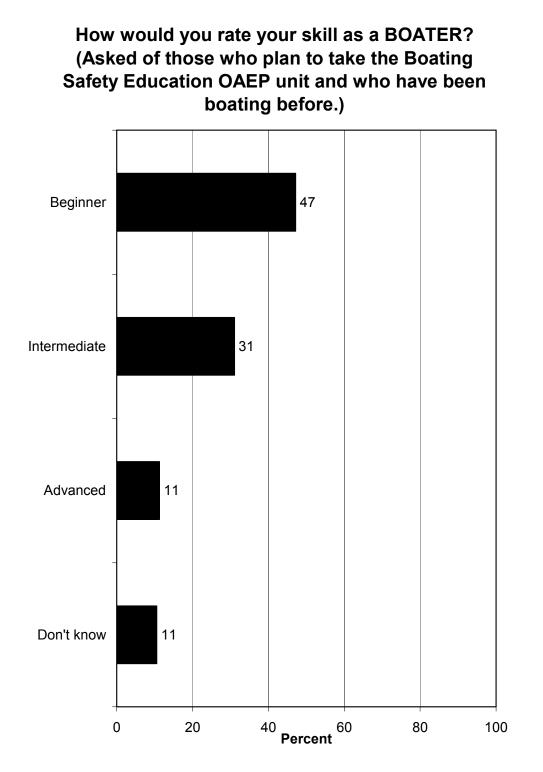
Have you ever been...? (Asked of those who plan to take the Boating Safety Education OAEP unit.)

Those who have gone boating before (n=2,563) were asked about their frequency of participation. The figure below shows that 23% of respondents have gone boating a lot, 59% have gone boating a little, and 16% do not go boating at all. Of this same group, 69% have gone boating in the past year and 30% have not, as shown on the next page.

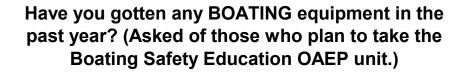


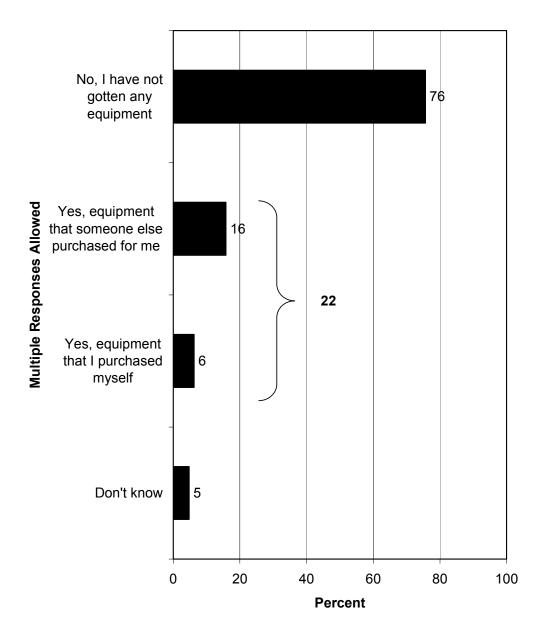


Those who have gone boating before were also asked to rate their skill level. As the figure below demonstrates, 47% considered themselves to be beginners, 31% considered themselves intermediate, and 11% considered themselves advanced, with the remaining 11% unsure of their skill level.

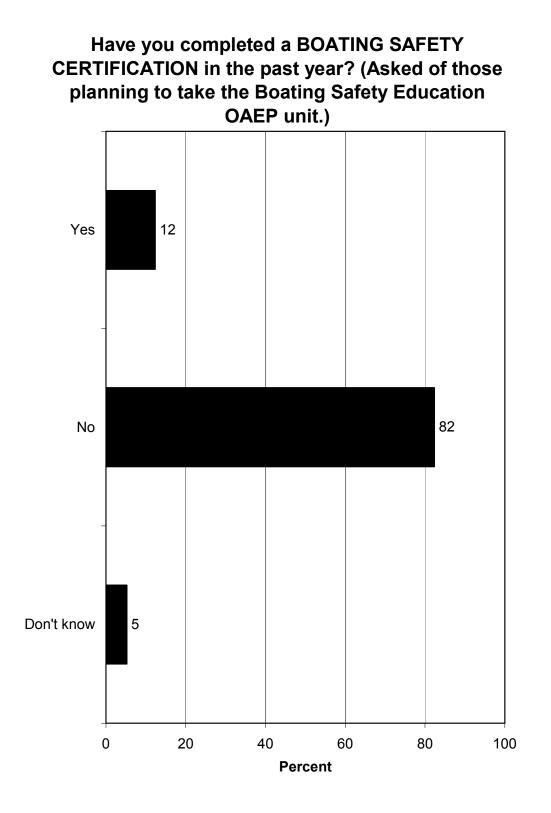


Regardless if they have been boating before, students planning to take the Boating Safety Education OAEP unit (n=3,201) were asked if they have gotten any boating equipment in the past year; a combined 22% either purchased equipment themselves or had equipment purchased for them.

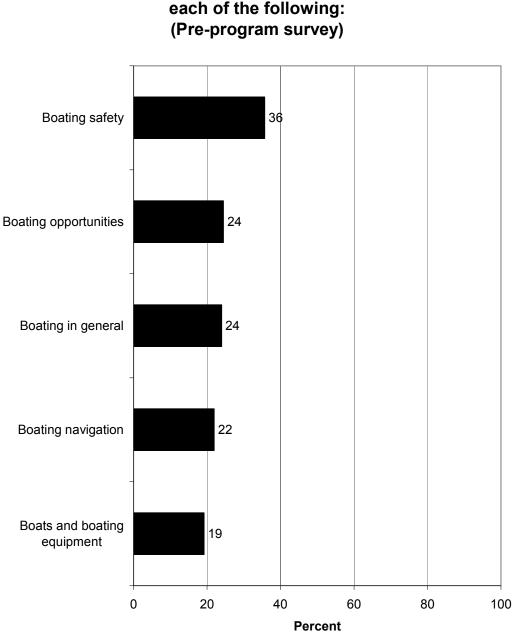




The previous group was also asked about boating safety certifications. Within the past year 12% of students have received certifications and 82% have not.

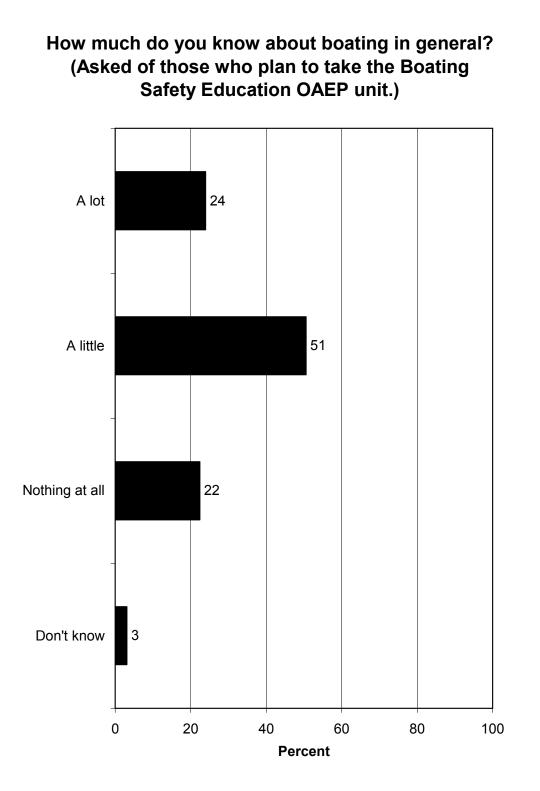


Students planning to take the Boating Safety OAEP unit (n=3,201) were asked to rate their knowledge on a number of boating topics. The figure below shows the percentages who indicated they knew "a lot" about each of the topics. Over a third of the students (36%) knew a lot about boating safety; the other topics were ranked substantially lower.

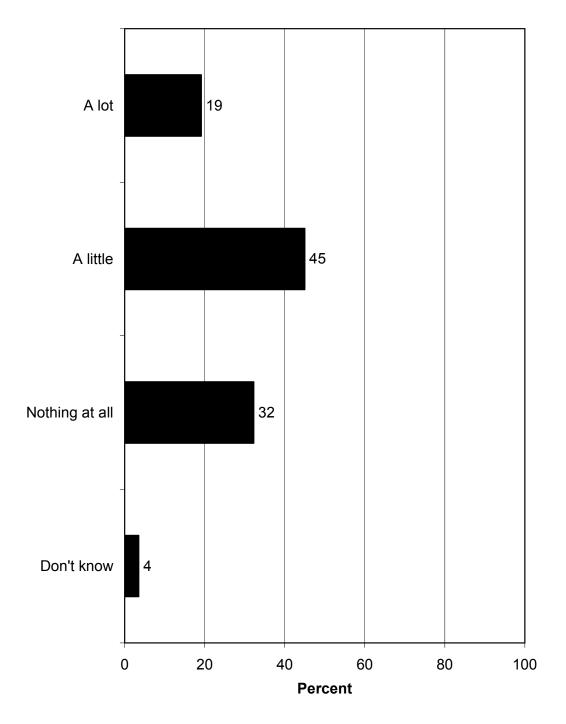


Percent who indicated they knew "a lot" about each of the following:

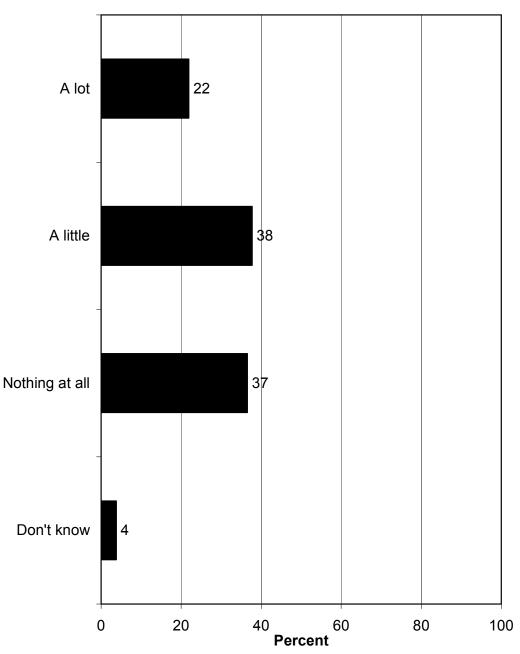
The next five charts show the results of each question related to boating knowledge, in which the students were asked to indicate if they knew a lot, a little, or nothing at all about the various boating topics prior to taking the Boating Safety OAEP unit.

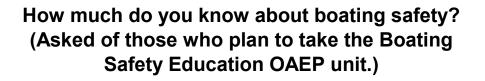


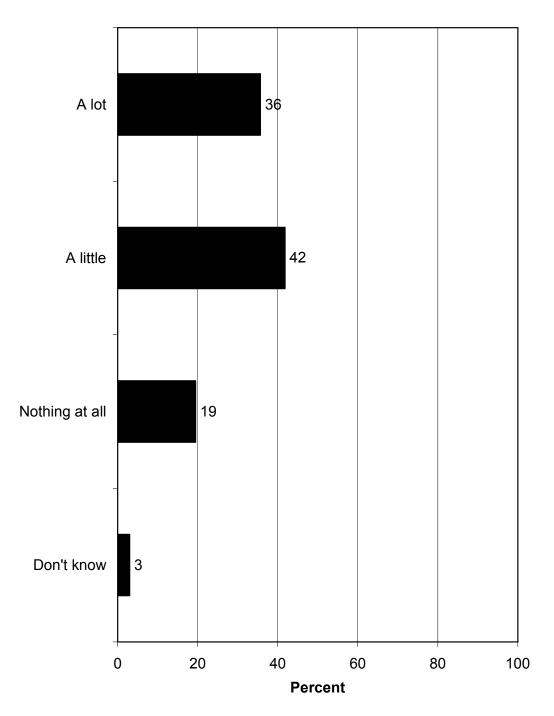
How much do you know about boats and boating equipment? (Asked of those who plan to take the Boating Safety Education OAEP unit.)



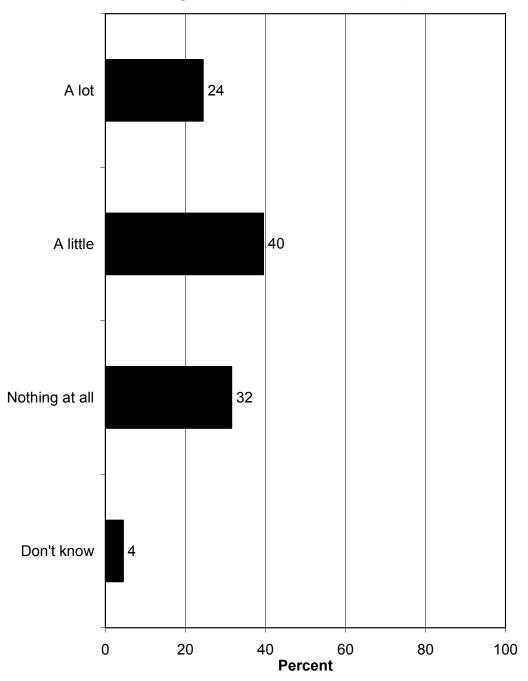
How much do you know about boating navigation? ("navigation" means being able to tell direction and control the movement of your boat) (Asked of those who plan to take the Boating Safety Education OAEP unit.)







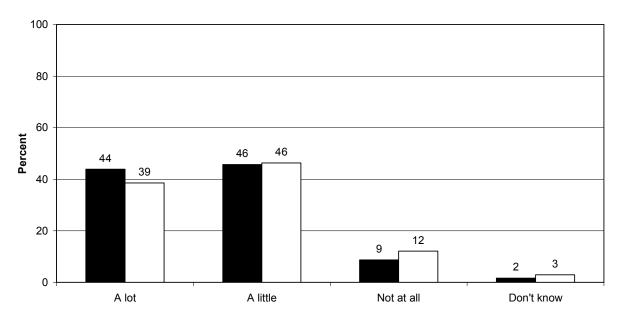
How much do you know about boating opportunities, such as when and where to go? (Asked of those who plan to take the Boating Safety Education OAEP unit.)



PRE- AND POST-PROGRAM COMPARISONS

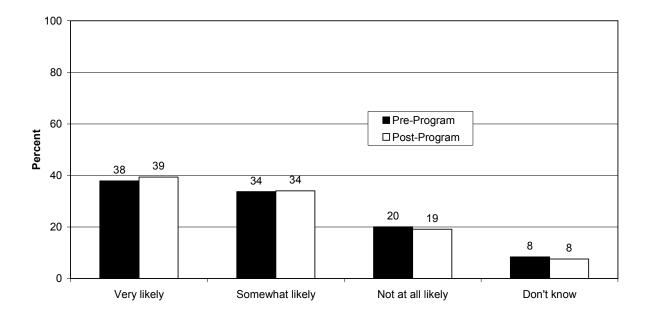
In making a direct comparison between pre- and post-program survey populations, the figure below shows a slight decrease in boating interest following participation in the Boating Safety Education OAEP unit. Also, the following question shows virtually no change in students' likelihood to go boating in the next year. These results appear to contradict the highly favorable ratings given to Boating Safety Education as shown later in this section.

As shown elsewhere, other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of boating or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.



How interested are you in BOATING? (Asked of those who took the Boating Safety Education OAEP unit.)

■Pre-Program □Post-Program



How likely are you to go BOATING in the next year? (Asked of those who took the Boating Safety Education OAEP unit.)

POST-PROGRAM SURVEY

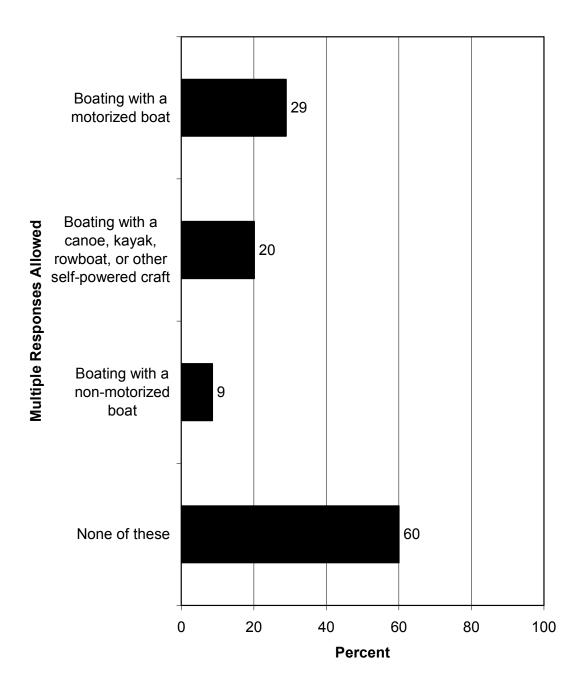
Following completion of the Boating Safety Education OAEP unit, participating students (n=1,082) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Boating Safety Education participants have gone boating, purchased equipment, and/or completed boating safety certification since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the survey asked. For example, a question in the pre-program survey asked if the participant has *ever* gone boating, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all boating categories, ranging from 96% for boating safety to 89% for boating opportunities.
- When asked about their interest in boating, 26% of students said the OAEP made them a lot more interested, 35% said it made them a little more interested, and 28% said their interest remained about the same. Only 8% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison discussed earlier. It is worth noting that this response came from the 1,082 students who

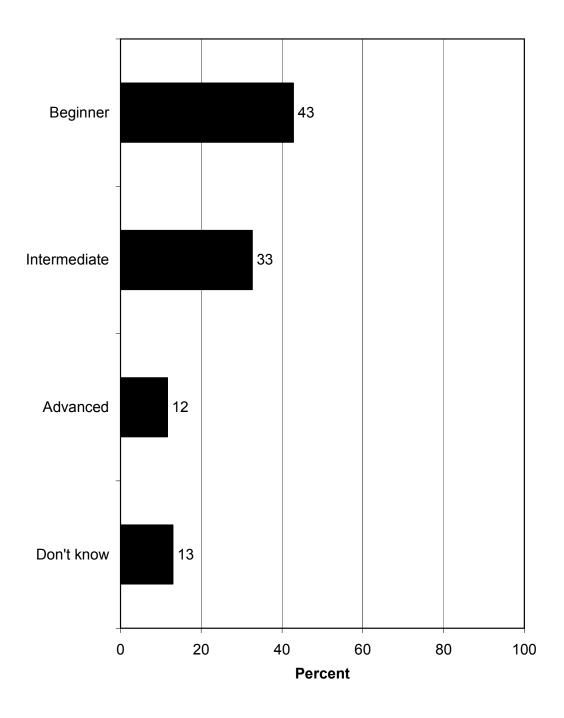
participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.

