

Protecting You/Protecting Me Program

Fourth Annual Evaluation Report August 2008

Final

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Executive Summary

The Protecting You/Protecting Me program is being implemented on the Hopi and Navajo Nations through funding provided by the Arizona Parents Commission on Drug Education and Prevention, with oversight by the State of Arizona Governor's Office of Children, Youth and Families, Division of Substance Abuse Policy. The 2007-2008 school year was the third year of classroom implementation at Hopi schools and the second year of implementation at the Navajo Nation Red Mesa School District.

Protecting You/Protecting Me (PY/PM) is an alcohol-use prevention and education program that targets elementary-age students and high school Peer Helpers. PY/PM was developed by Mothers Against Drunk Driving (MADD) in efforts to reduce underage drinking and alcohol-related traffic fatalities by teaching children the effects of alcohol use and how to protect themselves in dangerous driving situations. The PY/PM program is comprised of an elementary curriculum that can be taught by classroom teachers or Peer Helpers. The program utilizes the Peer Helper model. A semester-long training class for the high school Peer Helpers provides them the content knowledge and teaching skills to teach classes to elementary school students. The elementary curriculum is designed to be five consecutive years in length and consists of 40 lessons taught to students in grades one through five with eight lessons per grade. Elementary lessons focus on vehicle-related safety, risky behaviors, and the dangers of alcohol and its effect on brain development.

This is the fourth annual evaluation report of PY/PM. In this report, findings are reported separately for the Hopi and Navajo Nation programs on program implementation, participant demographics, and outcomes.



HOPI NATION EVALUATION FINDINGS

Key implementation findings for the Hopi 2007-2008 program year:

- 312 students and 16 Peer Helpers participated in the PY/PM program at Hopi schools.
- About 64% of the elementary students completed all lessons of the program. Over 80% attended at least seven of the eight sessions.
- Fidelity was closely monitored by completion of Peer Helper response forms, which showed that the Peer Helpers covered most of the program material. For approximately 15% of the classroom experiences, Peer Helpers made some adaptations to the lessons.
- Lesson adaptations were minor, and were mostly wording changes, or changing the order of an activity. Peer Helpers became more comfortable with the lesson material over time.
- Peer Helpers most frequently reported that classroom disruptions were students talking or not paying attention. Peer Helpers were supported by teachers.
- Elementary school participants liked the high school students teaching the class (92%), and 89% thought the classes were fun. Also, 91% said they planned to use or share what they learned from the program.
- Perceptions of support and coordination for project implementation were high among teachers, principals, and school staff. Strong leadership and coordination was cited as a key component of the Hopi program's success.

Key outcome findings-elementary students

- Similar to the previous year's findings, there are positive trends from pretest to post-test in knowledge gain among elementary students.
- Younger students (grades 1st through 3rd) reported a much higher awareness of the brain as the "boss of the body" on the post-program survey (from 69% at pre-test to 86% at post-test). Understanding of vehicle safety behaviors was high at pre-test and remained high at post-test.
- For the 4th and 5th grade students, a statistically significant *increase* in media literacy (indicating more awareness of advertising tactics) was found. Changes in mean scores on the other scales for grades 4 and 5



- were either in the positive direction or already high at the pre-test and were maintained at the post-test, but not statistically significant.
- Among participants, intentions to engage in risky behavior showed no change. However, students revealed relatively strong intentions to not engage in underage alcohol use prior to PY/PM participation, which remained high at program completion.
- Of concern are the alcohol and drug use rates reported by 4th and 5th graders. These were similar to the rates (about 6%) reported for last year with the exception of marijuana use, which was 11%, slightly higher than what was found last year (6%).
- Approximately 20% of 4th and 5th graders had ridden in a car with an impaired driver *prior* to receiving PY/PM, compared to 22% in 2006/07 and 40% in the first year of the program. The continued decrease in this rate is encouraging, and could be the result of having PY/PM in the schools now for multiple years, as well as increased parent and community awareness about vehicle safety and alcohol use.
- Although there was no significant increase in participants' protective skills related to vehicle safety, their knowledge of these skills was already quite high on the pre-test.

Key outcome findings – Peer Helpers

- Focus group data, collected at the conclusion of the program year, revealed that Peer Helpers:
 - Overall rated the program experience as being very valuable and enjoyable
 - Enjoyed the attention paid by their students and their high motivation to learn
 - > Felt they gained more skills and confidence in public speaking
 - > Felt they were positive role models for the younger students
 - ➤ Learned classroom management skills and teaching skills
 - ➤ Learned "a great deal" about alcohol's affect on the brain.
- Due to their participation in the program, several Peer Helpers reported they intend to pursue a teaching career.



- Two of the thirteen Peer Helpers who responded on the survey about alcohol and drug use, reported either using alcohol or drugs in the last 30 days. Only one Peer Helper reported riding with an impaired driver.
- Peer Helper survey data from the first two program years were combined with the 2007/08 Peer Helper data in order to increase the sample size for conducting an analysis of the pre- and post-test scores. (Outcome data were not collected in the first year of the evaluation). A total of 22 Peer Helper surveys were included in the pre-and post-test analyses.
- Statistically significant changes were found on the scale that assessed
 perceived risk of high alcohol use. For the other scales, non-significant
 positive trends were found. These scales assessed the following:
 knowledge of the effects of underage drinking, future intentions toward
 alcohol use, perceived risk of low alcohol use, self-efficacy, and teaching
 skills.

Conclusions and Recommendations for Hopi Program

The evaluation findings for this year reinforce the previous year's findings that the program was well received and perceived as benefiting both the elementary students and the Peer Helpers. Peer Helpers, teachers, project and school administrators continue to be receptive and committed to working on program improvements. This is shown by the maintenance of program fidelity and the continued trend of showing positive outcomes for the elementary school students and Peer Helpers.

Based on this year's evaluation findings, the evaluation team recommends the following:

- 1) Continue to focus efforts on classroom management strategies and engagement of students in the material. Specifically, there continues to be a need to incorporate more visuals and activities into the lessons.
- 2) Conduct more in-class observations of the Peer Helpers in the First Mesa School, and obtain specific feedback from these teachers about the Peer Helper's progress. The First Mesa teacher observation ratings of Peer Helpers' engagement with students were somewhat lower than the Second Mesa teacher observations. It may be that Second Mesa



- teachers rated the Peer Helpers more highly because they were more experienced with the program. Also, each school may have different needs for support and coordination.
- 3) Increase community awareness and recognition of the program. Increased public recognition will be helpful for recruiting new Peer Helpers and for making parent and other community members more aware of the program. The Peer Helper community service projects, another program component, should be continued and possibly enhanced in order to bolster community awareness.
- 4) Increase efforts to include Hopi culture into the lessons. One suggestion was made to review the lessons and specifically identify where in the lesson it would be appropriate for Peer Helpers to relate the material to their culture.
- 5) The increase in reports of marijuana use among 4th and 5th grade students is of concern. If possible, more emphasis on the negative consequences of marijuana and other drugs should be included in the curriculum.
- 6) Plan for program sustainability. A strong commitment to the program exists from school administrators, teachers, and students, and all would like the program to be continued. The program coordinators/consultants report that they are developing a specific plan for program sustainability after the Parents Commission funding ends. At the time of this report, the school district was proposing to cover most of the costs of the program.

NAVAJO NATION EVALUATION FINDINGS

Key implementation findings for the Navajo 2007-2008 program year:

- A total of 206 students (102 students in Grades 1-3 and 104 students in Grades 4-5) and 17 Peer Helpers participated in the PY/PM program at the Navajo Red Mesa District Schools.
- About 32% of the elementary students completed all 8 lessons of the program. 57% attended at least seven of the eight sessions. Data were not available for students in Grades 1-3.
- Fidelity was monitored by completion of Peer Helper response forms
 which showed that the Peer Helpers attempted to cover most of the
 program material. For approximately 11% of the classroom experiences,
 Peer Helpers made some adaptations to the lessons.
- Peer Helpers comfort with the lesson material decreased over the course of the program. This may have been due to the high attrition rate of Peer Helpers and the disruption this may have caused to the program. Eleven of 17 Peer Helpers dropped out of the program over the school year.
- Peer Helpers reported that students talking out of turn or not paying attention were the most frequent classroom disruptions. Some Peer Helpers felt they could have received more support from the classroom teachers.
- Elementary school participants in the 4th and 5th grades liked the high school students teaching the class (97%), and 99% thought the classes were fun. Also, 96% said they planned to use or share what they learned from the program.
- Perceptions of support and coordination for project implementation were low among teachers, principals, and school staff. School budget cuts, staff shortages, and lack of external technical assistance for the PY/PM program were cited as major barriers to the program implementation.
- The evaluation data were incomplete, and thus, several important program areas could not be analyzed and reported on due to missing data.



Key outcome findings-Navajo elementary students

- Similar to the previous year's findings, there are positive trends from pretest to post-test in knowledge gain among elementary students in the 4th and 5th grades.
- A majority (60%) of the younger students (grades 1-3) reported an awareness of the brain as the "boss of the body" on the pre-program survey. Understanding of vehicle safety behaviors was also high on the pre-test (93%). Although 103 students in grades 1-3 took the pre-test, only eight students completed the post-test, so change scores on these surveys could not be examined.
- For the 4th and 5th grade students, a statistically significant *increase* in preto post-test scores on vehicle safety, perceived harm of underage drinking, and media literacy (indicating more awareness of advertising tactics) was found. Changes in mean scores on the other scales for grades 4 and 5 were either in the positive direction or already high at the pre-test and were maintained at the post-test, but not statistically significant.
- According to self-report data at pre-test, alcohol use rates among 4th and 5th ranged from 3%-4%. Marijuana use was 2%.
- Approximately 12% of 4th and 5th graders had ridden in a car (about 8 students) with an impaired driver *prior* to receiving PY/PM.

Key outcome findings - Navajo Peer Helpers

- Focus group data collected at the conclusion of the program year, revealed that Peer Helpers:
 - ➤ Rated the program experience as being very valuable but challenging due to classroom disruptions and high attrition of Peer Helpers
 - > Felt they gained more skills and confidence in public speaking
 - ➤ Learned classroom management skills and teaching skills
 - ➤ Learned a great deal about alcohol's affect on the brain.
- All Peer Helpers who were interviewed would like to participate in the program next year.



- On the pre-test, Peer Helpers reported moderate to high levels of knowledge about the effects of underage drinking, knowledge of the perceived risks of high levels of alcohol use, and intentions not to use alcohol when they get older. Self-efficacy (ability to refuse alcohol from friends and family) was at a moderate level. Peer Helpers perceived the risks of low-level alcohol use as only somewhat risky.
- There were no Peer Helper post-test data available.
- Only one Peer Helper reported using alcohol recently, and one reported riding with an impaired driver.

Conclusions and Recommendations for Navajo Program

The 2007/2008 school year was the first full year of the program's implementation on the Navajo Nation in the Red Mesa School District (in the previous year, the program started in the Spring Semester). The findings show that the teachers, principals, and Peer Helpers were able to continue the program and achieve positive outcomes with the elementary students despite facing significant implementation challenges. These challenges were school staff cutbacks, increased workloads, and high Peer Helper attrition in the program.

The first three recommendations are considered crucial for the Navajo PY/PM program:

- 1. In order for the Navajo program to continue, the outside consultant for program technical assistance should be retained. The program was still new, and the schools were just getting the program established when contract difficulties suspended the consultant's assistance. This severely hampered the program's implementation.
- 2. In order for the Navajo program to continue, the Peer Helper teacher and elementary school program liaison need to receive a stipend for their involvement as well as reimbursement for supply costs.
- 3. Strong commitment from all levels of school administration and staff are needed for the program's success. The roles and responsibilities for staff involvement need to be clearly delineated and communicated,



as well as providing clear communication about the levels of support that will be provided.

The following recommendations apply to the Navajo Peer Helper training and support, and the evaluation:

- 4. Provide increased time for the Peer Helpers to observe elementary classrooms prior to starting their teaching.
- 5. Encourage the elementary classroom teachers to share their classroom management methods with the Peer Helpers to gain concrete suggestions and feedback at each grade level.
- 6. Require that the elementary classroom teachers remain present in the classroom during the PY/PM lesson in order to provide assistance and support to the Peer Helper to manage classroom disruptions.
- 7. Increase recognition of the program and Peer Helpers' involvement school-wide and with parents. The high rates of riding with impaired drivers also means that more work needs to be done to increase community awareness and action on these issues.
- 8. Continue to retain some second year Peer Helpers as well as recruit new Peer Helpers early in the spring.



Introduction and Background

In 2004, the Arizona Governor's Office Children, Youth and Families, Division for Substance Abuse Policy, with funds from the Arizona Parents Commission, sought proposals from Native American tribal communities to implement the Protecting You/Protecting Me (PY/PM) underage alcohol use prevention program in their schools. The Hopi Nation was one of the first Arizona tribes to receive the funding in 2004. In Fiscal Year 2006-2007, the Navajo Nation initiated funding for the program, and recruited the Red Mesa School District for the program. LeCroy & Milligan Associates, Inc. has been conducting the evaluation of the program since 2004.

Protecting You/Protecting Me Alcohol Use Prevention Program

Protecting You/Protecting Me is an alcohol-use prevention and education program that targets elementary-age students and high school Peer Helpers. PY/PM was developed by Mothers Against Drunk Driving (MADD) in efforts to reduce alcohol-related traffic fatalities by teaching children the effects of alcohol use and how to protect themselves in dangerous driving situations. PY/PM has been identified by SAMHSA (the Substance Abuse and Mental Health Services Administration) as a model program and was developed to incorporate the "Principles of Effectiveness" identified by the U.S. Department of Education in 1998.

Studies indicate that children begin to acquire an understanding about alcohol at a very early age, often before they have any direct involvement with it (Fossey, 1993; Lloyd, 1996). Accordingly, PY/PM is based on the assumption that children who learn about the effects of alcohol will develop negative attitudes toward alcohol use and will thereby be less likely to use alcohol in the future. PY/PM is also intended to increase social skills, self-protection skills for vehicle safety, assertiveness skills, knowledge of how the human brain develops, and awareness of media advertisements of alcoholic beverages. Lessons and activities teach children in 1st through 5th grades about their brains, the effects of alcohol on the brain, and vehicle safety. PY/PM consists of a 40-lesson curriculum with eight age-appropriate lessons per grade.



The PY/PM elementary curriculum can be taught by classroom teachers or Peer Helpers. The program utilizes the Peer Helper model. The program includes a training curriculum for the high school Peer Helpers that prepares them to teach the elementary curriculum. The Peer Helpers participate in a semester-long class that teaches them the content topics as well as personal values exploration, and teaching and presentation skills.

Evaluation of the Protecting You/Protecting Me Native American Programs

LeCroy & Milligan Associates, Inc. has conducted the program evaluation of the Protecting You/Protecting Me program since 2004. Previous reports focused on implementation of the program and short-term student outcomes. This report is the fourth annual evaluation report for the initiative and reflects the implementation and short-term outcome data from the 2007-2008 school year. The research questions addressed by the fourth year evaluation are provided in Appendix A, and the evaluation instruments are in Appendix B and C. The evaluation used both qualitative and quantitative methods. The qualitative methods used are primarily key-informant interviews and focus groups. The quantitative methods used are descriptive analyses of the program participants, and analyses of pre-test and post-test change scores using paired sample t-tests and tests of significance.

