



**Native STAND (Students Together Against Negative Decisions):  
Evaluating a School-based Sexual Risk Reduction Intervention  
in Four Indian Boarding Schools**

*The opinions expressed in this paper are those of the authors(s),  
and do not necessarily reflect the views of the IHS.*

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**Abstract**

Native STAND is a 29-session curriculum that covers a range of sexual and reproductive health topics, including important communication and peer education skills. It is based on an intervention that was designed and evaluated among rural youth in the southern U.S. and found to effectively increase condom self efficacy, human immunodeficiency virus (HIV) infection risk behavior knowledge, frequency of conversations with peers about birth control and sexually transmitted infections (STIs), and consistent condom use among participating 10<sup>th</sup> grade students. In 2008, Native STAND was adapted by a national group of American Indian and Alaska Native (AI/AN) partners and topical experts, and activities were tested with small groups of youth from the target audience.

To more fully evaluate the adapted curriculum in Indian Country, 80 students attending four Bureau of Indian Education (BIE) boarding schools were selected by fellow students to be trained as peer educators using the Native STAND curriculum. The curriculum was delivered in 1½ hour classes by two or three adult staff at each school, who were trained to facilitate the Native STAND curriculum. A comprehensive pre- and post- computer-assisted self interview (CASI) survey was administered to participating students to assess changes in knowledge, attitudes, intentions, behaviors, and skills over time. At the end of the program, a series of focus groups and key informant interviews were also carried out with separate groups of students, facilitators, and school staff not directly involved in the program to identify programmatic strengths and weaknesses and inform final program revisions.

These analyses reveal that, to varying degrees, positive outcomes and impacts were experienced at all four schools. Recommendations also emerged from this process that can guide future use of the program. Additional evaluation will be needed to determine to what

extent the newly trained peer educators take on their roles as peer educators, and what, if any impact this has on the social norms surrounding sexual health among these students and at these schools.

## Introduction

**Background:** Compared to other U.S. teens, AI/AN youth experience significant sexual health disparities. After experiencing more than a decade of decline, the teen birth rate increased 12% in Indian Country between 2005 and 2007—more than any in other racial or ethnic population (Hamilton et al., 2009). One fifth of Native teen girls now give birth before turning 20 years old (Hamilton et al., 2009). In 2007, AI/ANs were 4.5 times more likely than whites to be diagnosed with chlamydia, over three times more likely to be diagnosed with gonorrhea, and twice as likely to be diagnosed with primary or secondary syphilis (CDC, 2008b). Between 2000 and 2004, young people (15 to 24 years old) accounted for 68% of the AI/AN chlamydia cases and 60% of the AI/AN gonorrhea cases (Kaufman et al., 2007). Due to late testing and suboptimal treatment, AI/ANs also have one of the lowest HIV/AIDS survival rates of any racial/ethnic group, with just one in four living more than three years after their diagnosis (CDC, 2008a). In 2007 young people under 25 years old accounted for 19% of all AI/AN new HIV/AIDS diagnoses, compared to about 14% nationwide (CDC, 2009). Many factors contribute to these disparities, including poverty, stigma, insufficient and inaccessible health services, and persistent social norms that support substance abuse and sexual violence (See: [http://www.npaihb.org/health\\_issues/hiv\\_std\\_aids/](http://www.npaihb.org/health_issues/hiv_std_aids/)).

During the 2009-2010 school year, the Native STAND curriculum was piloted at four Bureau of Indian Education (BIE) boarding schools located throughout the United States. Overall, BIE oversees 183 elementary, secondary, residential and peripheral dormitories in 23 states. The majority of the schools (124) are tribally-operated; BIE operates the remaining 59 schools (See: <http://www.bie.edu/Schools/index.htm>). Fifty-two of the 183 schools are residential (boarding) schools. Although the majority of the residential schools are located on reservations, there are seven off-reservation residential schools (See: <http://www.bie.edu/idc/groups/xbie/documents/text/idc-008039.pdf>).

Off-reservation residential schools are distinct from on-reservation boarding schools in that they draw AI/AN youth from reservations and urban areas from across the country. A very different atmosphere thus prevails, with as many as 50 or more tribes represented at a single school. While rivalry and fighting among students certainly occurs, so do intimate relationships. Students study and live in tight quarters and develop strong relationships with other students over the course of the school year. Often—but not always—students attending BIE boarding schools have experienced difficulty in other schools, perhaps with destructive or problematic behaviors, or have been involved with the juvenile justice system. Students have few opportunities to travel home or leave campus, and BIE's budgetary constraints often manifest in sub-optimal staffing and oversight, which can lead to sex and drug use by students. Most

boarding schools do have a basic on-site health clinic, but students are hesitant to access campus health services because of concerns about confidentiality. BIE schools were selected for this study to help control for variability between tribes and geographic locations, and to centralize decision-making. Throughout the course of the pilot study, however, this did not always turn out to be true.

**Native STAND Curriculum:** Native STAND is a 29-session curriculum that covers a range of sexual and reproductive health topics, including important communication and peer education skills. It is based on an intervention that was designed and evaluated among rural youth in the southern U.S. Original effectiveness studies reported that the program increased condom self-efficacy, HIV/AIDS risk behavior knowledge, frequency of conversations with peers about birth control and STIs, and consistent condom use among participating students in the 10<sup>th</sup> grade. Recognizing the need for sexual health interventions tailored to the unique culture and social context experienced by AI/AN youth, Native STAND was adapted by a national group of AI/AN partners and topical experts in 2008.

As in the original STAND, Native STAND students were selected to participate in the program using a peer nomination process at the end of the 9<sup>th</sup> grade (described by Smith et. al., 2000). At each of the four schools, social networking software (UCINET, Lexington, KY) was used to identify and recruit 20 youth who were viewed as opinion leaders in matters of sexual health to participate in the training. The opinion leaders who became trainees were also selected based on their positions in the social networks of the school, so as to provide coverage of the largest possible number of cliques identified by UCINET.

The program was facilitated by two to three staff members at each school, who attended a 3½ day training prior to implementation. The curriculum was designed to holistically address healthy decision-making topics and skills associated with both adolescent sexual health and peer education. Session topics included: culture and tradition; sexual diversity; self-acceptance and body image; healthy relationships; reproductive health; pregnancy and parenting; STI/HIV; birth control methods; personal goals and values; drugs & alcohol; negotiation & refusal skills; stages of change, and effective communication. Each interactive session lasted approximately 1½ to 2 hours. The first several sessions of the program were carried out during off-site retreats; subsequent sessions were usually held once per week. Upon completion of the curriculum, Native STAND peer educators and facilitators were encouraged to form a peer educator club on campus, and interested peer educators were asked to help train a new cohort of Native STAND students during the next school year.

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## Evaluation Methods

**Evaluation Sites and Student Recruitment:** A mixed-methods study was conducted to evaluate the Native STAND curriculum at four pilot sites. In Spring 2009, students were nominated by their peers at the end of the 9<sup>th</sup> grade by asking students to list up to five friends

(total) in response to the following questions: Who would you feel comfortable talking to about a sensitive issue, like sex?; Who would you trust to talk to about a sensitive issue, like sex? Students were asked separately: Are you one of these people? (Yes/No). The student nominations were entered into the UCINET software program to analyze social networks and create a graphic distribution of social groups—or cliques – at each school. The 20 students with the most peer and self nominations and the greatest coverage of cliques at each school were invited to participate in the program.

As expected for BIE schools, summer attrition was such that only 15 to 18 of the students selected to participate at each site returned to the school and started the program the subsequent Fall (2009). To fill the remaining slots, additional students were invited to participate based on the original UCINET analysis, as well as on convenience and the adult facilitators' perception of the student's personal characteristics (i.e. peer leadership, maturity, and altruism). In some schools, less than 20 students began the program.