- When asked about their boating skills, 28% of students said they got a lot better after taking the course, 37% said they got a little better, and only 13% said they were not at all better.
- When asked about confidence in their boating skills, 48% of students said they were more confident after taking the course, 37% said they were about the same, and only 4% said they were less confident.

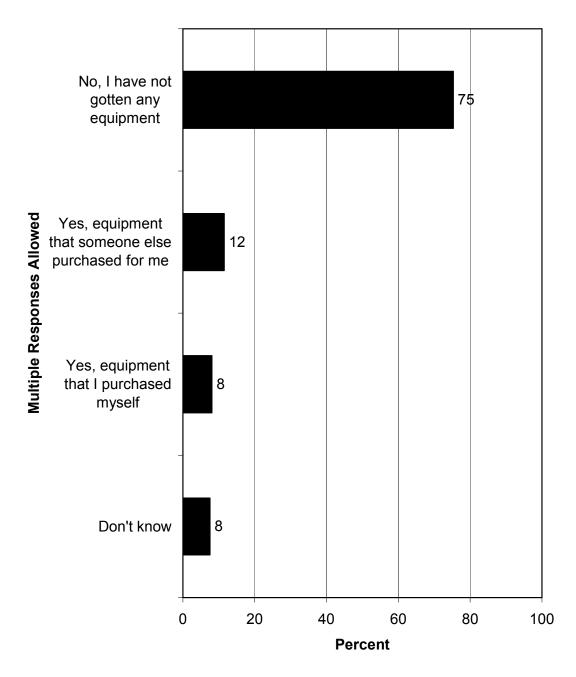
Since finishing the Outdoor Adventure Education Program, have you been...? (Asked of those who took the Boating Safety Education OAEP unit.)



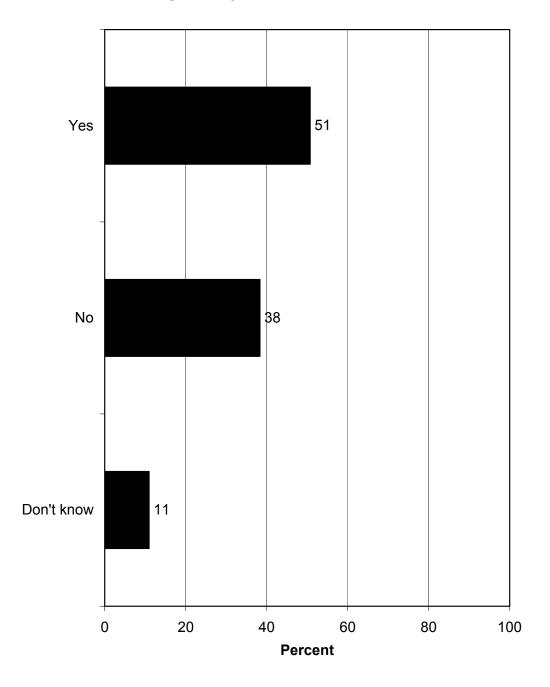
How would you rate your skill as a BOATER now? (Asked of those who took the Boating Safety Education OAEP unit.)

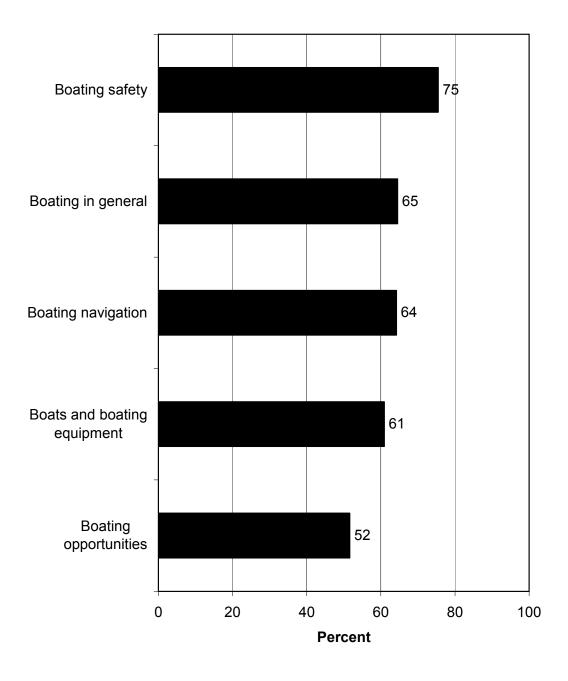


Since finishing the Outdoor Adventures Education Program, have you gotten any BOATING equipment? (Asked of those who took the Boating Safety Education OAEP unit.)

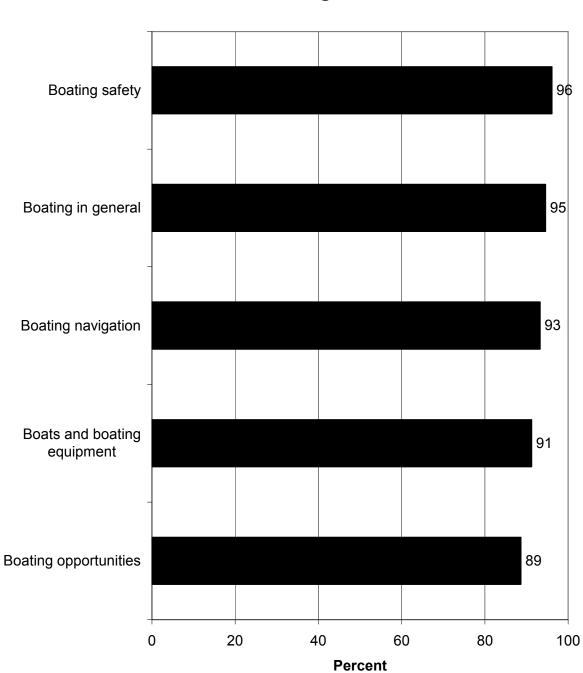


Since finishing the Outdoor Adventures Education Program, have you completed a BOATING SAFETY CERTIFICATION? (Asked of those who took the Boating Safety Education OAEP unit.)



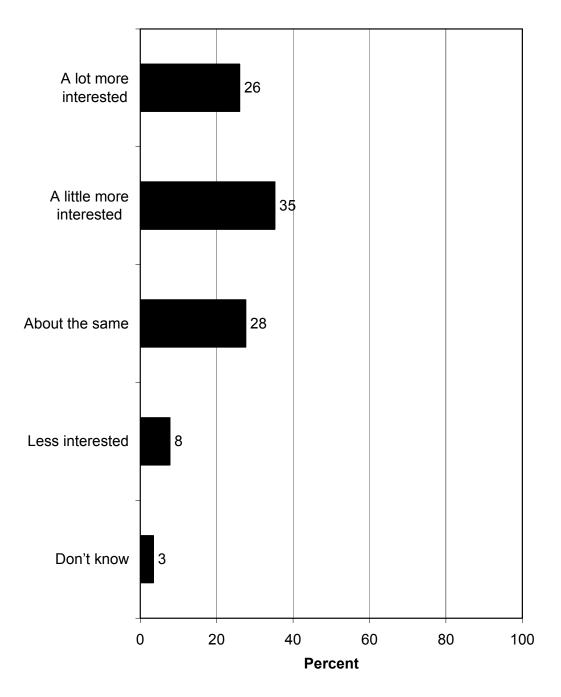


Percent who indicated that the program taught them "a lot" about each of the following:

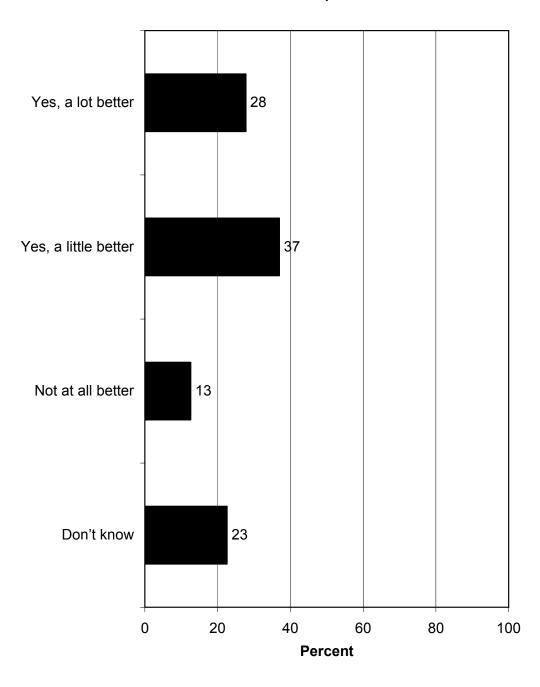


Percent who indicated that the program taught them "a lot" or "a little" about each of the following:

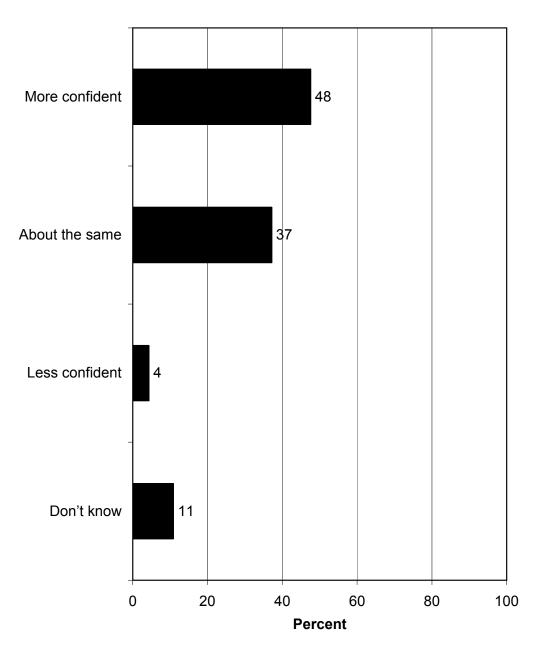
Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in BOATING? (Asked of those who took the Boating Safety Education OAEP unit.)



Did your BOATING skills get better while taking the Outdoor Adventures Education Program? (Asked of those who took the Boating Safety Education OAEP unit.)



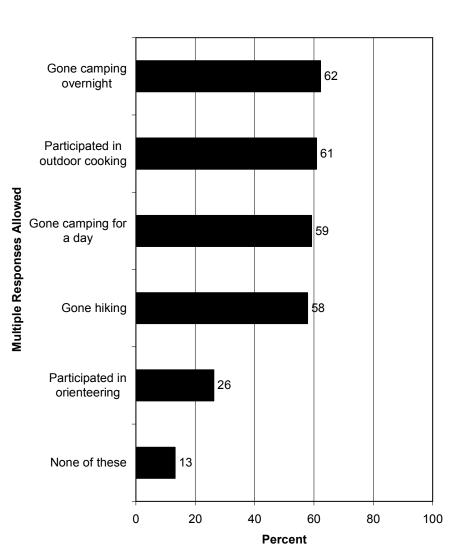
Do you feel more confident, about the same, or less confident about your BOATING skills since you finished the Outdoor Adventures Education Program? (Asked of those who took the Boating Safety Education OAEP unit.)



ASSESSING THE CAMPING, OUTDOOR COOKING, OR ORIENTEERING AND GPS UNITS

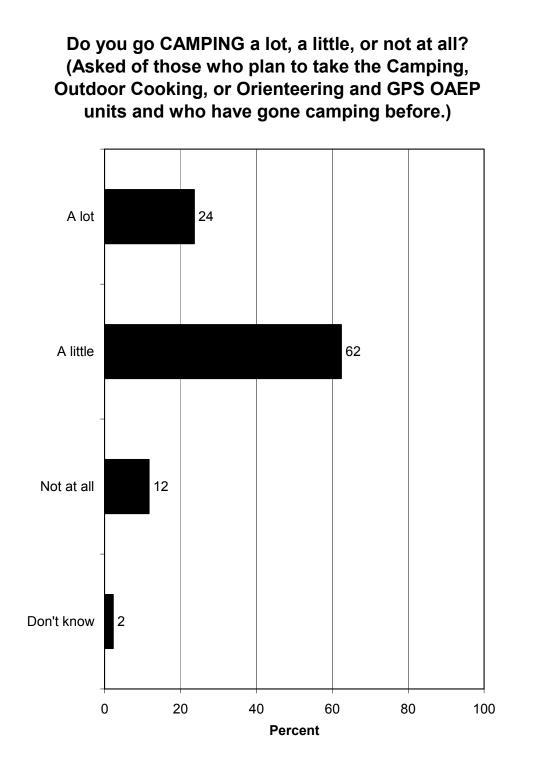
PRE-PROGRAM SURVEY

Before the program, students who indicated they planned to take the Camping, Outdoor Cooking, and/or Orienteering and GPS OAEP units (87% of the total survey population) were asked if they had prior experience with any of these outdoor activities. The results are shown in the figure below.

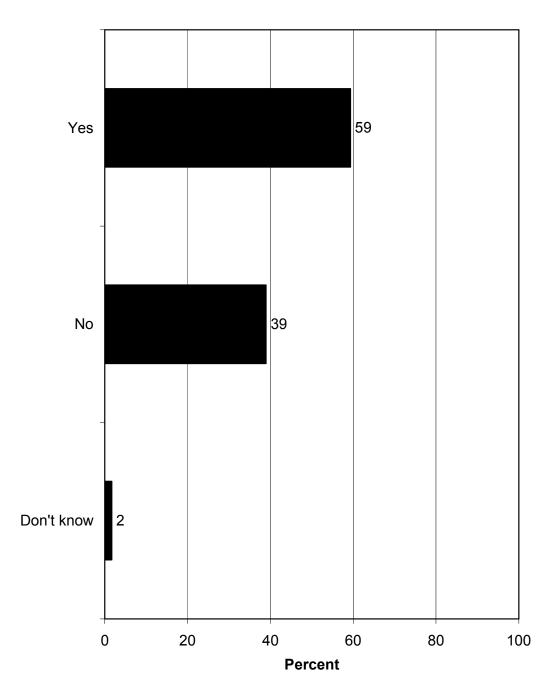


Have you ever...? (Asked of those who plan to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)

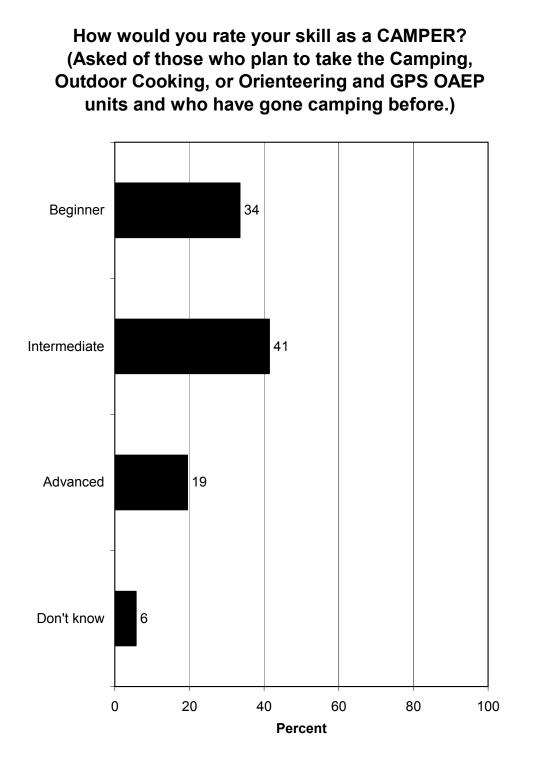
Those who have gone camping before (n=3,032) were asked about their frequency of participation. The figure below shows that 24% of respondents have gone camping a lot, 62% have gone camping a little, and 12% do not go camping at all. Of this same group, 59% have gone camping in the past year and 39% have not, as shown on the next page.