Findings for the Hopi and Navajo Program sites are presented in separate sections of this report. Each section focuses on implementation results (i.e., delivery, participant satisfaction, program attendance and fidelity), descriptions of elementary school participants and Peer Helpers, and short term changes for students as measured through participant pre- and post-surveys completed during the 2007-2008 school year.

The PY/PM program is intended to be a five-year intervention, with each year's information building upon the previous year. Therefore, it will take several years to clearly identify the impacts of the program.



Hopi Nation Evaluation Results

Program Implementation Overview

As of May 2008, the Hopi Nation program completed its third year of implementation. The program was taught in two elementary schools. During fall semester 2007, the Peer Helpers taught at Second Mesa Day School (October-December) and in the spring semester they taught at First Mesa Elementary School (February-April). This year (2007-08) was the third year of implementation at Second Mesa Day School and the second year of implementation at First Mesa Elementary. The Peer Helpers were organized into teams of two and were assigned to teach one grade level class each. There were a total of 19 classes covering grades 1-5, with ten classes at Second Mesa Day School, and nine implemented at First Mesa Elementary School.

Thirteen high school students at the Hopi Junior/Senior High School were recruited to be Peer Helpers in the spring prior to the start of the school year. Three students were returning Peer Helpers from the previous year. The recruitment process followed the recommended methods outlined in the PY/PM curriculum, including making a school-wide presentation, soliciting teacher and student recommendations for appropriate students, applications, and final selection by the project teacher. The same peer helper teacher from 2006/2007 was retained and brought continuity to the program. She also has a background in science education and teen leadership development that provided additional support to the program's implementation.

The high school Peer Helpers received school credit for participating in the PY/PM project and the class met daily as an elective. The first four weeks of class were devoted to training the Peer Helpers to teach the PY/PM curriculum. The training included sessions on content knowledge, teaching skills, classroom management, presentation skills, and personal values and behavior. In addition to the curriculum-based activities for the Peer Helper training, the Peer Helper teacher and the Project Coordinators conducted team-building activities with the students to develop relationships among students who previously did not know each other and to increase their skills in working in small groups. The students were also required to commit to abstain from alcohol or other drug use during their participation as Peer Helpers.



After the initial period of training, the Peer Helpers followed a consistent weekly format. Four days a week they prepared, rehearsed and reviewed lesson plans and on the fifth day the Peer Helpers traveled to the elementary schools to teach the 8-week PY/PM curriculum.

Profile of the Participants

Thirteen high school Peer Helpers and 312 elementary school students across five grades (1st through 5th) participated in the PY/PM project, for a total of 325 PY/PM participants who received the program in 2007-2008. Of the 325 participants, 233 completed both pre-program and post-program surveys. A profile of each set of participants follows.

Peer Helpers

Of the total 13 Peer Helpers who participated in the program in the 2007-2008 school year, seven were seniors and six were juniors, ages 16 to 18 years of age. The majority was female (10 female, 3 males).

Elementary School Students

Two cohorts of students are represented in the data for 2007-2008, including:

- 166 students at Hopi Second Mesa Day School (Fall 2007)
- 146 students at Hopi First Mesa Elementary School (Spring 2008)

Elementary students ranged in age from five to twelve years old, and were distributed across grades one through five. Of the total 312 students participating in PY/PM, 226 (72%) completed both pre- and post-tests. Table 1 below shows a summary description of participating elementary students.



Table 1. Participant Demographic Data

	Total # of	Sem	ester		Gr	ade Le	vel		Ger	nder
Site	participating in PY/PM	Fall 2007	Spring 2008	1st	2nd	3rd	4th	5th	Boys	Girls
Hopi	312	166	146	59	62	54	71	64	145	158

^{*} The number of students by grade level and gender does not sum to the total of 312 PY/PM participants. Grade level was missing for 2 students and gender was missing for 9 of the participating students.

Implementation Findings

This section includes results on the *staff and teacher assessment of the project*, *curriculum fidelity*, and *student satisfaction surveys*. Overall, the Hopi PY/PM program continues to receive positive feedback from everyone involved, as well as thoughtful suggestions about areas that can be strengthened and enhanced.

Project Staff and Teacher Assessment of Implementation

Interviews were conducted with project coordinators, teachers, and school administrators during the fall and spring semesters of 2007-2008 school year to gather impressions about the third year of peer teaching at Hopi Nation schools.

The major strengths in implementation at Hopi Nation this year were strong leadership and coordination between the high school and elementary schools, on-going training of Peer Helpers, and enthusiastic support and commitment for the program. The main challenges identified during this year included difficulties in scheduling, not enough peer helpers to team-teach, minimal community awareness about the program, infusing cultural content into program, and program sustainability. These strengths and challenges are further described in the following table.



Table 2. Summary of Hopi Implementation Strengths and Challenges

	Hopi Program Strengths			
Strong leadership and coordination Strong leadership and coordination Strong leadership and coordination Strong leadership and coordination others) has played their part and stayed in concommunication. Meetings with teachers to coordinate have been very beneficial. The program orientation with the First Mesa Soft teachers this year was perceived to be very help of the peer helper teacher is very committed to the program and she coordinates very well.				
Consistent training and support for Peer Helpers continues	 The PY/PM Summer Retreat in Chinle provided a good foundation for peer helper preparation, and created an opportunity to forge bonds before school started. Project Coordinators provided once-a-month sessions on assertiveness skills, making good personal choices, being a positive role model, and communication skills. Peer helpers wrote "reflection" papers that indicated the effectiveness of the training and support that were provided to them. Teacher feedback indicates that peer helpers improved their teaching styles and classroom management. 			
Enthusiastic support for and adoption of the program	 Staff and teachers from both elementary schools want the program to continue. They see it as a stable and valuable class. Second Mesa Day School staff and teachers are very enthusiastic about the program. It has now become incorporated into their regular schedule of classes. They see improvements each year in the peer helpers. Elementary students' retention of knowledge, and the value of positive role modeling have been recognized by staff and teachers. 			

	T
The peer helper model, and the program length and intensity is highly valued.	School administrators and teachers attribute the success of the program to its length, intensity, and the peer helper model, as exemplified by the following direct comments, o "There have been no continuous programs here, just one-shot deals. Most programs are short-lived." o "I would put peers above any other form of (program) delivery." "A lot would be lost without the peer helper. They are our own people. It's very powerful. They are true mentors; it's what makes this program so great."
H	Iopi Program Challenges
Increased recruitment of Peer Helpers	 A goal was set for Year 3 to recruit enough Peer Helpers to assure team teaching and a sufficient number of substitutes to cover for absences. This goal was not achieved. Some teachers reported disruption in their classes due to peer helper absences.
Scheduling	Although communication and coordination were strong this year, scheduling was still a challenge, for example:
	 High school students' schedules changed quickly due to sports or other involvement. Some students had to be taken out of recess to do the program. Second Mesa Teachers requested different starting and ending times for the PY/PM classes, which meant some peer helpers had to wait in the school hallway until the other Peer Helpers finished their classes.
Recognition of program and peer helpers in the community	 It is perceived that awareness of the program does not extend far beyond the school boundaries. Peer helpers should be recognized in the community for their efforts.
Infusion of more cultural content into program	 There are Hopi Nation ordinances that require Hopi culture to be incorporated into all the class- room lessons. The Peer Helpers need more ideas for how to do this. Attempts have been made to include Hopi Elders in the program, but they have not yet succeeded.
Sustainability of program	 It is unclear if the high school would or could support the PY/PM once the Parents Commission funding ends. Other federal grants, such as Safe and Drug Free Schools, require infrastructure supports that the Hopi School Districts do not have.



Program and Curriculum Fidelity

An examination of program fidelity in implementing the PY/PM program examined three aspects of fidelity:

- 1. Program dosage (frequency and duration of the program)
- 2. Classroom curriculum delivery--degree to which program components were delivered as prescribed (program content), and how the program was delivered (Peer Helper approaches, skills and qualities)
- 3. Student responsiveness to the program.

The results for each of these aspects fidelity are reported in the next sections.

Participant Attendance and Program Dosage

A total of 19 elementary classrooms received the PY/PM program during the two semesters (fall 2007 and spring 2008). There were ten classes taught at Second Mesa Day School, and nine classes taught at First Mesa Elementary School. All programs taught one class per week for 8 weeks as intended in the curriculum. Table 3 provides a breakdown of program dosage and participant attendance by grade.

Table 3. Attendance and Program Dosage

	Number	Average length	Average number of	Percent of students	Percent of students
	of	of sessions, in	students in	attending	attending 7 or
	sessions	minutes	class daily	<u>all 8</u>	8 sessions
Grade	available	(min,max)	(min, max)	sessions	
1 st	8 sessions	45 (15,80)	16 (12,19)	76%	91%
2 nd	8 sessions	45 (30,75)	17 (12,19)	45%	76%
3rd	8 sessions	47 (38,60)	19 (15,23)	74%	85%
4^{th}	8 sessions	50 (40,60)	18 (16,20)	74%	91%
5 th	8 sessions	59 (30,90)	17 (14,19)	52%	77%
Total		49 (15,90)	17 (12,23)	64%	84%

As Table 3 shows:

- Eight sessions (the full curriculum) were available for all five grades.
- The average length of sessions was 49 minutes, with the longest sessions being reported amongst the older grades. The curricula suggest that designed lessons last 45-50 minutes.
- The average number of students in class ranged from 12 to 23, with a mean of 17 students. The 3rd grade classes reported the highest average number of students per class, compared to the higher grades.
- Across grades 1-5, the percent of students receiving <u>all 8</u> sessions of the curriculum ranged from 45% -76%. This a wide range of attendance rates.

Classroom Curriculum Delivery

Teacher and Staff Observations

Results from teacher and staff observation forms (Appendix B) indicate that a high majority of the peer helpers showed good speaking and class presentation skills, such as repeating questions, strong and clear voice projection, and easy interaction with students. A majority was also considered prepared and knowledgeable about the program material. However, there were notable differences in the teachers' observations from the two elementary schools, as shown in Table 4. Second Mesa Day School teachers tended to report higher percentages on the peer helper presentation and teaching skills than the First Mesa Elementary School teachers. In particular, First Mesa teachers reported lower percentages for peer helpers on the following: giving positive reinforcement to students, enthusiasm for the subject matter, and encouraging questions and student participation.



Table 4. Peer Helper Presentation and Teaching Skills (N=154 Observations)

Teachers Observed the Peer Helpers Do		Mesa Day ol, N=81	First Mesa Elementary, N=73		
the Following "most or all of the time":	Valid %*	Number of observations	Valid %	Number of observations	
Appeared to connect with students	86%	69	69%	50	
Spoke in strong, clear voice	91%	72	86%	63	
Repeated questions for all to hear	78%	63	78%	56	
Asked students questions to review topics	86%	70	80%	57	
Prepared and knowledgeable about material	86%	67	76%	51	
Interacted with students with ease	88%	68	76%	54	
Gave positive reinforcement to students	84%	66	57%	40	
Demonstrated enthusiasm for subject matter	86%	68	62%	42	
Encouraged questions/ participation	88%	70	66%	45	
*Valid percents are calculated from the total number who responded to each question.					

Teachers also were asked to estimate their students' interest and understanding of the program content by marking an estimate of how many of their students engaged in various behaviors. The reported percentages were somewhat high, especially for the Second Mesa Day School. For example, 80-90% of teachers' observations indicated that a majority of the students participated in class, showed interest in the material, and appeared to understand the lesson. First Mesa Elementary teachers reported somewhat lower percentages. For example, only about a quarter (26%) of the First Mesa teacher observations indicated that a majority of their students asked questions during the class. In contrast, over 60% of the Second Mesa observations indicate that a majority of their students asked questions. Table 5 shows the percentages reported by teachers for each school.



Table 5. Student Interest in and Understanding of Program Content (N=154 Observations)

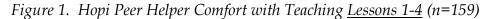
Teachers Observed "About 3/4 of youth" or		Mesa Day ol, N=81	First Mesa Elementary, N=73	
"All youth" do the following in the PY/PM Class:	Valid %*	Number of observations	Valid %	Number of observations
Participated/volunteered in class activities and discussions	90%	70	69%	50
Asked questions	62%	48	26%	18
Showed interest in the material	92%	70	68%	48
Showed respect for the Peer Helper	85%	66	70%	48
Appeared to understand the lesson	85%	66	68%	48
Followed directions	84%	66	63%	45
Were attentive	85%	66	61%	44

Peer Helper Class Response Forms

Peer helpers were required to complete a Class Response Form (Appendix B) after each PY/PM class to measure program fidelity and to self-assess their performance. The completed forms were used by the Peer Helpers and their teacher to debrief successes and challenges after each class. Using this form, the Peer Helpers specifically assessed the following: comfort in teaching, quality of class participation, amount of time available to teach and review, barriers to teaching or learning, and changes made to the lessons. The results for each of these areas are provided below.

<u>Comfort in teaching</u>. Overall, 73% of peer helpers felt comfortable to very comfortable. Peer Helpers' comfort with teaching increased over time, as Figures 1 and 2 below show. That is, their ratings of comfort with lessons 5-8 were much higher as compared to their ratings for the first four lessons (1-4).





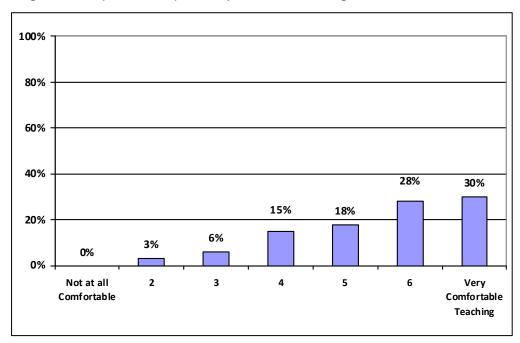
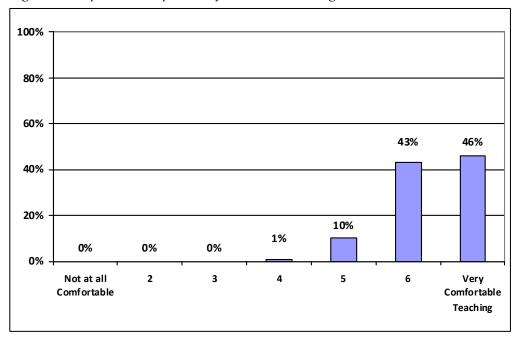


Figure 2. Hopi Peer Helper Comfort with Teaching <u>Lessons 5-8</u> (n=159)



Quality of class participation. Forty-one percent (41%) of Peer Helpers rated an "A" on student participation, that is, they felt that students were actively participating. Another 45% rated a "B" for participation, indicating good participation. About 46% of peer helpers' felt there were moderate to high amounts of classroom disruptions.

The following are some typical disruptions that Peer Helpers reported:

"Some kids seemed restless or tired so they began to play with each other."

"The same two boys kept on talking and wouldn't listen."

" A couple of students were talking back and messing around."

<u>Time to teach and time to review</u>. Nearly all of the Peer Helpers felt there was enough time to teach and review the material (99%).

<u>Barriers to teaching, learning or participation</u>. Forty percent (40%) of the Peer Helpers said there were barriers. Disruptive student behaviors, such as inattentive students and students talking were the barriers that were most frequently reported. The Peer Helper feeling ill or uncomfortable in the classroom was another reported disruption.