During the program's pilot, students were not allowed to miss more than three sessions. For this reason and others (discussed in greater detail in the discussion section), additional attrition occurred at all four sites, leaving 7-12 students to complete the program per site.

**Human Subjects Protection:** To ensure community and human protections throughout the research process, the evaluation protocol was submitted to the tribal institutional review boards (IRB) associated with each of the four sites. IRB approval letters were received and are available for review. Due to the low risk nature of the evaluation and the perceived value of the topics addressed by the program, the schools elected to use a passive parental consent process in which the parents or guardians of nominated students were sent a letter explaining the project and informing them to return a brief form if they did not want their child to participate in the program or its evaluation. No forms were returned at any of the schools.

The pre- and post-surveys were completely anonymous and posed no more than minimal risk to participants. Participant names, birthdates, and tribal affiliation(s) were not collected on these surveys. Informed consent was achieved by having a member of the evaluation team introduce the survey purpose and content to participants, assure anonymity and confidentiality, describe how the data would be used in aggregate form, and answer any questions the participants might have. Assent was thus assumed for those who completed and submitted the surveys.

Participants in the focus groups and key informant interviews carried out after the program was completed (Spring 2010) were also informed about the purpose and content of the discussion, and signed a written consent form that was retained by investigators.

**Quantitative Methods – Pre- and Post-Survey:** To assess changes in student knowledge, attitudes, beliefs, intentions, behaviors and skills, a computer-assisted self interview (CASI) survey was administered to students at the beginning of the program and again at its completion. The survey was administered using a web-based form (Remark Web Survey®, Malvern, PA), which was completed in a single sitting. The survey was comprised of 20 multi-

item measures ranging from 3 to 34 questions each (see Tables 3 and 4). The survey questions were drawn and adapted from several existing questionnaires that have been implemented and validated in other settings (including by: DiClemente; De Hart & Birkimer, 1997; Mathematica Policy Research, Inc., 2005; Smith et. al., 2000; and Fischer and Fischer, 2003). To verify comprehension and appropriate skip patterns, the tool was pilot tested with 15 intertribal AI/AN youth attending an adolescent reproductive health training in the summer of 2009.

The pre-survey was administered at each school in September 2009, one day before starting the program, and the post-survey was given in March-April 2010, one to two weeks after completing the program. Completion times for the survey ranged from 30 minutes to over 90 minutes, with most students completing the survey in less than 45 minutes. In general, the post-survey was completed more quickly than the pre-survey.

At one school, there were problems with the internet connection at the time of the pre-survey, resulting in substantial missing data. Although it appeared that the students were advancing through the survey, much of the data were not captured. The problem was particularly pronounced at the beginning of the survey, and data completeness improved somewhat toward the end of the survey. Out of the 20 students who took the pre-test at this school, 17 of them had more than 25% of their responses missing. However, this school had the highest retention rate of all the schools (60%; see Table 1), and the greatest number of students represented in the post-survey, so it would have been problematic to eliminate these respondents from all analyses. It was thus decided that any data that were captured in the pre-survey were analyzed, and proportions were calculated based on the number of responses to each item (i.e., missing data excluded from denominators). No imputation of missing data was attempted.

***Quantitative Data Management and Analysis:*** The survey employed some very complicated skip patterns that routed respondents to particular items based on responses to previous items (e.g., sexual behavior questions specific to respondents' gender and sexual orientation). The web-based survey did not have the ability to differentiate between survey-skipped items (due to coded skip patterns) and non-response data (i.e., a respondent neglected to answer a question). Thus, determining the appropriate denominators for these items required that skip patterns be clerically coded into the analytic datasets.

Statistical analyses included response frequencies by gender, mean scores with standard deviations by item and composite measure index, and t-tests to examine differences pre- and post-intervention. To protect the anonymity of students (who were under 21 years of age), no unique identifying information was collected. Therefore, no individual gain scores were computed and no pair-wise statistical analyses were conducted. Where proportions are presented, denominators include those who responded 'refuse', but exclude both survey-skipped and respondent-skipped missing data. Both 'refuse' and missing responses were excluded from mean analyses, such that mean scores and resulting analytic tests were based only on those who responded within the scale. All data management and analyses were conducted in SAS 9.1 (SAS Institute, Cary, NC).

**Qualitative Methods – Focus Groups and Interviews:** All focus groups and interviews were conducted in March-April 2010, one to two weeks after completing the curriculum. In order to capture the full scope of possible responses, four different moderator guides were developed: a youth participant focus group guide, a staff and faculty focus group guide, a school administrator interview guide, and a Native STAND facilitator interview guide. With permission, discussions were taped using an audio recording device and/or detailed notes were taken by a designated observer/notetaker.

The youth focus group questions centered on identifying the activities and topics in the curriculum that the youth *liked* the most and least, topics that they *learned* the most from, and topics that they felt *most comfortable discussing* with friends. These questions led to discussions about the effects of the program on the Native STAND graduates personally, on their friends, and on their school community. Facilitators were asked similar questions, and were additionally asked about the quality of the training and support they received from Native STAND developers and their respective school administration. Students and facilitators alike were asked about changes to the program that they would recommend for other students or sites.

The staff, faculty, and administrator interviews and discussions focused primarily on their observations of the program within their school, including aspects that worked and didn't work and effects on participating students and the school community at-large. Administrators were also asked about facilitator performance outside the intervention program, if they would support the program's continuation, and what possible alternative structures they would recommend to improve Native STAND's implementation at their school in the future.

To identify other strengths and weakness in the curriculum and to assess the fidelity of the implementation process, fidelity forms were completed by the facilitators after each session. While similar in design and content, each form was specifically tailored to each session. These forms were used to document changes made by the facilitators to the scripted activities and lesson plans, and to identify activities that seemed particularly effective (or were well-received by students) or ineffective (or were poorly-received by students).

**Qualitative Data Management and Analyses:** All qualitative data were systematically collected, transcribed, and analyzed. Three of the four schools' discussions and interviews were transcribed from audio recordings, and detailed notes were taken at the remaining school. The transcripts and notes were then used as the basis for content analysis. Content analysis can be used to describe the presence, intensity, and frequency of topics and themes generated by groups or individuals.

A coding scheme was developed by reading through one school's transcripts. Coding lists were then reviewed by project evaluators and several unique codes were added to the list. A code book was then developed based upon this edited coding schema. After the coding scheme was defined, all transcripts and notes were read twice and coded by a project evaluator. Qualitative

data were then separated and reassembled by site (School #1, School #2, etc) and focus group/interview type (student, facilitator, administrator, etc) to examine outcomes by subset.

Information collected on the fidelity forms was compiled for each school and each session in a matrix, looking specifically for patterns and outliers.

## Quantitative Results

**Youth Demographics:** Participants at all four schools were AI/AN students in the 10<sup>th</sup> grade, living at off-reservation BIE boarding schools. At the start of the program about half of the students were 15 years or younger, whereas the majority of students had reached the age of 16 by the end of Native STAND. More female students participated in the program than males (60% female at start; 65% female at end). Due to the internet connection problems at one school (discussed on pg. 5), all demographic data were missing for 15 of the students on the pre-survey. Thus, the actual distributions of age and gender are not known. All demographic data from the pre- and post-surveys are presented in Table 1.

