VOYAGEUR OUTWARD BOUND SCHOOL:

2016 SUMMER SURVEY RESULTS

Prepared by:

Timothy Sheldon, PhD
Jane Fields, PhD
Julia Baker, MA
Clare Halloran, MA
Rachel Roesslein

How to Cite this Report

Contact Information

Timothy D. Sheldon
Center for Applied Research and Educational Improvement
College of Education and Human Development
University of Minnesota
1954 Buford Avenue, Suite 425
Saint Paul, MN 55108
Telephone: (612) 626-7237
Email: tsheldon@umn.edu

Introduction

Voyageur Outward Bound School ("VOBS") provides education programming to schools and groups to "help students find a resiliency and grit that can carry them through obstacles they face at home, in school or at work. We create communities built on respect, where each student is encouraged to be his or her best self and dig deep to apply their learning for personal development."[1] The University of Minnesota's Center for Applied Research and Educational Improvement (CAREI) serves as the external evaluator for VOBS programs.

Focus of the Evaluation

The purpose of this evaluation was twofold: (1) to develop an instrument that would help VOBS program staff to assess changes in participants' perceptions of themselves in the areas of emotion management, empathy, teamwork, responsibility, initiative, problem solving, persistence, and service; and (2) to analyze survey data from VOBS courses offered in spring and summer 2016.

Methods

Instrument Development

Historically, VOBS has used the Outward Bound Outcomes Instrument (OBOI) to examine the impact of their courses.[2] The OBOI was designed, in part, to measure the outcomes common to all Outward Bound courses: character, leadership, and service. Recently, however, VOBS participated in the Social and Emotional Learning (SEL) Challenge, which was a partnership between the Susan Crown Exchange, eight out-of-school time programs, the David P. Weikart Center for Youth Program Quality (CYPQ), and other researchers and consultants (Smith, McGovern, Peck, Larson, Hillaker, & Roy, 2016, p. 2).[3] "The partnership was created for two purposes: (1) identify promising practices for building social and emotional learning (SEL) skills with vulnerable adolescents, and (2) develop technical supports for use of these SEL practices at scale in several thousand OST settings" (Smith et al., 2016, p. 2). The SEL Challenge identified six areas for SEL skill growth: emotion management, empathy, teamwork, responsibility, initiative, and problem solving.[4]

Because of their work with the SEL Challenge, VOBS asked CAREI to design a new survey instrument that would assess changes in participants' perceptions in the six areas identified by the Challenge. Two additional factors were included that correspond to key elements in VOBS programming: persistence and service. CAREI examined the literature to better understand how these eight areas have been defined and measured. This work resulted in the development of the 37-item, retrospective pre/post *Changes in Social and Emotional Learning (CHiSEL) Survey*.[5] Using a scale of *Never, Almost Never, Sometimes, Almost Always,* and *Always*, survey participants read each of the 37 statements and then think about how they were before and after the trip with respect to the statement (See Appendix A for a copy of the CHiSEL Survey). Eight SEL factors are included in the CHiSEL Survey:

- emotion management
- responsibility
- empathy
- Initiative

- problem solving
- teamwork
- persistence
- service

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[1] This information is taken directly from the VOBS web site: http://www.vobstwincities.org/.
[2] For more information, see: http://www.outwardboundcalifornia.org/about/impact/.
[3] Smith, C., McGovern, G., Peck, S.C., Larson, R., Hillaker, B., & Roy, L. (2016). *Preparing Youth to Thrive: Methodology and Findings from the Social and Emotional Learning Challenge.* Forum for Youth Investment, Washington, D.C.
[4] For more information, see: http://cypq.org/SELChallenge.
[5] A retrospective pre–post survey allows evaluators to collect information about how a participant felt before the program ("retrospective pre") and after ("post") the program in a single data collection event.

Table 1 shows the items used to measure each of the eight SEL factors. For example, in order to determine the average rating by respondents in the pre-condition (i.e., how often they said they acted in a specific way before the course) for the factor emotion management, the ratings for Items Q1-Q6 are summed and then the average is taken. The same procedure would then be used to determine the average rating in the post-condition for the emotion management factor. Of interest is the mean difference or change from the pre-condition to the post-condition; this is determined by subtracting the pre-condition mean from the post-condition mean. These same analytic procedures would then be used for Items Q7-Q10 to measure how respondents rate themselves on responsibility; for Items Q11-Q15 to measure how respondents rate themselves on empathy, and so on.

Table 1. Eight Social and Emotional Learning Factors in the CHiSEL Survey

Item	SEL Factor
Q1. I am able to wait my turn, even when I am excited about something.	Emotion Management
Q2. I can control my behavior when I am frustrated or mad.	Emotion Management
Q3. I know what to do to calm myself down when I am stressed.	Emotion Management
Q4. I can identify my emotions.	Emotion Management
Q5. I think before I act.	Emotion Management
Q6. I am able to adapt when things change.	Emotion Management
Q7. I know my actions have consequences.	Responsibility
Q8. I come prepared for activities.	Responsibility
Q9. People can depend on me.	Responsibility
Q10. I take responsibility for my actions.	Responsibility
Q11. I am able to think about how another person feels.	Empathy
Q12. I know how my behavior affects others.	Empathy
Q13. I treat others with respect.	Empathy
Q14. I am aware of my own strengths.	Empathy
Q15. I don't do something that I feel is wrong just because others are doing it.	Empathy
Q16. I can set realistic goals for myself.	Initiative
Q17. I seek out guidance from others when I need it.	Initiative
Q18. I willingly share my opinions.	Initiative
Q19. When I see something that needs to be done, I do it without being asked.	Initiative
Q20. I try challenging things.	Initiative
Q21. If I decide to learn something, I can do it.	Initiative
Q22. I am able to overcome barriers to complete a task.	Problem Solving
Q23. I can take steps to solve a problem.	Problem Solving
Q24. I approach problem solving with an open mind.	Problem Solving
Q25. I can work with different types of people.	Teamwork
Q26. I can put my own needs aside to help the group meet its goal.	Teamwork
Q27. I can work with others to accomplish a task.	Teamwork
Q28. I am able to resolve disagreements positively.	Teamwork
Q29. I can identify other peoples' strengths.	Teamwork
Q30. When I am working in a group, I make sure to do my part.	Teamwork
Q31. Even when something is hard, I follow through to finish it.	Persistence (shorter-term)
Q32. I am proud of my schoolwork.	Persistence (shorter-term)
Q33. I have learned things I can do to take care of the environment.	Service
Q34. I think I have a role to play in protecting nature.	Service
Q35. I now see connections between the environment and my life.	Service
Q36. I play a role in making the world a better place to live.	Service
Q37. I have a role in making sure all people are treated fairly.	Service

Survey Administration

Between May and August 2016, VOBS led 44 trips that varied in length from less than one week to greater than one month. Course leaders administered a paper version of the *Changes in Social and Emotional Learning (CHiSEL) Survey* to participants at the completion of each of the 44 Outward Bound program trips. The completed surveys were analyzed by CAREI. This report provides information across all 44 trips.[6]

Demographic information about respondents (grade level, race/ethnicity, and gender) was analyzed and is shown as the number and percent of respondents in each category. For all items on the survey, the percent of respondents selecting each response category (*Never, Almost Never, Sometimes, Almost Always,* and *Always*) was calculated for both the pre and post conditions. This information is shown in both figure and table format (in the Results section and Appendix B, respectively). In addition, the survey data were analyzed by each of the eight SEL factors mentioned above (emotion management, responsibility, empathy, initiative, problem solving, teamwork, persistence, and service). The information by factor is presented as the mean response across items in a factor for the pre and post conditions; the difference between the mean response across items in a factor for the post condition minus the mean response across items in a factor for pre condition is also provided.

Results

The results section is organized into three sections: (1) information about respondents, (2) reported changes in respondents by item, and (3) reported changes in respondents by each of the eight SEL factors.

Information about Respondents

Course leaders administered the *CHiSEL Survey* to participants at the completion of the 44 spring and summer 2016 Outward Bound program trips. Four hundred sixty-four youth participants (464) completed the survey. Participants were asked to report their grade level, race/ethnicity, and gender. Four hundred thirty-eight of the respondents (94%) provided information about their grade level (see Table 2). Thirteen percent (13%) identified themselves as post-secondary, 75% identified as high school students, and 11% identified as middle school students. The majority of respondents were male (66%; see Table 3). Table 4 shows that about half of the respondents identified themselves as Caucasian (49%). Nineteen percent (19%) of the respondents identified as Hispanic or Latino, 10% identified as African American, 10% identified as Multi-Ethnic -- the remaining 12% identified as Other (6%), Asian American (5%), Native Hawaiian or Pacific Islander (<1%), or American Indian or Alaskan Native (<1%).