<u>Changes made to the lesson.</u> Out of a total of 169 class forms that were completed by Peer Helpers, 15% of these indicated that lessons were changed in some way. For most of these, the reported changes did not indicate a significant threat to the curriculum fidelity. All of the reported changes made to the lessons were categorized and typical examples under each category or type are provided in the following:

Omitted lesson material: "Didn't go over one demonstration for pressure and resistance." "I got lost in the lesson."

Forgot some props, or materials: "Forgot the medicine bottles." "Forgot the transparencies, so I wrote stuff on the board."

Changed the wording: "Just changed the way I said something from the book." "I didn't speak word-for-word on the lesson."



Changed the order of something or the way an activity was done: "We did the Jesse poem before the birthday activity" "I was supposed to read, and I let the kids read instead of me."

Needed to fill in class time: "I had a lot of time left so the students wanted to make up their own play."

Most lesson changes or modifications were for wording, order of the content, or adding an activity to maintain students' attention.

Elementary Students' Assessment and Satisfaction (Fourth and Fifth Grade Students)

After completing the eight PY/PM lessons for the year, students in grades 4 and 5 were asked to report their satisfaction with the program (Appendix C, Student Outcome Survey Grades 4-6). Students were very satisfied with the program, with over 86 percent of 4th and 5th graders reporting the program was either "Excellent" or "Very Good" and over 86% reporting that the PY/PM teachers were "Excellent" or "Very Good."

As part of the post-program survey, students were also asked to answer several questions concerning the program and its impact on their behavior. As seen in Table 6, a large majority (91%) of students reported they "plan to use or share" aspects of the program that they have learned, and that they are more interested in the topic "as a result of the program." Nearly three-quarters of students said they thought the program was useful.

Table 6. Student (4th and 5th grades) Responses to the PY/PM Program: Postprogram Survey (n=96)

As a result of the PY/PM program	Yes
I will do something new or different.	78%
I will change the way I think, act, or behave.	79%
The information was useful.	77%
I plan to use or share what I have learned.	91%
I am more interested in this topic.	81%



Students were also asked to report on several items about the Peer Helpers. As seen in Table 7 below, Peer Helpers received positive marks among the 4th and 5th graders receiving the lessons. Nearly all of the students said the "classes were fun" and the Peer Helpers "were good teachers."

Table 7. Student (4th and 5th grades) Responses to Peer Helpers: Post-program Survey (n=96)

About the high school students	
that taught your PY/PM classes	Yes
The high school student(s) were prepared for class.	90%
The high school student(s) were easy to understand.	75%
The high school student(s) were good teachers.	88%
I liked having high school student(s) teach the classes.	92%
The classes were fun.	89%

Peer Helpers' Assessment of the Project

Focus groups were conducted with the Peer Helpers in September 2007 and again in May 2008. The students also wrote "reflection papers" about their experiences in the project. In these papers, Peer Helpers were asked by their peer helper teacher to write about how they helped their students, and what they learned from the experience. Similarly, the focus group questions were designed for the teens to discuss the most important things they learned as a Peer Helper, their perceived impact on the elementary students, as well as useful aspects about the Peer Helper training, and what the schools need to do to keep the program going in future years.

Since the "reflection papers" and focus groups asked similar questions, the responses from each were analyzed together, and the themes that emerged are summarized below. They are categorized under the following headings of: What Peer Helpers Learned or Gained, What Elementary Students Learned or Demonstrated, What Helped in the Training, Suggestions for Future Training and Changes to the Program.

What Peer Helpers Learned or Gained

Positive Connections Made with Students

Overwhelmingly, the Peer Helpers emphasized the fun and enjoyment they experienced from interacting with the students. Peer Helpers most frequently mentioned their students' motivation to learn and close attention students gave to the class content. They also reported developing bonds with their students over the course of the semester, which made it difficult to end their involvement.

"It was so much fun and (I) made a lot of little friends. It was fun teaching them for the whole semester and they said when I was leaving I was their number one teacher and that I did a good job teaching them."

"Now, when I am in the community, the kids I taught always come up to me and say hi and hug me, and asking me when I'm going back to their classroom."

Increase in Public Speaking Skills and Confidence in the Classroom

The PY/PM program provides the opportunity for high school students to practice their public speaking skills, and overcome the nervous emotions that can accompany this experience. Many of the Peer Helpers said that they gained more confidence in speaking in front of a group, and learned that preparation and organization were important aspects to good public speaking and teaching.

"Now I think I developed how to be more responsible and organized and have a little more public speaking skills."

"I knew what to expect and felt more experienced. Last year, I was scared and I wasn't sure how to present myself to the kids. But now I feel that I have more confidence. I learned that I need to take chances even though it can be scary. I have gained confidence in myself and how to present myself to a crowd."

"I can say that I have changed. Being a little more patient and more serious. Having to be a little more stern. Yet at the same time I could really be myself, being active in the lessons really opens up doors for the students to try something."



Realization of Being a Positive Role Model

The Peer Helpers frequently mentioned that the "little ones" attended very closely to their words and behaviors, and reacted to their demeanor and style in the classroom. This led to their increasing realization that they were setting an example and modeling behaviors for them.

"I learned that I needed to conduct myself in a different manner at times. Not holding nothing back when teaching because the little ones are there with open ears, eyes, arms and brains ready to learn whatever you're teaching."

"I also felt that I helped them by not being a hypocrite. I have kept to my word of being drug and alcohol free. I want them to know that they don't have to follow the crowd. They can stand out and still have a promising future."

"I also learned that I should always watch how I conduct myself, no matter where I am at. I learned this because I know that there is always someone watching."

What Elementary Students (Grades 1-5) Learned or Demonstrated

Motivation for Learning

The Peer Helpers closely observed the students' demeanor and responses to the PY/PM class. They immediately noticed the students' excitement and eagerness of having the Peer Helper teaching in their class. Students' motivation to learn and their eagerness and enthusiasm was reinforcing to the Peer Helpers.

"The students there were very eager to learn and always very excited to see us. Their interest in learning the PY/PM lessons made me happy to be a PY/PM teacher."

"And I don't know, it was just a joy teaching them and they always ask how you're doing and ask you questions about different things."



Student Retention of Program Content

The students were retaining the concepts and learning the messages.

"...they can put a lot of things in their minds. If they learn a lot one day they remember it a week later."

"They <u>KNEW</u> everything! Every question was answered correctly and they surprised me by finishing the worksheet in less than 10 minutes!"

Student Application of Program Concepts

Students were practicing what they learned, and attempting to apply it in their personal lives.

"Helped them a lot. At ceremonies they would tell me what they learned and that they talked to family about it and may have inspired change. It is good that we inspire them."

"Cousins in class had a dad who drank and his child told him about the damage he was doing and he put down his can and played with him."

What Helped in Training and in the Classroom

Brain Growth and Development

Several Peer Helpers mentioned that learning about brain growth and development helped them teach the concepts more effectively in the classroom or made them feel more confident to teach in general.

 $"... it\ helped\ with\ explaining\ it\ to\ the\ students."$

"I pretty much learned all I need to know about what alcohol does to the human brain, and now I can't wait to go to First Mesa Day school to teach them."



Feedback and Support from the Classroom Teachers

The elementary school teachers were mentioned by Peer Helpers as providing help in the classroom. This was appreciated by the Peer Helpers.

"The teachers also enjoyed the PY/PM program and enjoyed the lessons we were teaching. They assisted us whenever they could and helped to make our lessons run smooth and calm."

"Their teacher was also great. She helped when she felt it was necessary. I appreciated that."

Suggestions for Future Training and Changes to the Program

Classroom Management

The Peer Helpers did not provide as many suggestions for future training as they had in previous years. However, a frequently mentioned area that posed challenges and was suggested for more skill-building was in classroom management. It was also suggested that classroom teachers could provide more instruction and assistance with this.

Increase Strategies to Recruit New Peer Helpers

As mentioned earlier, the goal of increasing the number of peer helpers was not reached during this school year. One Peer Helper mentioned that more are needed, and that recommendations for new students should be increased. Another Peer Helper was hopeful and felt that fellow students will want to participate.



Student Outcomes

This section of the report presents baseline descriptions of the elementary students and Peer Helpers who participated in the PY/PM program, during the 2007-2008 school year. The results that follow were derived from surveys given to students and Peer Helpers before starting the program (pre-test) and again at the end of the program (post-test). The following results are based upon those students who completed both a pre- *and* a post-test survey (a matched set).

Different types of analyses were conducted based on the type of data that were available from the surveys. Analysis of the Grades 1-3 data included a descriptive comparison of the frequencies and percentages from pre-test to post-test. For Grades 4 and 5, parametric statistics and significance tests were conducted because the survey data were appropriate for this type of analysis (i.e. employed multiple scales using Likert-type responses).

Available attendance data shows that 312 elementary students received at least one session of PY/PM, but 226 participants completed both pre and post surveys, resulting in an 72% survey completion rate overall.

Table 8. Matched Surveys: Students Completing both Pre- and Post-Test Surveys by Site

	# of students completing both pre- and post-test by			tudents ing both
Total # of students	semester		pre- and post-test	
participating in	Fall	Spring	Number	% of
PY/PM	2007	2008	Number	participants

Grades 1-3

One-hundred and seventy-five (175) students in 1st, 2nd, and 3rd grades participated in the PY/PM program *and* 130 (74%) completed both pre- and post-surveys.

- 49% were boys and 52% were girls
- 29% were first graders
- 37% were second graders
- 34% were third graders
- Overall, 69% attended all eight sessions.

The survey for grades 1-3 consisted of six questions. Data regarding student responses can be found in the tables below. Similar to the previous year's results, data from the third year of PY/PM suggest that younger students learned some of the concepts taught in the program. For instance, students gained an increased awareness of the importance of the brain, with 112 students (86%) noting that the brain was the "boss of your body" on the posttest. Additionally, at the conclusion of the program, more students indorsed the item that it is harmful for teens to drink alcohol. However, with only 65% believing it is harmful at post-test, this message should be emphasized more in class. The item that asks if "you should talk to the driver if they drank beer, wine, or alcohol" shows some slight changes in a positive direction at the post-test period.

Table 9. Data Regarding Student Outcomes – Grades 1, 2, 3 (N=130)

What is the boss of your body?	Pre-Program	Post- Program
My Heart	41 (31.5%)	18 (13.8%)
My Brain	89 (68.5%)	112 (86%)
Is it harmful for teens to drink beer, wine, or alcohol?	Pre-Program	Post- Program
Yes	50 (38.5%)	85 (65.4%)
Sometimes	5 (3.8%)	0 (0.0%)
No	75 (57.7%)	45 (34.6%)



Should you talk to the driver if they drank beer, wine, or alcohol?	Pre-Program	Post- Program
Yes	7 (5.4%)	3 (2.3%)
Sometimes	2 (1.5%)	2 (1.6%)
No	121 (93.1%)	124 (96.1%)

Students were also asked to write or draw something to show the main thing they learned from PY/PM. Their responses helped to illustrate students' understanding of key PY/PM messages and included such statements as:

- "Alcohol can damage your brain"
- "Don't drink and drive"
- "I learned not to drink or do drugs"
- "I learned that beer affects your body"

Data show that the young students begin the program with some well-formed ideas about vehicle safety, with over 90% understanding the safest place to sit is in the back seat and 93% reporting that it is not okay for people to drive after drinking. These already high percentages slightly increased at post-test, as shown in Table 10.

Table 10. Data Regarding Student Outcomes – Grades 1, 2, 3 (N=130)

Where is the safest place to sit in a car?	Pre-Program	Post- Program
Front Seat	7 (5.4%)	3 (2.3%)
Back Seat	123 (94.6%)	127 (97.7%)
Is it okay for people to drive when they drink beer, wine, or alcohol?	Pre-Program	Post- Program
Yes	5 (3.8%)	5 (3.8%)
Sometimes	6 (4.6%)	4 (3.1%)
No	119 (91.5%)	121 (93.1%)

Grades 4-5

Students receiving PY/PM in 4th and 5th grades were asked to complete preand post-program surveys to assess their knowledge about the brain and attitudes with respect to underage drinking and vehicle safety. The pre-test and post-test contained sets of questions that comprised scales to measure several constructs associated with underage drinking and vehicle safety:

- Attitudes toward Underage Alcohol Use
- Intentions to use alcohol
- Vehicle Safety Skills (riding with an impaired driver)
- Media Literacy
- Perceived Harm of Underage Alcohol Use

Items on the survey were rated on a four-point Likert-type scale (e.g., scores of 1, 2, 3, and 4), with 4 being the most desirable (positive) response. (Appendix C, Student Outcome Survey, Grades 4-6)

One-hundred and thirty-seven students (137) in grades 4-5 from both Second Mesa Day School, and First Mesa Elementary School participated in the PY/PM program and 96 students (70%) completed both pre- and post-program surveys. Among the students who completed both pre- and post-tests:

- 43% were in 4th grade
- 57% were in the 5th grade
- 67% of students attended all eight sessions
- 50% of the students were male, and 50% were female.

Table 11 displays the mean scores on the five scales. Questions comprising the scales and their respective mean scores are also presented. At the completion of the third year of PY/PM program, the results of the survey data for 4th and 5th graders illustrate positive, or desirable, increases in mean scores on the two scales of media literacy and vehicle safety. The data revealed a statistically significant¹ increase in one scale: attitudes about media literacy. In the previous year, two scales, media literacy and attitudes toward underage drinking, showed statistically significant change. The main

¹ Paired sample t-tests were conducted using a two-tailed probability test of significance, alpha level set at p<.05.



findings for each scale are discussed below, followed by the data results in Table 11.

Attitudes toward Underage Alcohol Use

The total mean score for this scale did not show change from pre-test to post-test. However, the scores were already high at baseline, and were maintained at the post-test, indicating that students either disagreed or strongly disagreed that drinking alcohol is okay for people under age 21.

Alcohol Intentions

Students' ratings regarding their intentions to use alcohol continue to be the highest, or most desirable, scale score reported on both the pre- and post-test measures. This finding indicates that children start the program with strong intentions not to use alcohol and remain that way (therefore not showing significant difference from pre- to post-test). A similar result was reported last year.

Vehicle Safety Skills

The mean score on vehicle safety skills increased from pre- to post-test, but was not found to be statistically significant. The largest difference found amongst the individual items that make up the scale was on the item that asks if the student would talk to the driver who had been drinking alcohol. The other items showed little to no change, but were already high, indicating that students enter the program being aware of vehicle safety skills.

Media Literacy

Students' scores on media literacy showed a statistically significant change in the positive direction after receiving the program. The scale of media literacy measured children's awareness of the deceptive nature of television advertisements and how they portray alcohol use.

Perceived Harm of Underage Alcohol Use

Students' scores did not change from pre- to post-test. Students' scores showed their awareness that drinking alcohol as a teen can be harmful. Also, upon closer examination of the specific items in the scale, there is an



indication that drinking one or two cans of beer is not perceived as harmful as drinking one or two shots of liquor. Also, on the post-test, students showed a decrease in their perceptions of harm in trying one or two shots of liquor.