**Table 1. Demographics**

Variable	n (%*)		
	Pre-survey N=70	Post-survey N=34	Pre-post Retention %
<b>Age</b>			
<=15	27 (49.1)	4 (11.8)	
>=16	28 (50.9%)	30 (88.2)	
Missing	15	--	
<b>Gender</b>			
Male	22 (40.0)	12 (35.3)	
Female	33 (60.0)	22 (64.7)	
Transgender	0 (0)	0 (0)	
Missing	15	--	
<b>School of attendance</b>			
School #1	17 (24.3)	8 (23.5)	47.1%
School #2†	20 (28.6)	12 (35.3)	60.0%
School #3	17 (24.3)	7 (20.6)	41.2%
School #4	16 (22.9)	7 (20.6)	43.8%
* Among those who responded to the question (i.e., missing data excluded from denominator) †Data imputed from survey date/time stamp; Substantial missing data throughout pre-survey due to computer/ connection problems			

**Communication with Peers and Adults:** On the pre-survey, 22 of 53 students (41.5%) reported that they had talked with a peer about a sexual health topic in the past three months (see Table 2). When asked how many times, answers ranged from “one” to “all the time”, but

the reliability of some answers were somewhat suspect (e.g., “1-10”, “67”, and “all the time” were given as responses). On the post-survey, a slightly higher proportion of students indicated that they had offered peer education around sexual health (12 of 25 respondents, 48%). On average, they reported five instances of talking with a peer about a sexual health topic in the past three months (range =1 to 10). Ten students on the pre-survey (18.5%) and two students on the post-survey (7%) reported having talked with a parent or adult about a sexual issue in the past three months.<sup>1</sup>

**Table 2. Communication with peers and adults**

	n (% among respondents)	
	Pre-survey (N=70)	Post-survey (N=34)
<b>Spoke with a peer about sexual health topic in past 3 months (no. of times)</b>		
None	30 (56.6)	12 (48.0)
One or more times (see text)	22 (41.5)	12 (48.0)
Refuse	1 (1.9)	1 (4.0)
Missing	17	9
<b>Spoke with an adult about sexual health topic in past 3 months (no. of times)</b>		
None	43 (79.6)	24 (88.9)
One or more times (see text)	10 (18.5)	2 (7.4)
Refuse	1 (1.9)	1 (3.7)
Missing	16	7

**Changes in Knowledge, Attitudes, and Behaviors:** Table 3 presents descriptions and results of composite measures that were used to assess changes in participant knowledge, attitudes, skills, and behaviors. The most drastic changes were seen in STI/HIV prevention knowledge and reproductive health knowledge ( $p < 0.001$  for each). On average, students answered 51% of STI/HIV questions correctly at the start of the program, and over 70% correctly post-intervention. They also demonstrated increases in knowledge about healthy relationships, answering 78% of questions correctly post-intervention, compared to 65% of questions pre-intervention ( $p = 0.04$ ).

Intentions to use condoms to avoid pregnancy and STIs and condom self-efficacy indices both increased moderately ( $p = 0.06$  and  $0.11$ , respectively), but no change was seen in overall condom attitude ( $p = 0.32$ ). This may be an artifact of relatively positive condom attitudes at the start (mean = 3.86 on a scale of 1 to 5, with 5 being the most positive).

No differences were demonstrated in the composite indices for Native pride, perceived life chances, or self-esteem. Similarly, there were no significant changes in motivation to be a role model and in self-efficacy for being a HIV peer educator (pre = 1.83 vs. post = 1.69, where 1 = highest confidence).

<sup>1</sup> Note: At pretest students had been at home, not at school, for the past three months. At posttest, students had not been home with their parents for most or all of the time in the past three months.



**Table 3. Description and results of composite survey measures**

Survey Section	Domain	No. of items	Scale anchors <i>Benchmark value</i>	Composite index mean (SD)		Cohen's d
				Pre-survey N=70	Post-survey N=34	
B	Native Pride	9	1 (strongly agree) to 5 (strongly disagree) <i>1=higher Native pride</i>	1.66 (0.35)	1.66 (0.32)	0
C	Perceived life chances	11	1 (very high) to 5 (very low) <i>1=high perceived life chances</i>	1.99 (0.62)	1.98 (0.53)	0.02
I	Self esteem	10	1 (strongly disagree) to 4 (strongly agree) <i>4=higher self esteem</i>	3.02 (0.57)	3.07 (0.59)	0.09
J	Abstinence	3	1 (strongly disagree) to 4 (strongly agree) <i>4=more supportive of teen abstinence</i>	3.59 (0.47)	3.58 (0.50)	-0.02
K	Refusal skills regarding sex	7	1 (I definitely can say no) to 5 (I definitely can't) <i>1=stronger refusal skills</i>	1.90 (0.64)	1.81 (0.62)	0.14
L	Condom attitude	22	1 (strongly disagree) to 5 (strongly agree) <i>5=more positive attitude</i>	3.86 (0.46)	3.96 (0.55)	0.20
M	Condom self-efficacy	9	1 (no problem) to 5 (a lot of a problem) <i>1=high self-efficacy</i>	2.28 (0.89)	1.98 (0.68)	0.38
<b>Partner communication</b>						
N.1-N.6	Self-efficacy	6	1 (very easy) to 4 (very hard) <i>1=high self-efficacy</i>	1.94 (0.60)	1.87 (0.59)	0.12
N.7-N.11	Frequency (among those w/ partner in the past 3 months)*	5	1 (never) to 4 (7 or more times) <i>4=more frequent partner communication</i>	1.51 (0.76)*	1.55 (0.74)*	0.05
<b>Motivation to avoid pregnancy &amp; STIs</b>						
O.1-O.9	Condom attitude†	9	1 (very true) to 5 (very untrue) <i>1=more positive attitude/motivation</i>	2.18 (0.97)†	1.81 (0.71)	0.44†
O.10-O.13	Condom use intentions	4	1 (very true) to 5 (very untrue) <i>1=higher intention to use condoms</i>	2.12 (0.93)	1.74 (0.73)	0.45
P	Motivation to be a role model	4	1 (strongly disagree) to 4 (strongly agree) <i>4=higher motivation</i>	3.47 (0.51)	3.49 (0.46)	0.04
Q	HIV peer educator self-efficacy	9	1 (very confident) to 4 (not at all confident) <i>1=greater confidence</i>	1.83 (0.66)	1.69 (0.52)	0.24
E	STI/HIV prevention knowledge	10	True/False/Don't Know <i>Average proportion of questions correct</i>	51.4% (0.28)	70.6% (0.21)	0.78
R	Reproductive health knowledge	10	True/False/Don't know <i>Average proportion of questions correct</i>	48.2% (0.21)	65.9% (0.23)	0.80
S	Healthy relationships knowledge	10	True/False/Don't know <i>Average proportion of questions correct</i>	65.1% (0.31)	77.9% (0.28)	0.43
*This section did not skip respondents with no current partner; summary statistic not reliable since it is unclear how they responded						
†An error in response options on the pre-survey makes this measure unreliable						

**Sexual Behavior and Other Survey Measures:** The pre- and post-surveys also collected data on personal sexual behavior, STI testing and treatment history, alcohol and drug use, and abuse and bullying experiences. Table 4 presents descriptions of all these survey measures and selected variable frequencies are presented in Tables 5 and 6.