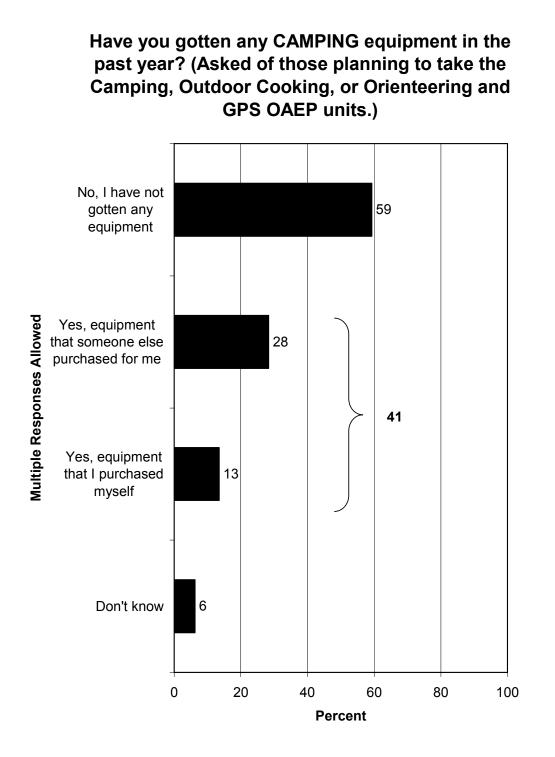
Have you gone CAMPING in the past year? (Asked of those who plan to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units and who have gone camping before.)



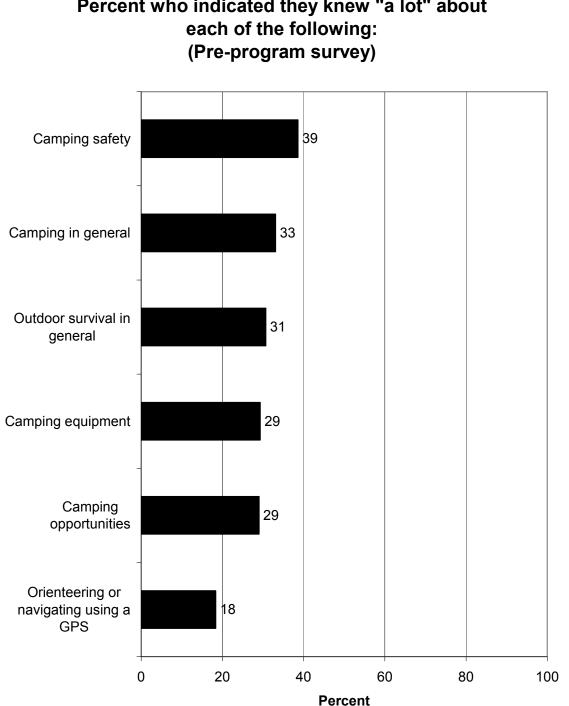
Those who have gone camping before were also asked to rate their skill level. As the figure below demonstrates, 34% considered themselves to be beginners, 41% considered themselves intermediate, and 19% considered themselves advanced, with the remaining 6% unsure of their skill level.



Regardless if they have been camping before, students planning to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units (n=4,297) were asked if they had gotten any camping equipment in the past year; a combined 41% either purchased equipment themselves or had equipment purchased for them.

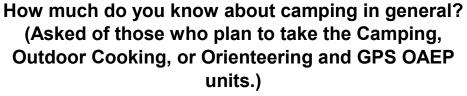


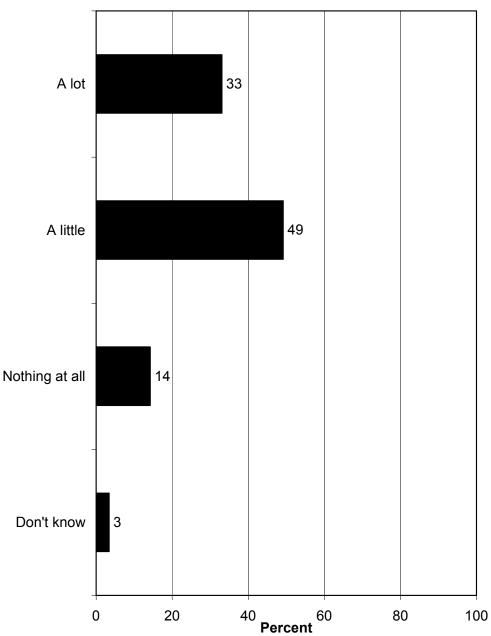
Students planning to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units were asked to rate their knowledge on a number of camping topics. The figure below shows the percentages who indicated they knew "a lot" about each of the topics. A third or more of the students knew a lot about camping safety (39%) and camping in general (33%).

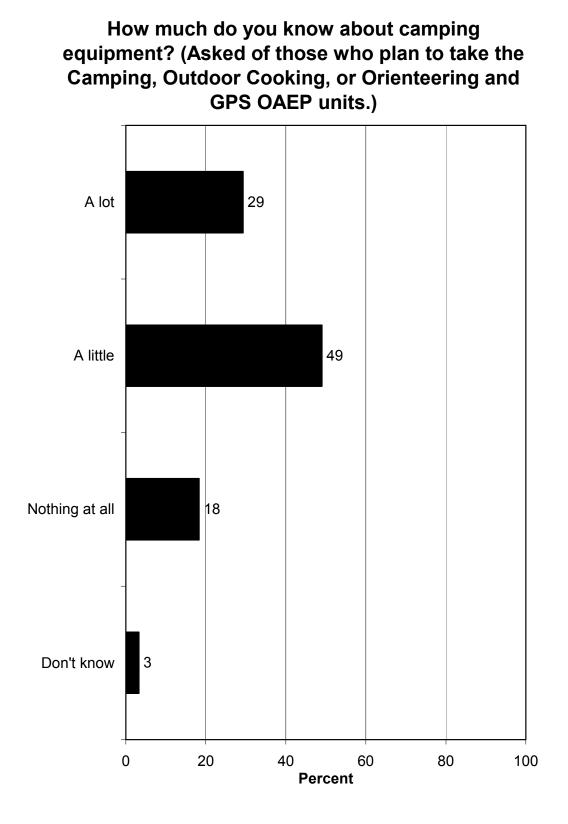


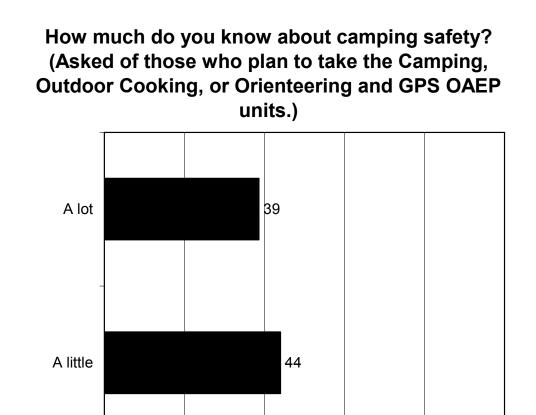
Percent who indicated they knew "a lot" about

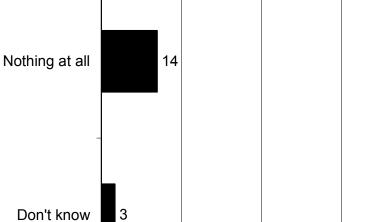
The next six charts show the results of questions related to camping knowledge, in which the students were asked to indicate if they knew a lot, a little, or nothing at all about the various camping topics prior to taking the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.



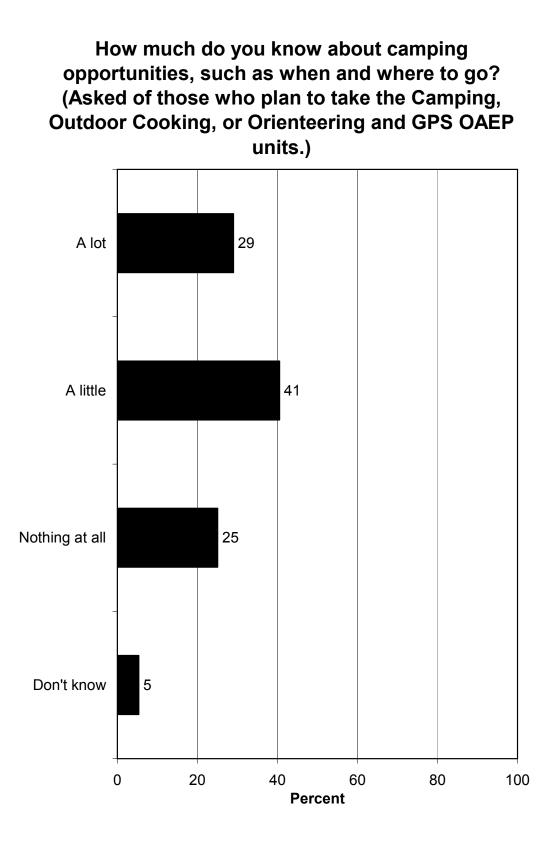




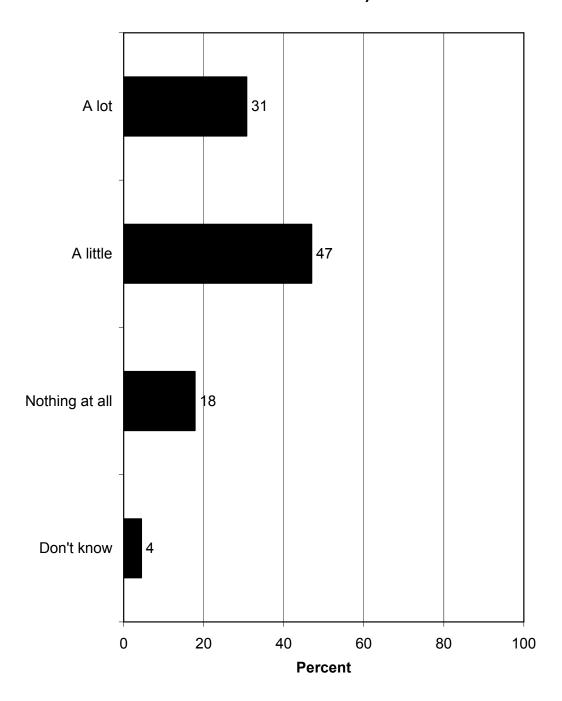




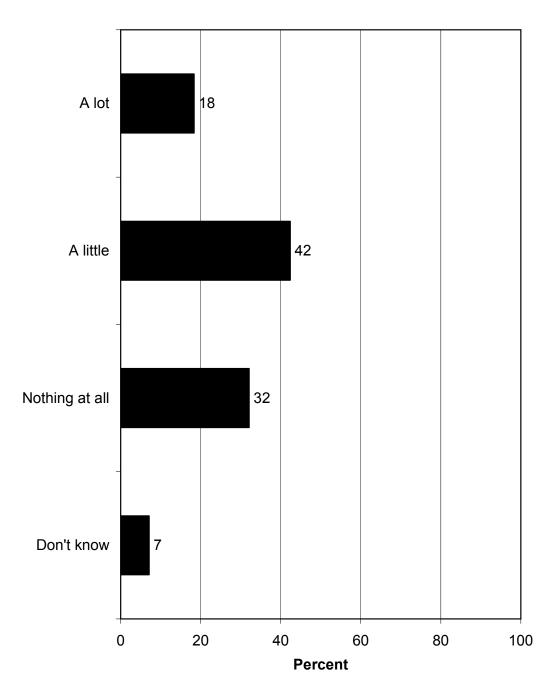
Percent



How much do you know about outdoor survival in general? (Asked of those who plan to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)



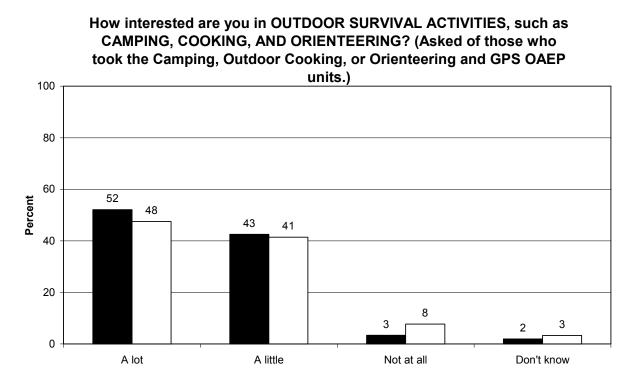
How much do you know about orienteering or navigating using a GPS? (Asked of those who plan to take the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)



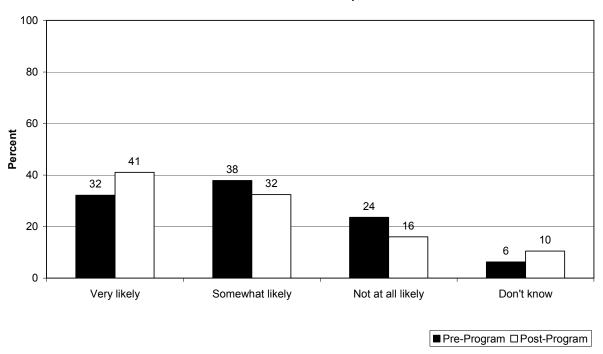
PRE- AND POST-PROGRAM COMPARISONS

In making a direct comparison between pre- and post-program survey populations (n=699), the figure below shows a slight decrease in interest following participation in the Camping, Outdoor Cooking, and Orienteering and GPS OAEP units. This contradicts the following graph, which shows a small increase in students' likelihood to go camping in the next year, not to mention the highly favorable ratings given to these units as shown later in this section.

As shown elsewhere, other OAEP units also reflect slightly negative effects when looking at one or both of these questions. This may indicate that some students liked the idea of camping or other outdoor activities in concept, but lost interest after learning about the rules, costs, or levels of effort required to participate.



■Pre-Program □Post-Program



How likely are you to go CAMPING in the next year? (Asked of those who took the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)

POST-PROGRAM SURVEY

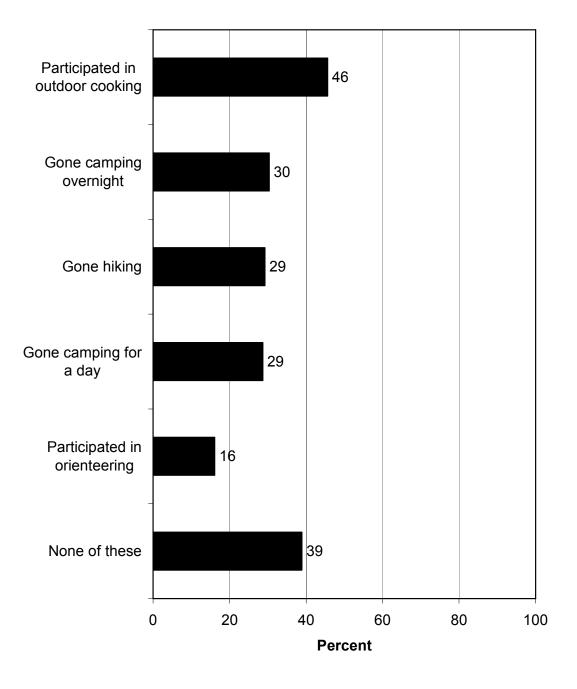
Following completion of the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units, participating students (n=1,129) were asked to evaluate the course. The feedback was very favorable, as discussed below.

- A substantial number of Camping, Outdoor Cooking, or Orienteering and GPS participants have gone camping and/or purchased camping equipment since taking these courses. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone camping, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all camping categories, ranging from 92% for outdoor survival in general to 78% for orienteering or navigating using a GPS.
- When asked about their interest in camping, 31% of students said the OAEP made them a lot more interested, 33% said it made them a little more interested, and 28% said their interest remained about the same. Only 4% said the program made them less interested; the response to this question appears to contradict the pre- and post-program comparison

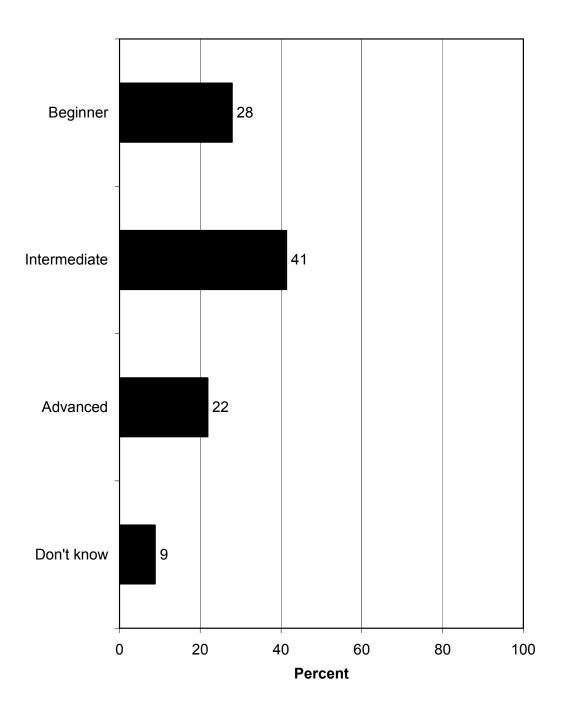
discussed earlier. It is worth noting that this response came from the 1,129 students who participated in the program, while the comparison response came from 699 students who could be matched between the pre- and post-program surveys.

- ➤ When asked about their camping skills, 32% of students said they got a lot better after taking the course, 43% said they got a little better, and only 10% said they were not at all better.
- When asked about confidence in their camping skills, 49% of students said they were more confident after taking the course, 39% said they were about the same, and only 4% said they were less confident.

