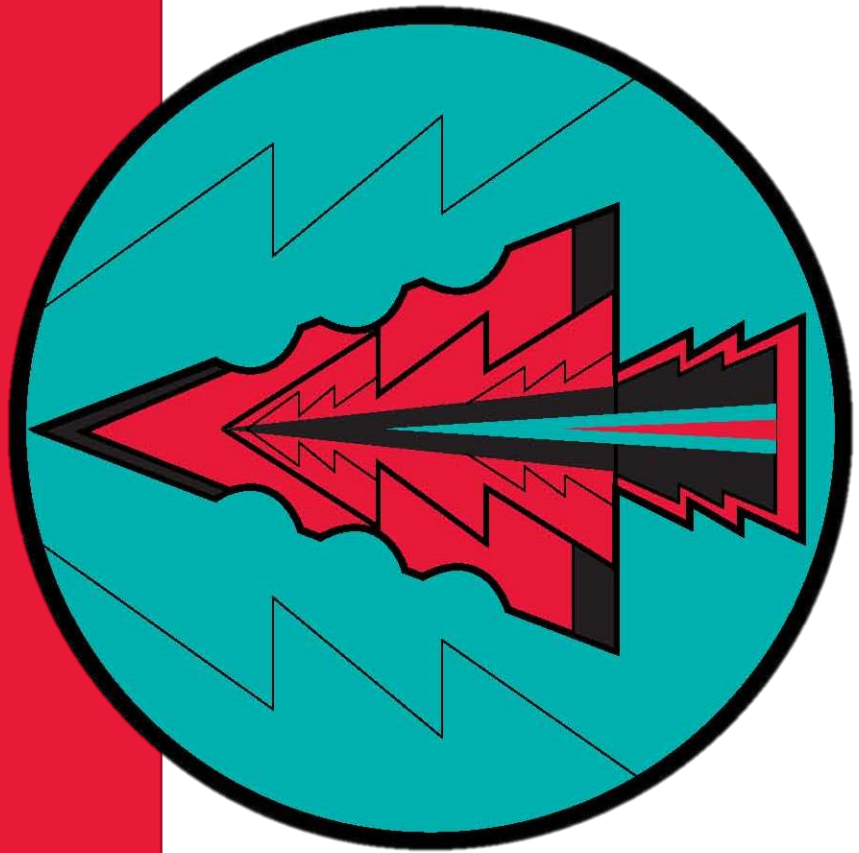


EVALUATION REPORT

2017-19



METHAMPHETAMINE AND SUICIDE PREVENTION INITIATIVE: ARROWHEAD BUSINESS GROUP

The Methamphetamine and Suicide Prevention Initiative grant in the Chinle Health Promotions Division of the Chinle Service Unit has been utilized to provide the Arrowhead Business Program, a culturally grounded youth entrepreneurship life skills education program—with emphasis on motivating youth's educational and career aspirations, and forging connections to positive peers and caring adults as antecedents to improve mental health including reduction in suicide and substance use.

Introduction and Executive Summary

DOMESTIC VIOLENCE PREVENTION INITIATIVE AND RESPECTING THE CIRCLE OF LIFE

INTRODUCTION

In 2015, the Chinle Health Promotions Division of the Chinle Service Unit received a Methamphetamine and Suicide Prevention Grant (MSPI) from Division of Behavioral Health. The five-year grant enabled Chinle Health Promotions to implement a number of services and activities intended to combat substance use and suicide throughout the region served by the Service Unit. In year two of the grant, the Chinle Health Promotions contracted Johns Hopkins University Center for American Indian Health (JHU) to provide technical assistance to implement the Arrowhead Business Group Program (ABG). In year four of the grant, JHU was contracted to evaluate the impact of ABG on key outcomes related to MSPI grant deliverables. Johns Hopkins University reviewed all available data pertaining to the implementation and impact of the ABG program and is pleased to present this report.

BACKGROUND

For more than four decades, youth living on US tribal reservation lands have sustained the highest rates of drug use, suicide and related morbidity and mortality of all races or ethnic groups in the US.^{1, 2}

Suicide. While suicide rates are increasing nationally, Native American (Native) rates are highest, and peak at age 20 compared with ages 50 and 80 for the general US population.^{1, 3} Suicide that concentrates in youth translates to high burdens of productive years lost and devastating, intergenerational despair.