**Table 4. Description of non-composite survey measures**

Survey Section	Domain	Variable	No. of items	Description	Skip pattern
<b>A</b>	<b>Demographics</b>				
		Age	1	Age in years	--
		Gender	1	Male/Female/Transgender	--
		School	1	School of attendance (names suppressed)	--
<b>D</b>	<b>Personal sexual behavior</b>				
		Orientation	1	Sexual orientation	--
		Ever had sex	2	Vaginal, oral, or anal sex	--
		Vaginal sex	Up to 11	Ever had vaginal sex with male/female; follow-up: frequency & intention of condom use for vaginal sex, number of partners, number of times, and use of drugs/alcohol with vaginal sex	Among those who reported ever having any type of sex
		Anal sex	11 per partner gender; up to 22	Ever had anal sex with male/female; follow-up: frequency & intention of condom use for anal sex, number of partners, number of times, and use of drugs/alcohol with anal sex	Among those who reported ever having any type of sex, gender-specific questions for respondents' gender & sexual orientation
		Oral sex	Up to 3	Ever had oral sex; follow-up: recency, use of latex barrier last time	Among those who reported ever having any type of sex
		Pregnancy history (female)	Up to 6	Ever been pregnant; follow-up: number of times, age at first pregnancy, planning & timing	Among females with history of vaginal sex with a male
		Pregnancy history (male)	Up to 2	Ever gotten someone pregnant; follow-up: how many times	Among males with history of vaginal sex with a female
<b>F</b>	<b>STI testing/ treatment history</b>		Up to 6	Perception of how safe current sexual behavior is re: STIs/HIV avoidance; ever been tested for HIV; know someone with HIV/AIDS; ever tested for STIs; follow-up: ever been told you have an STI; told partner you had STI	This section <b>did not</b> skip respondents with no personal sex history; it is unclear how they responded
<b>J</b>	<b>Abstinence</b>				
		Expect to abstain	2	Expect to have sex as unmarried teen; expect to have sex in the next year	--

**Table 4. Description of non-composite survey measures**

Survey Section	Domain	Variable	No. of items	Description	Skip pattern
Q.10- Q.11	<b>HIV peer educator self-efficacy</b>				
		Peer education frequency	2	No. of times spoke with peer in past 3 months; no. of times spoke w/an adult in past 3 months	--
G	<b>Alcohol and drug use</b>				
		Cigarettes	Up to 3	Ever used; amount smoked in past 12 months, amount smoked in past month	--
		Alcohol	Up to 4	Number of times used; follow-up questions: age at first drink, past month use, past month binge drinking	--
		Marijuana	Up to 3	Number of times used; follow-up: lifetime use, past month use, age at first use	--
		Other drugs	9	Number of times used: cocaine, glue/paint/aerosol, heroin, methamphetamines, ecstasy, needle to inject any drug, hallucinogens, pills non-medically	--
H	<b>Abuse &amp; bullying history</b>				
		Bullying	Up to 2	Been bullied in past year; follow-up: how old at first instance	--
		Physical abuse	Up to 2	Been hurt in past year by parent/guardian/partner; follow-up: how old at first instance	--
		Sexual abuse	Up to 2	Ever been forced to have sex; follow-up: age at first instance	--

As shown in Table 5, over 80% of the students reported their sexual orientation as straight (heterosexual), and over 60% reported having had sex in their lifetime.<sup>2</sup> Among post-survey respondents reporting a sexual history, 95% had had vaginal sex, 27% reported having had anal sex, and 59% had ever given and/or received oral sex. The proportion of students who felt their current sexual behavior practices were “safe” or “very safe” increased slightly from pre- to post-survey (from 82% to 85%). The proportion who had ever been tested for HIV also increased (20% to 29%), but the percentage of students who reported having been tested for other STIs remained fairly constant (26% vs. 24%).

**Table 5. Personal sexual behavior, selected measures**

Variable	n (%)	
	Pre-survey (N=70)	Post-survey (N=34)
<b>Orientation</b>		
Straight	44 (83.0)	28 (82.4)
Gay/lesbian	1 (1.9)	1 (2.9)
Bisexual	4 (7.6)	3 (8.8)
Not sure	2 (3.8)	1 (2.9)
Refuse	2 (3.8)	1 (2.9)
Missing	17	--
<b>Ever had sex</b>		
Yes	33 (62.3)	22 (64.7)
No	16 (30.2)	11 (32.4)
Refuse	4 (7.6)	1 (2.9)
Missing	17	--
<b>Ever had vaginal sex*</b>		
Yes	29 (87.9)	21 (95.5)
No	2 (6.1)	1 (4.6)
Refuse	2 (6.1)	0 (0)
Missing	19	--
<b>Ever had anal sex*</b>		
Yes	4 (13.8)	6 (27.3)
No	24 (82.8)	16 (72.7)
Refuse	1 (3.4)	0 (0)
Missing	21	--
<b>Ever had oral sex*</b>		
Yes	19 (57.6)	13 (59.1)
No	13 (39.4)	9 (40.9)
Refuse	1 (3.0)	0 (0)
Missing	19	--
<b>Ever been pregnant (female)*</b>		
Yes†	3 (17.7)	3 (20.0)
No	14 (82.4)	12 (80.0)
Missing	18	--

<sup>2</sup> In comparison, 32% of 9<sup>th</sup> graders of all races reported ever having sex in the 2009 YRBS.

**Table 5. Personal sexual behavior, selected measures**

Variable	n (%)	
	Pre-survey (N=70)	Post-survey (N=34)
<b>Ever gotten someone pregnant (male)*</b>		
Yes	0 (0)	1 (16.7)
No	11 (91.7)	3 (50.0)
Don't know	1 (8.3)	1 (16.7)
Refuse	0 (0)	1 (16.7)
Missing	18	--
<b>Current sexual behavior safety perception**</b>		
Very safe or safe	44 (81.5)	29 (85.3)
Not sure	5 (9.3)	1 (2.9)
Not very or not at all safe	3 (5.6)	2 (5.9)
Refuse	2 (3.7)	2 (5.9)
Missing	16	--
<b>Ever been tested for HIV</b>		
Yes	11 (20.4)	10 (29.4)
No	42 (77.8)	23 (67.6)
Don't know	0 (0)	0 (0)
Refuse	1 (1.9)	1 (2.9)
Missing	16	--
<b>Ever been tested for STIs</b>		
Yes	14 (25.5)	8 (23.5)
No	40 (72.7)	25 (73.5)
Don't know	1 (1.8)	0 (0)
Refuse	0 (0)	1 (2.9)
Missing	15	--
<b>Ever been told you have STI</b>		
Yes	0	0
No	15 (100)	8 (100)
*Denominator adjusted for skip patterns		
†Responses to 'age at first pregnancy': 14, 15, and 'refuse' on pre-survey; 16, 'refuse', and missing on post		
** This section <b>did not</b> skip respondents with no personal sex history; it is unclear how they responded		

The lifetime use of cigarettes, alcohol, and marijuana was high among survey respondents at both time points (Table 6). Approximately 19% of pre-survey respondents reported having been bullied in the past year, but this proportion decreased to 9% at the time of the second assessment. Twenty and 27% of pre- and post-survey respondents, respectively, reported physical abuse by a parent, guardian, or intimate partner in the past year.

**Table 6. Alcohol and drug use, bullying, and abuse history**

Topic	n (%)	
	Pre-survey N=70	Post-survey N=34
Cigarettes, ever used	49 (87.5)	30 (88.2)
Alcohol, ever used	46 (79.3)	29 (82.9)
Marijuana, ever used	52 (85.2)	29 (85.3)
Cocaine, ever used	9 (15.5)	6 (17.6)
Glue/Paint/Aerosols, ever used	19 (32.8)	15 (44.1)
Heroin, ever used	0 (0)	0 (0)
Methamphetamines, ever used	3 (5.2)	4 (11.8)
Ecstasy, ever used	6 (10.2)	1 (2.9)
Needle to inject any illegal drug, ever used	0 (0)	1 (2.9)
Hallucinogen, ever used	7 (11.9)	3 (8.8)
Pills without a prescription, ever used	24 (40.7)	12 (35.3)
Been bullied, past year	11 (18.6)	3 (8.8)
Physically abused, past year	12 (20.3)	9 (26.5)
Sexually abused, ever	8 (12.9)	4 (12.1)

## Qualitative Results

### *Intervention Fidelity*

Fidelity forms were completed by the Native STAND facilitators after each session to document changes made to the scripted activities and lesson plans, and to identify activities that seemed particularly effective or ineffective. The fidelity forms generated quantitative and qualitative data, including check lists tracking whether specific activities occurred or not and short written answers to explain differences, etc.