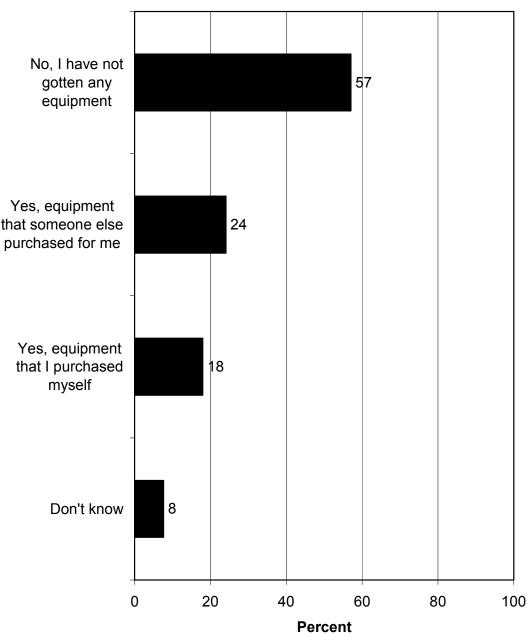
Since finishing the Outdoor Adventures Education Program, have you...? (Asked of those who took the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)

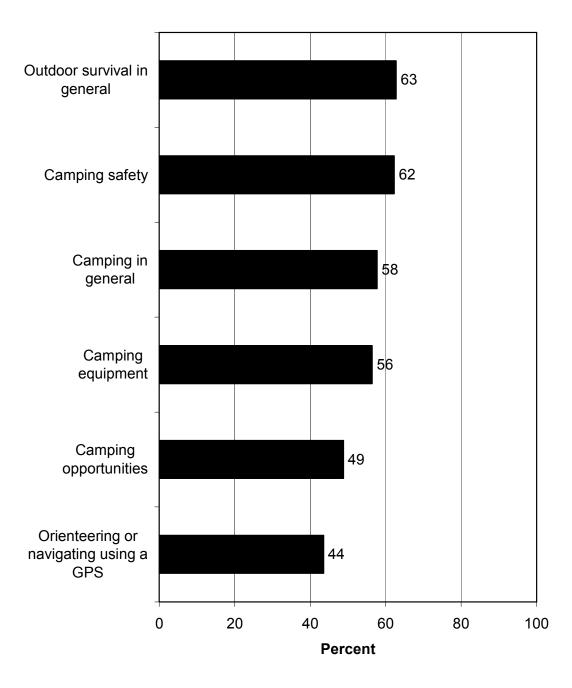


How would you rate your skill as a CAMPER now? (Asked of those who took the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)

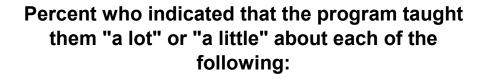


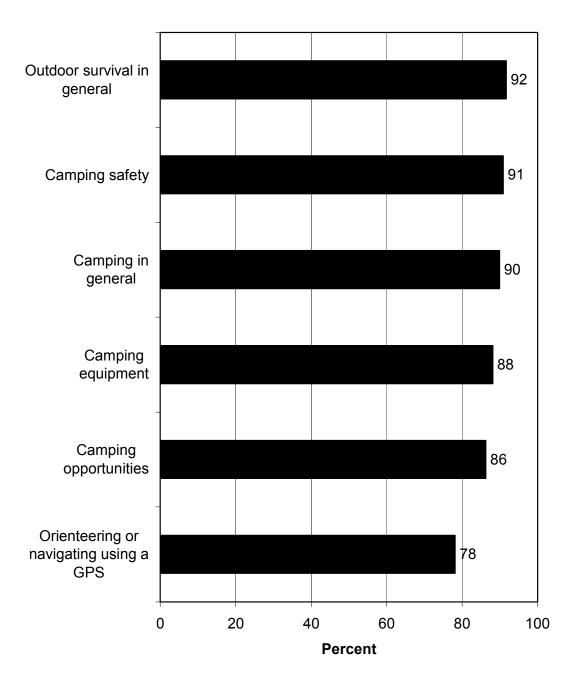
Since finishing the Outdoor Adventures Education Program, have you gotten any CAMPING equipment? (Asked of those who took the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)



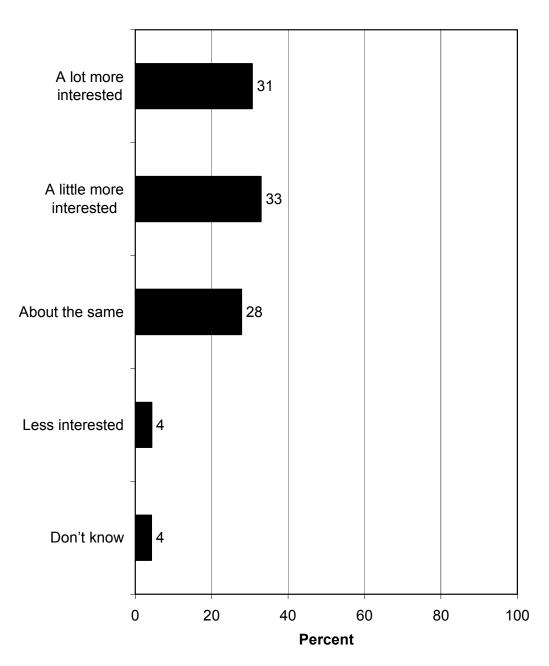


Percent who indicated that the program taught them "a lot" about each of the following:

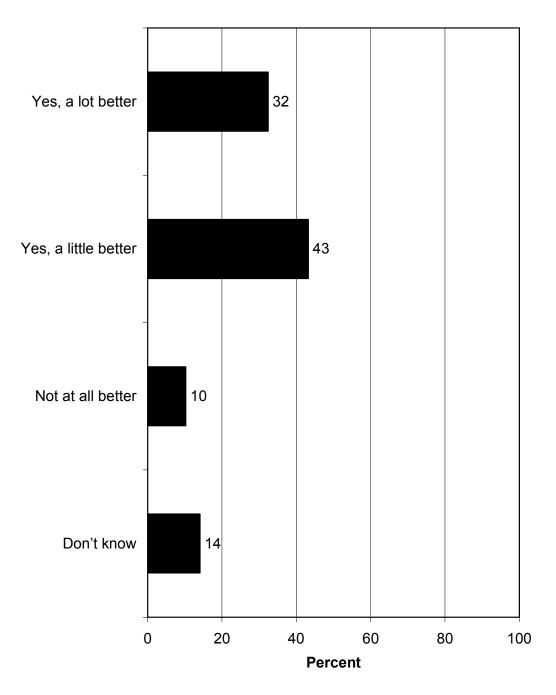




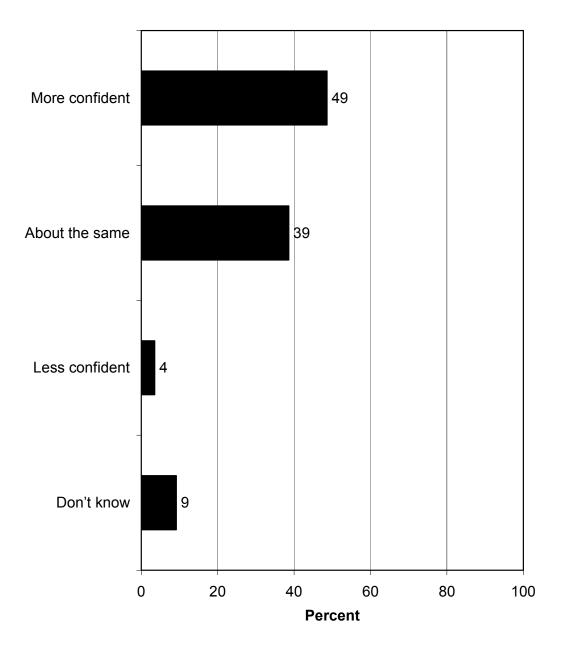
Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in CAMPING? (Asked of those who took the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)



Did your CAMPING skills get better while taking the Outdoor Adventures Education Program? (Asked of those who took the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)



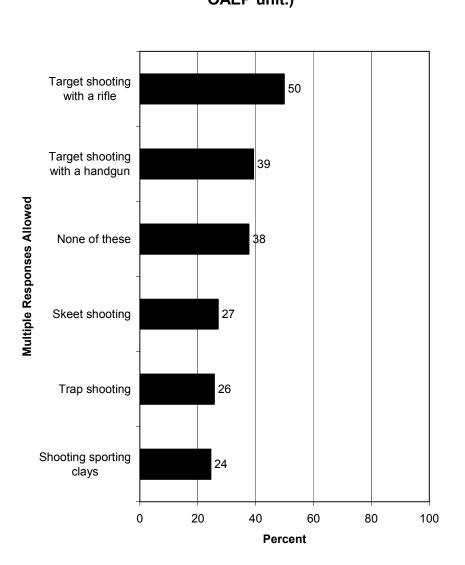
Do you feel more confident, about the same, or less confident about your CAMPING skills since you finished the Outdoor Adventures Education Program? (Asked of those who took the Camping, Outdoor Cooking, or Orienteering and GPS OAEP units.)



ASSESSING THE SPORTING CLAYS OR OTHER SPORT SHOOTING EDUCATION UNIT

PRE-PROGRAM SURVEY

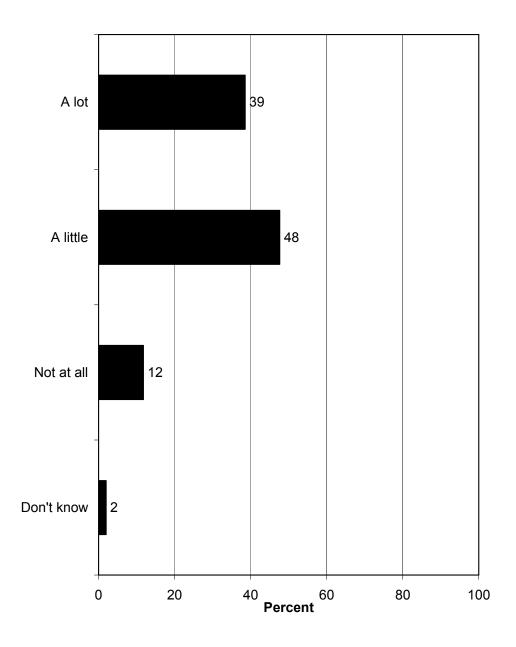
Before the program, students who indicated they planned to take the Sporting Clays or Other Sport Shooting OAEP unit (26% of the total survey population) were asked if they had prior sport shooting experience, as shown in the figure below.



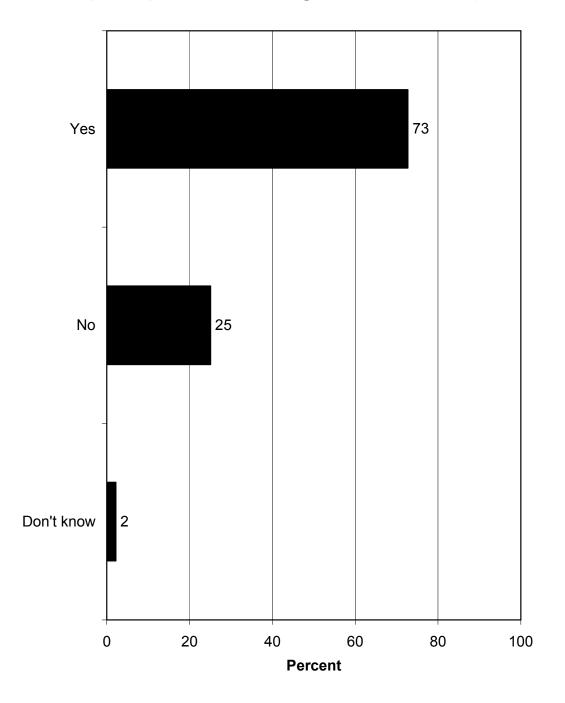
Have you ever been...? (Asked of those planning to take the Sporting Clays or Other Sport Shooting OAEP unit.)

Those who have gone sport shooting before (n=814) were asked about their frequency of participation. The figure below shows that 39% of respondents go shooting a lot, 48% go shooting a little, and 12% do not go shooting at all. Of this same group, 73% have gone shooting in the past year and 25% have not, as shown on the next page.

Do you go SHOOTING a lot, a little, or not at all? (Asked of those who plan to take the Sporting Clays or Other Sport Shooting OAEP unit and who have participated in shooting activities before.)

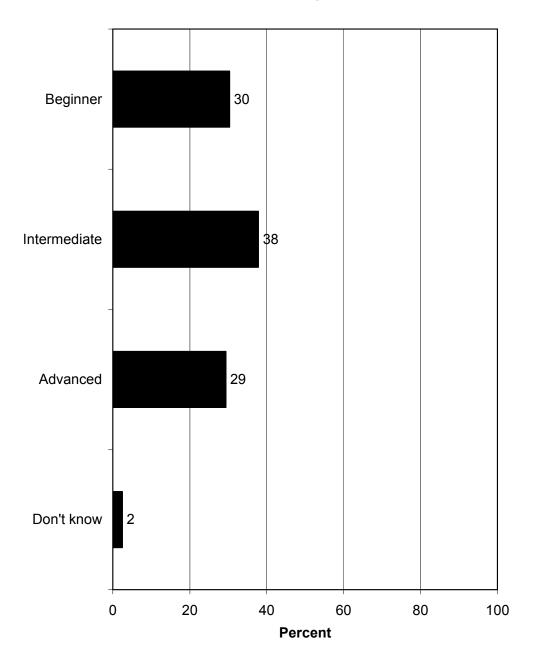


Have you gone SHOOTING in the past year? (Asked of those who plan to take the Sporting Clays or Other Sport Shooting OAEP unit and who have participated in shooting activities before.)

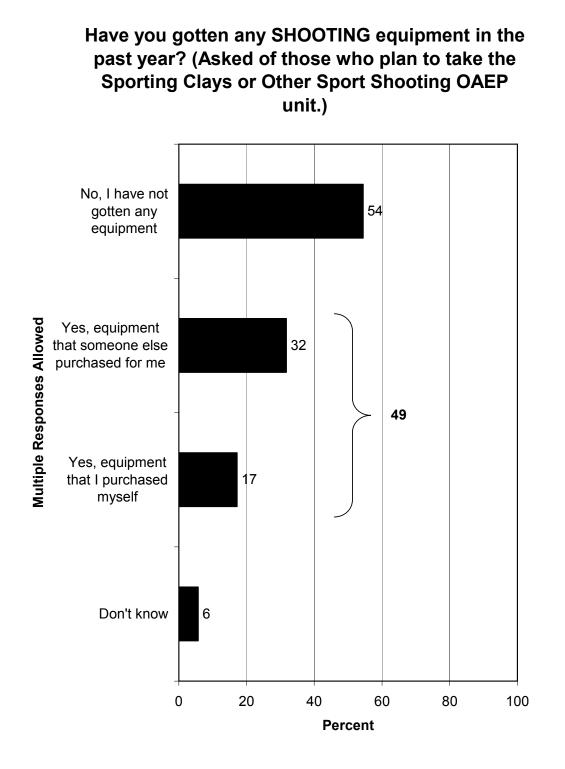


Those who have gone shooting before were also asked to rate their skill level. As the figure below demonstrates, 30% considered themselves to be beginners, 38% considered themselves intermediate, and 29% considered themselves advanced, with the remaining 2% unsure of their skill level.

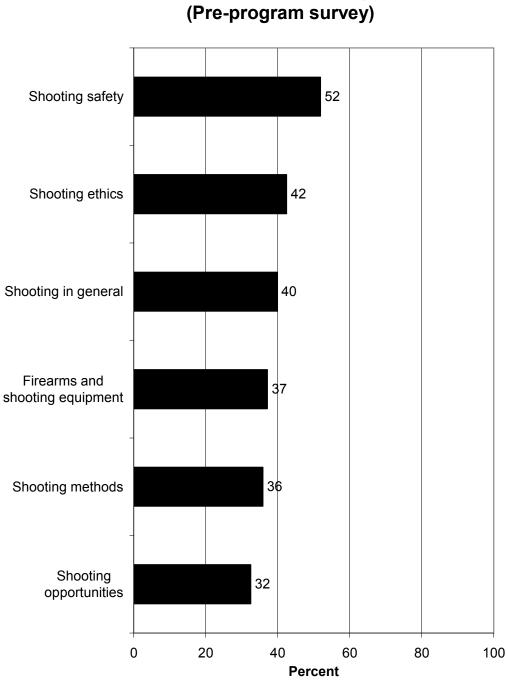
How would you rate your skill as a SHOOTER? (Asked of those who plan to take the Sporting Clays or Other Sport Shooting OAEP unit and who have participated in shooting activities before.)



Regardless if they have gone shooting before, students planning to take the Sporting Clays or Other Sport Shooting OAEP unit (n=1,291) were asked if they have gotten any shooting equipment in the past year; a combined 49% either purchased equipment themselves or had equipment purchased for them.