Substance use. Paralleling suicide trends, tribal youth have higher substance use rates and earlier initiation. A recent study comparing drug and alcohol use among reservation based Native 8th-12th graders with a national sample of comparably aged students found rates of last 30-day alcohol and marijuana use were 2.1 and 2.4 times higher among Native 8th graders. Particularly troubling, rates for illicit drugs including cocaine, crystal meth and psychedelics were 7.8 to 8.3 times higher among Native youth than youth in the comparative sample.¹

School attachment. Low school attachment and high school dropout have been strongly linked to substance abuse,^{4, 5} including among Native youth. Native Americans have a lower overall high school graduation rate than all other races and minorities: about 72 percent graduate high school, compared with 85 percent of the U.S. population.⁶

Entrepreneurship Education. Past research among Native youth has borne evidence that promoting protective factors is more effective at reducing the probability of suicide or substance use than decreasing risk factors. Specifically, promoting self-sufficiency through education, achievement and broad based business skills has shown to improve positive life outcomes including security, autonomy, identity, achievement, confidence, knowledge, and

capacity among minority youth.⁷ Thus, entrepreneurship programs have potential to improve mental health and reduce rates of suicide and substance use among Native youth.

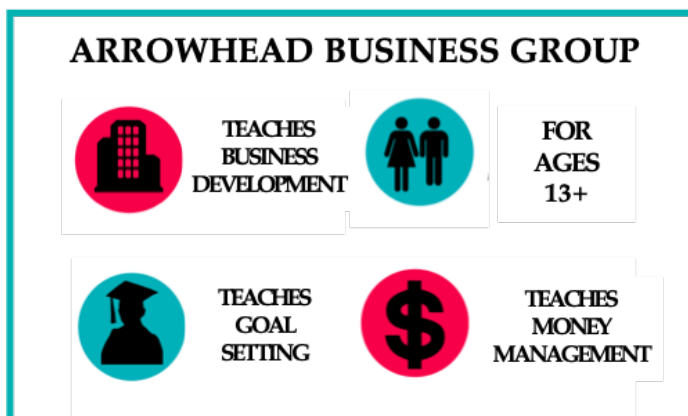
Arrowhead Business Group (ABG) Program

ABG PROGRAM SUMMARY

ABG is a culturally relevant program that empowers youth to pursue and stay committed to their educational and occupational goals. It consists of 16 lessons delivered by trained Native paraprofessionals through a residential summer camp. The camp promotes life skills, financial literacy, and small business development. The program emphasizes hands-on training that enables students to implement what they have learned in the classroom as they work to establish their own businesses.

The ABG curriculum provides a comprehensive, primary prevention platform for substance use and suicide prevention. In addition to learning how to start a small business, ABG students learn cross-cutting life skills, including: communication, decision making, problem solving, values clarification, and goal-setting. ABG also provides incentives to stay in school, and mentorship from community leaders

and local entrepreneurs, as connectedness to school and caring adults have been identified as central protective factors for preventing suicide and substance use among Native youth.



The first trial of the ABG program conducted by JHU found the following positive impacts:

- Improved knowledge about higher education
- Increased life skills
- Increased connectedness
- Feeling safer at school
- Reduction in violent behaviors including fighting
- Reduction in binge drinking
- Reduction in marijuana use
- Fewer suicide attempts

ABG Implementation & Evaluation

ABG PROGRAM ACTIVITIES

The contract with JHU consisted of 5 activities, which include:

- Activity 1: Training of facilitators to deliver the ABG program
- Activity 2: Implementation of the ABG program
- Activity 3: Evaluation of the ABG program
- Activity 4: Plan for potential implementation of the ABG program

ACTIVITY 1: FACILITATOR TRAINING

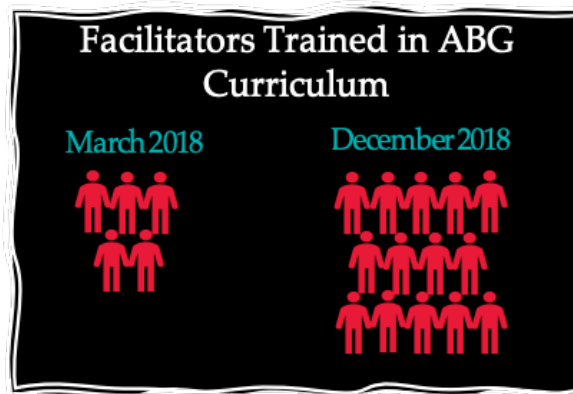
Two ABG facilitator trainings were held over the contract period. They were both 5 days and facilitated by two Johns Hopkins staff members. The first was held March 26-30, 2018 and the second December 3-7, 2018. Following the trainings, two follow-up training calls totaling 4 hours were held with facilitators needing additional support and practice in the curriculum.

Both trainings included the following:

- An overview of the curriculum
- Demonstration of each lesson activity by the trainers
- Lesson tips and tricks
- Classroom management
- Additional skill/informational areas selected by supervisors
- Extensive time for the participants to teach back the curriculum and learn from one another

In order to be certified to facilitate the ABG program, facilitators needed to attend all days of training and pass a competency exam.