Table 11. Student Outcomes – Grades 4 - 5 (N=96)

Scale	Pre-test	Post-test
Items	Mean	Mean
Attitudes toward Underage Alcohol Use	3.31	3.31
(1=Strongly Agree to 4=Strongly Disagree)	(SD=.81)*	(SD=.82)
Drinking alcohol is okay for people under 21 if they do not drive.	3.50	3.41
Drinking alcohol is okay for people under 21 if they are at home.		
Drinking alcohol is okay for people under 21 if they only drink a	3.42	3.38
little.		
	3.03	3.17
Alcohol Intentions	3.69	3.65
(1=Definitely to 4=No Way)	(SD=.56)	(SD=.65)
In the future, do you think you will		
Drink beer	3.60	3.56
Drink wine, 'hard lemonade,' or wine coolers	3.68	3.65
Drink liquor (whiskey, vodka, tequila, etc)	3.81	3.76
Vehicle Safety Skills	3.47	3.51
(1=Strongly Agree, to 4=Strongly Disagree)	(SD=.61)	(SD=.57)
If you ever had to ride in a car with a driver who had been drinking		
alcohol (like beer, wine, or liquor), what would you do?		
Talk to the driver		
Sit in the front seat to be near the driver	3.26	3.58
	3.70	3.76
(1=Definitely to 4=No Way)		
In the future, do you think you will		
Ride in a car with a driver who has drunk any alcohol	3.62	3.61
Forget to wear a seatbelt when in a car	3.29	3.09
Media Literacy ^a	2.77	3.24
(4=Strongly Agree to 1=Strongly Disagree)	(SD=.58)	(SD=.68)

Scale Items	Pre-test Mean	Post-test Mean
Commercials on TV leave out important information.**	2.92	3.22
Beer commercials on TV show what happens when	2.49	3.14
people drink beer.		
Commercials on TV always tell us what we need to know.	2.70	3.15
Commercials on TV always tell the truth.	2.96	3.35
Perceived Harm of Underage Alcohol Use	3.19	3.10
(1=Not at all to 4=A lot)	(SD=.92)	(SD=.98)
How much do you think people under 21 years of age will harm		
themselves if they		
Try one or two cans or bottles of beer?	3.02	2.97
Try one or two cans or bottles of beer? Try one or two glasses or bottles of wine, 'hard	3.02 3.30	2.97 3.19
Try one or two glasses or bottles of wine, 'hard		
Try one or two glasses or bottles of wine, 'hard lemonade', or wine coolers?	3.30	3.19

^{*}Standard deviations (SD) are only reported for the overall mean scale score.

Pre-Program Exposure to Alcohol & Drugs

Participants in the 4th and 5th grades were also assessed (using the pre-test) on alcohol and drug use behavior, which indicated whether students ever drank alcohol, used marijuana, used other illegal drugs, or rode in a car with a driver who had consumed alcohol. The results indicate that some alcohol use had already occurred by the time students were in 4th or 5th grade. As reported before they began the program:

- about 6% had tried wine/wine coolers
- about 11% had used marijuana
- about 6% of the students had tried beer
- less than 5% had tried hard liquor
- no students had used other illegal drugs.

(Note: Of the 135, students, 35 had data missing for these items)



^{**}Reverse-scored so that 4 represents the desired behavior (on the survey the response categories are 1=Strongly Agree, 4=Strongly Disagree).

a Paired samples t-tests indicated statistically significant difference in scores from pre- to post-test on media literacy t=7.337, df=83, p<.000.

Of the 99 students who responded to the question about riding in a car with a drunk driver, approximately 20% indicated that they had done so in the last year. Of these students:

- 4% say it occurs about once a day
- About 7% say it occurs about once a year
- About 8% say it occurs either once a week or once a month.

These findings tend to suggest that Hopi children in the program are being exposed to alcohol at younger ages and are being placed in unsafe driving situations at high rates. This finding reinforces the importance of a comprehensive approach to prevention and intervention programs that aim to change youth, family, and community attitudes and behaviors about alcohol and drug use.

Peer Helper Outcomes

Thirteen high school students at Hopi Jr./Sr. High School started with the program in the fall of 2007, and most taught both fall and spring semester. Peer Helpers were 16 to 18 years of age, including seven seniors and six juniors, and the majority was female (10 females as compared to 3 males).

Peer Helpers completed surveys prior to being trained in PY/PM and again after teaching the curriculum at the end of the school year. The evaluation design assessed changes in Peer Helpers' knowledge of vehicle safety and the effects of alcohol on youth. Pre- and post-tests contained sets of questions that comprised scales to measure constructs associated with underage drinking, including:

- Knowledge of the effects of underage drinking
- Future intentions toward alcohol use
- Perceived risks of high levels of alcohol use
- Perceived risks of low levels of alcohol use
- Self-efficacy
- Teaching skills



Items on the survey were rated on four-point Likert-type scales (e.g., scores of 1, 2, 3, and 4), with 4 being the most desirable (positive) response. Peer Helpers were also asked about recent alcohol and drug use.

Because only seven peer helpers completed a post-survey in 2008, an outcome analysis could not be conducted with this small sample. In order to increase the sample size and to enable conducting a valid outcome analysis, peer helper data from program years 2005-2006 and 2006-2007 were combined with data from 2007-2008.

Forty peer helpers completed pre-test surveys over the three program years, and of these 22 completed a post survey. The following results are based on the 22 peer helper matched pre- and post-program survey data. These results should still be considered with caution due to small sample size. A short summary of the findings is described for each scale, followed by Table 12 that shows the mean scores on the six scales.

Knowledge of the Effects of Underage Drinking

Peer Helpers showed an increase in knowledge of the effects of underage drinking, with an overall mean score of 3.48 at pre-, increasing to 3.71 at the post-period. Each item on the scale showed increases in a positive direction. While the change was not found to be statistically significant, these consistent increases are promising. The inability to find a significant difference could be due to the small sample size or because the participating students already had high scores at the start of the program.

Future Intentions toward Alcohol Use

The scale score showed little to no changes from the pre- to post-program period. However, peer helpers' reported intentions were desirable from a program perspective. That is, a majority intend not to use beer or hard liquors when they get older.

Perceived Risk of High Alcohol Use

Peer helpers are highly aware of the risks of high alcohol use upon entering the program. The statistically significant change found on this scale shows that their participation in the program reinforces their risk awareness.



Perceived Risk of Low Alcohol Use

Students' scores on this scale showed change in a positive direction. Although not statistically significant, this change is promising and is consistent with the other findings reported above. However, this scale is comprised of only two items, which is not considered a robust measurement and should be considered with caution.

Self Efficacy

Students' scores on the self-efficacy scale did not show any change. Also, most of the specific items show a declining trend at the post-program period, indicating that the peer helpers' confidence is not as strong after going through the program in regards to refusing alcohol from friends and relatives in various contexts.

Teaching Skills

Peer helpers' perception of their teaching proficiency increased over time. The individual items in this scale show that after the program, peer helpers gave higher endorsements to the statements indicating their understanding of how children's brains develop and having good public speaking skills.

Table 12. Peer Helpers' Outcomes, FY 2005-2008 (N=22)

Scale Items	Pre-test Mean	Post-test Mean
Knowledge of the effects of underage drinking		3.71
(1=Strongly Disagree to 4=Strongly Agree)	(SD=.44)*	(SD.54)
Drinking alcohol is more dangerous for people younger than 21 than for	3.40	3.77
people older than 21.		
It's okay to drink alcohol when you're under 21 if you don't get caught.*	3.75	3.82
I know what alcohol does to the brains of people under 21.		3.50
Drinking alcohol harms the development of people under 21.		3.77
Future intentions toward alcohol use		3.28
(1=Definitely will to 4=Definitely won't)		(SD=.58)
Sometimes we don't know what we will do as adults, but we may have an		
idea. Please put an X in the box to answer how true these statements may be		
for you.		

Scale Items	Pre-test Mean	Post-test Mean
I will drink alcohol when I get older*	3.08	3.05
I will drink beer when I get older.*	3.43	3.55
I will drink wine or hard liquor, like vodka, gin, or whiskey.**	3.20	3.27
Perceived risks of high levels of alcohol use a	3.70	3.92
(1=No risk to 4=Great risk)	(SD=.42)	(SD=.18)
Do people under 21 years old risk harming themselves (physically or in other		
ways) if they		
Have one or two alcoholic beverage nearly every day?	3.77	3.82
Have five or more alcoholic beverages at one time?	3.80	3.95
Drive after drinking one or two alcoholic beverages?	3.68	3.91
Drive after drinking three or more alcoholic beverages?	3.80	4.00
Perceived risks of low levels of alcohol use	2.64	2.97
(1=No risk to 4=Great risk)	(SD=.77)	(SD=.76)
Do people under 21 years old risk harming themselves (physically or in other		
ways) if they		
Have one or two alcoholic beverages (beer, wine, wine cooler, hard liquor)	2.33	2.73
once or twice a year?		
Have one or two alcoholic beverages once or twice a month?	2.85	3.23
Self-efficacy	3.44	3.47
(1=Definitely couldn't say no to 4=Definitely could say no)	(SD=.59)	(SD=.66)
If I was offered alcohol at my friend's house	3.53	3.32
If I was offered alcohol by my older brother or sister	3.68	3.59
If I was offered alcohol by other older persons, including my	3.73	3.55
relatives		
If I was offered alcohol at a party or dance	3.48	3.59
If I was offered alcohol by my boyfriend/girlfriend	3.53	3.45
If I was offered a ride by someone who had been drinking	3.35	3.36
Teaching skills	2.94	3.13
(1=Strongly Disagree to 4=Strongly Agree)	(SD=.51)	(SD=.59)
I am comfortable teaching children.	3.50	3.45
I understand how children's brains develop.	2.65	3.18
I have good public speaking skills.	2.72	2.82
I am comfortable presenting information in front of groups.	2.95	3.00

^{*} Standard deviations (SD) are only reported for the overall mean scale score. **Items were reverse-scored so that 4 represents the desired behavior. _a Statistically significant paired t-test: t=-2.42, df=21, p<.02.



The Peer Helper survey included several questions, only on the pre-test, about alcohol and other drug use. As can be seen in Table 13 below, before starting the program several students reported recent alcohol or other drug use as well as impaired driving or riding with an impaired driver. This is of concern because the students are role models and the younger students are often aware of their behaviors both in and out of the classroom. It is unknown if the students ceased drug use during the program, although the reports and observations of key informants were positive and indicated no problems with these issues.

Table 13. Recent Alcohol and Drug Use at Pre-test (FY 2005–2008) Peer Helpers

Item	2005- 2006 (N=11)	2006- 2007 (N=16)	2007- 2008 (N=13)	Total (N= 40)
Recent alcohol use (beer, liquor, or wine)	0	1 (6%)	1 (8%)	2 (5%)
Recent illegal drug usage (marijuana, ecstasy, LSD, meth)	0	1 (6%)	1 (8%)	2 (5%)
Riding with impaired driver	0	3 (18%)	1 (8%)	4 (10%)
Driving after drinking	0	1 (6%)	0	1 (2.5%)

Limitations of the Evaluation Data

The evaluation team implemented an evaluation design and survey materials provided by the curricula developer, with some adaptations for cultural relevance to this target group. Similar to last year, there appear to be some positive trends from pre- to post-test among the elementary students and the Peer Helpers. Also, the same limitations that were reported in previous years still apply for this year's findings and therefore this report's findings should be interpreted with caution. The major limitations of this evaluation include valid measurement, adequate sample size, comparison or control groups, and time for the program to be fully implemented. These limitations are described below:



- Assessment of young children using self-report surveys is challenging because of young children's limited comprehension abilities and motivation to make socially desirable responses. Studies suggest that younger children have shorter attention spans and tend to respond less consistently (Borgers, de Leeuw, & Hox, 2000).
- Developing precise and valid measurements of program outcomes to detect meaningful change for children in this age range is challenging. The reliability of some scales has not been shown to be consistently high, and their precision is low. This is not atypical of prevention program evaluations.
- Small sample sizes make it difficult to conduct statistical tests of significance. Large amounts of missing data also preclude meaningful analyses.
- PY/PM is a peer-led program; accordingly, variation in Peer Helpers' efforts could create differential effectiveness by grade and/or class.
- The lack of a comparison or control group makes it difficult to measure the program's impact without ruling out other plausible factors that might have caused the detected changes.
- Students in the upper grades have not been taught the curricular material from the earlier grades and thus are being surveyed on new material. Because the program intervention is designed to be five years in length, it is likely the impact of the program will best be assessed after that time.



Conclusions about Hopi PY/PM Evaluation Findings

The evaluation findings for this year reinforce the previous year's findings that the program was well received and perceived as benefiting both the elementary students and the Peer Helpers. It was apparent that Peer Helpers, teachers, and project and school administrators continue to be committed, receptive, and working to improve the program. Program fidelity continues to be strong, as demonstrated by good attendance, coverage of class lessons, and low frequency of lesson modifications (approximately 15% were modified).

The implementation results indicate that the program is becoming wellestablished. This is demonstrated by the strong leadership, communication, and coordination from all of the teachers, staff, and administrators at the high school and elementary schools. The strengths of the PY/PM program—its intensity (semester long, five year program), utilization of peers as teachers/helpers, and its content (neuro-science of alcohol effects, highly interactive) — also make it a challenging program to implement. For example, both the high school and elementary schools must adjust their already full school schedules for this program. This is not a small feat, especially with the increasing demands for schools to meet performance and testing standards. The geography of the Hopi Nation schools also pose challenges, because the Peer Helpers have to be bussed to the elementary schools once a week to deliver the classes. This makes coordination of Peer Helper schedules with elementary school schedules more difficult. Also, the school administrators must identify teachers and staff who are willing and able to take on the extra work and responsibility of being the project coordinator at their school for the PY/PM. Despite these challenges, the PY/PM implementation has succeeded because all involved have observed or directly experienced positive effects from the program.

The results from the short-term outcome analyses (both quantitative and qualitative) show trends in a positive direction for both the elementary school students and Peer Helpers. These trends have been consistent over the three years of their program implementation, which is highly encouraging. The changes observed through the pre-post surveys have primarily been on attitudes and intentions. Hopefully, these changes will endure through



continued programming and community reinforcement. The Peer Helper changes are particularly notable and inspiring, such as increases in their public speaking, knowledge about child development, and pride in being a positive role model.

There are still areas for improvement. The following recommendations are provided:

- 1) Continue to focus efforts on classroom management strategies and engagement of students in the material. Specifically, it was reported that there needs to be more visuals and activities incorporated into the lessons.
- 2) Conduct more in-class observations of the Peer Helpers in the First Mesa School, and obtain specific feedback from the school's teachers about the Peer Helper's progress. The First Mesa teacher observation ratings of Peer Helpers' engagement with students were somewhat lower than the Second Mesa teacher observations. It may be that Second Mesa teachers rated the Peer Helpers more highly because they were more experienced with the program. Also, each school may have different needs for support and coordination.
- 3) Increase community awareness and recognition of the program. Peer Helpers tend to receive most public recognition at graduation ceremonies. Peer Helpers may experience some stigma from their fellow high school peers. Increased public recognition may also be helpful for recruiting new Peer Helpers. Also, several informants mentioned that the program accomplishments should be shared in the community, not only to bolster the students' self-esteem but also as a way to share the messages about alcohol use prevention. Parents of PY/PM students may not even be aware of the program. In order for prevention to be most effective, community-wide awareness and effort need to exist. The community service projects that are another program requirement should be continued in order to bolster community awareness and support.