Table 2. Self-Reported Grade Level

Grade Band	Count	Percent
Middle School	48	11%
High School	330	75%
Post-Secondary	60	14%
Total	**438**	**100%**

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[6] The results for each of the 44 course trips was also prepared and provided to VOBS in a separate document. Each course report contains information about that trip's respondents (percent of respondents in each category). In addition, the percent of respondents selecting each response category was calculated for the pre and post conditions and is presented in figure format.

Table 3. Self-Reported Gender

Gender	Count	Percent
Female	146	33%
Male	296	66%
Other	7	1%
Total	**449**	**100%**

Table 4. Self-Reported Race/Ethnicity

Race/Ethnicity	Count	Percent
African American	46	10%
Asian American	22	5%
Caucasian	223	49%
Hispanic or Latino	87	19%
American Indian or Alaskan Native	2	<1%
Native Hawaiian or Pacific Islander	3	<1%
Multi-Ethnic	44	10%
Other	27	6%
Total	**454**	**100%**

Respondent Changes Reported by Item

Changes in the way respondents thought about themselves before the trip to how they felt after the trip are documented by their responses to items on the CHiSEL Survey. In Figures 1-7 below, the "Pre" bar for each item shows how respondents felt about themselves before the course; the "Post" bar shows how they rated themselves after the course.[7] Appendix B shows the percent of respondents selecting each response option (*Never, Almost Never, Sometimes, Almost Always,* or *Always*) for each item in table format. The number of people responding to each item is not reported because there was only minimal variability across all 37 items (i.e., the number of people answering each item ranged from n = 441 to n = 460, as shown in Table C1 in Appendix C).

As demonstrated in Figure 1, participants who completed the survey perceived a notable, positive shift in their behaviors in the areas of self-regulation and their ability to identify their emotions. For each statement in Figure 1, the percentage of *almost always* and *always* responses increased by 24-33% from pre- to post-program. For example, 60% of the respondents selected *almost always* or *always* when thinking about how they were before the trip regarding the statement, "*I am able to wait my turn, even when I am excited about something,*" (item 1), while 89% selected *almost always* or *always* when thinking about that statement in terms of themselves after the trip. Similarly, the percent of respondents who selected *almost always* or *always* increased from 44% to 77% for item 2, "*I can control my behavior when I am frustrated or mad;*" from 47% to 78% for item 3, "*I know what to do to calm myself down when I am stressed;*" from 57% to 81% for item 4, "*I can identify my emotions;*" and from 45% to 76% for item 5, "*I think before I act.*"

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[7] Note that percentages in the figures may not add up to 100% due to rounding error.
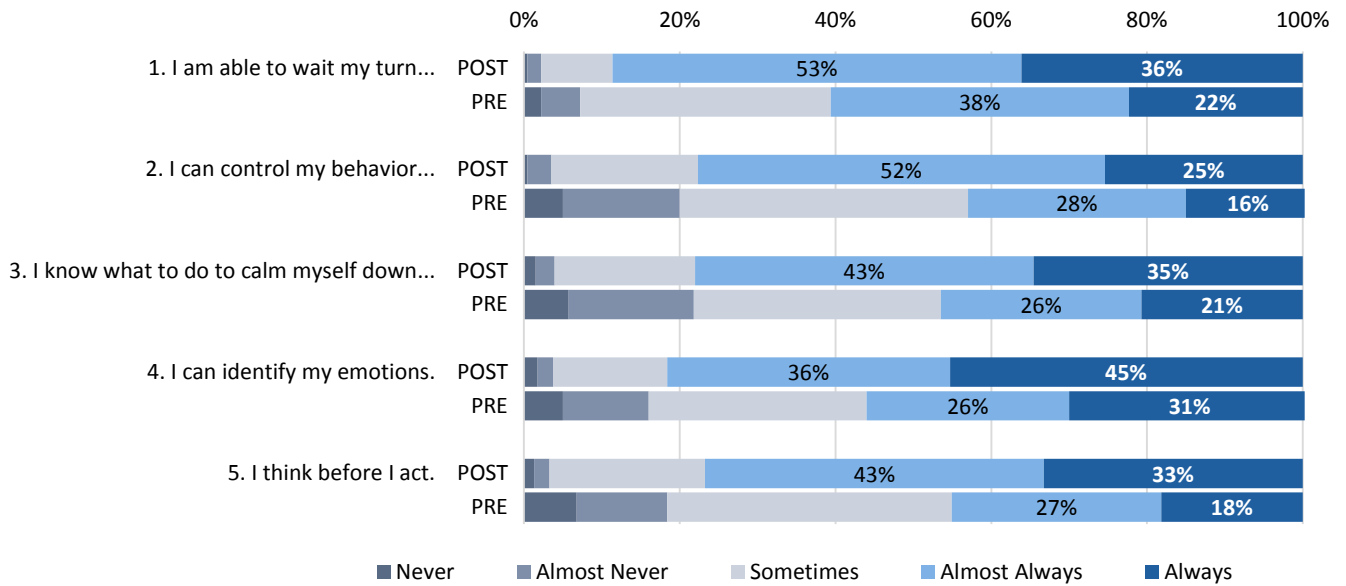
Figure 1. Distribution of Responses for Items 1-5

As with the response patterns for items 1-5, the responses to items 6-10 show an increase in the proportion of respondents selecting *almost always* or *always* when thinking about themselves in relation to each statement after the program (Figure 2). For example, the proportion of respondents who selected *almost always* or *always* increased 34% for item 6, "*I am able to adapt when things change*" (from 50% to 84%). As demonstrated by the increase from pre- to post-trip ratings in the proportion of *almost always* and *always* responses, respondents report an increased ability to know their actions have consequences, come prepared for activities, be dependable, and take responsibility for their actions.