Although facilitators at all four sites dutifully completed the fidelity forms at the beginning of the project, as time went on, fewer and fewer forms were returned. All told, 19% of the fidelity forms were completed by all four sites, 38% were completed by three sites, 27% were completed by two sites, and 15% were completed by one site only. Only one of the sites submitted fidelity forms for every session. Similarly, the facilitators provided more thorough commentary in the earlier sessions, but less so as the project progressed.

For the fidelity forms that were submitted, there was almost 100% concurrence between the proscribed activities in the curriculum and the actual activities reportedly undertaken, indicating that some facilitators may have felt uncomfortable reporting that they did not comply with all of the activities as planned (even though slight changes were noted by facilitators during their interviews).

Ultimately, the fidelity forms did not provide as much useful information about adherence to the curriculum as had been hoped.

### *Native STAND Curriculum*

Participating students and facilitators had a great deal to say about the strengths and weaknesses of the Native STAND curriculum.

- **Positive Aspects of the Curriculum:** The Native STAND curriculum was well-received at all four sites. Almost everyone felt that no topics should be removed from the curriculum, and that the health topics and activities included in the curriculum were relevant and important to include.

“There was something in there they could all use. I think each one of them took something out of every one of these topics.” - Facilitator

“There aren’t really any [activities] that I don’t like.” - Peer educator

During the focus groups, students shared some of their favorite activities, including *Drunk Barbie*, where students simulated progressively increasing sensory impairment as would be associated with heavy drinking, while attempting to dress a Barbie doll. Another favorite was *Man in the Maze*, a trust-building exercise in which one student of each pair was blindfolded and led through a maze by the verbal directions of a peer. Even though these two were clearly the favorites overall, youth and facilitators generally felt that all of the activities contributed to the curriculum. On worksheets that were passed out during the focus groups, peer educators had the freedom to see and mark other activities that they liked. *Drunk Barbie* was the clear favorite, just as stated in the focus groups, followed closely by: Drug & Alcohol Case Studies, Dreamcatcher, M&M activity, and Building Bridges.

It was clear in interviewing the sites that the session with the health clinic visit was not consistently made by all schools. Though, it was a favorite activity of the youth and facilitators at the school(s) who did make the visit. The students who had visited the clinic enthusiastically showed us pictures of their visit and discussed the clinical skills that they had watched and practiced.

“The trip off-campus to that clinic... Listening to them talk... that was when everything started clicking in. A lot of the stuff they were saying [at the clinic] was what they had already heard [in Native STAND], and that made it all the more a reality. ...Our stay at the clinic was from 1-4:30. The [clinician], she went over everything with them again: birth control, getting a physical, what happens when you become sexually active, all the risks that are taken, the number of students that are at high risk. She just reinforced everything that we had gone over up until that point. Then they went into the laboratory ...showed them different stuff there, right down to the petri dish. ‘This is what it looks like inside of you when it’s growing, and this is what happens.’ That kinda opened their eyes.” – Facilitator

During the focus groups, students also had the opportunity to indicate which topics they learned the most from and felt the most secure teaching others. The most frequently marked topic was *Healthy Relationships*, but strong support was also given to: Decision-Making, Condoms, Drugs & Alcohol, and Being a Peer Educator.

- **Concerns about the Curriculum:** The most frequently voiced concerns about the Native STAND curriculum were associated with topics not included in the curriculum or topics they felt were under emphasized. All four schools asked for more information on healthy relationships, suicide, pregnancy and parenting, and drug and alcohol use.

“I think the suicide, LGBTQ, abuse, and teen pregnancy [sessions] should be a bit bigger. . . I think we could have done two days actually. Cause that’s what our kids deal with a lot.” -Facilitator



*Domestic Violence* was another issue brought up as needing more attention by the curriculum:

“So even though they come from a strong family, they’re still going to have to deal with that type of element out in the community, whether it’s a cousin or a friend and so forth.” –Facilitator

One concern was voiced with the *Visualize Having an STI* activity, which could be important for maintaining cultural competence:

“Visualize you have an STI [was the most difficult to lead because] Native Americans don’t believe that you should say or pretend you have something negative.” – Facilitator

The *Ground Rules* activity also proved problematic at one site, where students created rules that were so constricting that they couldn’t successfully follow them. As a result, a facilitator faced this scenario:

“I had one student who threw a tantrum when I told him he had to leave. He cussed and said, ‘F-you,,’ and he didn’t want to have to leave. To me, that didn’t hurt my feelings; it made me feel good that he wanted to stay in the program so much that he’s willing to get angry, because I told him to leave, you see.” – Facilitator

No other site had an equal emphasis in crafting their own rules, nor did any of the other schools face similar outcomes.

When asked to mark topics and activities that they didn’t care for on a confidential worksheet, few students marked anything at all. The greatest consensus (5 students across all four schools) voted that they disliked the *STIs* and *HIV/AIDS* sections. Several students and facilitators also reported that these topics were overemphasized by the curriculum during the focus group discussions/interviews.

- **Healthy Relationships:** *Healthy Relationships* was the topic that almost all participants wanted more information on and more time to discuss. It was also the topic that students felt they learned the most about. Of the relationship activities already included in the curriculum, students particularly appreciated learning about what a healthy relationship looks like, and having a safe, open forum to discuss these sensitive issues.

“Oh, no, I never used to talk to my friends about their relationships. But now it’s ...like (this guy), I’m always helping him out...” - Peer educator

“I tell her, ‘You’re like a really young girl, you’re really nice. I know you got respect and trust and stuff like that. You shouldn’t be getting treated like that, you deserve a lot better’ and stuff like that.” –Peer educator

“‘*Are you being abused?*’ you know that was a good one for us, because a lot of these kids have either seen abuse, have been abused themselves, or know about other people that are being abused. And that generated a lot of discussion in my book. That was definitely a good topic to be covered there... that we came back to several times...” – Facilitator

- **HIV/STIs:** Students and facilitators both reported that having three HIV/AIDS sessions was too much. Facilitators felt that the students were already getting this information elsewhere in school and that the topic therefore did not warrant three full sessions. Some staff and students felt similarly about STIs in general, but this perception was less consistently voiced than for HIV/AIDS in particular.

“They needed the HIV/AIDS data and stuff, but it seemed to me... [the students] were tired of it. I do [HIV prevention] in the program I do too, because it’s still there, but it seems like everybody’s tired of hearing about it.” -Facilitator

- **Body Image:** Body image was the only topic that facilitators and students appeared to disagree about. Overall, students felt more strongly about including the topic than did facilitators; some facilitators were ready to drop body image session from the curriculum. Students, on the other hand, saw it as a platform to build their knowledge about health and as a possible inroad to start conversations with their friends.

“You can’t get to people’s health without [talking about] their body image and all that...” -Peer educator

- **Native Culture:** The curriculum’s Native-specific content was appreciated by most facilitators and students, but some felt like it was almost too much. Some felt that Native young people are not particularly connected to their traditional culture, and the curriculum’s emphasis on it was not really helpful.