- 4) Increase efforts to incorporate Hopi culture into the lessons. Although the Peer Helper model is viewed as being consistent with Hopi cultural values (older teens modeling appropriate behaviors to the younger ones), it was felt that for each lesson something applicable from the Hopi culture could be included.
- 5) The increase in reports of marijuana use among 4th and 5th grade students is of concern. If possible, more emphasis on the negative consequences of marijuana and other drugs should be included in the curriculum.
- 6) Plan for program sustainability. A strong commitment to the program exists among school administrators, teachers, and students, and all would like the program to be continued and if possible, expanded. At the time of this report, the school district administrators were offering to the cover the cost of the program after the Parents Commission funding ends.

Navajo Nation, Red Mesa School District Evaluation Results

Program Implementation

As of May 2008, the Navajo Nation program completed its second year of implementation. The program was taught in Red Mesa elementary school. There were a total of 11 classes, grades 1 to 5, who participated during the 2007-2008 school year. The Peer Helpers were organized into teams of two and were assigned to teach one grade level class each.

Seventeen high school students at the Red Mesa High School were recruited to be Peer Helpers in the spring prior to the start of the school year. One student returned from the previous year, and she served as a substitute when needed. The recruitment process followed the recommended methods outlined in the PY/PM curriculum, including making a school-wide presentation, soliciting teacher and student recommendations for appropriate students, applications, and final selection by the project teacher. A new peer helper teacher participated in 2007/2008, and she was well received by the students.

The high school Peer Helpers received school credit for participating in the PY/PM project and the class met daily as an elective. The first four weeks of class were devoted to training the Peer Helpers to teach the PY/PM curriculum. The training included sessions on content knowledge, teaching skills, classroom management, presentation skills, and personal values and behavior. The training helped the Peer Helpers feel more comfortable, so that they could substitute for one other if one member of the teaching team was absent. The students were also required to commit to abstain from alcohol or other drug use during their participation as Peer Helpers.

The program staff at both the high school and elementary school encountered significant challenges to program implementation this year. These challenges will be described later in this report.



Profile of the Participants

There was a total of 223 elementary and high school students who participated in PY/PM during 2007-2008 school year. A majority of these were elementary students, (n=206), and the remaining number included peer helpers. Of the 223 PY/PM participants, 88 completed both pre-program and post-program surveys. A profile of each set of participants follows.

Peer Helpers

During the 2007-2008 school year, a total of 17 Peer Helpers² participated in the program. Eleven of the 17 students left the program during the school year. The Peer Helpers were 14 to 17 years of age, including two seniors and ten juniors, and the majority was female.

Elementary School Students

Two hundred and six (206) students from Red Mesa Elementary School are represented in the data for 2007-2008. Of the total 206 students participating in PY/PM, 88 (43%) completed both pre- and post-tests. Initial data on the outcomes of the 88 students who completed both pre- and post-tests are discussed in the "Student Outcomes" section of this report. A description of participating elementary students is detailed in Table 14 below.

Table 14. Participant Demographic Data

	Total # of	Semester		Grade Level				Gender		
Site	students participating in PY/PM	Fall 2007	Spring 2008	1st	2nd	3rd	4th	5th	Boys	Girls
Navajo	206	124	82	31	34	37	64	40	107	80

^{*} The number of students by grade level and gender does not sum to the total of 206 PY/PM participants. Gender was missing for 19 of the participating students.

² At the time of this report, the total number of Peer Helpers who participated in the Navajo Program could not be verified.



Implementation Findings

Data regarding the effectiveness of the implementation of the PY/PM program were collected through a variety of sources including interviews with project staff, teachers and administrators, classroom observations during lessons, classroom response forms from Peer Helpers, focus groups with the Peer Helpers, and student survey questions. This section of the report includes findings regarding the *staff and teacher assessment of the project*, *curriculum fidelity*, and *student satisfaction surveys*.

Project Staff and Teacher Assessment of Implementation

Interviews were conducted with project coordinators, teachers, and school administrators during the spring of 2008 to gather impressions about the second year of PY/PM program implementation.

The major strengths in implementation at the Navajo Nation site this year were: the program curriculum continues to be perceived as excellent and needed; elementary students' enthusiasm for the program was maintained; the program class scheduling became routine; and Peer Helper cohesiveness and judgment were notable. The main challenges identified during this year included: Peer Helper attrition; school district budget and staff cutbacks affected the program; technical assistance and support was minimal to non-existent; and awareness and recognition of program was minimal. These strengths and challenges are highlighted below.

Navajo Program Strengths				
Curriculum	 The PY/PM curriculum is considered to be of high quality and needed for the students. There is a need to promote positive role models among Navajo youth in the community and the PY/PM program fills this need through its strong role and peer modeling approach. 			
Elementary students' enthusiasm	 Elementary students continue to be enthusiastic about the program and motivated to participate. Students looked forward to seeing the Peer Helpers and rated the class highly in terms of learning new things, and being fun. 			

Program schedule became routine	All involved perceived that scheduling became easier this year, and knew their roles and
Peer Helper cohesiveness and judgment	responsibilities. The core group of Peer Helpers who stayed with the program bonded well. The Peer Helpers developed an interview for the selection of new Peer Helpers. When faced with some peers violating the PY/PM behavior code, Peer Helpers showed thoughtful decision-making about how to terminate fellow peers from the program.
Navaj	o Program Challenges
Peer Helper attrition	 There was high Peer Helper attrition (over 60%) in the program, which jeopardized the Peer Helpers' ability to bond and become a cohesive working group. The high attrition and low group cohesiveness made it difficult at times for the Peer Helper teacher to manage the group. The high attrition placed more demands and stress on the small number of Peer Helpers (N=6) who stayed with the program in the second semester.
School district budget and staff cuts	 The Red Mesa School district experienced severe budget shortfalls in the 2007/2008 school year. District staff positions were cut, which increased workloads on existing staff. Heavy workloads and low staff morale affected the PY/PM program implementation.
Technical assistance and support	 Administrative difficulties with the PY/PM program contract led to a suspension of external technical assistance to the school. Administrative difficulties with disbursement of stipends and reimbursement for program supplies created an extra burden on overworked staff. PY/PM program staff felt unsupported and isolated due to these difficulties.
Awareness and recognition of the program	 High school teachers at Red Mesa had little awareness of the PY/PM program. Parents have limited awareness of the program. Peer Helpers should receive more public recognition of their PY/PM involvement to counteract peer pressure and increase their commitment to the program and its message.



Program and Curriculum Fidelity

An examination of program fidelity in implementing the PY/PM program examined three aspects of fidelity, including:

- 1. Program dosage (frequency and duration of the program)
- 2. Classroom curriculum delivery--degree to which program components were delivered as prescribed (program content), and how the program was delivered (Peer Helper approaches, skills and qualities)
- 3. Student responsiveness to the program.

Participant Attendance and Program Dosage

A total of 11 elementary classrooms received the PY/PM program during the two semesters (fall 2007 and spring 2008). One class per week for 8 weeks was implemented as intended in the curriculum. Table 15 provides a breakdown of program dosage and participant attendance by grade.

Table 15. Attendance and Program Dosage

	Number of sessions	Average length of sessions, in minutes	Average number of students in class daily	Percent of students attending <u>all 8</u>	Percent of students attending 7 or 8 sessions
Grade	available	(min,max)	(min, max)	sessions	
1 st	8 sessions	40 (30,45)	19 (18,22)	No data	No data
2 nd	8 sessions	43 (35,45)	17 (15,18)	No data	No data
3 rd	8 sessions	43 (25,45)	20 (15,22)	No data	No data
4^{th}	8 sessions	45 (35,55)	18 (12,20)	25%a	32%
5 th	8 sessions	45 (45,45)	21 (20,21)	40%	80%
Total		44 (25,55)	19 (12,22)	32%	57%

 $^{^{\}rm a}$ Percent based on data for only 45% of 4th grade students. There is no session attendance data for 55% of students in 4th grades.

As Table 15 shows:

- Eight sessions (the full curriculum) were available for all five grades.
- The average length of sessions was 44 minutes, with the longest sessions being reported amongst the older grades. The curriculum suggests that designed lessons last 45-50 minutes.



- The average number of students in class ranged from 12 to 22, with a mean of 19 students. Among all the grades, the 5th grade classes reported the highest average number of students per class.
- Thirty-two percent of students received <u>all 8</u> sessions of the curriculum. This percentage is based primarily on students in grades 4 and 5. There were no session data available for grades 1-3, and over half of the data were missing for the 4th grade classes.

Classroom Curriculum Delivery

Teacher and Staff Observations

Results from teacher and staff observation forms indicate that a majority of the peer helpers showed good speaking and class presentation skills, such as repeating questions, strong and clear voice projection, and easy interaction with students. A majority was also considered prepared and knowledgeable about the program material. The lowest observation rating for the peers, as shown in the table below, was 62% for "repeating questions for all to hear." *Table 16. Peer Helper Presentation and Teaching Skills*

Teacher Observation Ratings of Peer Helper (N=88 observations)	Most or all of the time Valid %*	Number
Appeared to connect with students	81%	70
Spoke in strong, clear voice	79%	67
Repeated questions for all to hear	62%	52
Asked students questions to review topics	71%	59
Prepared and knowledgeable about material	75%	63
Interacted with students with ease	76%	65
Gave positive reinforcement to students	72%	59
Demonstrated enthusiasm for subject matter	71%	60
Encouraged questions/ participation	73%	62
*Valid percents are calculated from the total number who respond	ed to each question.	

Teachers also were asked to estimate their students' interest and understanding of the program content by marking an estimate of how many of their students engaged in various behaviors. Most of the reported percentages were high, indicating that a majority of the elementary students participated in class, showed interest in the material, and appeared to understand the lesson. The lowest rating of 33% was for "asking questions," which indicates that teachers did not frequently observe their students asking questions of the peer helpers about the PY/PM curriculum content.

Table 17. Student Interest in and Understanding of Program Content (N=88 Observations)

Teachers Observed "About 3/4 of youth" or "All youth" do the following in the PY/PM Class:	Valid %*	Number	
Participated/volunteered in class activities and discussions	82%	61	
Asked questions	33%	24	
Showed interest in the material	93%	69	
Showed respect for the Peer Helper	84%	63	
Appeared to understand the lesson	85%	63	
Followed directions	88%	66	
Were attentive	82%	60	
*Valid percents are calculated from the total number who responded to each question.			

Peer Helper Class Response Forms

Peer helpers were required to complete a Class Response Form (in Appendix B) after each PY/PM class to measure program fidelity and to self-assess their performance. The completed forms were used by the Peer Helpers and their teacher to debrief successes and challenges after each class. Using this form, the Peer Helpers specifically assessed the following: comfort in teaching, quality of class participation, time to teach and review, barriers to teaching or

learning and changes made to the lessons. The results for each of these areas are provided below.

Comfort in teaching. Overall, approximately 60% of peer helpers felt comfortable to very comfortable in teaching the PY/PM content to the elementary students. Peer Helpers' comfort with teaching decreased over time, as the graphs below show. That is, their ratings of comfort with lessons 5-8 were lower as compared to their ratings for the first four lessons (1-4) of the curriculum. The Peer Helper teaching comfort levels could have been influenced by a number of factors: the type of training and preparation provided, the high Peer Helper attrition rates, and the increased workloads for Peer Helpers who stayed with the program.

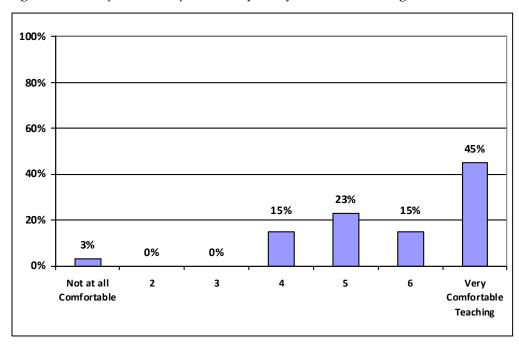


Figure 3. Navajo Peer Helper Level of Comfort with Teaching <u>Lessons 1-4</u> (n=62)

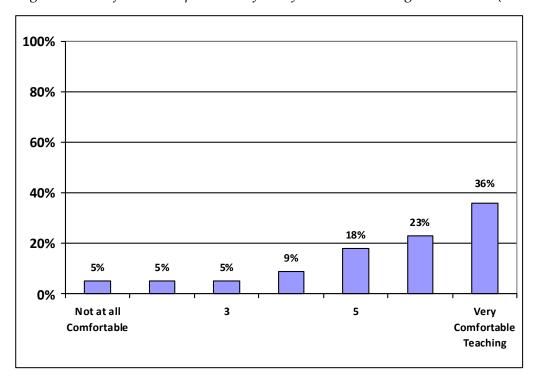


Figure 4. Navajo Peer Helper Level of Comfort with Teaching Lessons 5-8 (n=62)

Quality of class participation. Fifty-three percent (53%) of Peer Helpers rated an "A" on student participation. That is, they felt that students were actively participating. Another 31% rated a "B" for participation, indicating good participation. A majority of peer helpers (64%) rated that classroom disruptions were relatively infrequent.

<u>Time to teach and time to review</u>. Nearly all (97%) of the Peer Helpers felt there was enough time to teach and review the material.

Barriers to teaching, learning or participation. Only 11% of the Peer Helpers said there were barriers. Disruptive student behaviors, such as inattentive students and students talking, were the most frequently reported barriers. Also, Peer Helpers could write open comments about one good or bad thing that happened during the class period. Approximately 17% of the comments were about unruly students. Peer Helpers also reported losing their composure and "yelling" at students. However, the majority of the comments were about good class participation and engagement.

<u>Changes made to the lesson.</u> Out of a total of 64 class forms that were completed by Peer Helpers, 13% indicated that lessons were changed in some way. The type of reported changes did not seem to indicate a significant threat to the curriculum fidelity. Most lesson changes or modifications were for wording and shortening or adding more content to maintain students' attention.

Elementary Students' Assessment and Satisfaction

After completing the eight PY/PM lessons for the year, students in grades 4 and 5 were asked to report their satisfaction with the program. Students were very satisfied with the program, with over 90 percent of 4th and 5th graders reporting the program was either "Excellent" or "Very Good" and over 90 percent reporting that the PY/PM teachers were "Excellent" or "Very Good."

As part of the post-program survey, students were also asked to indicate their responses to several questions concerning the program and its impact on their behavior. As seen in Table 18, a great majority (93% to 96%) of students say they "plan to use or share" aspects of the program that they have learned, and that they are more interested in the topic as a result of the program. Nearly three-quarters of students said they thought the program was useful.

Table 18. Student (4th and 5th grades) Responses to the PY/PM Program: Postprogram Survey (N=104)

As a result of the PY/PM program	Yes
I will do something new or different.	79%
I will change the way I think, act, or behave.	87%
The information was useful.	71%
I plan to use or share what I have learned.	96%
I am more interested in this topic.	93%



Students were also asked to report on several items regarding the Peer Helpers. As seen in Table 19 below, Peer Helpers received positive marks among the 4th and 5th graders receiving the lessons. Nearly all of the students said the "classes were fun" and the Peer Helpers "were good teachers."