Figure 2. Distribution of Responses for Items 6-10

Items 11-15 provide some insight into respondents' perceptions of their empathy, abilities, and integrity. The response patterns to these items (see Figure 3) continue to demonstrate a positive shift in responses, with an increased proportion of *almost always* and *always* responses from pre- to post-trip. For example, there was a 26% increase in the percentage of respondents selecting *always* post-trip for item 11 ("*I am able to think about how another person feels*") and item 12 ("*I know how my behavior affects others*") and a 23% increase in those selecting *always* post-trip for item 15 ("*I don't do something that I feel is wrong just because others are doing it*"). This demonstrates an increase in respondents' reported abilities to think about how another person feels, know how their behavior affects others, treat others with respect, be aware of their own strengths, and not follow peers' negative actions.
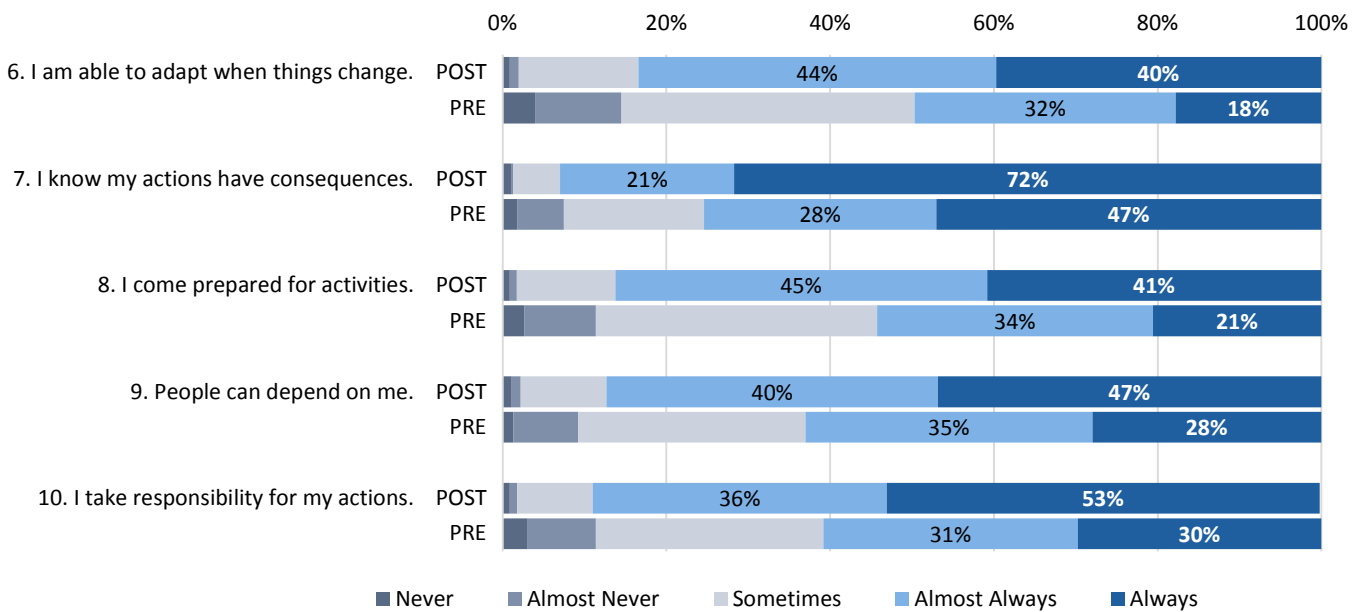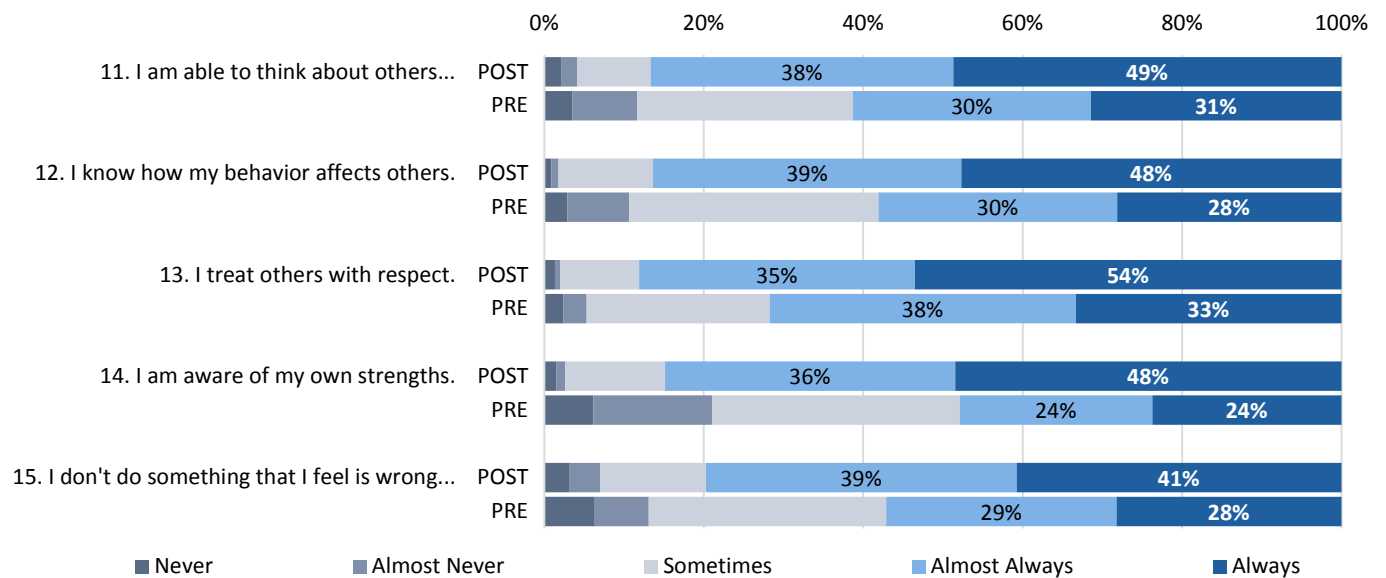

Figure 3. Distribution of Responses for Items 11-15

The response patterns to items 16-20 again show positive shifts in responses from pre- to post-program (see Figure 4). For all items, the percentage of respondents selecting *never* and *almost never* decreased from the pre-program ratings to post-program ratings, while the percentage of respondents selecting *always* increased. Thus, on average, respondents reported increased frequency for setting realistic goals, seeking guidance when needed, sharing opinions willingly, doing things that need to be done without being asked, and trying challenging things.

All items in Figure 5 (items 21-25) again show that, after the trip, a larger proportion of respondents selected the response option *always* and fewer selected *almost never*. Respondents reported increased frequency in their ability to learn something when they decide to, to overcome barriers to complete a task, to take steps to solve a problem, to keep an open mind, and to work with different kinds of people.

For items 26-30, the proportion of *always* responses increased in the pre- to post-program ratings and the proportion of *almost never* and *sometimes* ratings decreased (see Figure 6). For example, the percent of respondents selecting *always* increased by 34% from the pre- to post-program rating for item 26 ("*I can put my own needs aside to help the group meet its goal*") and by 22% from the pre- to post-program rating for item 27, "*I can work with others to accomplish a task.*" In addition, the percent of respondents selecting *always* increased by 27% from the pre- to post-program rating for item 30, "*When I am working in a group, I make sure to do my part.*"
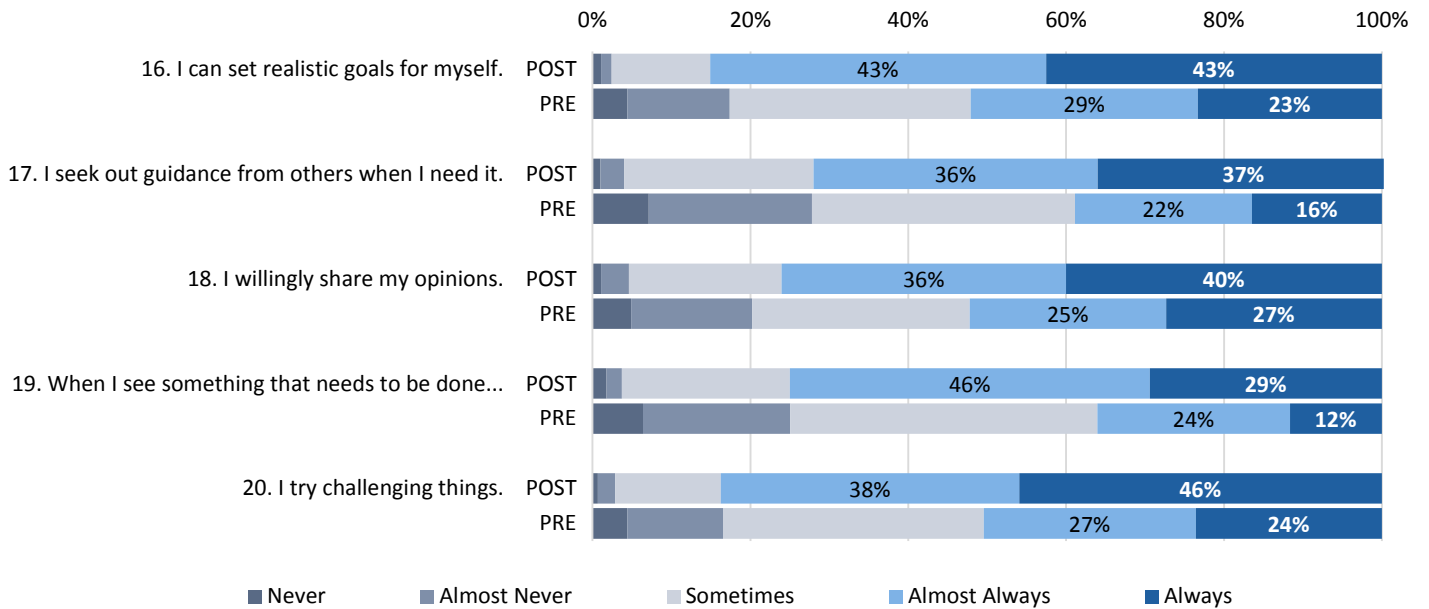
Figure 4. Distribution of Responses for Items 16-20
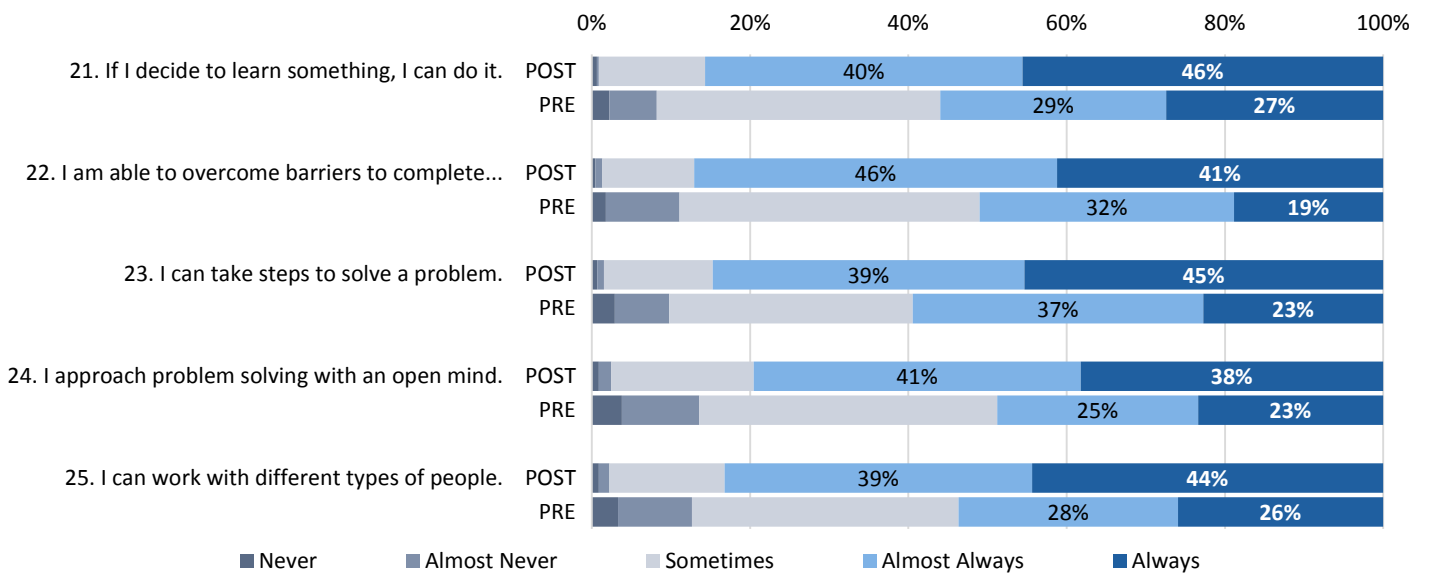
Figure 5. Distribution of Responses for Items 21-25
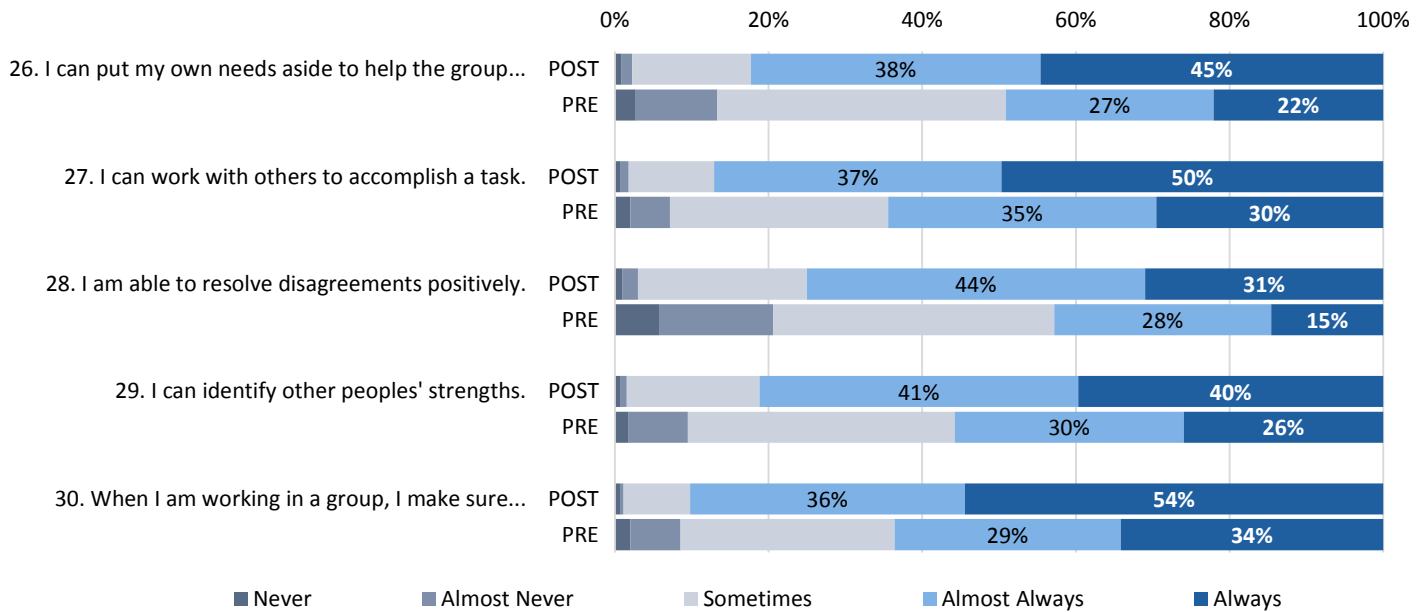
Figure 6. Distribution of Responses for Items 26-30