“...some of the kids aren’t too interested in it [Native culture]. It’s just kind of a ‘good thing, bad thing’.” -Facilitator

On the other hand, everyone seemed to appreciate the intertribal focus of the program, particularly because of the wide diversity of cultures represented by the students in the program.

“I really liked the fact that this was a program for Native American students, which we don’t find a lot of. That it was trying at least to work down their cultural

road, and trying to help them through their own system that they have.” –  
Facilitator

“I think all of them, at some [point], connected with [it]... I don't think anybody from our group is from the same tribe. So you had *The Man in Maze* which [student's name] associated with, cause that's [her tribe]... Then there was something in there for [another student's name], who is [tribal affiliation]. So I think there isn't anything in here that one of the kids didn't grasp onto.” –  
Facilitator

### **Facilitator Training and Support**

On the whole, facilitators were pleased with the training and support they received from the pilot project evaluation team.

- **Group Facilitator Training:** The 3½ day training that took place prior to implementation was well received by the facilitators. They particularly enjoyed having the opportunity to be away from school and to network with new colleagues.

Facilitators offered three suggestions for improving the training in future years, including: 1) Involving youth in the training so that facilitators could see and practice facilitating interactions with students; 2) Spreading the training out over 4-5 days, rather than “cramming everything into 3½ days;” and 3) Giving facilitators the opportunity to sharpen their skills by leading a full-length session.

“Say, ‘Okay you have an hour to do this session.’ So you can time yourself, so you can get that sense of urgency and timeline.” –Facilitator

- **Native STAND and BIE:** Support provided by the pilot project evaluation team seemed universally appreciated and sufficient. Facilitators were neutral or pleased with the monthly teleconference calls. Most found BIE inconsequential or unsupportive, but this was not generally perceived to be problematic. The only consistent disappointment voiced by facilitators was with the lack of closure they felt at the end of the school year.

“It would be nice to get together with all the other schools and see how everything went. What didn't work and what did. Can we each help each other?” -  
Facilitator

### **Implementation Strategies**

Several conditions were consistently reported by students and staff as positively affecting the program's implementation.

- **Session Structure:** Students generally liked having one session per week, with sessions lasting 1-2 hours, depending on the topic and the amount of discussion it inspired.

Students and staff felt strongly that if it was not possible to continue the Native STAND program as an extra-curricular activity in future years, teachers and school administrators should explore incorporating the curriculum into the school's health class or offering it as an elective. At least one facilitator thought that offering the curriculum as a for-credit elective might help retain students and be a way to reach a wider group of students.

- **Group Size:** There was a clear consensus among both students and staff that having 10-12 students was the optimal group size. Several facilitators expressed views similar to the following:

“Seven to twelve is good. [Its] better with a larger group, but 20 is too many.” –Facilitator

Generally, the effects of attrition were not seen as negative, unless students were removed from the group who wanted to be there. Removal generally occurred because students missed too many sessions or because they broke a group-defined rule (i.e., one group created its own rule against “hickeys”). If students left voluntarily, because they had left school for example, their absence did not appear to affect other participants negatively.

- **Number of Facilitators:** As voiced by facilitators, having three facilitators was seen as optimal for implementation at all four sites (in addition to trained youth who would like to co-facilitate in future years). Two facilitators were considered too few and four never seemed to materialize. Facilitators conceptually felt comfortable having up to four facilitators, as long as they were competent and could all get along. Facilitator compatibility was a major determinant of successful co-facilitation. Students generally felt positive about the number of facilitators they had (2-3), and didn't voice a need for either more or less.
- **Youth Incentives:** Three incentives were seen as particularly useful for maintaining student participation: food at each meeting, the kick-off retreat, and the prospect of participating in other off-campus trips. These “extras” were good enticements for the youth but were not independently sufficient to maintain strong participation. The content of the program itself, the relationships that were formed, and the camaraderie that emerged from the groups were also critical to youths' commitment to continue. Many facilitators recognized that additional incentives were required to make participants feel special and honored to be selected as peer educators. Suggestions included parties, club shirts, or getting special privileges (i.e. attending meetings after curfew, etc).

The kick-off retreat garnered the widest range of viewpoints. Most people felt that it was unnecessary to have the retreat at the beginning of the program, that it would have been better at the end to encourage continued participation.

“I think the retreat should come after [the program]. I think it should be the incentive that they get, cause it was after the retreat that the kids just fell off. [Student’s name] never came back, [another student’s name] never came back after the retreat. So there were some who did it cause it was an off-campus activity and it was a way to get off campus.” –Facilitator

- **Funding for Implementation:** Each site received \$5,000 to implement the program. The funds were used primarily to buy food, for student field trips, and to host the kick-off retreat. One of the program partners administered the funds on behalf of the schools; funds not spent for the kick-off retreat were transferred into gift cards for facilitators to use for program incidentals. Facilitators consistently voiced enthusiastic support for the debit cards, as they provided flexibility to meet site-specific needs while avoiding the school’s financial bureaucracy. Future sites should consider using a similar process, if possible. Facilitators at all four schools voiced the need for at least some funding to start or maintain the program, most importantly for snacks.

During the interviews, all four school administrators indicated that they hoped the program would continue and acknowledged the need for financial support. One of the schools had submitted a proposal to the school administration to continue the program, otherwise there were no concrete plan to fund the program in future years. BIE leadership has voiced its intent to continue Native STAND at the four pilot sites for the 2010-2011 school year.

### ***Factors that Contributed to Programmatic Challenges***

Because the Native STAND program was implemented in slightly different ways from site to site, variations in implementation could be examined for their impact on the program.

- **Participant Selection:** The participant selection process was somewhat controversial at all four sites. Facilitators felt that some students were nominated as a joke and that others were selected consciously but were unfit for the position. Other facilitators felt that the peer selection process was a great tool and created a truly effective and diverse group. This trade-off was voiced by a facilitator:

“I think the kids that were well-known—and I wouldn’t say ‘looked up to’—were the ones that were kind of acting out and a behavior problem, but their names were well-known. ...The problem is, when the adults select, it’s someone who’s prim and prissy, that none of the kids really go to. So, you have to be careful. I understand the selection—you do need to get the kids that actually [are respected by their peers]—because there’s a certain element of kids that really don’t relate to the other kids, and they’re the ones that usually get selected to do a lot of things.” -Facilitator

When asked for suggestions to improve the process, they suggested altering the selection process to give facilitators at least some voice in the selection of students to participate. Some felt it would be helpful to pick a few students to participate based on their personal qualities or expressed interest in the program, using a combination of both recruitment strategies.

- **Meeting Space and Logistics:** Some sites were not able to establish a consistent meeting time and location until well into the program year, leaving facilitators feeling disorganized and somewhat overwhelmed by the logistics of assembling students with busy school schedules. At these sites, students and staff both expressed interest in having a permanent meeting space with consistent meeting times.

Some Native STAND groups had their own personal meeting room, which allowed them to display their group work, secure their program materials, and develop a sense of group ownership. Other schools overcame busy student schedules by meeting Sunday evenings after curfew or by meeting during the day on Saturday, which was well liked by the students.

- **Community Awareness:** Several sites felt that the Native STAND program was not adequately marketed in their school. Many staff members were completely unaware of the program, even after being invited to attend the focus group. One facilitator captured this sentiment:

“I think if we do do it next year, I think we need to [make people on campus more aware of] what we do, like make an information page, because a lot of the staff still don’t know. They ask, ‘What are you teaching the kids?’ And I say, ‘We’re not teaching them, we’re showing them information that they can teach their peers.’” -  
Facilitator

Students also voiced concern that their fellow students didn’t know they were being trained as peer educators and felt that, as a result, the program did not have “as much” of an impact “as they [thought] it should have.” Other sites overcame this challenge by introducing the program and students at school assemblies, having a Native STAND homecoming float, or by wearing Native STAND t-shirts once a week.