Table 19. Student (4th and 5th grades) Responses to Peer Helpers: Post-program Survey (N=104)

About the high school students	
that taught your PY/PM classes	Yes
The high school student(s) were prepared for class.	91%
The high school student(s) were easy to understand.	88%
The high school student(s) were good teachers.	99%
I liked having high school student(s) teach the classes.	97%
The classes were fun.	99%

The 4th and 5th grade students were asked to write the main thing they learned from the program. The most frequent responses show many children retained the program's key messages of:

- Don't drink or do drugs
- How the brain works or how the brain is affected by alcohol
- Not to drink and drive or not to ride with someone who has been drinking.

Peer Helpers' Assessment of the Project

Focus groups were conducted with the Peer Helpers in September 2007 and again in May 2008. In a focus group with four of the six Peer Helpers in May 2008, the teens discussed the most important things they learned as a Peer Helper, how they felt the program helped the elementary students, what was most helpful about the Peer Helper training, and what the schools need to do to keep the program going in future years.



The students' comments below are a reflection of the motivation and persistence they showed in the face of numerous challenges they encountered over the course of the year. These challenges included high Peer Helper attrition, class behavior management, and inconsistent training and support due to staff shortages. In the face of these challenges, the Peer Helpers continued to teach because they saw the benefits to their students and to themselves. All of the Peer Helpers responded that they wanted to continue to participate in PY/PM next year.

When asked about the most important things they learned from the experience of being a Peer Helper or their biggest success, participants said:

"Lots of patience, the 2^{nd} grade class were trouble-makers, there were lots of boys. We had to keep their attention. We usually kept them quiet by waiting for them to settle down. We put the naughty ones up front."

"Learned about the bad effects of alcohol on young people. This was a big revelation."

"Got used to speaking by myself last semester."

"Learning these lessons at an early age will help them (the elementary students) later in life and not make mistakes."

"Knowing your lessons, practicing what to say, getting mixed up, being prepared."

In terms of how the Peer Helpers felt the program helped the elementary students, they shared:

"The students remembered things taught (to them) from the previous year."

"The symbols for respect, order, and protect in sign language. They liked the drawings."

"The lesson about sitting in the back seat and using the seat belt, the safety lesson was the best. The lesson was all visual, and they learned and they see it in action."

"Thought about dropping the 2nd grade class, but we realized kids needed it and some kids wanted it."



For future program implementation, Peer Helpers were asked to describe the most helpful parts of the Peer Helper training and teaching. They commented,

"It was a good training, but then you're on your own. I did get to observe classrooms twice, which was a big help."

"The training helped subconsciously, but it was mostly on-the-spot preparation."

"Got help from the teacher, but then she would leave."

The Peer Helpers also shared their recommendations for sustaining the program in future years:

"Having more peer helpers"

"Hold interviews with students to make sure they will stick with it."



Student Outcomes

This section of the report presents baseline descriptions of the elementary students and Peer Helpers who participated in the PY/PM program, during the 2007-2008 school year. The results that follow were derived from surveys given to students and Peer Helpers before starting the program (pre-test) and again at the end of the program (post-test). The following results are based upon those students who completed both a pre- *and* a post-test survey (a matched set).

Different types of analyses were conducted based on the type of data that were available from the surveys. Analysis of the Grades 1-3 data included a descriptive comparison of the frequencies and percentages from the pre-test data only. For Grades 4 and 5, parametric statistics and significance tests were conducted because the survey data were appropriate for this type of analysis (i.e., employed multiple scales using Likert-type responses).

Available attendance data show that 206 elementary students received at least one session of PY/PM. However, only 88 participants completed both preand post-surveys, resulting in an 43% survey completion rate overall.

Table 20. Matched Surveys: Students Completing both Pre- and Post-Test Survey – Navajo Nation, Red Mesa Schools

	# of students completing both pre- and post-test by		Total students completing both	
Total # of students	semester		pre- and	post-test
participating in PY/PM	Fall 2007	Spring 2008	Number	% of participants
206	88	0	88	43%

Grades 1-3

Eight students in 1st, 2nd, and 3rd grades participated in the PY/PM program *and* completed both pre- and post-surveys. Due to this small number, only presurvey results are reported. One-hundred and two (102) students in grades 1 to 3 completed a pre-survey.

The survey for grades 1-3 consisted of six questions. Data regarding student responses can be found in the tables below. Baseline data from the second year of PY/PM suggest that younger students already knew some of the concepts taught in the program. For instance, 60% of students showed an awareness of the importance of the brain, noting that the brain was the "boss of your body" on the pre-test. While 43% of the students were aware of how harmful it is for teens to drink alcohol, this low percentage indicates that the program message is needed. Also, the number of youth who indicated you should not talk to the driver if they consumed alcohol was 72% at the pre-test, which shows a high percentage of awareness at the start of the program.

Table 21. Baseline Data Regarding Student Outcomes – Grades 1, 2, 3 (N=102)

What is the boss of your body?	Pre-Program
My Heart	40 (40.4%)
My Brain	59 (59.6%)
Is it harmful for teens to drink beer, wine, or alcohol?	Pre-Program
Yes	42 (42.9%)
Sometimes	4 (4.1%)
No	52 (53.1%)
Should you talk to the driver if they drank beer, wine, or alcohol?	Pre-Program
Yes	16 (16.8%)
Sometimes	6 (6.3%)
No	73 (71.6%)

Data show that the young students enter the program with some well-formed ideas about vehicle safety. Over 93% understand that the safest place to sit is in the back seat and 88% responded that it is not okay for people to drive after drinking.

Table 22. Baseline Data Regarding Student Outcomes – Grades 1, 2, 3 (N=102)

Where is the safest place to sit in a car?	Pre-Program
Front Seat	7 (7.1%)
Back Seat	92 (92.9%)
Is it okay for people to drive when they drink beer, wine, or alcohol?	Pre-Program
Yes	5 (5.1%)
Sometimes	3 (3.1%)
No	90 (88.2%)

Grades 4-5

Students receiving PY/PM in 4th and 5th grades were asked to complete preand post-program surveys to assess their knowledge about the brain and attitudes with respect to underage drinking and vehicle safety. The pre-test and post-test contained sets of questions that comprised scales to measure several constructs associated with underage drinking and vehicle safety:

- Attitudes toward Underage Alcohol Use
- Intentions to use alcohol
- Vehicle Safety Skills (riding with an impaired driver)
- Media Literacy
- Perceived Harm of Underage Alcohol Use

Items on the survey were rated on a four-point Likert-type scale (e.g., scores of 1, 2, 3, and 4), with 4 being the most desirable (positive) response.



A total of 80 students in grades 4-5 completed both pre- and post-program surveys (77% of all students). Of the 80 students who completed both pre- and post-tests:

- 59% were in 4th grade
- 41% were in the 5th grade
- 35% of students attended all eight sessions
- 24% completed seven of the eight sessions
- 41% attended six or fewer sessions
- 49% of the students were male, and 51% were female.

Table 23 displays the mean scores on the five scales. Questions comprising the scales and their respective mean scores are also presented. At the completion of the second year of PY/PM program, the results of the survey data for 4th and 5th graders illustrate positive, or desirable, increases in mean scores for four out of five of the scales. The data also revealed statistically significant increases¹ in three scales—vehicle safety, media literacy, and perceived harm of underage alcohol use. In the previous year, attitudes about underage alcohol use and media literacy scores showed significant change. Each scale is discussed below, followed by data in Table 23.

Attitudes toward Underage Alcohol Use

When comparing students' attitudes towards underage drinking from pre- to post-test, although not statistically significant, students showed small increases in their attitudes against underage drinking. After receiving the program, 4th and 5th graders were more likely to say that alcohol use among minors is not "okay;" and they were more likely to say that drinking is not "okay" even if they only drink "a little" or if they are at home.

¹ Paired sample t-tests were conducted using a two-tailed probability test of significance, alpha level set at p<.05.



Alcohol Intentions

Students' mean scores on this scale were the highest, both on the pre-test and post-tests (ranges from 3.86 to 3.93) regarding their intentions not to use alcohol when they are older. This indicates that children start the program with strong intentions not to use alcohol and these intentions are maintained over the course of the program. It may be possible that these young students feel compelled to report more socially desirable responses, or conversely they may be exposed to negative social, family, community, and media messages that counteract their healthy alcohol avoidance intentions. If the latter is true, it could be considered a positive result that the program participants maintain desirable intentions over the course of the program year.

Vehicle Safety Skills

The mean score on vehicle safety skills increased from pre- to post-test, but not significantly. When looking at the individual items that make up the scale, it suggests that participants increased their awareness in regards to not talking to a driver who has been drinking alcohol and to not sit in the front seat. Students maintained a high awareness that they should not ride in the front seat with a driver who has been drinking alcohol, as the pre-test to post-test mean scores showed little change. However, one concern is the decrease in students who report that they may forget to wear their seat belt in the future. This result, however, may be due to survey error as the wording of the question could have confused some of the students.

Media Literacy

The Media Literacy scale measured children's awareness of the deceptive nature of television, especially as it portrays alcohol use. Students' scores on Media Literacy changed significantly in the positive direction after receiving the program. In other words, after the program, 4th and 5th graders were more likely to agree that commercials do not always tell the truth, do not tell us what we need to know, accurately represent the consequences of drinking beer, and do in fact leave out important information.



Perceived Harm of Underage Alcohol Use

Students' scores on their perceptions of the harm of underage drinking *increased* significantly from the pre-test to the post-test. This result continues the promising, but statistically non-significant change from the previous year (in which children showed an increase in their perceptions that underage alcohol use was harmful). It is possible that the Peer Helpers were more effective in teaching the concepts this year, or perhaps some of the students retained some knowledge from the previous year's exposure to the program.

Table 23. Student Outcomes, Survey Scale Scores – Grades 4 - 5 (N=80)

Scale Items	Pre-test Mean	Post-test Mean
Attitudes toward Underage Alcohol Use		3.31
(1=Strongly Agree to 4=Strongly Disagree)	(SD=.85)*	(SD=.73)
Drinking alcohol is okay for people under 21 if they do not drive.	3.24	3.30
Drinking alcohol is okay for people under 21 if they are at home.	3.27	3.45
Drinking alcohol is okay for people under 21 if they only drink a	2.80	3.13
little.		
Alcohol Intentions		3.86
(1=Definitely to 4=No Way)		(SD=.44)
In the future, do you think you will		
Drink beer	3.93	3.82
Drink wine, 'hard lemonade,' or wine coolers	3.88	3.89
Drink liquor (whiskey, vodka, tequila, etc)	3.98	3.89
Vehicle Safety Skills ^a		3.46
(1=Strongly Agree to 4=Strongly Disagree)		(SD=.46)
If you ever had to ride in a car with a driver who had been		
drinking alcohol (like beer, wine, or liquor), what would you do?		
Talk to the driver	2.41	3.10
Sit in the front seat to be near the driver	3.42	3.72

Scale	Pre-test	Post-test
Items	Mean	Mean
(1=Definitely to 4=No Way)		
In the future, do you think you will		
Ride in a car with a driver who has drunk any alcohol	3.82	3.84
Forget to wear a seatbelt when in a car	3.28	3.18
Media Literacy ^b	2.45	2.74
(1=Strongly Agree to 4=Strongly Disagree)	(SD=.58)	(SD=.58)
Commercials on TV leave out important information.**	2.65	2.57
Beer commercials on TV show what happens when	2.55	2.87
people drink beer.		
Commercials on TV always tell us what we need to know.	2.24	2.70
Commercials on TV always tell the truth.	2.38	2.80
Perceived Harm of Underage Alcohol Use ^c	2.55	2.94
(1=Not at all to 4=A lot)	(SD=1.1)	(SD=1.01)
How much do you think people under 21 years of age will harm		
themselves if they		
Try one or two cans or bottles of beer?	2.50	2.99
Try one or two glasses or bottles of wine, 'hard		
lemonade', or wine coolers?	2.63	2.90
Try one or two shots of liquor (whiskey, vodka, tequila, etc)?	2.60	2.99
Have one or two cans, bottles, glasses, or shots of any		
alcohol once a month?	2.46	2.89

^{*}Standard deviations (SD) are only reported for the total mean scale score.



^{**} Reverse-scored so that 4 represents the desired behavior (e.g., 4=Strongly Agree, 1=Strongly Disagree).

a Paired samples t-tests indicated a statistically significant difference in scores from pre-test to post-test on Vehicle Safety (t=-3.908, t=-3.908, t=-3.908, df=74, p<.00, two-tailed test).

b Paired samples t-tests indicated statistically significant difference in scores from pre- to post-test on Media Literacy (t=-3.50, df=74, p<.001, two-tailed test).

c Paired samples t-tests indicated statistically significant difference in scores from pre- to post-test on Perceived Harm of Underage Alcohol (t=-3.21, df=78, p<.002, two-tailed test).

Pre-Program Exposure to Alcohol & Drugs

Participants in 4th and 5th grades were also assessed on alcohol and drug use behavior, which indicated whether students ever drank alcohol, used marijuana, used other illegal drugs, or rode in a car with a driver who had consumed alcohol. The results indicate that some alcohol use had already occurred by the time students were in 4th or 5th grade. As reported, before they began the program:

- about 4% had tried wine/wine coolers
- about 2% had used marijuana
- about 3% had tried beer
- about 3% had tried hard liquor
- and about 3% had used other illegal drugs.

Furthermore, approximately 12% had previously ridden in a car with a driver who had consumed alcohol. Of the students who say they have ridden with an impaired driver:

- 6% say it occurs about once a day
- About 3% say it occurs about once a year
- About 3% say it occurs either once a week or once a month.

These findings suggest that children are being exposed to alcohol at young ages and are being placed in unsafe driving situations. This finding reinforces the importance of a comprehensive approach to prevention and intervention programs that aim to change youth, family and community attitudes and behaviors about alcohol and drug use.

Peer Helpers

A total of 17³ high school students at Red Mesa High School participated in the PY/PM over the course of the school year. Eleven students started in the fall, 2007. Eight students dropped out after the fall semester, and six new ones were recruited for the spring session. The eight students either

³ At the time of this report, the total number of Peer Helpers who participated in the program at some point during the year could not be verified.



voluntarily left the program or were asked to leave because the program was affecting their school performance or a program behavior code was violated. Peer Helpers completed surveys prior to being trained in PY/PM and again after teaching the curriculum at the end of the school year. The evaluation design assessed changes in Peer Helpers' knowledge of vehicle safety and the effects of alcohol on youth. Pre- and post-tests contained sets of questions that comprised scales to measure constructs associated with underage drinking, including:

- Knowledge of the effects of underage drinking
- Future intentions toward alcohol use
- Perceived risks of high levels of alcohol use
- Perceived risks of low levels of alcohol use
- Self-efficacy
- Teaching skills

Items on the survey were rated on four-point Likert-type scales (e.g., scores of 1, 2, 3, and 4), with 4 being the most desirable (positive) response. Peer Helpers were also asked about recent alcohol and drug use.

Table 24 displays the mean/average scores on six scales. Questions comprising the scales and their respective mean scores are also presented. Only 10 Peer Helpers completed pre-test surveys, and no *post*-survey data was received. Therefore, only the pre-survey data were included in the analysis and results.