Consistent with the response patterns for the previous 30 items, the respondents demonstrated a positive shift again from pre- to post-program when responding to the statements in items 31-37 (i.e., as shown in Figure 7, there is an increased proportion of *always* responses and decreased proportions of *never* and *almost never* responses). A particularly large shift was evident for three items:

- item 33, "*I have learned things I can do to take care of the environment*," increased from 24% of the respondents selecting *always* on the pre-program rating to 53% selecting *always* on the post-program rating (an increase of 29%);
- item 31, "*Even when something is hard, I follow through and finish it*," increased from 21% of the respondents selecting *always* on the pre-program rating to 48% selecting *always* on the post-program rating (an increase of 27%); and
- item 36, "*I play a role in making the world a better place to live*," increased from 24% of the respondents selecting *always* on the pre-program rating to 49% selecting *always* on the post-program rating (an increase of 25%).
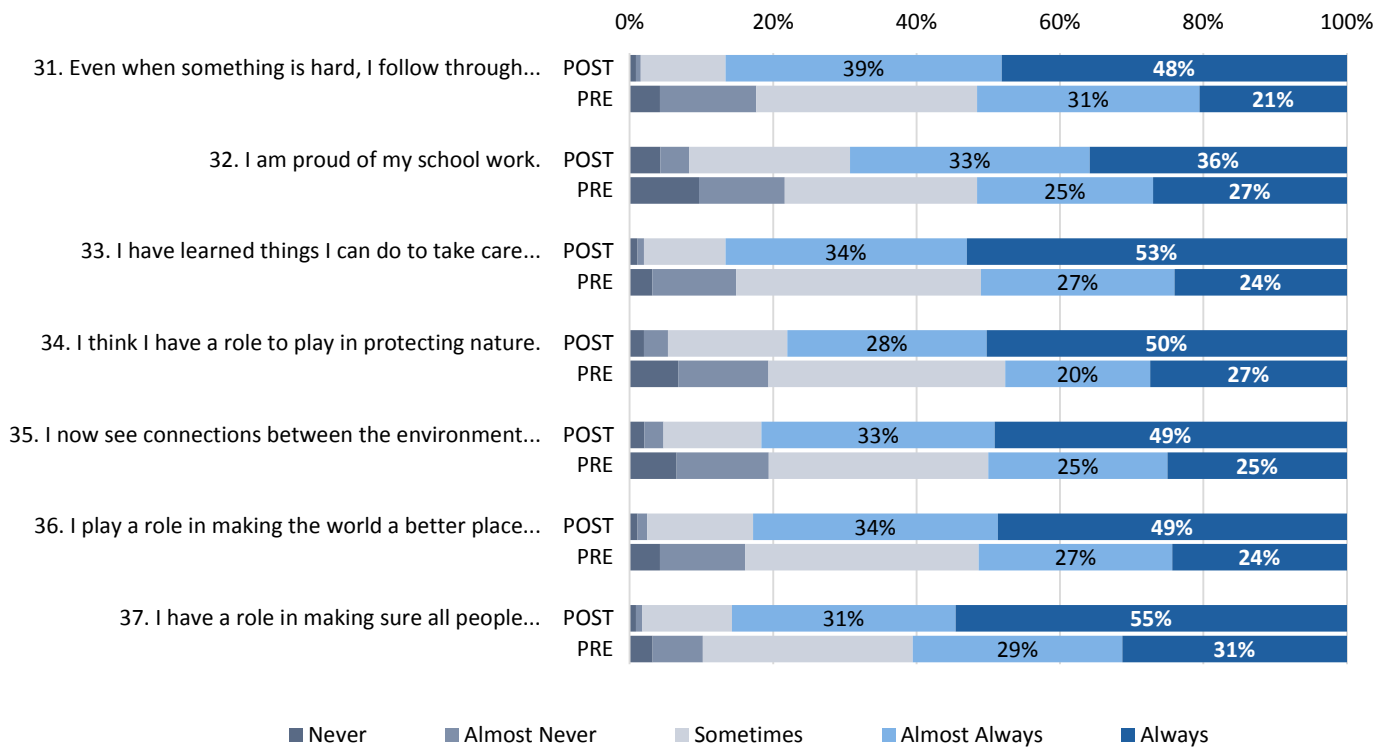
Figure 7. Distribution of Responses for Items 31-37

Respondent Changes Reported by SEL Factor

The mean change in responses to the items related to the SEL factor *emotion management* from the pre-program condition to the post-program condition was .62 (see Table 5). Females showed a slightly larger increase (.66) than males (.61) from the pre to post condition. High school-aged respondents, the largest group, showed a slightly larger increase (.67) than post-secondary (.49) or middle school (.55) respondents. A similar increase was observed in the responses of white respondents (.63) and respondents of color (.60) to this factor. With the exception of weeklong trips, the mean change in responses increased as trip length increased. For example, respondents who participated in a one-day trip reported, on average, a shift of .68 while respondents who attended a month-long trip or longer averaged a change of .80.