- **Overworked Facilitators:** At many of the sites, the facilitators felt overworked before starting the Native STAND program, and the project was added to already busy schedules. As a result, the amount of time facilitators spent preparing for upcoming sessions varied considerably from site to site. Those who spent more time preparing felt more confident with the material and were better able to plan for upcoming sessions, especially guest speakers and field trips.

One site offered facilitators stipends for taking on this added responsibility. At this site offering stipends seem to have modestly increased the facilitator’s personal satisfaction with the program. Facilitators from other schools went so far as to say:

“You almost have to offer it as a stipend.” - Facilitator

Despite the many challenges they faced, all of the facilitators showed a great deal of dedication to the program and to their students. To accommodate busy schedules, one facilitator even returned to campus on her days off, volunteering her time for the project. Many of the facilitators were clearly proud of their students and what they’d accomplished together.

- **Student Retention:** One additional challenge with implementing Native STAND in residential boarding school settings is the high rate of student turn-over that many schools commonly experience. One facilitator voiced this concern:

“We have such an influx of kids coming and going that we have new freshman, new sophomores, new juniors, and new seniors coming throughout the whole year...” -Facilitator

Because the effectiveness of Native STAND is dependent upon having a cadre of trained peer educators, this attrition could be problematic if a sufficient number of students are not retained across a single year of training or for multiple years (returning to school in the fall to implement what they’ve learned through the program).

### ***Intervention Outcomes and Impacts***

Although the true weight of the program will not be felt until after the students graduate from the program and assume their roles as peer educators (year two and beyond), positive outcomes were already being reported by students, facilitators, and other school personnel.

- **Student Impacts:** Students generally had a good time participating in the program, took the training they received very seriously, and had few negative comments about the Native STAND curriculum or their experience. This certainly may have been affected by participation bias (i.e., those who stayed involved in the program till the end may have had more favorable opinions about the curriculum than those who left early), but the positive feedback they gave was consistent across all four schools.

During the focus groups, several students’ expressed changes in attitude and outlook:

“I’ve always shown them [teachers] respect, but [now] just a little bit more.” – Peer educator

“I respect [my parents] more. [Native STAND] made me notice how hard it is for my [single] mom, how she’s raising three teenagers.” – Peer educator

“You just look at life in a different way, I guess. Because a lot of these things...it is all part of life. You grow up with it, you live with it. It just helps you a lot dealing with situations and stuff like that, you know, like what we learned in the [Native STAND] book.” – Peer educator

Many students and facilitators expressed favorable changes in student behavior among those participating in the program, including increased self-confidence among those who were shy as well as more respectful behavior towards themselves and others.

“Some students were really shy and they have really come out. We have less trouble with some students and others are slowly becoming leaders the more they believe in themselves.” –Facilitator

“For example, one student came and talked to me about constant conflicts, a fight that she was able to walk away from. That was really important because that tied to certain communication skills, so she was really proud about the fact that she was able walk away from that...” -Facilitator

There were also clear personal effects related to learning about the specific health topics in Native STAND:

“Well, it talks about who you’re in a relationship with, or it talks about being trustable and stuff like that...It kind of makes you think back and see if you’re like that. You start thinking about what being trustable means and stuff like that. You kind of look at yourself that way, if you’re that kind of person.” - Peer educator

“[Native STAND] made me more aware of my body. And if you get in trouble, or know someone who’s in trouble, you can talk to them about what they’re gonna do and how they’re gonna handle it.” - Peer educator

While the curriculum does not assume that students will begin providing peer education until after the training is completed; some students did mention that such interactions were already starting to take place:

“People feel they can trust us, they come up to us for information.” – Peer educator

“I feel confident because I know that I can help her, and I know what I think is right.” – Peer educator

“[My friends say], ‘I just want to get drunk’ or ‘I just want to have sex.’ When my friends say that, I’ll be like, ‘No you don’t, you don’t want to do that.’ ...Try to tell them the consequences of what will happen before they actually do it, try to stop it before it happens.” – Peer educator



“If I see someone sitting there with a problem, I go ask them what’s wrong, see if I can help them talk about it and stuff.” – Peer educator

There were several examples of students reaching out to pregnant students or serving as a sounding board for relationship issues.

Other students felt a sense of responsibility to set a good example (as Native STAND peer educators in training), but not everyone expressed this sentiment. At one school, a few participants seemed to feel so empowered by the program that they felt they could say whatever they wanted, whenever they wanted to – clearly not the intended message of the program.

Many of the students also seemed to develop close relationships with their facilitators, getting to know them on a new level outside their traditional roles at the school.

“[The facilitators] had a good impact for me... Made me want to stay in the program. Made it funner. Just the way they explained things, they were good. They helped us with what we needed to understand better.” –Peer educator

“I loved the facilitators!” –Peer educator

- **Facilitator Impacts:** The facilitators reported a wide spectrum of experiences due to the program. Experiences ranged from learning a great deal about the health topics themselves, to those who felt they were applying already honed skills and didn’t learn much from the program. The majority fell somewhere in the middle and stated that they learned more about how to effectively teach and communicate about sensitive issues such as women’s health and sex. At one school, facilitators began applying some of the program’s techniques in their “day jobs,” e.g., adding talking circles to their classroom teaching.

Overall, it was the personal connections with the students that facilitators most enjoyed and what inspired them to continue the program next year. Many facilitators made comments similar to the following:

“I liked the connections I made with the students. I liked the energy of the students, what they bring...It really helped me to appreciate the students and what they do and how they do it.” –Facilitator

As it did for the students, Native STAND gave facilitators a chance to interact with the students beyond the regular context of their job, and in turn, the adults seemed to gain a new found appreciation for their students as people.

- **Community Impacts:** Effects of the Native STAND program are just beginning to expand to the larger school communities and the students’ social networks. Beyond peer interactions,

several sites noted that students outside the Native STAND program expressed curiosity and interest in the program, which in turn created more opportunities for peer education.

“Other students--who are not peer educators--talk to staff more now, because they see the STAND students talking with us and they have heard that we are okay.” – Staff member

“Students [now] come to adults and actually know what questions to ask, probably because they have already talked to a peer educator. I believe the light has come on for some students, and that is good.” – Staff member

Beyond the school setting, several students also voiced an eagerness to bring the concepts that they learned from Native STAND back to their families and reservations.

“Maybe we could share what we learned with [our] younger brothers and sisters, so when they get older they can already know.” -Peer educator

- **Reasons to Retain Program:** Looking forward, student and staff expressed several reasons to continue the Native STAND program at their school. All the schools mentioned two main reasons: 1) students wanted to continue it, and 2) there was still a great need for sexual health education in the school. Most also referenced the bonding and trust that was built among the students themselves and between the students and the facilitators.

The need for better sexual health education in the schools was repeatedly voiced:

“Sexual activity, drug and alcohol [use]... absolutely is prevalent and we need extra resources. Some of these kids come from very little supervision and become active at very early ages.” -School administrator

“It’s really amazing what they don’t know. That’s what’s scary – they’re not aware of the different risks involved. It’s sad ...”-Staff member

“Just because of the level of sexual activity, and maybe even more so here, because they’re here 24/7, so the relationships tend to get pretty intense pretty quickly. With there not being a place [for them] to go home to at night... yeah I definitely see a need for it.” -Staff member

Almost universally, students, facilitators, and school staff indicated that they hoped the program would continue.