The data at pre-test illustrate a number of positive survey responses at the time the Peer Helpers entered the program. For example, their knowledge about the effects of underage drinking, future intentions to not use alcohol, and perceived risks of high level of alcohol use ranged from a mean of 3.5 to 3.67. However, scores on the other scales reveal areas for growth in knowledge and attitudes. For example, as seen in Table 24 below, Peer Helpers' scores at pre-test appear to be at a lower moderate level for the perceived risks of low levels of alcohol use (mean of 2.5). Peer Helpers' self-efficacy, a measure of their beliefs about their capabilities to resist pressure to use alcohol, had a mean score of 3.22 at pre-test, indicating a moderate level of efficacy, with some room for improvement. And finally, the Peer Helpers'



perceptions of their teaching skills and abilities were in the mid-range of the scale with a 3.17 mean at pre-test.

Table 24. Peer Helpers' Attitudes and Knowledge at Pre-Test (n=10)

Scale Items	Pre-test Mean (N=10)
Knowledge of the effects of underage drinking	3.50
(1=Strongly Disagree to 4=Strongly Agree)	
Drinking alcohol is more dangerous for people younger than 21 than for people	3.20
older than 21.	
It's okay to drink alcohol when you're under 21 if you don't get caught.*	3.80
I know what alcohol does to the brains of people under 21.	3.40
Drinking alcohol harms the development of people under 21.	3.70
Future intentions toward alcohol use	3.67
(1=Definitely will to 4=Definitely won't)	
Sometimes we don't know what we will do as adults, but we may have an idea.	
Please put an X in the box to answer how true these statements may be for you.	
I will drink alcohol when I get older*	3.40
I will drink beer when I get older.*	3.80
I will drink wine or hard liquor, like vodka, gin, or whiskey.*	3.70
Perceived risks of high levels of alcohol use	3.63
(1=No risk to 4=Great risk)	
Do people under 21 years old risk harming themselves (physically or in other ways)	
if they	
Have one or two alcoholic beverage nearly every day?	3.60
Have five or more alcoholic beverages at one time?	3.90
Drive after drinking one or two alcoholic beverages?	3.10
Drive after drinking three or more alcoholic beverages?	3.90
Perceived risks of low levels of alcohol use	2.50
(1=No risk to 4=Great risk)	
Do people under 21 years old risk harming themselves (physically or in other ways)	
if they	
Have one or two alcoholic beverages (beer, wine, wine cooler, hard liquor) once or	2.60
twice a year?	
Have one or two alcoholic beverages once or twice a month?	2.40



Scale	Pre-test
Items	Mean
	(N=10)
Self-efficacy	3.22
(1=Definitely couldn't say no to 4=Definitely could say no)	
If I was offered alcohol at my friend's house	3.20
If I was offered alcohol by my older brother or sister	3.30
If I was offered alcohol by other older persons, including my	3.20
relatives	3.20
If I was offered alcohol at a party or dance	3.20
If I was offered alcohol by my boyfriend/girlfriend	3.20
If I was offered a ride by someone who had been drinking	3.20
Teaching skills	3.17
(1=Strongly Disagree to 4=Strongly Agree)	
I am comfortable teaching children.	3.30
I understand how children's brains develop.	3.30
I have good public speaking skills.	3.00
I am comfortable presenting information in front of groups.	3.10

^{*}Items were reverse-scored so that 4 represents the desired behavior.

The Peer Helper survey included several questions about alcohol and other drug use. As can be seen in Table 25 below, before starting the program only one student reported alcohol use, and one student reported riding with an impaired driver. This is of concern because the students are role models and the younger students are often aware of their behaviors both in and out of the classroom.

Table 25. Recent Alcohol and Drug Use Pre-test – Peer Helpers (N=10)

	Pre-test
Item	(N=10)
Recent alcohol use (beer, liquor, or wine)	1 (10%)
Recent illegal drug usage (marijuana, ecstasy, LSD, meth)	0 (0%)
Riding with impaired driver	1 (10%)
Driving after drinking	0 (0%)

Limitations of the Evaluation Data

The evaluation team implemented an evaluation design and survey materials provided by the curricula developer, with some adaptations for cultural relevance to this target group. Similar to last year, there appear to be some positive trends from pre- to post-test among the elementary students. Also, the same limitations that were reported in previous years still apply for this year's findings and therefore this report's findings should be interpreted with caution. The major limitations of this evaluation fall within the areas of valid measurement, adequate sample size, comparison or control groups, and time for the program to be fully implemented. These limitations are described below:

- Assessment of young children using self-report surveys is challenging because of young children's limited comprehension abilities and motivation to make socially desirable responses. Studies suggest that younger children have shorter attention spans and tend to respond less consistently (Borgers, de Leeuw, & Hox, 2000).
- Developing precise and valid measurements of program outcomes to detect meaningful change for children in this age range is challenging. The reliability of some scales has not been shown to be consistently high, and their precision is low. This is not atypical of prevention program evaluations.
- Small sample sizes make it difficult to conduct statistical tests of significance. Large amounts of missing data also preclude meaningful analyses.
- PY/PM is a peer-led program; accordingly, variation in Peer Helpers' efforts could create differential effectiveness by grade and/or class.
- The lack of a comparison or control group makes it difficult to measure the program's impact without ruling out other plausible factors that might have caused the detected changes.
- Students in the upper grades have not been taught the curricular material from the earlier grades and thus are being surveyed on new material. Because the program intervention is designed to be five years in length, it is likely the impact of the program will best be assessed after that time.



Conclusions about the Navajo PY/PM Evaluation Findings

The 2007/2008 school year was the first full year of PY/PM program implementation on the Navajo Nation in the Red Mesa School District. (In the previous year, the program started in the Spring Semester). The evaluation findings show that program staff were able to continue the program and achieve moderate positive outcomes with the elementary students despite facing significant implementation challenges.

One of the major challenges was that Red Mesa School District experienced severe budget cutbacks during this school year, and as a consequence, staff positions were cut. The staff shortage increased workloads of existing personnel, and affected work morale. Coupled with this, the PY/PM program tribal contract had administrative difficulties, which led to the suspension of outside assistance from the PY/PM technical consultant, disbursement of teacher stipends, and re-imbursement for program supplies.

The program also experienced high attrition of Peer Helpers. The program started with approximately 11 Peer Helpers in the fall semester, lost eight after the fall semester, and retained six for the spring semester. The students left due to school performance issues, and inability to maintain abstinence. Due to the attrition and limited technical and resource support, the Peer Helper teacher faced challenges in managing the program. The Peer Helpers who remained had to take on extra classes during the second semester.

Due to these difficulties cited above, data collection for the evaluation was incomplete. Program fidelity and outcomes were more difficult to assess this year due to large amounts of missing program attendance data, and missing post-test surveys for Grades 1-3 and Peer Helpers. Data were available from teacher observations and Peer Helper class response forms. Results from these analyses seem to indicate that Peer Helpers sometimes struggled with management of students in some classes, and that classroom teachers were not always present to assist them with the disruptive student behaviors. Despite these challenges, the results from the short-term outcome analyses (both quantitative and qualitative) show trends in a positive direction for both the elementary school students and Peer Helpers. The scores of the 4th



and 5th grade students from pre- and post-tests show statistically significant changes in their knowledge of vehicle safety, perceived harm of underage alcohol use, and media literacy. The students also expressed high satisfaction with the program and the Peer Helpers as teachers. Although post-test data were not available for the younger students in Grades 1-3, their scores at pre-test showed moderate knowledge about the program concepts.

Results from the focus groups and staff interviews indicate that the Peer Helpers gained from their experience in terms of learning new knowledge and skills. All Peer Helpers who were interviewed would like to return to the program next year.

The principals and teachers at both the elementary and high schools perceive the PY/PM curriculum and the peer model approach as an effective way to prevent alcohol use among their students. All staff and students who were interviewed in the evaluation would like the program to continue, but only if more technical support and resources are provided to them in the future. Without these supports in place, it is likely the program will not continue.

Recommendations for the Navajo PY/PM Program

Based on this year's evaluation findings, the evaluation team recommends the following. The first three recommendations are crucial for continuation of the program:

- 1. In order for the program to continue, an outside consultant for program technical assistance should be retained. When the program was still new, and the schools were beginning to get the program established, contract difficulties led to a suspension in the consultant's assistance. This severely hampered the program's implementation.
- 2. In order for the program to continue, the Peer Helper teacher and elementary school program liaison should receive a stipend for their involvement as well as reimbursement for supply costs.



3. Strong commitment from all levels of school administration and staff are needed for the program's success. The roles and responsibilities for staff involvement need to be clearly delineated and communicated, as do the levels of support that will be provided.

The following recommendations apply to Peer Helper training and support, and the evaluation:

- 4. Provide increased time for the Peer Helpers to observe elementary classrooms prior to starting their teaching.
- 5. Encourage the elementary classroom teachers to share their classroom management methods with the Peer Helpers so they may gain concrete suggestions and feedback at each grade level.
- 6. Require that the elementary classroom teachers remain present in the classroom during the PY/PM lesson in order to provide assistance and support to the Peer Helper for managing classroom disruptions.
- 7. Increase recognition of the program and Peer Helpers' involvement school-wide and with parents.
- 8. Continue to retain some second year Peer Helpers as well as recruit new Peer Helpers early in the spring.



References

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Appendix A. Evaluation/Research Questions

Process Evaluation Questions

Process Questions	Data Source
How many elementary school-aged youth participated in the program?	Consent formsAttendance sheetsPre- and post-program surveys
How many teen Peer Helpers participated in the program?	Peer Helper assent formsPeer Helper tracking forms
What percentage of the scheduled education sessions did the elementary school-aged youth attend (i.e., dosage)?	Attendance sheets
To what degree did the program adhere to the Protecting You/Protecting Me curriculum as intended (i.e., fidelity)?	Class response formsClassroom observation formsFocus groups with Peer Helpers
To what degree were the participants receptive and engaged in the program?	Classroom observation formsFocus groups with Peer Helpers
Were the participants satisfied with the program?	 Participant satisfaction surveys Focus groups with Peer Helpers Focus groups with elementary school students
What were the outcomes and limitations of the Protecting You/Protecting Me curriculum?	 Focus groups with Peer Helpers Focus groups with elementary school students Interviews with teachers
Is the Protecting You/Protecting Me curriculum culturally appropriate for the targeted youth?	Interviews with teachers



Outcome Evaluation Questions for Elementary School Participants and Peer Helpers

Outcome Questions for Both Elementary School Participants and Teen Peer Helpers:	Data Source
Was there an increase in participants' knowledge about the brain and physiological risks associated with alcohol use?	Pre- and Post-program surveys
Was there a decrease in participants' attitudes favorable to underage drinking? (Grades 4 and 5 only)	Pre- and Post-program surveys
Was there a decrease in participants' intentions to engage in risky behaviors, including expectations to use alcohol while underage?	Pre- and Post-program surveys
Was there an increase in understanding of advertising tactics? (Grades 4 and 5 only)	Pre- and Post-program surveys
Was there a change in the perception of the age one reaches adulthood?	Pre- and Post-program surveys
Was there a change in current use of alcohol or illegal drugs? (<i>Grades 4 and 5 only</i>)	Pre- and Post-program surveys
Was there an increase in participants' protective skills related to vehicle safety and passenger safety?	Pre- and Post-program surveys



Outcome Evaluation Questions for Teen Peer Helpers

Outcome Questions for Teen Peer Helpers:	Data Source
Was there an increase in participants' understanding of child development?	Pre- and Post-program surveys
Was there an increase in participants' perceptions of self-confidence, assertiveness, or public speaking ability?	Pre- and Post-program surveysFocus groups with Peer Helpers
Was there an increase in participants' assertiveness skills and protective skills in situations where alcohol was present?	Pre- and Post-program surveys
Was there a decrease in participants' alcohol use, including binge drinking?	 Pre- and Post-program surveys Focus groups with Peer Helpers



Appendix B. Process Evaluation Forms

CLASSROOM OBSERVATION FORM

Protecting You Protecting Me

DATE:		SCHOOL: _			
OBSERVER TYPE:	O teacher	O peer	GRADE:	# Students:	
PEER HELPER NAM	E:		LE	SSON:	
OTHER NOTES on C	LASS ENVIF	RONMENT (i.e	e., comfort, temperature, size)):	

Presentation of Material / Communication of Message Items

THE PEER HELPER	Not at all	Some- times	About half of the time	Most or All of the time
Appeared to connect with students				
2. Spoke in a strong, clear voice				
3. Repeated questions for all to hear				
4. Asked students questions to review topics				
5. Was prepared and knowledgeable about material				
6. Interacted with the students with ease				
7. Gave positive reinforcement to students				
8. Demonstrated enthusiasm for subject matter				_
9. Encouraged questions/ participation				

10. NOTES ON PRESENTATION/ COMMUNICATION:



11. Describe any successes/ challenges end	ountered	d during th	e session		
Student Responsiveness Items					
THE STUDENTS	None	About 1/4	About ½	About ¾	All of
THE STOVENTS		of youth	of youth	of youth	youth
12. Participated/ volunteered in class					
activities and discussions					
13. Asked questions					

19. NOTES ON STUDENT RESPONSIVENESS:

14. Showed interest in the material

17. Followed directions

18. Were attentive

15. Showed respect for the Peer Helper

16. Appeared to understand the lesson

20. Was the time allocation appropriate to the lesson?	o Yes	o No
21. [Program Staff only] Were the PY/PM posters displayed		
in the classroom?	o Yes	o No
22. [Program Staff only] If observing lessons 2, 3, or 4: Did the		
Peer Helper conduct the ownership/ reinforcement activity?	o Yes	o No

23. Any key concerns about the lesson or how it was taught?



Encouraging One Another ATTENDANCE SHEET for ELEMENTARY SCHOOL YOUTH

₫

Date of Birth General Form Took General Hallow Received Pre? (MMVDD/YY) (MMVD/YY) (MMVDD/YY) (MMVD/YY) (MMVD/YY				0					Atten	dance - Pre	Attendance Status:	 		6	シ (1) 人
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	First and Last Name of Student		(MM/DD/YY)	9		yes	-	4	,	-	,	-	-	,	yes
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		I													
		'													

Pre-survey/Post-survey Status: = took the survey, blank = did not take survey
Ethnicity: Al = American Indian/ Native American, W = White, H = Hispanic/ Latino, B=Black, A = Asian, O = Other, M = Mixed/ Multi-ethnic



To be completed immediately after each class session!

PEER HELPER NAM	ME:											_							
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Time to teach?			(Class	partici None	patio	on/ e	nergy	?		A lot		(tudeni	ts
No Y	'es		7		1	2		3	4		5			?	res A	pone E	ar BC	D	F
Time to review	?		ı	Disrup	tions?	•												ed" sho	
No Y	es		10	$oldsymbol{\odot}$	None 1	2		3	4		A lot		beh	aviors - stud	s. lents	ate ve	ev acti	volv	
Comfortable te	aching?												·8·	part help bett	icipa othe orthe	ting ar ers. an C. r	nd takin not as c	ng initiati good as	A.
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Were there barrie	ers to tea	achin	g, lea	rning.	or par	ticip	atio	n?											
No Ye	es Ify	yes, w	vhat w	ere th	ey?														
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Was there enough time to teach the lesson today?

Was there enough time to review the previous lesson?

How much energy to learn and participate did the students have today?

How much disruption was there in class today?

Any changes to the lesson? If yes, please describe.

Any challenges/ barriers to teaching, participating, or learning?

How comfortable did you feel teaching the lesson today?