Table 5. Pre- and post-program means and mean change for emotion by characteristic.

EMOTION MANAGEMENT			
	PRE	POST	Change
Overall	3.51	4.12	+ .62
	n = 447	n = 446	n = 436
Gender			
Male	3.57	4.18	+ .61
	n = 284	n = 281	n = 274
Female	3.39	4.05	+ .66
	n = 144	n = 145	n = 143
Other	3.56	3.90	+ .47
	n = 6	n = 7	n = 6
Grade			
Middle School	3.39	3.85	+ .55
	n = 45	n = 43	n = 41
High School	3.48	4.15	+ .67
	n = 319	n = 321	n = 313
Post-Secondary	3.75	4.26	+ .49
	n = 60	n = 59	n = 59
Ethnicity			
White	3.57	4.20	+ .63
	n = 214	n = 214	n = 208
Students of Color	3.46	4.05	+ .60
	n = 233	n = 232	n = 228
Trip Length			
<1 day	2.95	3.64	+ .68
	n = 11	n = 11	n = 11
<1 week	3.61	4.04	+ .45
	n = 155	n = 153	n = 149
1 to 2 weeks	3.73	4.00	+ .27
	n = 22	n = 22	n = 22
3+ weeks	3.50	4.22	+ .71
	n = 123	n = 124	n = 119
1+ month	3.37	4.18	+ .80
	n = 17	n = 17	n = 17

For the items related to the SEL factor of responsibility, the overall mean increase from the pre- to post-program condition was .59. The increase was approximately the same for males (.56), females (.59) and other genders (.58). The increase was larger for respondents in high school (.60) than those in post-secondary (.47) or middle school (.47). The mean increase for white respondents (.59) was slightly higher than for respondents of color (.54). Similar to the previous factor, emotion management, the mean increase was, in general, higher for respondents who participated in longer trips than for those on shorter trips.[8] For example, the mean increase for respondents who went on a one-day trip was .45, for those whose trip was more than three weeks it was .61, and for those whose trip was longer than one month the increase was 1.03 (see Table 6).

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[8] The one exception is for respondents who went on a trip longer than one day but shorter than one week.

Table 6. Pre- and post-program means and mean change for responsibility by characteristic.

	RESPONSIBILITY		
	PRE	POST	Change
Overall	3.83	4.39	+ .59
	n = 451	*n* = 444	*n* = 439
Gender			
Male	3.82	4.38	+ .56
	n = 290	*n* = 284	*n* = 280
Female	3.86	4.46	+ .59
	n = 142	*n* = 140	*n* = 140
Other	3.67	4.18	+ .58
	n = 6	*n* = 7	*n* = 6
Grade			
Middle School	3.69	4.14	+ .47
	n = 45	*n* = 46	*n* = 44
High School	3.79	4.41	+ .60
	n = 323	*n* = 317	*n* = 315
Post-Secondary	4.09	4.58	+ .47
	n = 59	*n* = 57	*n* = 56
Ethnicity			
White	3.86	4.46	+ .59
	n = 217	*n* = 212	*n* = 209
Students of Color	3.79	4.33	+ .54
	n = 234	*n* = 232	*n* = 230
Trip Length			
<1 day	3.30	3.75	+ .45
	n = 11	*n* = 11	*n* = 11
<1 week	3.89	4.28	+ .40
	n = 156	*n* = 156	*n* = 153
1 to 2 weeks	4.05	4.45	+ .41
	n = 22	*n* = 22	*n* = 22
3⁺ weeks	3.89	4.53	+ .61
	n = 126	*n* = 120	*n* = 119
1⁺ month	3.44	4.49	+ 1.03
	n = 17	*n* = 18	*n* = 17

For items related to the empathy factor, the overall mean changes from the pre- to post-program condition resulted in a .57 increase from pre to post (see Table 7). The increase for females was slightly higher (.63) than males (.56) and respondents of other genders (.40). The increase for high school respondents (.61) was higher than that for post-secondary (.49) or middle school (.44) respondents. The increase for white respondents (.61) was slightly higher than the change for respondents of color (.57). With the exception of trip length between one day and one week, those who went on longer trips exhibited higher increases in the mean responses to the empathy items from the pre to post condition. For instance, those whose trip was one day or less had a mean increase of .38, while those whose trip was one month or more had a mean increase of .87.

Table 7. Pre- and post-program means and mean change for empathy by characteristic.

	EMPATHY		
	PRE	POST	Change
Overall	3.72	4.28	+ .57
	n = 440	*n* = 444	*n* = 430
Gender			
Male	3.73	4.28	+ .56
	n = 140	*n* = 143	*n* = 138
Female	3.69	4.32	+ .63
	n = 140	*n* = 143	*n* = 138
Other	3.83	4.20	+ .40
	n = 6	*n* = 7	*n* = 6
Grade			
Middle School	3.60	4.06	+ .44
	n = 42	*n* = 45	*n* = 41
High School	3.68	4.29	+ .61
	n = 316	*n* = 318	*n* = 309
Post-Secondary	3.98	4.45	+ .49
	n = 59	*n* = 59	*n* = 58
Ethnicity			
White	3.78	4.38	+ .61
	n = 212	*n* = 212	*n* = 207
Students of Color	3.66	4.18	+ .57
	n = 228	*n* = 232	*n* = 430
Trip Length			
<1 day	3.18	3.58	+ .38
	n = 10	*n* = 11	*n* = 10
<1 week	3.84	4.21	+ .37
	n = 150	*n* = 152	*n* = 146
1 to 2 weeks	3.90	4.30	+ .40
	n = 22	*n* = 22	*n* = 22
3⁺ weeks	3.71	4.36	+ .66
	n = 125	*n* = 124	*n* = 120
1⁺ month	3.54	4.37	+ .87
	n = 17	*n* = 18	*n* = 17

The mean increase from the pre- to post-program condition for items related to initiative was .71 (see Table 8). Females reported a slightly greater increase (.77) than males (.69) and respondents of other genders (.69). High school students showed a greater mean increase (.76) than post-secondary (.71) or middle school (.46) students. White respondents had a slightly higher increase in responses to the initiative items (.73) than respondents of color (.70). Respondents who went on a month or longer trip reported greater increases in their responses to the initiative items (1.16) than respondents who went on shorter trips.

Table 8. Pre- and post-program means and mean change for initiative by characteristic.

	INITIATIVE		
	PRE	POST	Change
Overall	3.45	4.16	+ .71
	n = 439	n = 444	n = 432
Gender			
Male	3.53	4.21	+ .69
	n = 279	n = 285	n = 275
Female	3.32	4.21	+ .77
	n = 144	n = 285	n = 141
Other	3.14	3.71	+ .69
	n = 6	n = 7	n = 6
Grade			
Middle School	3.55	4.00	+ .46
	n = 45	n = 48	n = 45
High School	3.41	4.17	+ .76
	n = 316	n = 319	n = 311
Post-Secondary	3.64	4.34	+ .71
	n = 58	n = 58	n = 57
Ethnicity			
White	3.53	4.23	+ .73
	n = 212	n = 215	n = 209
Students of Color	3.39	4.09	+ .70
	n = 227	n = 229	n = 223
Trip Length			
<1 day	3.20	3.65	+ .45
	n = 11	n = 11	n = 11
<1 week	3.64	4.08	+ .45
	n = 150	n = 151	n = 146
1 to 2 weeks	3.67	4.08	+ .49
	n = 20	n = 22	n = 20
3+ weeks	3.42	4.29	+ .87
	n = 124	n = 126	n = 122
1+ month	3.06	4.21	+ 1.16
	n = 18	n = 18	n = 18

The overall mean increase from the pre- to post-program condition for items related to problem solving was .64 (see Table 9). The mean change was higher for respondents of other genders (1.00) than for females (.74) or males (.60). High school respondents exhibited a greater increase (.68) than post-secondary (.61) or middle school (.52) respondents. The mean change for white respondents (.65) was approximately equal to that of respondents of color (.64). In contrast to the previous four factors, the mean change for respondents who attended a trip lasting one month or longer (.56) did not show the largest mean change from the pre- to post-program condition.