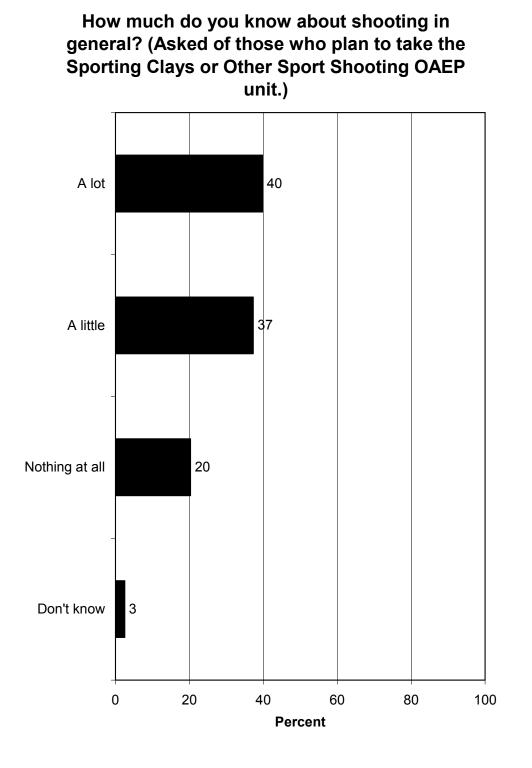


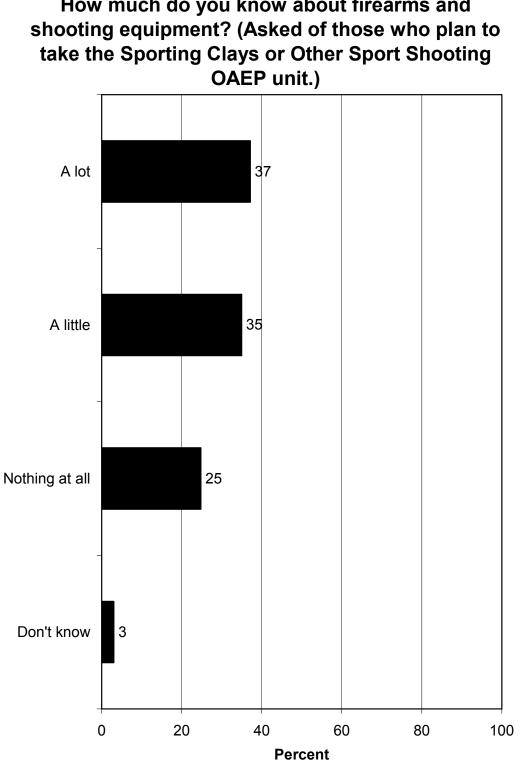
Students planning to take the Sporting Clays or Other Sport Shooting OAEP unit were asked to rate their knowledge on a number of shooting topics. The figure below shows the percentages who indicated they knew "a lot" about each of the topics. Over half of the students (52%) knew a lot about shooting safety.



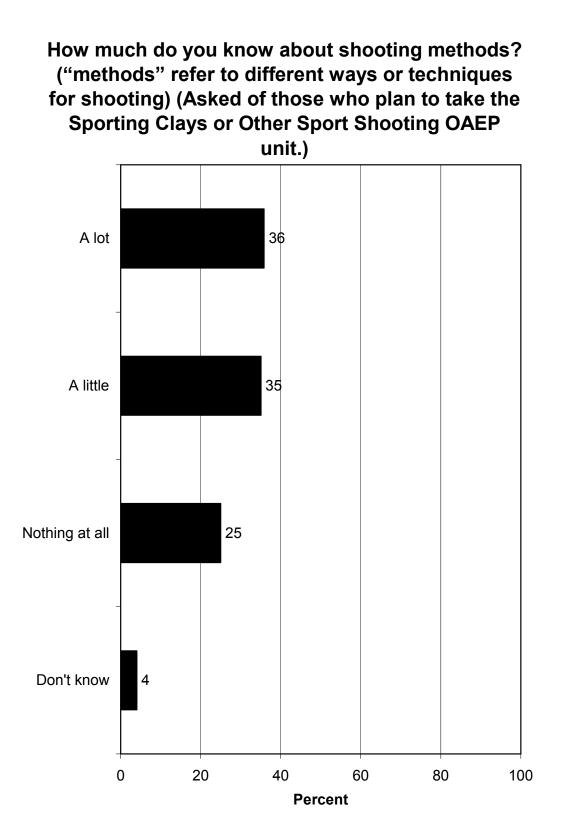
Percent who indicated they knew "a lot" about each of the following: (Pre-program survey)

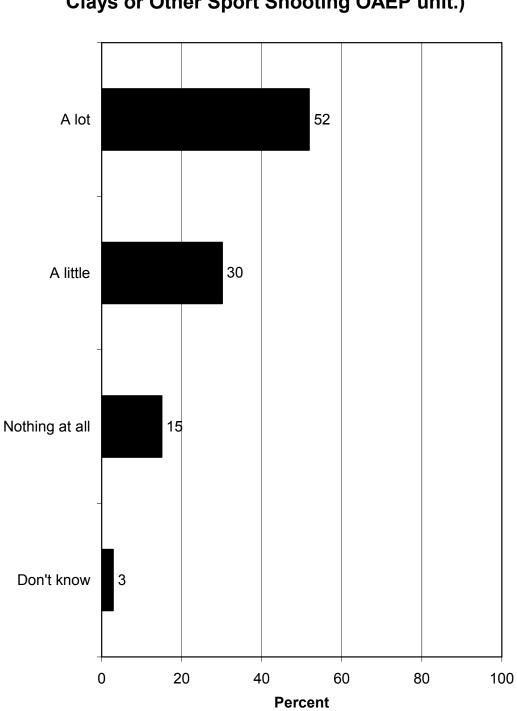
The next six charts show the results of each question related to shooting knowledge, in which the students were asked to indicate if they knew a lot, a little, or nothing at all about the various shooting topics prior to taking the Sporting Clays or Other Sport Shooting OAEP unit.



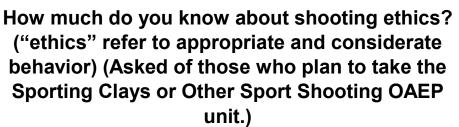


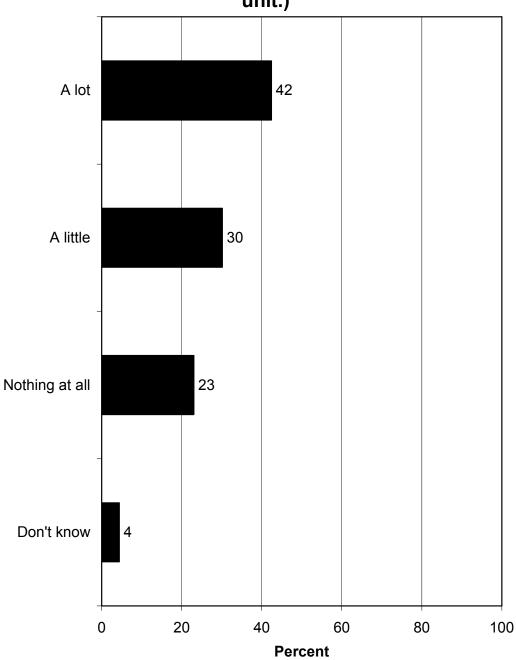
How much do you know about firearms and



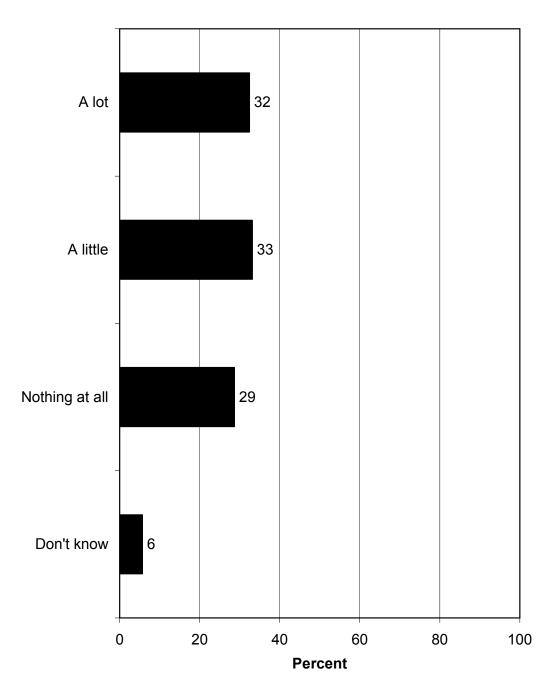


How much do you know about shooting safety? (Asked of those who plan to take the Sporting Clays or Other Sport Shooting OAEP unit.)





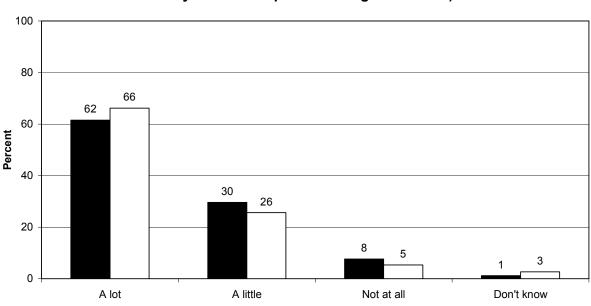
How much do you know about shooting opportunities, such as when and where to go? (Asked of those who plan to take the Sporting Clays or Other Sport Shooting OAEP unit.)



PRE- AND POST-PROGRAM COMPARISONS

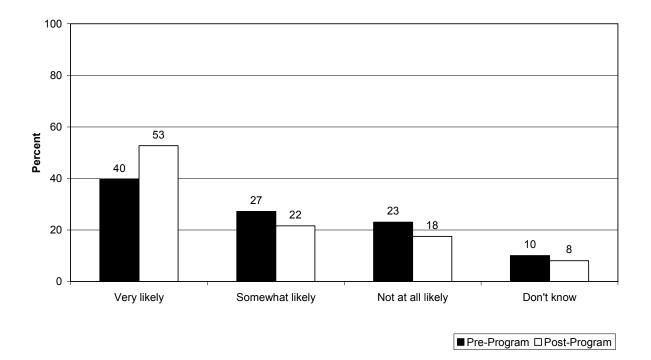
In a direct comparison between pre- and post-program survey populations, the figure below shows a minor shift from "a little" to "a lot" when students were asked about their interest in shooting. The following graph shows an increase in students' likelihood to go shooting in the next year.

This was the only OAEP unit that showed positive results on both of these comparison questions. However, it should be noted that only 11% of the post-program survey population (that is, 177 out of 1,560 students) took the Sporting Clays or Other Sport Shooting OAEP unit, compared to participation in the other units ranging from 77% for Hunter Education to 69% for Angler Education. Also, the other post-program survey questions reflected much more favorable ratings than these comparison questions for all the OAEP units.



How interested are you in SHOOTING, such as shooting at a target like a bullseye or a paper target? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)

■Pre-Program □Post-Program



How likely are you to go SHOOTING in the next year? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)

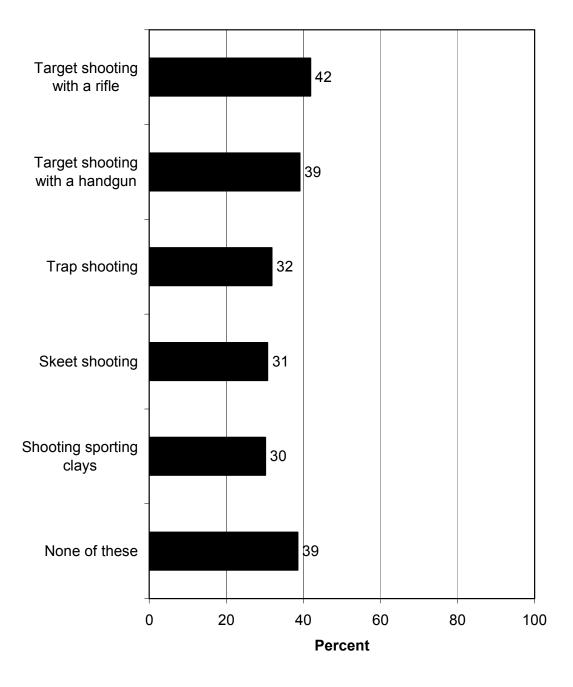
POST-PROGRAM SURVEY

Following completing of the Sporting Clays or Other Sport Shooting OAEP unit, participating students (n=177) were asked to evaluate the course. The feedback was very favorable, as discussed below.

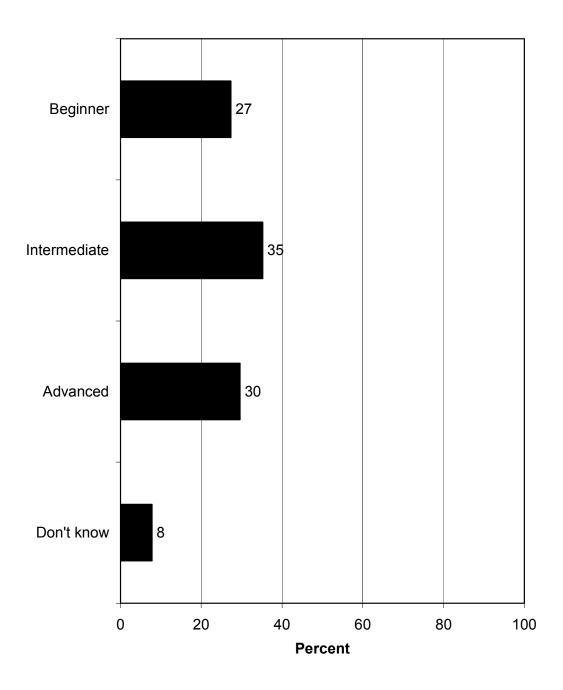
- A substantial number of participants have gone shooting and/or purchased shooting equipment since taking the course. However, it is not possible to directly measure the impact this program had on participation or purchases because of differences in the timeframe about which the surveys asked. For example, a question in the pre-program survey asked if the participant has *ever* gone shooting, whereas the post-program survey asked about participation *since finishing the program*.
- An overwhelming majority of students claimed they learned "a lot" or "a little" about all shooting categories, ranging from 93% for shooting safety to 85% for shooting opportunities.
- ➤ When asked about their interest in shooting, 47% of students said the OAEP made them a lot more interested, 28% said it made them a little more interested, and 16% said their interest remained about the same. Only 3% said the program made them less interested.

- ➤ When asked about their shooting skills, 42% of students said they got a lot better after taking the course, 31% said they got a little better, and only 13% said they were not at all better.
- When asked about confidence in their shooting skills, 49% of students said they were more confident after taking the course, 36% said they were about the same, and only 6% said they were less confident.

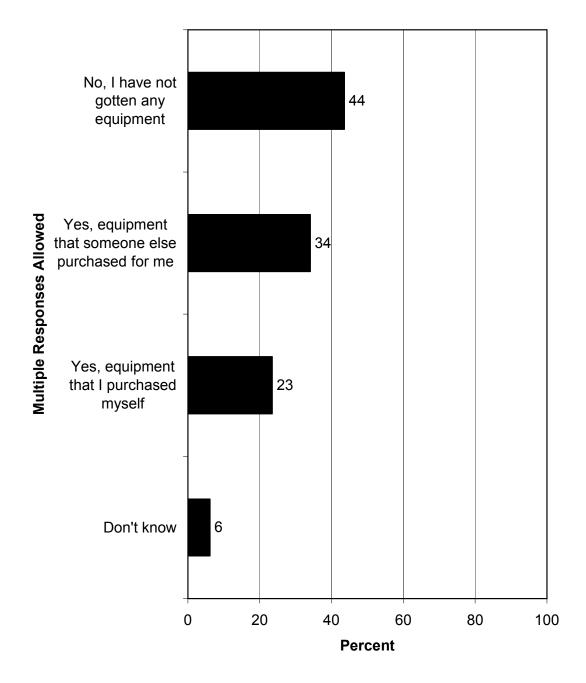
Since finishing the Outdoor Adventures Education program, have you been...? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)

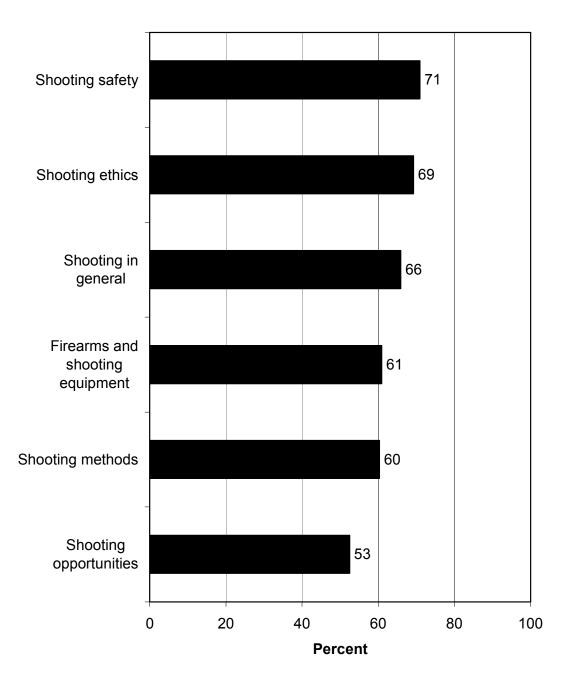


How would you rate your skill as a SHOOTER now? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)

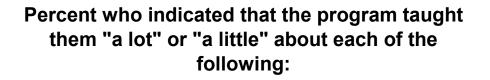


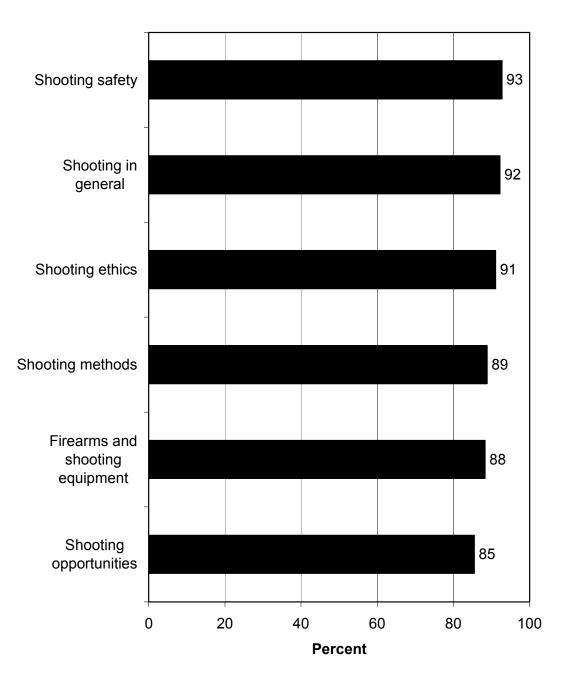
Since finishing the Outdoor Adventures Education Program, have you gotten any SHOOTING equipment? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)