LeCroy & Milligan Associates, 2005



Appendix C. Outcome Evaluation Surveys

	PEER HELPER SU	RVEY	,			TOT W PRO
Your student ID number:			Today (month	's date n, day, year)	:	
1. How old	are you? (years)	2, A	re you (circle one):	Male F	emale
3. High Sch	nool:	4.	What g	rade are you	in?	
5. What is	your ethnicity? (put an X in the box)					
		be?				
	White			/ Mexican-/		
	African American/ Black		A sian A	merican		
	Multi-racial/ Other (Specify:)
If you have during the s to your teac 1. Put an	r or your parents will NOT see any of your any questions during the survey, please rais urvey. After you have finished, please put youer. This survey will take less than 20 minutes. X in the box below your answer indicach statement, STRONGLY DISAGREE means you all DISAGREE means you usually disagree AGREE means you usually agree with the STRONGLY AGREE means you always.	e your learning learn	hand, Ple wey in the complete, how mu isagree whis statem ement with this	ase don't tal envelope, se ch you agre ith this states ent statement	k to each val it, and ee or dis ment	other give it agree
			rongly sagree	Disagree	Agree	Strongly Agree
	alcohol is <u>more</u> dangerous for people than 21 than for people <i>older</i> than 21.		sagree			Agice
b, I will dri	ink alcohol when I get older.					
c, I am con	nfortable teaching children.					
d, I underst	and how children's brains develop.					
	to drink alcohol when you're under 21 if t get caught.					
	lligan Associates, Inc			-	Turn page over	F ₁

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Remember,

STRONGLY DISAGREE means you <u>always</u> disagree with this statement DISAGREE means you <u>usually</u> disagree with this statement AGREE means you <u>usually</u> agree with this statement STRONGLY AGREE means you <u>always</u> agree with this statement

	Strongly Disagree	Disagree	Agree	Strongly Agree
 I look forward to being old enough to drink alcohol legally. 				
g. I have good public speaking skills.				
 I know what alcohol does to the brains of people under 21. 				
 I am comfortable presenting information in front of groups. 				
 Drinking alcohol harms the development of people under 21. 				

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2. Put an \boldsymbol{X} in the box below to indicate your level of confidence in the following situations.

	I <u>definitely</u> COULDN'T say"no"	I probably COULDN'T say "no"	I probably COULD say "no"	I <u>definitely</u> COULD say "no"
a. If I was offered alcohol at my friend's house				
b. If I was offered alcohol by my older brother or sister				
c. If I was offered alcohol by other older persons, including my relatives				
d. If I was offered alcohol at a party or dance				
e. If I was offered alcohol by my boyfriend/ girlfriend				
f. If I was offered a ride by someone who had been drinking, including my friend or boy friend/girlfriend				

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Do people under 21 years old risk harming themselves (physically or in other ways) if they...

	No risk at all	Slight risk	Medium risk	Great risk
a have one or two alcoholic beverages (beer, wine, wine cooler, hard liquor) once or twice a year?				
b, have one or two alcoholic beverages once or twice a month?				
c have one or two alcoholic beverages nearly every day?				
d have five or more alcoholic beverages at one time?				
e drive after drinking one or two alcoholic beverages?				
f drive after drinking three or more alcoholic beverages?				
g smoke cigarettes?				
 h use illegal drugs (marijuana, ecstasy, LSD, meth, cocaine, etc)? 				
i huff (sniff) paint or other chemicals?				

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Sometimes we don't know what we will do as adults, but we may have an idea.
 Please put an X in the box to answer how true these statements may be for you.

	Definitely won't	Probably won't	Probably will	<u>Definitely</u> will
a. I will smoke cigarettes.				
b. I will drink beer.				
 I will drink wine or hard liquor, like vodka, gin, or whiskey. 				
 d. I will use illegal drugs like marijuana, ecstasy, LSD, meth, cocaine, etc. 				
e. I will huff (sniff) paint or other chemicals,				

Turn page over



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5. IN THE PAST 30 DAYS, how many times have you:

	Not in past 30 days	1-2 times	3-10 times	11-19 times	20+ times
ahad any beer?					
bhad any liquor?					
chad any wine?					
d had 5 or more drinks of any alcohol in one sitting?					
e, huffed paint or other chemicals?					
f had any illegal drugs (marijuana, ecstasy, LSD, meth, cocaine, etc.)?					
g ridden in a car with a driver who had recently been drinking alcohol?					
h driven a car within 2 hours after drinking alcohol?					

@***************	@************************

6. Do you think it's wrong for someone your age to ...

	Not wrong at all	A little bit wrong	Mostly wrong	Very wrong
a drink beer regularly?				
 b drink wine or hard liquor (like vodka, whiskey, gin) regularly? 				
c smoke cigarettes?				
 d use illegal drugs like manijuana, ecstasy, LSD, meth, cocaine, etc.? 				
e, huff paint or other chemicals?				

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7. Would you be considered "cool" if ...

	No chance	Some chance	Pretty good chance	Very good chance
a you worked hard in school?				
b you defended someone who was being verbally abused at school?				
c you regularly volunteered to do community service?				
d you regularly volunteered for cultural activities?				
e, you smoked cigarettes?				
f you drank alcoholic beverages once or twice a month?				
g you used marijuana?				
hyou used other illegal drugs, like ecstasy, LSD, meth, cocaine, etc.?				

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8. In the past 12 months, how often have you...

	Never	Hardly ever	Most of the time	Always
a participated in school clubs, organizations, or other activities at school?				
b participated in activities in the community?				
c done extra work on your own for school?				
d volunteered to do community service?				

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9. In the past 12 months, how many of your best friends have...

	NONE of my friends	SOME of my friends	About HALF of my friends	MOST of my friends	ALL of my friends
a participated in clubs, organizations, or activities at school?					
 b participated in activities in the community? 					
c made the commitment to stay drug-free?					
d, tried to do well in school?					
e liked school?					
f regularly attended religious services?					
g regularly participate in cultural activities?					

@************************	@********************	@********************

11. In the past 12 months, how many of your best friends have...

	NONE of my friends	SOME of my friends	About HALF of my friends	MOST of my friends	ALL of my friends
a, smoked cigarettes?					
b, tried beer?					
c. tried wine or liquor, like vodka, gin, or whiskey?					
d. used marijuana?					
e. used ecstasy, LSD, meth, or another illegal drug?					

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- 12. Has anyone in your family ever had a severe alcohol or drug problem? (Check one)
 - Yes

□ No

And finally....

- 13. How honest were you in filling out this survey? (Check one box)
 - I was <u>not</u> honest at all
 - I was honest once in a while
 - I was honest some of the time
 - I was honest almost all of the time
 - I was honest for every question

Please put your survey in the envelope provided, seal it, and give it to your teacher. Remember, all your answers are confidential.



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ADDITIONAL QUESTIONS FOR POST-SURVEY

14.			Protecting You/Protecting		Yes □ No
15.	Did you tea	nch the PY/PM	curriculum to elementary	students?	Yes □ No
15.			Protecting You/ Protecting		′es □No
As	a result of th	e Protecting Y	ou/ Protecting Me prog	ıram	
17.	I will do so	mething new or	different	Yes	□ No
18.	I will chang	ge the way Ithin	ık, act, or behave	Yes	□ No
19.	I plan to us	se or share wha	t I learned	Yes	□ No
20.	I am more	interested in thi	is topic	Yes	□ No
21.	OVERALL, t	he PY/PM prog	ram was		
	POOR	OKAY	VERY GOOD	EXCELLENT	
LeCr	ov & Millioan A	ssociates. Inc.		ø	Thank you!!
		ou/ Projecting Me Peer He		A.C.	8

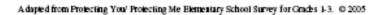




PRE-SURVEY for GRADES 1-3

t has 1							
1. Today's Date:	:						_
2. Your grade (c	ircle one)	:	Grade 1	l	Grade	2	Grade 3
3. Are you a (cir	cle one):		Воу	Girl			
4. Your age (cire	cle one):					9 years old	10 years old
5. Are you (chec	k one):						
	Native A	American/	America	ın Indian '	Tribe:	□ Норі	□ Navajo
	White						
	Asian A	merican					
	Mexican	or Hispa	ınic				
	African	Americar	n				
	Other _						E
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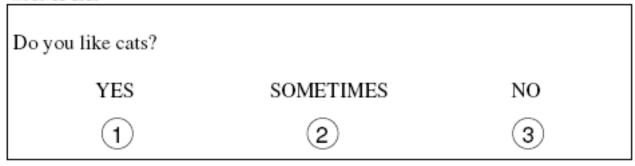
Page 1





Directions: Each question will be read out loud. Then you are to fill in the bubble that best describes your answer. Fill in only ONE BUBBLE for each question. If you are unsure about your answer, you can guess. If you do not know or do not want to answer the question, leave it blank. Neither your teacher nor your parents will see any of your answers. You do not have to take this survey. If you have any questions during the survey, please raise your hand. Please don't talk to each other during the survey. There is no right or wrong answer; everyone will answer things differently.

SAMPLE





START

1. What is the boss of your body?

MY HEART

MY BRAIN

2



Page 2

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2. Is it harmful for teens to drink beer, wine, or alcohol?							
YES	SOMETIMES	NO					
1	2	3					
******************	<u> </u>	***************************************					
3. Is it okay for people	to drive when they drink bee	er, wine, or alcohol?					
YES	SOMETIMES	NO					
1	2	3					
© ********************	<u> </u>	······································					
4. Should you talk to the	he driver if they drank beer, v	wine or alcohol?					
YES	SOMETIMES	NO					
1	2	3					

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5. Where is the safest place to sit in a car?

In the front seat

In the back seat







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PRE-SURVEY for GRADES 4-6

1. Today's date:							
2. Your grade (circle one):	4ti	h	5th	6	ōth		
3. Are you a (circle one):	В	ру	Girl				
4. Your age (circle one):	8	9	1	0	11	12 13	
5. Are you (check one): ☐ Native American/ American ☐ Multi-racial/Other ☐ White ☐ African-American	☐ Mexi	ribe: can or Hi n America	spanic				
Directions: Each question will be re answer. Fill in only ONE BUBBLE If you do not know or do not want to parents will see any of your answers, the survey, please raise your hand. F	for each qu answer the You do n	estion, If question, othave to t	you are leave it ake this	unsure ab blank, No survey, I	oout your ar either your f you have :	nswer, you can gu teacher nor your	
Let's practice on a sample question fir or disagree with the statement.	st, Fill in th	e bubble of	the ans	wer that be	est shows ho	ow much you agree)
EXAMPLE: I like cats.			ongly gree	Agree	Disagree	Strongly Disagree	
		(0	0	0	0	
STRONGLY AGREE means you AGREE means you <u>usually</u> agr DISAGREE means you <u>usually</u> STRONGLY DISAGREE mean	ee with th disagree	nis statem with this	ent staten	nent			

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Part 1. FILL IN THE BUBBLE under your answer.

		Strongly Agree	Agree	Disagree	Strongly Disagree
1	mercials on TV leave out important mation.	0	0	0	0
	commercials on TV show what happens people drink beer.	0	0	0	0
The h body.	neart is the most important part of the	0	0	0	0













	Strongly Agree	Agree	Disagree	Strongly Disagree
 Commercials on TV always tell us what we need to know, 	0	0	0	0
Drinking alcohol messes up how the brain and body communicate,	0	0	0	0
 Drinking alcohol is okay for people under 21 if they do not drive. 	0	0	0	0

















	Strongly Agree	Agree	Disagree	Strongly Disagree
Most people's brains are fully formed by the time they are 18 years old.	0	0	0	0
 Drinking alcohol changes how the brain works. 	0	0	0	0
 Drinking alcohol is okay for people under 21 if they are at home. 	0	0	0	0
10. Commercials on TV always tell the truth,	0	0	0	0

Turn page over



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	Strongly Agree	Agree	Disagree	Strongly Disagree
 People are grown up when they are 18 years old. 	0	0	0	0
 Drinking alcohol is okay for people under 21 if they only drink a little. 	0	0	0	0
 Drinking alcohol changes the brain's chemistry. 	0	0	0	0
 Drinking alcohol affects everyone the same no matter how old they are. 	0	0	0	0

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Part 2. Answer the questions below.

15. Tell us how often you					
	About once a <u>day</u>	About once a week	About once a month	About once a <u>year</u>	Never
a. Drink beer?	0	0	0	0	0
ь. Drink wine, "hard lemonade", or wine coolers?	0	0	0	0	0
c. Drink liquor (whiskey, vodka, tequila, etc.)?	0	0	0	0	0
d. Use marijuana or pot?	0	0	0	0	0
	About once a <u>day</u>	About once a <u>week</u>	About once a month	About once a <u>year</u>	Never
e. Smoke cigarettes?	once a	once a	once a	once a	Never
Smoke cigarettes? Use other illegal drugs, like ecstasy, meth, cocaine, heroin?	once a	once a week	once a month	once a <u>year</u>	
f. Use other illegal drugs, like ecstasy,	once a day	once a week	once a month	once a <u>year</u>	0
f. Use other illegal drugs, like ecstasy, meth, cocaine, heroin? g. Ride in a car with a driver who has	once a day	once a week	once a month O	Once a year	0

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	16. If you ever had to ride in a car with a driver who had been drinking alcohol (like beer, wine, or liquor), what would you do?				
		Strongly Agree	Agree	Disagree	Strongly Disagree
a.	Talk to the driver,	0	0	0	0
ь.	Sit in the front seat to be near the driver,	0	0	0	0
c.	Put any things I had with me (like my backpack) on the seat next to me.	0	0	0	0

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17. In the future, do you think you will:				
	Definitely	Probably	Unlikely	No way
a. Drink beer?	0	0	0	0
ь. Drink wine, "hard lemonade", or wine coolers?	0	0	0	0
c. Drink liquor (whiskey, vodka, tequila, etc.)?	0	0	0	0
d. Use marijuana or pot?	0	0	0	0
	Definitely	Probably	Unlikely	No way
Smoke cigarettes?	Definitely O	Probably O	Unlikely	No way
Smoke cigarettes? Use other illegal drugs, like ecstasy, meth, cocaine, and heroin?				-
f. Use other illegal drugs, like ecstasy,	0	0	0	0
Use other illegal drugs, like ecstasy, meth, cocaine, and heroin? Ride in a car with a driver who has drank	0	0	0	0

Turn page over



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18. How much do you think people under 21 years of age will harm themselves if they					
	A Lot	Some	A Little	Not at all	
a. try one or two cans or bottles of beer?	0	0	0	0	
ь. try one or two glasses or bottles of wine, "hard lemonade", or wine coolers?	0	0	0	0	
c. try one or two shots of liquor (whiskey, vodka, tequila, etc.)?	0	0	0	0	
d. have one or two cans, bottles, glasses, or shots of any alcohol once a month?	0	0	0	0	
	A Lot	Some	A Little	Not at all	
e. use marijuana?	0	0	0	0	
f. smoke cigarettes?	0	0	0	0	
g. use other illegal drugs, like ecstasy, meth, cocaine, heroin?	0	0	0	0	
ь. ride in a car with a driver who has had any alcohol?	0	0	0	0	
i. forget to wear a seatbelt when in a car?	0	0	0	0	
j. huff (sniff) paint, glue, or other chemicals?	0	0	0	0	



Please put your survey in the envelope provided and give it to your teacher.

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