Table 9. Pre- and post-program means and mean change for problem solving by characteristic.

PROBLEM SOLVING			
	PRE	POST	Change
Overall	3.60	4.24	+ .64
	n = 446	*n* = 441	*n* = 433
Gender			
Male	3.67	4.26	+ .60
	n = 286	*n* = 284	*n* = 279
Female	3.47	4.23	+ .74
	n = 143	*n* = 140	*n* = 138
Other	3.11	3.90	+ 1.00
	n = 6	*n* = 7	*n* = 6
Grade			
Middle School	3.58	4.03	+ .52
	n = 43	*n* = 43	*n* = 40
High School	3.56	4.24	+ .68
	n = 323	*n* = 319	*n* = 315
Post-Secondary	3.83	4.44	+ .61
	n = 58	*n* = 58	*n* = 57
Ethnicity			
White	3.67	4.31	+ .65
	n = 215	*n* = 216	*n* = 212
Students of Color	3.54	4.16	+ .64
	n = 231	*n* = 225	*n* = 221
Trip Length			
<1 day	3.03	3.58	+ .55
	n = 11	*n* = 11	*n* = 11
<1 week	3.81	4.16	+ .38
	n = 150	*n* = 147	*n* = 142
1 to 2 weeks	4.00	4.32	+ .77
	n = 22	*n* = 21	*n* = 125
3+ weeks	3.53	4.30	+ .86
	n = 128	*n* = 127	*n* = 17
1+ month	3.31	4.22	+ .56
	n = 17	*n* = 18	*n* = 316

The overall mean change from the pre- to post-program condition on items related to teamwork was .59 (see Table 10). The mean change for males (.61) was slightly higher than respondents of other genders (.60) and female respondents (.59). High school respondents' mean increase (.65) was higher than the mean change for post-secondary respondents (.61) and middle school respondents (.41). The mean increase for white respondents (.60) was approximately equal to that of respondents of color (.59). The greatest reported increase in teamwork was for respondents who went on a trip lasting between three and four weeks (.71).

Table 10. Pre- and post-program means and mean change for teamwork by characteristic.

	PRE	POST	Change
TEAMWORK			
Overall	3.66	4.26	+ .59
	n = 431	*n* = 431	*n* = 416
Gender			
Male	3.66	4.27	+ .61
	n = 274	*n* = 276	*n* = 265
Female	3.64	4.25	+ .59
	n = 141	*n* = 238	*n* = 135
Other	3.60	4.06	+. 60
	n = 5	*n* = 420	*n* = 5
Grade			
Middle School	3.56	4.02	+ .41
	n = 42	*n* = 44	*n* = 40
High School	3.59	4.25	+ .65
	n = 309	*n* = 311	*n* = 300
Post-Secondary	3.97	4.46	+ .61
	n = 59	*n* = 57	*n* = 397
Ethnicity			
White	3.41	4.30	+ .60
	n = 209	*n* = 210	*n* = 200
Students of Color	3.61	4.22	+ .59
	n = 222	*n* = 221	*n* = 216
Trip Length			
<1 day	3.12	3.56	+ .44
	n = 11	*n* = 9	*n* = 9
<1 week	3.82	4.15	+ .33
	n = 144	*n* = 147	*n* = 139
1 to 2 weeks	4.00	4.30	+ .36
	n = 20	*n* = 21	*n* = 20
3$^+$ weeks	3.66	4.37	+ .71
	n = 126	*n* = 124	*n* = 123
1$^+$ month	3.60	4.30	+ .68
	n = 18	*n* = 17	*n* = 17

The overall mean increase for items related to persistence was .68 (see Table 11). The increase for female respondents and respondents of other genders (both .67) was higher than the increase for males (.65). The increase was higher for post-secondary students (.71) than for high school (.67) or middle school (.42) students. The increase for white respondents (.68) was slightly greater than the increase reported by respondents of color (.61). The largest increase was observed for respondents who went on a month-long trip or longer (1.31).

Table 11. Pre- and post-program means and mean change for persistence by characteristic.

PERSISTENCE			
	PRE	POST	Change
Overall	3.49	4.13	+ .68
	n = 441	n = 211	n = 204
Gender			
Male	3.49	4.13	+ .65
	n = 280	n = 282	n = 274
Female	3.48	4.16	+ .67
	n = 144	n = 140	n = 140
Other	3.25	3.64	+ .67
	n = 6	n = 7	n = 6
Grade			
Middle School	3.41	3.74	+ .42
	n = 43	n = 45	n = 42
High School	3.47	4.15	+ .67
	n = 319	n = 318	n = 313
Post-Secondary	3.66	4.39	+ .71
	n = 58	n = 57	n = 56
Ethnicity			
White	3.46	4.13	+ .68
	n = 209	n = 211	n = 204
Students of Color	3.52	4.13	+ .61
	n = 232	n = 229	n = 227
Trip Length			
<1 day	2.82	3.45	+ .63
	n = 11	n = 11	n = 11
<1 week	3.72	4.02	+ .34
	n = 149	n = 149	n = 144
1 to 2 weeks	3.74	4.27	+ .52
	n = 21	n = 22	n = 21
3+ weeks	3.55	4.29	+ .72
	n = 125	n = 124	n = 121
1+ month	2.72	4.03	+ 1.31
	n = 18	n = 18	n = 18

For items related to service, the overall mean increase from the pre- to post-program condition was .74 (see Table 12). The increase was highest for respondents of other genders (.87) than for females (.86) or males (.68). The mean change for high school students (.80) was larger than that for post-secondary (.60) or middle school students (.52). The mean change for respondents of color (.81) was higher than that of white respondents (.66). The highest mean increase by trip length was for respondents whose trip lasted longer than one month (.87).

Table 12. Pre- and post-program means and mean change for service by characteristic.

	SERVICE		
	PRE	POST	Change
Overall	3.57	4.30	+ .74
	n = 432	*n* = 436	*n* = 420
Gender			
Male	3.57	4.24	+ .68
	n = 276	*n* = 279	*n* = 267
Female	3.60	4.45	+ .86
	n = 140	*n* = 141	*n* = 137
Other	3.17	4.03	+ .87
	n = 6	*n* = 6	*n* = 6
Grade			
Middle School	3.60	4.06	+ .52
	n = 43	*n* = 44	*n* = 42
High School	3.50	4.29	+ .80
	n = 312	*n* = 317	*n* = 304
Post-Secondary	3.90	4.50	+ .60
	n = 58	*n* = 57	*n* = 57
Ethnicity			
White	3.69	4.33	+ .66
	n = 208	*n* = 212	*n* = 203
Students of Color	3.46	4.26	+ .81
	n = 224	*n* = 224	*n* = 217
Trip Length			
<1 day	3.13	3.84	+ .66
	n = 11	*n* = 10	*n* = 10
<1 week	3.82	4.22	+ .42
	n = 144	*n* = 145	*n* = 137
1 to 2 weeks	3.73	4.28	+ .53
	n = 21	*n* = 22	*n* = 21
3⁺ weeks	3.52	4.35	+ .84
	n = 126	*n* = 125	*n* = 123
1⁺ month	3.44	4.31	+ .87
	n = 18	*n* = 18	*n* = 18

Summary of the Findings

During the spring and summer of 2016, Voyageur Outward Bound School (VOBS) offered a variety of programming. The courses occurred between May and August 2016, and all courses varied in length. The 37-item Changes in Social and Emotional Learning (CHiSEL) Survey was administered to participants enrolled in the 44 program trips. Changes in the way respondents thought about themselves before the trip to how they felt after the trip were documented by their responses to items on the CHiSEL Survey.

Four hundred sixty-four students (464) completed the survey. Information on the grade level, race/ethnicity, and gender of participants was reported on the survey by the participants. Four hundred thirty-eight (438) youth respondents (94%) provided information about their grade level. The majority of the respondents identified as high school youth (75%). Thirteen percent (13%) of the respondents identified themselves as post-secondary and 11% identified as middle school youth. The majority of respondents were male (66%). About half of the respondents identified themselves as Caucasian (49%) and half as respondents of color (51%).

Respondent Changes by Item

Notably, for all 37 items, the percentage of respondents selecting *always* increased from pre- to post-program. Eight items exhibited the largest shifts to the *always* category, with more than half of the respondents indicating that they *always* did these things. These eight items clustered in factors that related to responsibility, empathy and teamwork, and service and connections to the environment.