## Study Limitations

All four groups experienced significant attrition over the course of the intervention. While each group began with roughly 20 students, some sites ended up with as few as 7 participants. Given that only the students remaining at the end of the program participated in the evaluation, the results included in this report are likely influenced by selection bias.

No unique identifiers were collected by the pre/post surveys, so we were unable to examine characteristics of those who did and did not complete the curriculum. This project design decision also limited our ability to conduct paired analyses, which would have been more powerful tests for a pre/post study design. Due to the large attrition--almost 50% across all four schools--no statistical testing could be done to compare pre/post survey measures. As we are not able to control for the students who dropped out of the program, we can only make descriptive statements about what we see in the pre/post surveys. Additionally, the length of the survey may have contributed to respondent fatigue, and the substantial amount of missing data on the pre-survey caused by technical problems meant that we have limited trust in the reliability of our conclusions to reflect expected results in future implementations.

We only took measurements immediately pre- and post-implementation, so we are unable to draw any conclusions or make any inferences about the peer educators' ability to diffuse the information they learned nor how well that will occur in the future. Presently there are no plans to carry out follow-up evaluation activities with the peer educators to assess the impact of their "peer education" on their future activities/conversations.

## Discussion

The primary goals of this pilot project evaluation were to identify the strengths and weaknesses of the Native STAND curriculum, topics, and activities needing additional revision and to generate recommendations for future implementation. Overall, Native STAND was well-received at all four sites by students, facilitators, and school administrators. Almost everyone felt that no topics should be eliminated and that all the curriculum's activities were relevant and important to include. The clinic visits turned out to be a notably positive activity in those programs that included it. Visiting the clinic allowed students to visualize and experience issues addressed by the curriculum and provided the students a hands-on opportunity to connect with the material that they had read and talked about. This activity was frequently skipped but should be encouraged if possible.

In response to student and facilitator feedback, additional sessions or activities could be added to more fully address: healthy relationships, pregnancy and parenting, dating and sexual

violence, suicide, and drug and alcohol use. The healthy relationship topic resonated most strongly with the youth, creating in them a desire to learn more, and had the students talking with an interest and openness that the other health topics did not.

The STI/HIV portions of the curriculum were not viewed as a primary interest to students or facilitators. If anything, participants would have preferred less material covering HIV/AIDS and STIs. Given their reported changes in sexual health knowledge, couching these issues under the healthy decision-making framework successfully helped in reaching participants who might otherwise have been resistant or more likely to tune this material out. Making STI/HIV information appear personally relevant to youth is critical for information retention, and talking about these topics in the context of relationships, peer pressure, and drug and alcohol use seemed to accomplish this goal. While the overarching focus of the curriculum is still STI/HIV prevention, it is possible to creatively weave these reinforcing messages and skills into a healthy decision-making framework.

It was mentioned during the course of one focus group, however, that students still didn't know what chlamydia was. Given students' reluctance to participate in *additional* STI/HIV activities, it may be better to spread this information out (giving students a shorter duration of STI/HIV content at any one session, but providing greater repetition of the material). Students who missed a session would thus encounter the material again later in the year, and students may feel more comfortable asking questions as trust is built over time. Another option might be to hone in on the critical STI/HIV knowledge and skills that are *most* relevant to youth, and include other information only if the need arises. It is more important, for example, that students know that they should be screened annually for STI/HIV if they are sexual active and less important that they know about specific STIs (not a requirement of the piloted curricula, but embodied by the example above). Focusing in on core concepts may help guide future revisions of the curriculum, understanding that we must strive to meet youth where they are in terms of their readiness to consume and retain STI/HIV information.

Two unexpected negative results should also be considered in revisions of the curriculum moving forward. The first was the possible over-empowerment of peer educators at one site. Students expressed what they thought to the point of offending other students, which in some cases devolved into physical violence. Language should be added to the curriculum to strengthen the point that peer educators are not meant to provide judgment or personal advice when sharing health information.

The second was an account from two facilitators of a student (who was thought to be a survivor of sexual assault), who seemed to be affected by a discussion that took place during a session. After the session, she quit the program and received no further support or referrals from facilitators. Language in the curriculum that acknowledges the sensitive and often personal nature of the discussions that take place should be strengthened, and the need for adult facilitators to refer students to school counselors as needed should be stressed. Facilitators should be encouraged to watch for instances of such triggers and help students access needed support and follow-up if needed. Both events happened in isolated circumstances, but warrant

further attention. One possible solution might be to invite the school counselor to attend a session if they are not already involved as a facilitator. Doing so could help students build a relationship with the counselor for future referrals if needed and would allow students to learn about the differing roles and expectations of adult counselors and peer educators.

In terms of on-site logistics, having a committed group of 10-12 youth and 3-4 facilitators appears to enhance implementation, as does having a consistent time and place to meet each week. Neither facilitators nor youth minded when sessions lasted longer than anticipated (up to two hours), as long as the conversations were fruitful and on-task. On the whole, students took the training they received quite seriously and expressed both a desire and intent to carry on their role as peer educators and co-leaders for the next group of Native STAND students. Almost universally, students, facilitators, and school indicated that they hoped the program would continue. Facilitators voiced more hesitancy than others, concerned primarily about time, funds, and administrative support.

Most students and staff felt that Native STAND should ideally be implemented as an extra-curricular activity, as was done during the pilot, but that if that proves to be impractical or unfeasible, sites should explore incorporating the curriculum into a health class or an elective, or within existing residence hall programs. Offering the curriculum as a for-credit elective or as a required residence hall activity might increase student retention and help the program reach a wider audience of students. Concern was voiced, however, that in these settings students may not take the information as seriously.

The secondary goal of the evaluation was to determine changes in student knowledge, attitude, intention, or skill, as measured by a pre/post survey. As discussed in the study's limitations, this aspect of the evaluation was hampered by attrition and the study's small sample size. While little variation was seen in most quantitative measures, this component of the evaluation did reveal significant changes in knowledge of STI/HIV prevention, reproductive health, and healthy relationships. The lack of demonstrated results in other areas is likely due to small sample sizes, ceiling effects, and lack of variability. For example, students taking the pre-survey already reported high levels of Native pride, perceived life chances, self-esteem, support for teen abstinence, and refusal skills, leaving little room for measurable improvement.

To help the program make the biggest possible social impact in future years, additional steps should be taken by sites to market the program and those who have been trained. Doing so would help acknowledge the special skills and training that the peer educators received (and could additionally make them feel better about their involvement) and would also inform fellow students and staff about their availability on campus as peer resources.



## Conclusion

The Native STAND program effectively educated and empowered Native high school students at four BIE boarding schools to help their peers address sensitive adolescent health issues and concerns, including healthy relationships, sexual health, violence, and drug and alcohol use. After participating in the 29-session curriculum, students demonstrated significant improvements in knowledge of STI/HIV prevention, reproductive health, and healthy relationships. Youth at all four sites reported providing one-on-one counseling and referrals to their peers post intervention. Adult facilitators learned how to better communicate and teach about sensitive topics, and the program was well received by school staff and administrators, who recognized the program was addressing critical gaps in sexual health education on campus.

The impacts of the Native STAND program are just beginning to take root and should continue to grow as new students are trained and past graduates take on their new roles as student peer educators. The energy and enthusiasm of this first group of students is already sparking interest among the freshmen to participate next year (even without advertising). More systematic changes in social norms and behavior can be expected after the “diffusion of innovation” moves throughout the school community. Ideally, future studies will continue to evaluate the program to see how peer educators take what they learned and apply it at their individual schools.