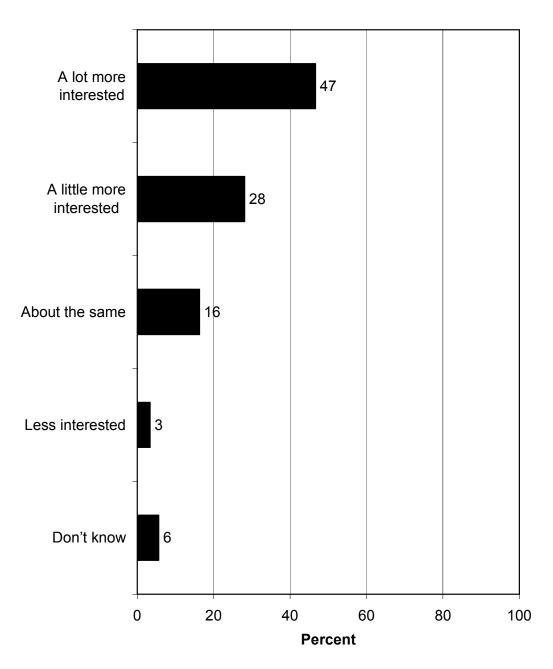


Percent who indicated that the program taught them "a lot" about each of the following:

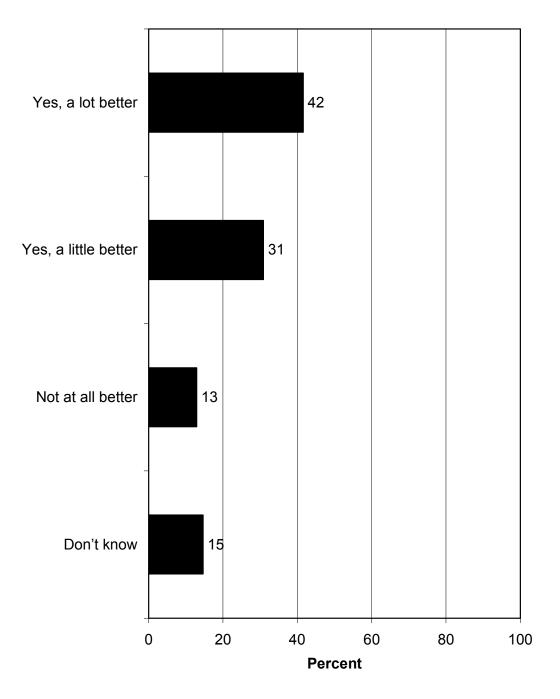




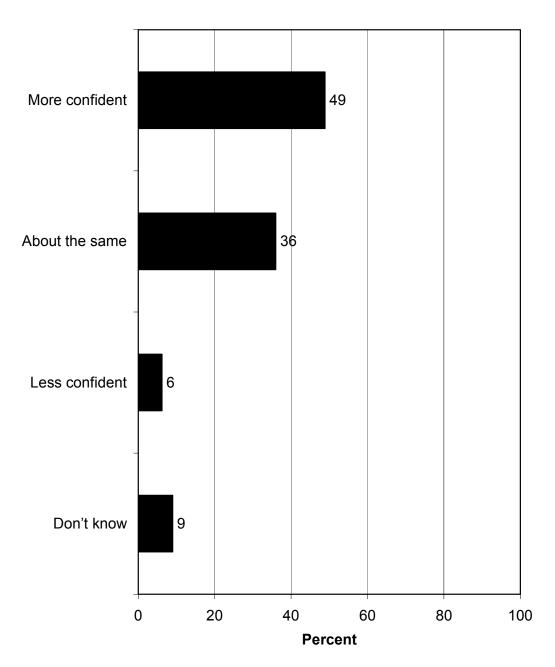
Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in SHOOTING? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)



Did your SHOOTING skills get better while taking the Outdoor Adventures Education Program? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)



Do you feel more confident, about the same, or less confident about your SHOOTING skills since you finished the Outdoor Adventures Education Program? (Asked of those who took the Sporting Clays or Other Sport Shooting OAEP unit.)

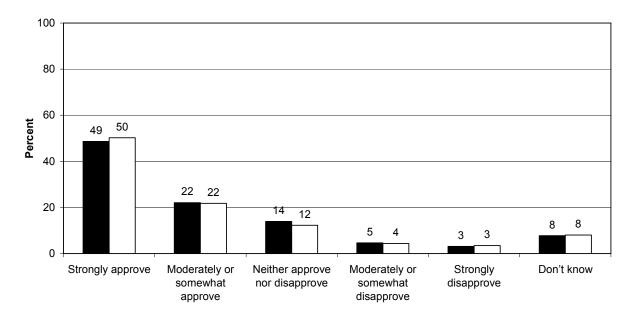


GENERAL PROGRAM FEEDBACK

ATTITUDES TOWARD HUNTING, SHOOTING, AND FISHING IN GENERAL

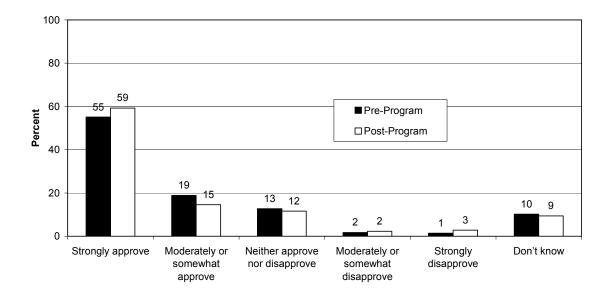
The following three charts show a pre- and post-program comparison of attitudes toward hunting, shooting, and fishing. As with the individual sporting categories, comparisons were only made when students could be matched between the pre- and post-program surveys (n=699). There was very little change in approval percentages, due to the already high approval ratings shown for each sport.

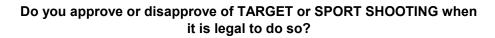
- 72% of students who participated in the OAEP either strongly or moderately approve of hunting, while only 7% strongly or moderately disapprove.
- 74% of students strongly or moderately approve of sport shooting, while only 5% strongly or moderately disapprove.
- 80% of students strongly or moderately approve of fishing, while only 5% strongly or moderately disapprove.



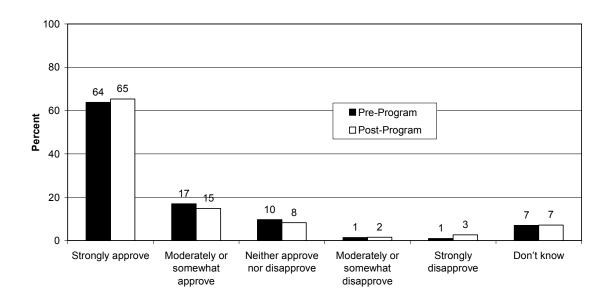
Do you approve or disapprove of HUNTING when it is legal to do so?

■Pre-Program □Post-Program





Do you approve or disapprove of FISHING when it is legal to do so?

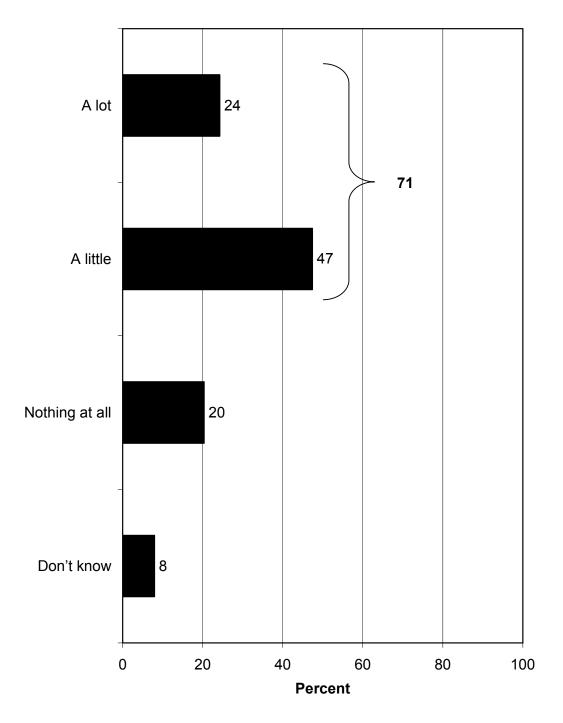


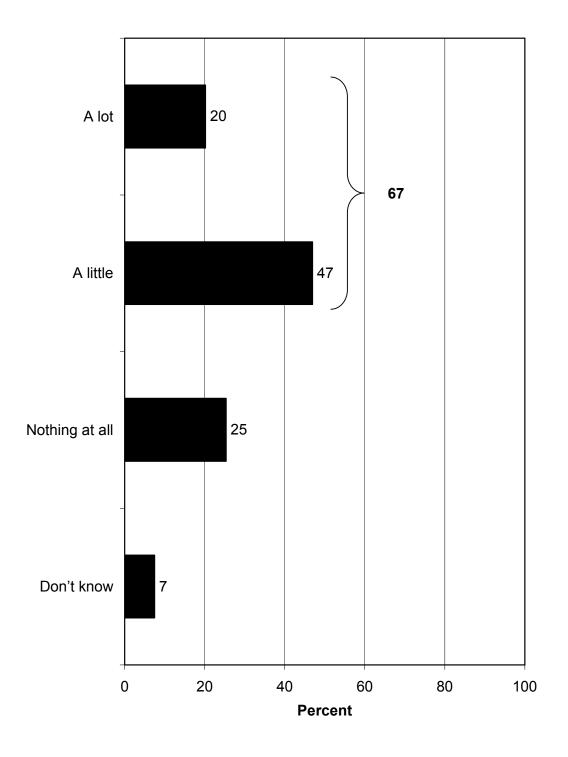
KNOWLEDGE OF STATE FISH AND WILDLIFE AGENCY

Before participating in the OAEP, all the surveyed students (n=4,957) were asked to rate their knowledge regarding conservation issues. The next four charts show these pre-program results.

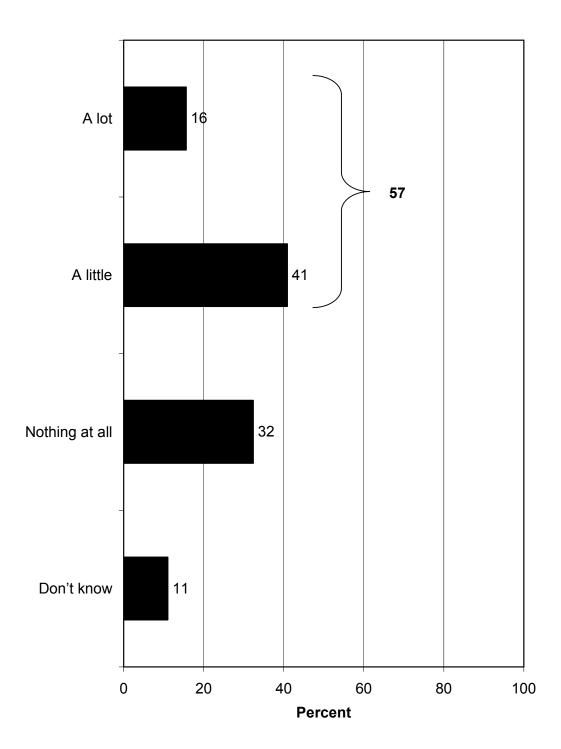
- \succ 71% of the students said they knew a lot or a little about conservation.
- ▶ 67% said they knew a lot or a little about fish and wildlife management.
- > 57% said they knew a lot or a little about outdoor or natural resource stewardship.
- 55% said they knew a lot or a little about the government agency that manages hunting, fishing, and wildlife in their state.

How much do you know about conservation? ("Conservation" means maintaining the health of the natural world, such as fisheries and habitats.)



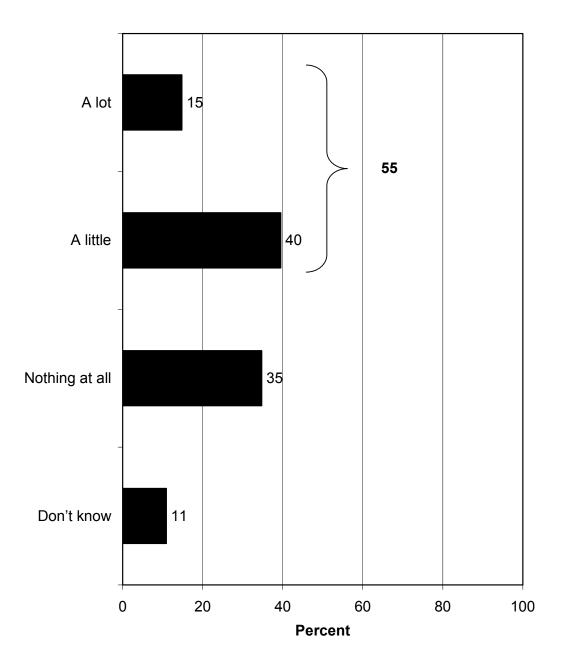


How much do you know about fish and wildlife management?

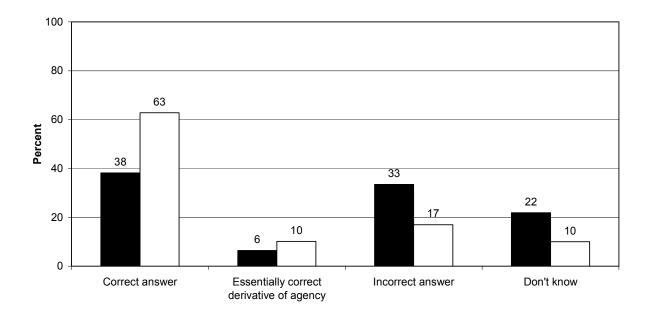


How much do you know about outdoor or natural resource stewardship?

How much do you know about the government agency or organization that manages hunting, fishing, and wildlife management in your state?



On one knowledge-related question, a direct comparison could be made with students who matched between the pre- and post-program surveys (n=699). As the figure below shows, the percentage of students who could correctly name their state wildlife agency greatly increased following participation in the OAEP. The percentage of students who could correctly identify the government agency that manages hunting, fishing, and wildlife in their state increased from 38% to 63%, and the percentage who named an essentially correct derivation of the agency increased from 6% to 10%. Likewise, the percentage of incorrect answers decreased from 33% to 17% and the percentage who did not know the answer decreased from 22% to 10%.

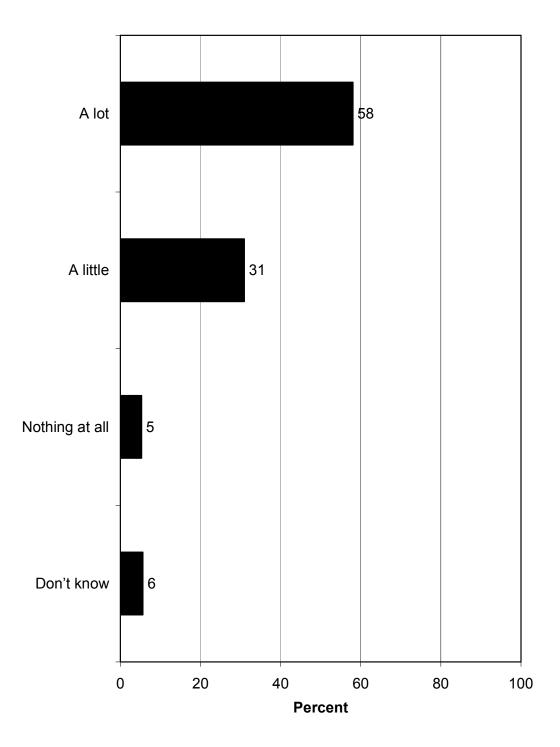


Which government agency or organization do you think manages hunting, fishing, and wildlife in your state?

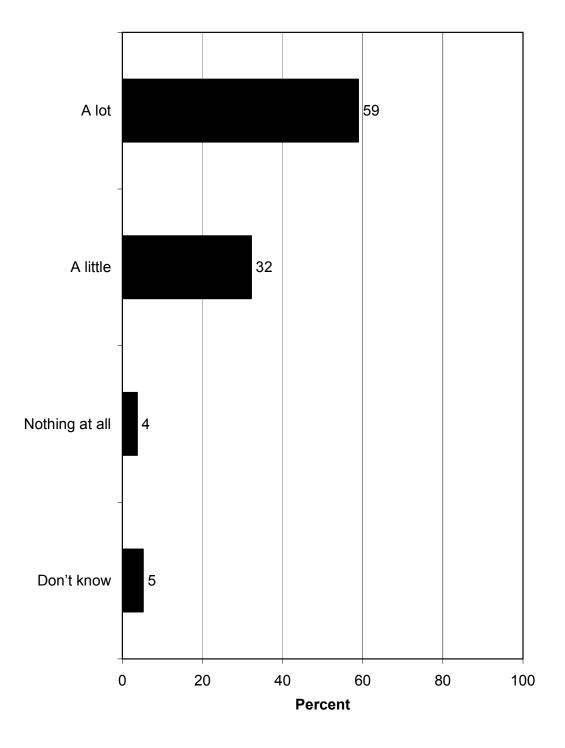
■Pre-Program □Post-Program

Following their participation in the OAEP, all the surveyed students (n=1,560) were asked to rate how much they learned about conservation issues. The next four charts show these post-program results.