Responsibility

> I know my actions have consequences. (72% *always*)
> I take responsibility for my actions. (53% *always*)

Empathy and teamwork

> I treat others with respect. (54% *always*)
> When I am working in a group, I make sure to do my part. (54% *always*)
> I can work with others to accomplish a task. (50% *always*)

Service and connections to the environment

> I have a role in making sure all people are treated fairly. (55% *always*)
> I have learned things I can do to take care of the environment. (53% *always*)
> I think I have a role to play in protecting nature. (50% *always*)

In addition, the positive shift from before the trip to after the trip can be seen in the percentage of respondents who answered *always* in their post-trip ratings of themselves as compared to the percent who answered *always* in their pre-trip ratings. The percent of respondents selecting *always* increased, on average, 19% from the pre- to post-trip rating (the range was from 9% to 29%). A particularly large shift was evident on four items:[9]

- an additional 29% of the respondents selected *always* in their post-trip rating of the statement, "*I have learned things I can do to take care of the environment*" (item 33);
- an additional 27% selected *always* in their post-trip rating of the statement, "*Even when something is hard, I follow through*" (item 31);
- an additional 24% selected *always* in their post-trip rating of the statement, "*I am aware of my own strengths*" (item 14); and
- an additional 25% selected *always* in their post-trip rating of the statement, "*I know my actions have consequences*" (item 7).

Respondent Changes by Factor

There was an overall mean increase from pre- to post-program ratings for all eight factors. There were no clear trends in increases based on gender. Overall, high school students often had greater increases than post-secondary or middle school students, although post-secondary students had the greatest increase in Persistence. For example:

- The average increase in Service for high school students was 0.80, for middle students was 0.52 and for post-secondary students was 0.60.
- The average increase in Persistence for high school students was 0.67, for middle school students was 0.42 and for post-secondary students was 0.71.

Overall, respondents whose trip lasted one month or more had the greatest increases, although the pattern did not hold for teamwork. It should be noted, however, that the group was rather small (*n* = 17), so results should be interpreted with caution. For example:

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[9] The percent change for these four items was greater than one standard deviation above the mean.

- The average increase in Persistence based on trip length was:
  - Less than one day = 0.63
  - Less than one week = 0.34
  - 1- 2 weeks = 0.52
  - 3 or more weeks = 0.72
  - One or more months = 1.31
- The average increase in Empathy based on trip length was:
  - Less than one day = 0.38
  - Less than one week = 0.37
  - 1- 2 weeks = 0.40
  - 3 or more weeks = 0.66
  - One or more months = 0.87

Generally, the increase for white respondents was slightly higher than that of respondents of color; although respondents of color had a greater increase in service (average increase was 0.81 for respondents of color and 0.66 for white respondents).

In summary, participants who completed the survey perceived a positive shift in their behaviors in the six SEL challenge factors (emotion management, responsibility, empathy, initiative, problem solving, teamwork) as well as the two additional factors (persistence and service). This was evident from the increase in the percent of respondents shifting their selections from *never*, *almost never*, or *sometimes* to *almost always* or *always* in their post-trip ratings, as well as by the mean increases from the pre- to post-trip ratings on each of the 8 SEL factors.

Appendix A: CHiSEL Survey Instrument

This is a questionnaire, NOT a test. There are no right answers or wrong answers. Your responses are optional, but your answers will help improve the program. If you choose not to answer, it won't affect your grades or your relationship with your teacher, your school, or VOBS staff members.   *Thank you for your help!*

YOUR NAME: _____   COURSE NUMBER: _____   DATE: _____

DIRECTIONS. *Read each statement below. First, think about how you were <u>before the course</u> and rate yourself in the BEFORE THE COURSE columns. Then, think about how the course may have changed you and rate yourself in the AFTER THE COURSE (NOW) columns. Choose the best answer for each statement by completely filling in an oval.*

NEVER	ALMOST NEVER	SOMETIMES	ALMOST ALWAYS	ALWAYS	BEFORE THE COURSE ↙ AFTER THE COURSE (NOW) ↘	NEVER	ALMOST NEVER	SOMETIMES	ALMOST ALWAYS	ALWAYS
O	O	O	O	O	1. I am able to wait my turn, even when I am excited about something...........	O	O	O	O	O
O	O	O	O	O	2. I can control my behavior when I am frustrated or mad..................................	O	O	O	O	O
O	O	O	O	O	3. I know what to do to calm myself down when I am stressed..........................	O	O	O	O	O
O	O	O	O	O	4. I can identify my emotions..	O	O	O	O	O
O	O	O	O	O	5. I think before I act..	O	O	O	O	O
O	O	O	O	O	6. I am able to adapt when things change...	O	O	O	O	O
O	O	O	O	O	7. I know my actions have consequences...	O	O	O	O	O
O	O	O	O	O	8. I come prepared for activities..	O	O	O	O	O
O	O	O	O	O	9. People can depend on me..	O	O	O	O	O
O	O	O	O	O	10. I take responsibility for my actions...	O	O	O	O	O
O	O	O	O	O	11. I am able to think about how another person feels...	O	O	O	O	O
O	O	O	O	O	12. I know how my behavior affects others..	O	O	O	O	O
O	O	O	O	O	13. I treat others with respect..	O	O	O	O	O
O	O	O	O	O	14. I am aware of my own strengths...	O	O	O	O	O
O	O	O	O	O	15. I don't do something that I feel is wrong just because others are doing it....	O	O	O	O	O
O	O	O	O	O	16. I can set realistic goals for myself...	O	O	O	O	O
O	O	O	O	O	17. I seek out guidance from others when I need it...	O	O	O	O	O
O	O	O	O	O	18. I willingly share my opinions..	O	O	O	O	O
O	O	O	O	O	19. When I see something that needs to be done, I do it without being asked.	O	O	O	O	O

NEVER	ALMOST NEVER	SOMETIMES	ALMOST ALWAYS	ALWAYS	BEFORE THE COURSE ↙ AFTER THE COURSE (NOW) ↘	NEVER	ALMOST NEVER	SOMETIMES	ALMOST ALWAYS	ALWAYS
0	0	0	0	0	20. I try challenging things…………………………………………………………………………	0	0	0	0	0
0	0	0	0	0	21. If I decide to learn something, I can do it……………………………………………	0	0	0	0	0
0	0	0	0	0	22. I am able to overcome barriers to complete a task……………………………	0	0	0	0	0
0	0	0	0	0	23. I can take steps to solve a problem……………………………………………………	0	0	0	0	0
0	0	0	0	0	24. I approach problem solving with an open mind…………………………………	0	0	0	0	0
0	0	0	0	0	25. I can work with different types of people………………………………………	0	0	0	0	0
0	0	0	0	0	26. I can put my own needs aside to help the group meet its goal……………………	0	0	0	0	0
0	0	0	0	0	27. I can work with others to accomplish a task…………………………………………	0	0	0	0	0
0	0	0	0	0	28. I am able to resolve disagreements positively……………………………………	0	0	0	0	0
0	0	0	0	0	29. I can identify other peoples' strengths………………………………………………	0	0	0	0	0
0	0	0	0	0	30. When I am working in a group, I make sure to do my part…………………………	0	0	0	0	0
0	0	0	0	0	31. Even when something is hard, I follow through to finish it…………………………	0	0	0	0	0
0	0	0	0	0	32. I am proud of my school work…………………………………………………………	0	0	0	0	0
0	0	0	0	0	33. I have learned things I can do to take care of the environment…………………	0	0	0	0	0
0	0	0	0	0	34. I think I have a role to play in protecting nature……………………………………	0	0	0	0	0
0	0	0	0	0	35. I now see connections between the environment and my life……………………	0	0	0	0	0
0	0	0	0	0	36. I play a role in making the world a better place to live………………………………	0	0	0	0	0
0	0	0	0	0	37. I have a role in making sure all people are treated fairly………………………	0	0	0	0	0

ABOUT YOU: Fill in the oval that *best* applies.

38. I describe myself as:

  0   African American

  0   Asian American

  0   Caucasian

  0   Hispanic or Latino

  0   American Indian or Alaskan Native

  0   Native Hawaiian or Pacific Islander

  0   Multi-Ethnic

  0   Other

39. I describe myself as:

  0   Female

  0   Male

  0   _____

40. What grade are you currently in?

  0   Grade: _____

Appendix B: Survey Results Presented in Table Format[10]

Table B1. Distribution of Responses for Items 1-5

Item	Time	Never	Almost Never	Sometimes	Almost Always	Always
1. I am able to wait my turn, even when I am excited about something.	Pre	2%	5%	32%	38%	22%
	Post	0%	2%	9%	53%	36%
2. I can control my behavior when I am frustrated or mad.	Pre	5%	15%	37%	28%	16%
	Post	0%	3%	19%	52%	25%
3. I know what to do to calm myself down when I am stressed.	Pre	6%	16%	32%	26%	21%
	Post	2%	2%	18%	43%	35%
4. I can identify my emotions.	Pre	5%	11%	28%	26%	31%
	Post	2%	2%	15%	36%	45%
5. I think before I act.	Pre	7%	12%	37%	27%	18%
	Post	1%	2%	20%	43%	33%

Table B2. Distribution of Responses for Items 6-10

Item	Time	Never	Almost Never	Sometimes	Almost Always	Always
6. I am able to adapt when things change.	Pre	4%	11%	36%	32%	18%
	Post	1%	1%	15%	44%	40%
7. I know my actions have consequences.	Pre	2%	6%	17%	28%	47%
	Post	1%	0%	6%	21%	72%
8. I come prepared for activities.	Pre	3%	9%	34%	34%	21%
	Post	1%	1%	12%	45%	41%
9. People can depend on me.	Pre	1%	8%	28%	35%	28%
	Post	1%	1%	11%	40%	47%
10. I take responsibility for my actions.	Pre	3%	8%	28%	31%	30%
	Post	1%	1%	9%	36%	53%

Table B3. Distribution of Responses for Items 11-15

Item	Time	Never	Almost Never	Sometimes	Almost Always	Always
11. I am able to think about how another person feels.	Pre	4%	8%	27%	30%	31%
	Post	2%	2%	9%	38%	49%
12. I know how my behavior affects others.	Pre	3%	8%	31%	30%	28%
	Post	1%	1%	12%	39%	48%
13. I treat others with respect.	Pre	2%	3%	23%	38%	33%
	Post	1%	1%	10%	35%	54%
14. I am aware of my own strengths.	Pre	6%	15%	31%	24%	24%
	Post	2%	1%	13%	36%	48%
15. I don't do something that I feel is wrong just because others are doing it.	Pre	6%	7%	30%	29%	28%
	Post	3%	4%	13%	39%	41%

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[10] Note that percentages in the tables may not add up to 100% due to rounding error.

Table B4. Distribution of Responses for Items 16-20

Item	Time	Never	Almost Never	Sometimes	Almost Always	Always
16. I can set realistic goals for myself.	Pre	4%	13%	31%	29%	23%
	Post	1%	1%	13%	43%	43%
17. I seek out guidance from others when I need it.	Pre	7%	21%	33%	22%	16%
	Post	1%	3%	24%	36%	37%
18. I willingly share my opinions.	Pre	5%	15%	28%	25%	27%
	Post	1%	4%	19%	36%	40%
19. When I see something that needs to be done, I do it without being asked.	Pre	6%	19%	39%	24%	12%
	Post	2%	2%	21%	46%	29%
20. I try challenging things.	Pre	4%	12%	33%	27%	24%
	Post	1%	2%	13%	38%	46%

Table B5. Distribution of Responses for Items 21-25

Item	Time	Never	Almost Never	Sometimes	Almost Always	Always
21. If I decide to learn something, I can do it.	Pre	2%	6%	36%	29%	27%
	Post	1%	0%	13%	40%	46%
22. I am able to overcome barriers to complete a task.	Pre	2%	9%	38%	32%	19%
	Post	0%	1%	12%	46%	41%
23. I can take steps to solve a problem.	Pre	3%	7%	31%	37%	23%
	Post	1%	1%	14%	39%	45%
24. I approach problem solving with an open mind.	Pre	4%	10%	38%	25%	23%
	Post	1%	2%	18%	41%	38%
25. I can work with different types of people.	Pre	3%	9%	34%	28%	26%
	Post	1%	1%	15%	39%	44%

Table B6. Distribution of Responses for Items 26-30

Item	Time	Never	Almost Never	Sometimes	Almost Always	Always
26. I can put my own needs aside to help the group meet its goal.	Pre	3%	11%	38%	27%	22%
	Post	1%	1%	15%	38%	45%
27. I can work with others to accomplish a task.	Pre	2%	5%	28%	35%	30%
	Post	1%	1%	11%	37%	50%
28. I am able to resolve disagreements positively.	Pre	6%	15%	37%	28%	15%
	Post	1%	2%	22%	44%	31%
29. I can identify other peoples' strengths.	Pre	2%	8%	35%	30%	26%
	Post	1%	1%	17%	41%	40%
30. When I am working in a group, I make sure to do my part.	Pre	2%	7%	28%	29%	34%
	Post	1%	0%	9%	36%	54%

Table B7. Distribution of Responses for Items 31-37

Item	Time	Never	Almost Never	Sometimes	Almost Always	Always
31. Even when something is hard, I follow through to finish it.	Pre	4%	13%	31%	31%	21%
	Post	1%	1%	12%	39%	48%
32. I am proud of my schoolwork.	Pre	10%	12%	27%	25%	27%
	Post	4%	4%	22%	33%	36%
33. I have learned things I can do to take care of the environment.	Pre	3%	12%	34%	27%	24%
	Post	1%	1%	11%	34%	53%
34. I think I have a role to play in protecting nature.	Pre	7%	13%	33%	20%	27%
	Post	2%	3%	17%	28%	50%
35. I now see connections between the environment and my life.	Pre	7%	13%	31%	25%	25%
	Post	2%	3%	14%	33%	49%
36. I play a role in making the world a better place to live.	Pre	4%	12%	33%	27%	24%
	Post	1%	1%	15%	34%	49%
37. I have a role in making sure all people are treated fairly.	Pre	3%	7%	29%	29%	31%
	Post	1%	1%	12%	31%	55%

Appendix C: Number of Respondents per Survey Item

Table C1. Number of Respondents Answering Each Item

Item	Time	n	Item	Time	n
1. I am able to wait my turn, even when I am excited about something.	Pre	457	20. I try challenging things.	Pre	454
	Post	457		Post	455
2. I can control my behavior when I am frustrated or mad.	Pre	455	21. If I decide to learn something, I can do it.	Pre	452
	Post	457		Post	454
3. I know what to do to calm myself down when I am stressed.	Pre	454	22. I am able to overcome barriers to complete a task.	Pre	451
	Post	460		Post	449
4. I can identify my emotions.	Pre	456	23. I can take steps to solve a problem.	Pre	449
	Post	457		Post	452
5. I think before I act.	Pre	457	24. I approach problem solving with an open mind.	Pre	449
	Post	460		Post	450
6. I am able to adapt when things change.	Pre	455	25. I can work with different types of people.	Pre	451
	Post	458		Post	453
7. I know my actions have consequences.	Pre	455	26. I can put my own needs aside to help the group meet its goal.	Pre	444
	Post	456		Post	446
8. I come prepared for activities.	Pre	457	27. I can work with others to accomplish a task.	Pre	447
	Post	458		Post	449
9. People can depend on me.	Pre	454	28. I am able to resolve disagreements positively.	Pre	446
	Post	457		Post	448
10. I take responsibility for my actions.	Pre	457	29. I can identify other peoples' strengths.	Pre	443
	Post	454		Post	451
11. I am able to think about how another person feels.	Pre	455	30. When I am working in a group, I make sure to do my part.	Pre	445
	Post	458		Post	450
12. I know how my behavior affects others.	Pre	451	31. Even when something is hard, I follow through to finish it.	Pre	448
	Post	458		Post	449
13. I treat others with respect.	Pre	453	32. I am proud of my schoolwork.	Pre	444
	Post	454		Post	446
14. I am aware of my own strengths.	Pre	455	33. I have learned things I can do to take care of the environment.	Pre	445
	Post	456		Post	449
15. I don't do something that I feel is wrong just because others are doing it.	Pre	450	34. I think I have a role to play in protecting nature.	Pre	445
	Post	454		Post	450
16. I can set realistic goals for myself.	Pre	455	35. I now see connections between the environment and my life.	Pre	444
	Post	456		Post	446
17. I seek out guidance from others when I need it.	Pre	450	36. I play a role in making the world a better place to live.	Pre	448
	Post	454		Post	448
18. I willingly share my opinions.	Pre	450	37. I have a role in making sure all people are treated fairly.	Pre	441
	Post	455		Post	449
19. When I see something that needs to be done, I do it without being asked.	Pre	455			
	Post	456			

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AND EDUCATIONAL IMPROVEMENT
UNIVERSITY OF MINNESOTA

Center for Applied Research and Educational Improvement
University of Minnesota
1954 Buford Ave., Suite 425, St. Paul MN 55108
Phone: 612-624-0300 • Fax: 612-625-3086 • carei@umn.edu