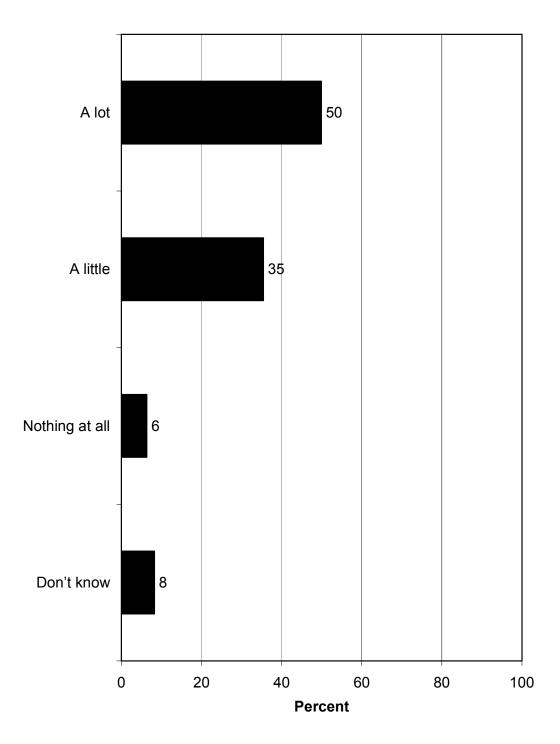
- ➤ 58% of the students said the OAEP taught them a lot about conservation and 31% said it taught them a little, while only 5% said it taught them nothing at all.
- ➢ 59% said the OAEP taught them a lot about fish and wildlife management and 32% said it taught them a little, while only 4% said it taught them nothing at all.
- ➢ 50% said the OAEP taught them a lot about outdoor or natural resource stewardship and 35% said it taught them a little, while only 6% said it taught them nothing at all.
- ➤ 52% said the OAEP taught them a lot about the government agency that manages hunting, fishing, and wildlife management in their state and 35% said it taught them a little, while only 6% said it taught them nothing at all.



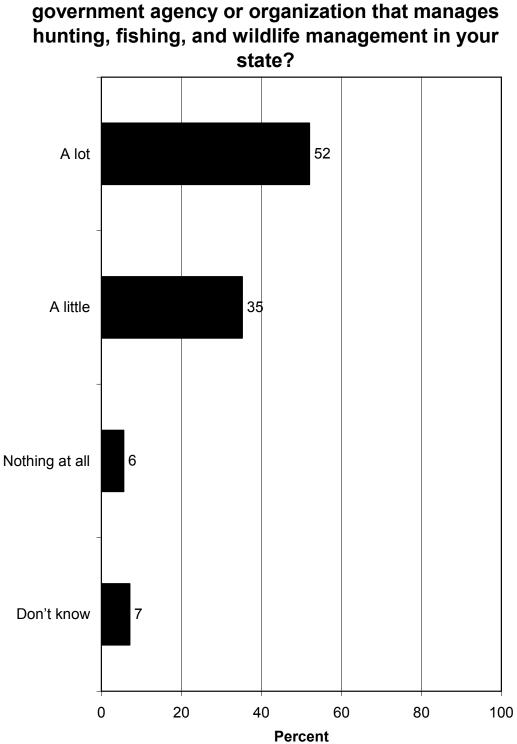
How much did the OAEP teach you about conservation?



How much did the OAEP teach you about fish and wildlife management?



How much did the OAEP teach you about outdoor or natural resource stewardship?

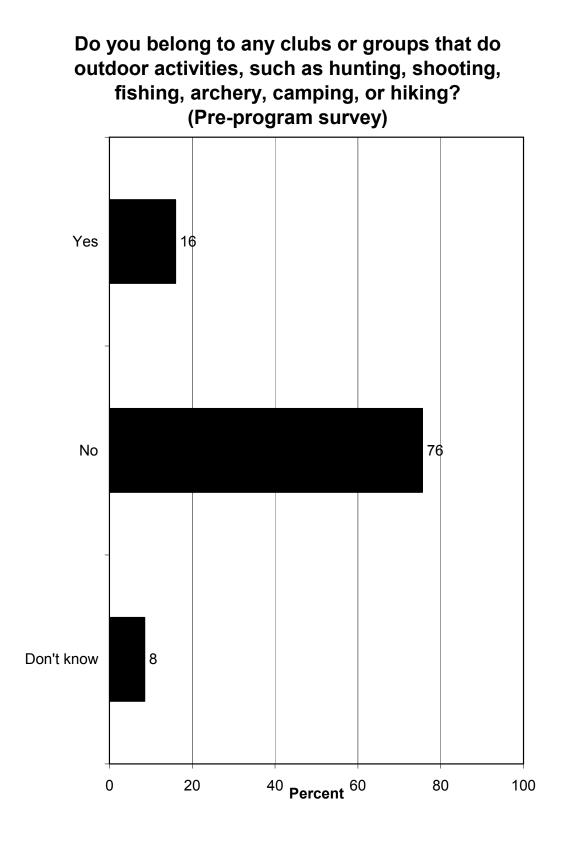


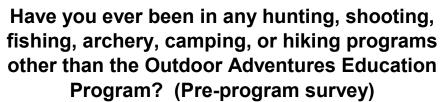
How much did the OAEP teach you about the

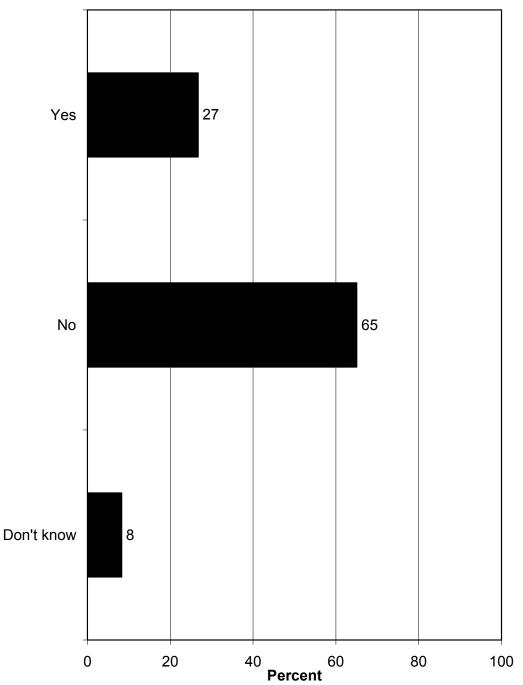
MEMBERSHIP IN OUTDOOR RECREATION CLUBS

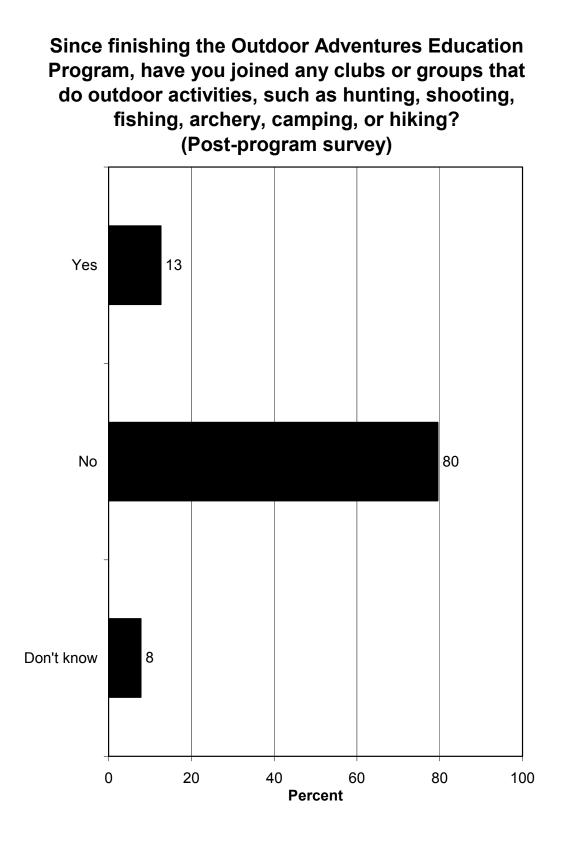
The students were asked if they belonged to any clubs that participate in outdoor activities, both prior to and since participating in the OAEP. The next three charts show the results.

- Before participating in the OAEP, 16% of the surveyed students (n=4,957) said they belonged to clubs or groups that participate in outdoor activities, such as hunting, shooting, fishing, archery, camping, or hiking, while 76% did not.
- Of the same pre-program survey, 27% of students said they have been in hunting, shooting, fishing, archery, camping, or hiking programs other than the OAEP, while 65% have not.
- After participating in the OAEP, 13% of the surveyed students (n=1,560) said they have joined a club or group that participates in outdoor recreational activities, while 80% have not.







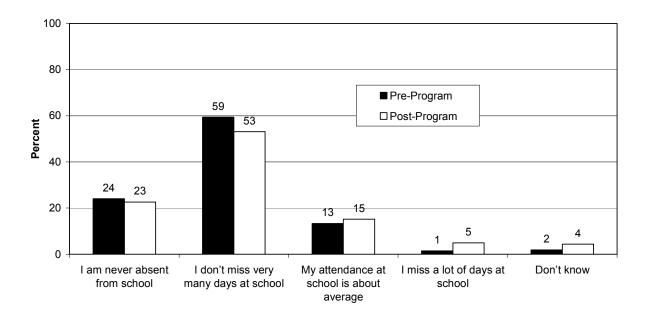


ATTITUDES TOWARD SCHOOL PERFORMANCE

Students were asked a series of questions related to school performance. Comparisons were made for the students who matched between the pre- and post-program surveys (n=699).

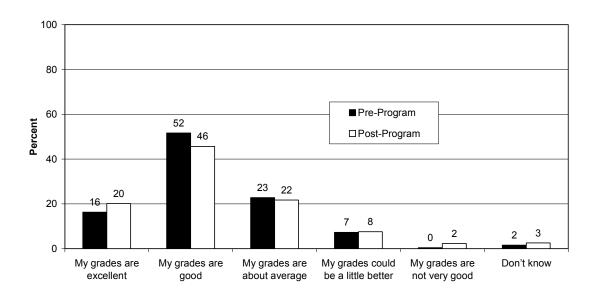
In general the following charts reflect minor positive results following the OAEP, with several responses showing a shift of about 5% from "good" to "excellent".

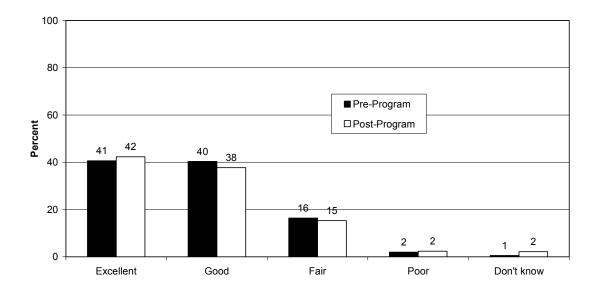
- The pre- and post-program comparison reflects a minor decrease in school attendance, with students claiming they are never absent decreasing from 24% to 23% and students claiming they don't miss very many days at school decreasing from 59% to 53%.
- When asked to describe their grades at school, students stating their grades are good decreased from 52% to 46%, but students stating their grades are excellent increased from 16% to 20%.
- The comparison showed very little change when students were asked to rate their ability to complete their school work. The response of "excellent" increased from 41% to 42% and the response of "good" decreased from 40% to 38%.
- The comparison indicated a positive influence from the OAEP (that is, a shift from "good" to "excellent") when students were asked to rate their ability to participate in sports and physical activities. The response of "good" decreased from 31% to 25% and the response of "excellent" increased from 44% to 49%.
- Likewise, the comparison reflected a shift from "good" to "excellent" when students were asked to rate their ability to develop friendships with other students. The response of "good" decreased from 36% to 30% and the response of "excellent" increased from 47% to 54%.
- The results also shifted from "good" to "excellent" when students were asked to rate their ability to maintain good relationships with their teachers. The response of "good" decreased from 38% to 32% and the response of "excellent" increased from 48% to 55%.
- The comparison reflected a similar positive influence from the OAEP when students were asked to rate their ability to stay out of trouble. The response of "good" decreased from 33% to 28% and the response of "excellent" increased from 54% to 58%.
- The survey reflected a positive shift when students were asked to rate their ability to get good grades. The response of "good" decreased from 48% to 43% and the response of "excellent" increased from 35% to 43%.
- There was little change when students were asked to rate their likelihood of going to college, although the percentages were already high. The response of "very likely" increased from 74% to 76% and the response of "somewhat likely" decreased from 20% to 16%.



How would you describe your attendance at school?

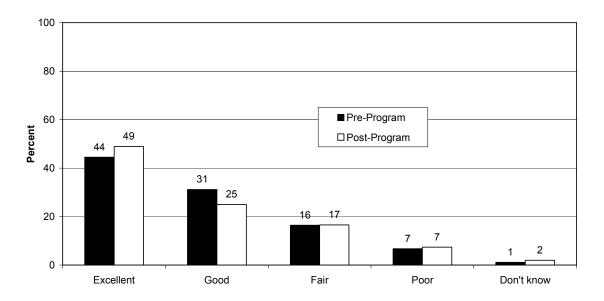
How would you describe your grades at school?

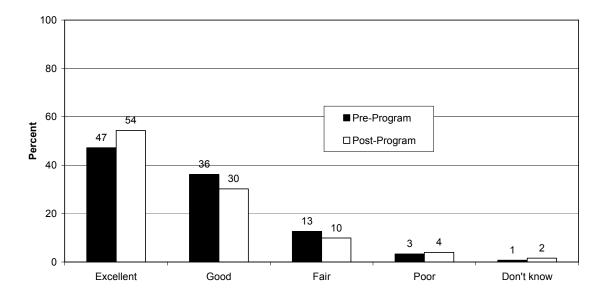




How would you rate your ability to complete your school work?

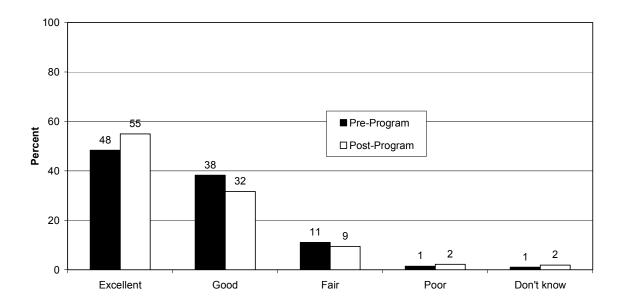
How would you rate your ability to participate in sports and physical activities?

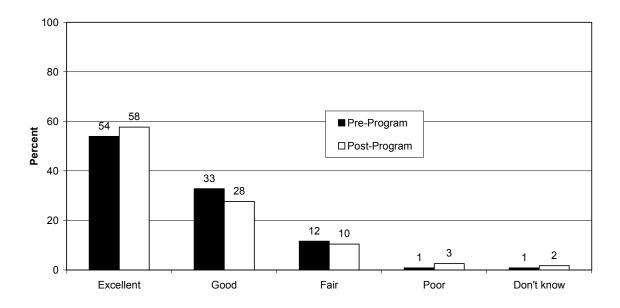




How would you rate your ability to develop friendships with other students?

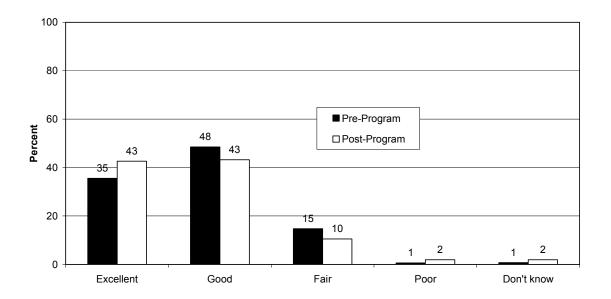
How would you rate your ability to maintain good relationships with your teachers?

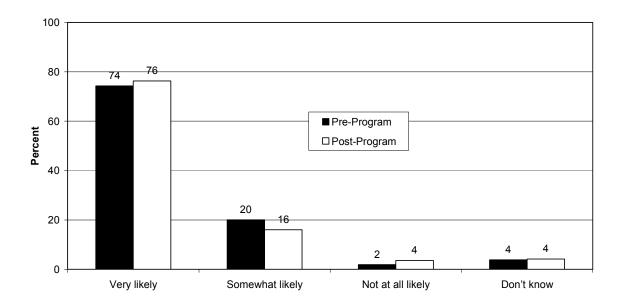




How would you rate your ability to stay out of trouble?

How would you rate your ability to get good grades?

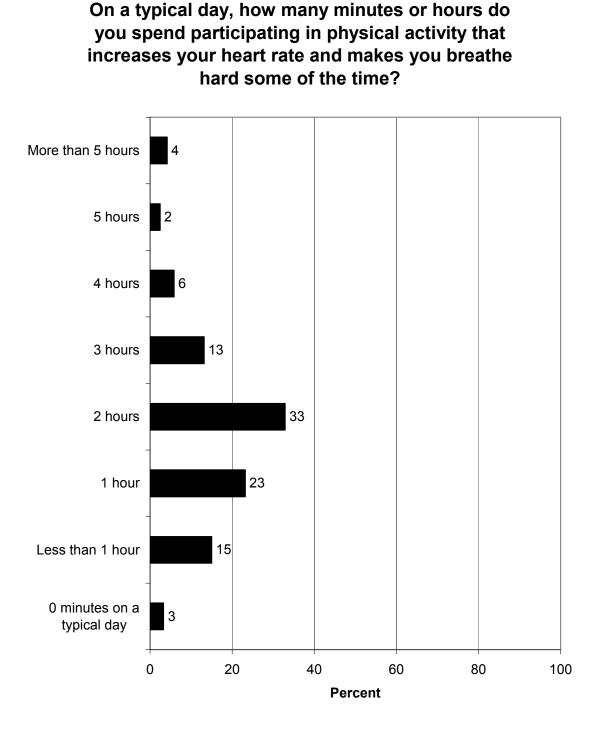


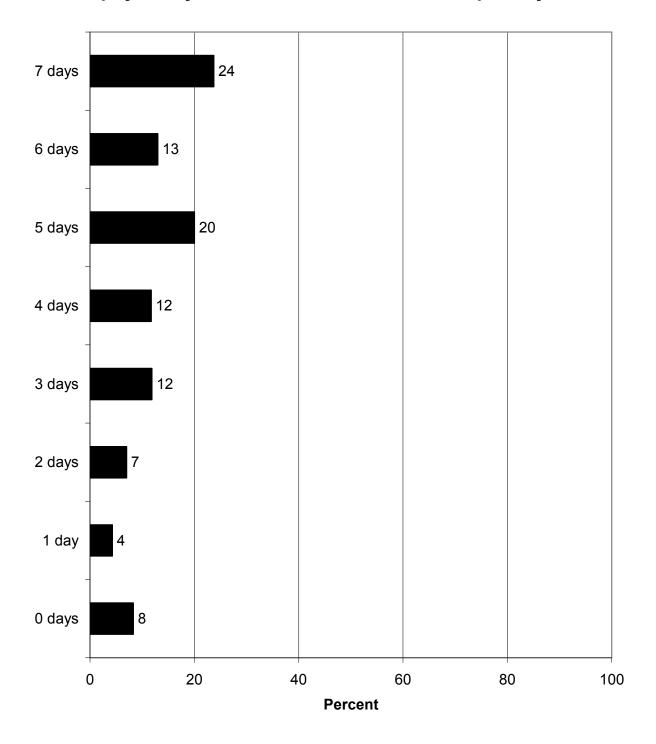


How likely do you think it is that you will go to college?

LEVELS OF PHYSICAL ACTIVITY

Students were asked to evaluate their levels of physical activity, both in minutes or hours per day and in days during the past week. There were no differences between the pre- and post-program surveys (n=699).





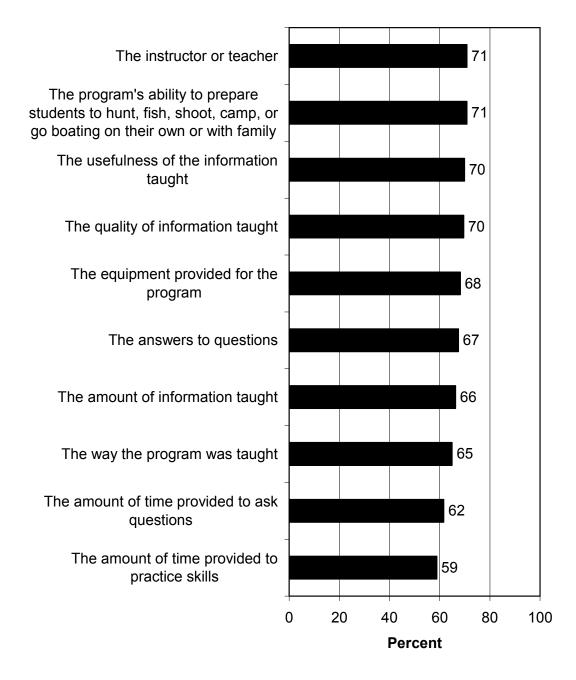
During the past 7 days, how many days were you physically active for at least 60 minutes per day?

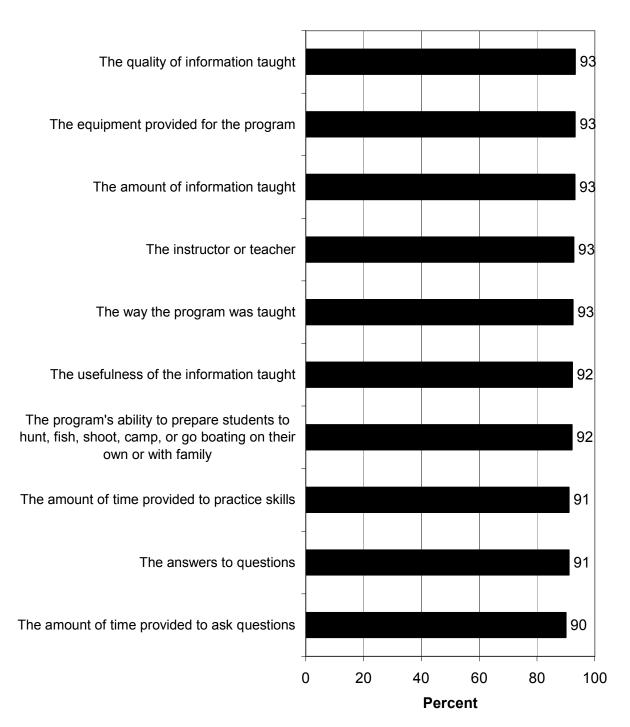
PROGRAM RATINGS

Following completion of the OAEP, participating students (n=1,560) were asked to evaluate the program as a whole by responding to questions about specific program elements.

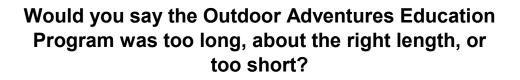
- The survey asked about 10 program elements, and students ranked all of the program elements highly. In fact, more than half of all students who participated indicated that they like each of the program elements "a lot". Some of the highest rated elements included: the teacher or instructor; the program's ability to prepare students to hunt, fish, shoot, camp, or go boating on their own or with family; the usefulness of the information taught; and the quality of the information taught.
- An overwhelming majority (more than 90% of participating students) indicated that they liked each of the 10 program elements "a lot" or "a little".
- The majority of students (65%) said that the program was just about the right length. Otherwise, students more often said the program was too short (21%).
- The majority of students (70%) said that there was about the right number of other students in the program. Otherwise, students more often said there were too many (16%).
- When asked about the level of difficulty, 79% of students indicated the level of difficulty was about right, 9% indicated the information taught was too easy, and 5% said it was too hard.
- The majority of students (68%) indicated that they had about the right amount of opportunities to practice what they were learning. Otherwise, more students said there were too few opportunities (21%) than said there were too many (4%).

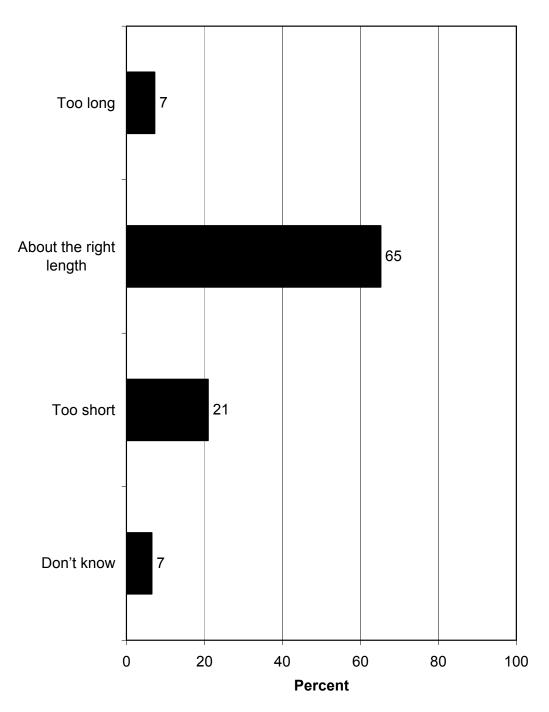




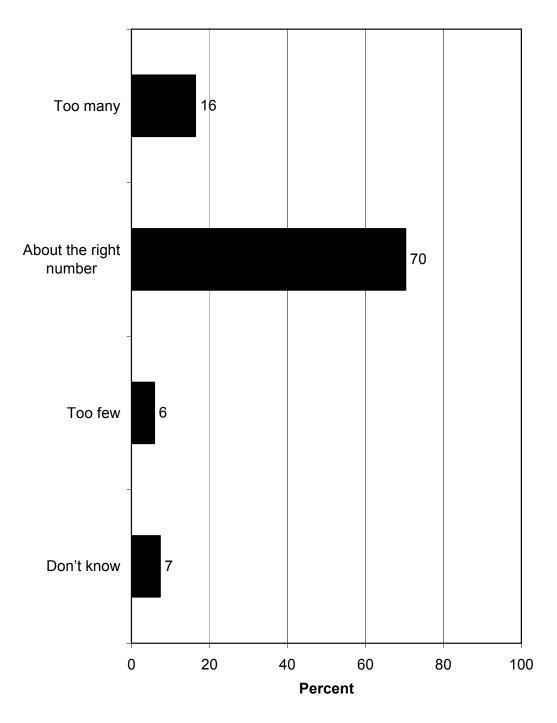


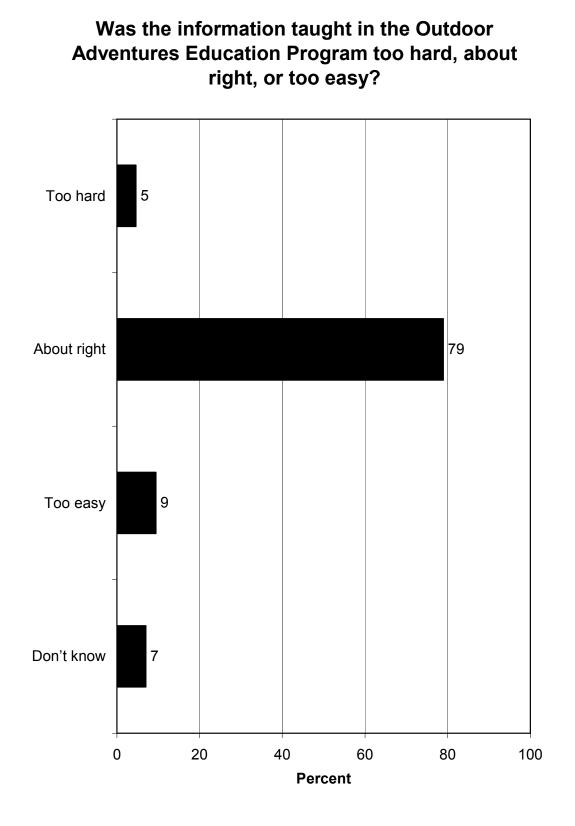
Percent who liked each of the following aspects of the program "a lot" or "a little":



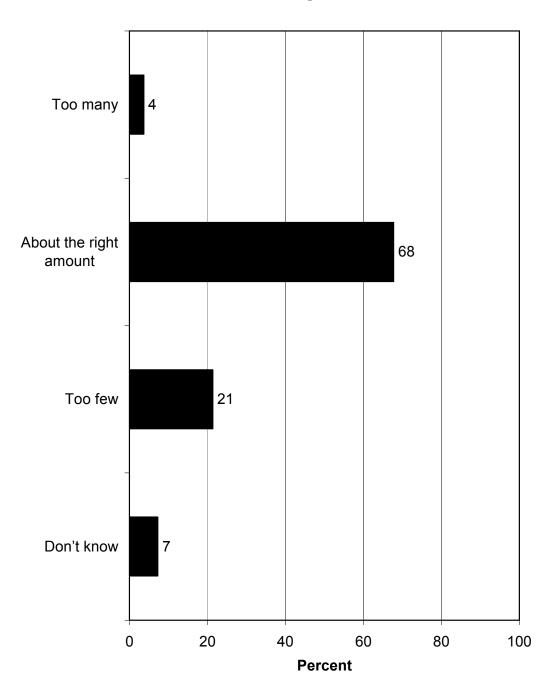


Do you think there were too many, about the right number, or too few other students in the Outdoor Adventures Education Program with you?





Did the Outdoor Adventures Education Program have too many, about the right amount, or too few opportunities or chances to practice what you were learning?



CONCLUSIONS

This report provides an assessment of the Texas Outdoor Adventures Education Program (OAEP), both for the program in general and for six specific sporting units: Hunter Education; Angler Education; Archery; Boating Safety Education; Camping, Outdoor Cooking, or Orienteering and GPS; and Sporting Clays or Other Sport Shooting.

Responsive Management coordinated with the Dallas Ecological Foundation to develop a webbased survey that was conducted in the classroom, both before and after students participated in the OAEP. The total pre-program survey size was 4,957 students and the total post-program survey size was 1,560 students. Also, it was possible to match 699 students between the pre- and post-program surveys; this population was used to make direct comparisons for certain questions.

The post-program survey (n=1,560) showed the OAEP to be highly popular. Ratings for each individual sporting unit and the OAEP in general were very high. For example, the post-program question "Did the Outdoor Adventures Education Program make you more interested, about the same, or less interested in HUNTING?" received the following responses: 32% a lot more interested, 35% a little more interested, 26% about the same, and only 4% less interested. This feedback was typical for all the sporting units. Likewise, the survey asked students to evaluate 10 overall program elements, and the students ranked all the program elements highly. A majority of students liked all program elements "a lot", and an overwhelming majority (90% or higher) liked all the program elements "a lot" or "a little". OAEP evaluations of the instructors, quality of information, program duration, classroom size, and opportunities to practice the sport, among many other program aspects, all received high ratings from the students. Also, pre- and post-program comparisons indicated a small (typically about 5%) shift from "good" to "excellent" when students were asked to rate their ability to participate in sports or physical activities, to develop friendships with other students, to maintain good relationships with their teachers, to stay out of trouble, and to get good grades.

Within each sporting unit, two questions were appropriate for a pre- and post-program comparison: "How interested are you in [sport]?" and "How likely are you to [participate in sport] in the next year?" For each sporting unit except Sport Shooting, which had a much lower participation rate, one or both of these comparisons showed a slight (typically about 5%) decrease following participation, in apparent contradiction to the highly positive ratings discussed above. This may indicate that some students lost interest after experiencing the level of effort, expense, or other factors required to participate in the given activity. Also, interest levels were very high at the outset.

Because the Hunter Education OAEP unit had the most attendance, the comparison question "How interested are you in hunting?" was evaluated more closely. Demographic breakdowns related to grade in school or type of residential area did not reveal any substantial differences, but a gender cross-tabulation showed that more females than males lost interest after participating in Hunter Education. The percentage of males who stated they were not at all interested in hunting only increased from 4% to 7%, but females giving that response increased from 16% to 27%.

Whenever possible, recruitment and retention programs should strive to include instructors that share common demographic traits with participants in the program. Research has shown that in numerous activities, participants are most comfortable learning from and emulating the actions of those they consider to be like themselves. For this assessment it is not known if the instructors were predominantly male, but the issue may be worth investigating. Programs that are able to match participant and instructor backgrounds and demographics will encourage not only feelings of trust and security but an overall sense of identification—the feeling that an activity is not dominated by a particular type of person or group, but is rather an inclusive atmosphere that provides a sense of belonging.

ABOUT RESPONSIVE MANAGEMENT

Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing our in-house, full-service telephone, mail, and web-based survey center with 50 professional interviewers, we have conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communication plans, needs assessments, and program evaluations.

Clients include the federal natural resource and land management agencies, most state fish and wildlife agencies, state departments of natural resources, environmental protection agencies, state park agencies, tourism boards, most of the major conservation and sportsmen's organizations, and numerous private businesses. Responsive Management also collects attitude and opinion data for many of the nation's top universities.

Specializing in research on public attitudes toward natural resource and outdoor recreation issues, Responsive Management has completed a wide range of projects during the past 22 years, including dozens of studies of hunters, anglers, wildlife viewers, boaters, park visitors, historic site visitors, hikers, birdwatchers, campers, and rock climbers. Responsive Management has conducted studies on endangered species; waterfowl and wetlands; and the reintroduction of large predators such as wolves, grizzly bears, and the Florida panther.

Responsive Management has assisted with research on numerous natural resource ballot initiatives and referenda and has helped agencies and organizations find alternative funding and increase their membership and donations. Additionally, Responsive Management has conducted major organizational and programmatic needs assessments to assist natural resource agencies and organizations in developing more effective programs based on a solid foundation of fact.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management has also conducted focus groups and personal interviews with residents of the African countries of Algeria, Cameroon, Mauritius, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe.

Responsive Management routinely conducts surveys in Spanish and has conducted surveys in Chinese, Korean, Japanese, and Vietnamese and has completed numerous studies with specific target audiences, including Hispanics; African-Americans; Asians; women; children; senior citizens; urban, suburban, and rural residents; large landowners; and farmers.

Responsive Management's research has been upheld in U.S. District Courts; used in peer-reviewed journals; and presented at major natural resource, fish and wildlife, and outdoor recreation conferences across the world. Company research has been featured in most of the nation's major media, including CNN, *The New York Times, The Wall Street Journal*, and on the front pages of USA

Today and *The Washington Post*. Responsive Management's research has also been highlighted in *Newsweek* magazine.

Visit the Responsive Management website at: www.responsivemanagement.com