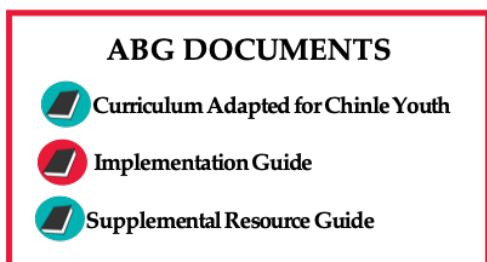
A total of 5 Chinle Health Promotions staff members attended the first training, 4 of whom were certified to facilitate the ABG program. A total of 14 Chinle Health Promotions staff members attended the second training, of which 13 were certified to facilitate ABG. In total, 17 Chinle Health Promotions staff members have been trained and certified to teach the ABG curriculum through this contract. Average score on competency exams for these 17 staff members was 98%, showing they are extremely proficient in facilitating this curriculum.



Feedback from the training was positive, with 100% of participants stating they understood the curriculum and felt positive about teaching it.

ACTIVITY 2: ABG IMPLEMENTATION

First, the Johns Hopkins team worked with Chinle Health Promotions to update the ABG curriculum to ensure it was culturally and contextually appropriate for Chinle youth. Next, JHU developed and provided Chinle Health Promotions with a detailed implementation guide. Additionally, template documents and other resources- including sample camp schedules, recruitment documents and budgets for implementation- were created and provided to the Chinle team to guide them during implementation of the program.



With guidance from Johns Hopkins, the following partners were identified to work with Chinle Health Promotions on Implementation of the ABG program:

- **Dine College** provided a location for the camp
- **Pinon Community School** provided a location for the camp
- Volunteers from **Wells Fargo** spoke with youth about the financing and their experience starting a business
- Volunteers from **The United States Army** spoke with youth about opportunities
- Volunteers from **The Navajo Regional Business Office** spoke to youth about the process of opening a business on the Navajo Nation
- **Local Entrepreneurs/business owners** spoke about their own experience opening their own business on the Navajo Nation

The ABG program was implemented with 35 youth through three summer residential camps held July 16-20, 2018 and July 14-19, 2019 at Dine College and June 23-28, 2019 at Pinon Community School.

Camp 1: June 2018. A total of 4 facilitators participated in the 2018 camp, which was held the week of July 16th, 2018 at Dine College. A total of 12 youth attended the camp. All students attended all days of the camp and stayed overnight at the dorms at Dine College during camp, providing youth with a unique college experience. Dine College provided meals throughout the camp.



Camp 2: June 2019. A total of 7 facilitators participated in the first 2019 camp which was held the week of June 23rd, 2019 at the Pinon Community School. A total of 11 youth attended the camp. Only one youth stayed overnight at the camp, others came to camp for the day and were provided transport back to their homes at night. Youth attended on average 80% of program sessions.

Camp 3: July 2019. A total of 6 trained facilitators participated in the second 2019 camp, which was held week of July 13th at Dine College. A total of 12 youth attended the camp. All 12 youth stayed overnight at the dorms at Dine College during camp, providing youth with a unique college experience. Dine College provided meals throughout the camp.

ACTIVITY 3: EVALUATE ABG PROGRAM IMPACT

The RCL program evaluation content was discussed and reviewed with the Chinle Health Promotions team for fit with the program and grant expectations. The following domains were included in the evaluation:

1. Demographics
2. Future Aspirations
3. Mental Health
4. Hopefulness
5. Connectedness
6. Life skills
7. Economic Empowerment
8. Knowledge
9. Sharing Information
10. Program Feedback

Demographics

A total of 32 participants completed the pre-survey, 17 females (56.7%) and 15 males. The average age was 14.9 years and ranged from 12 to 17. One participant who completed the post-survey did not complete the pre-survey. Otherwise, the same participants who completed the pre-survey completed the post-survey. All students were enrolled in school currently or in the last six months at each timepoint. Most participants reported being affiliated with the Navajo tribe (N=31, 96.9%).

Future Aspirations

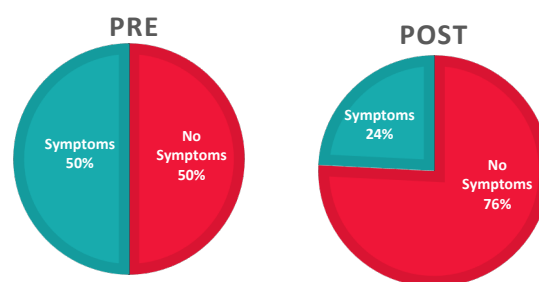
We asked participants how much school they hoped to complete and how much they expected they would complete. Youth were more likely to report that they hoped to complete graduate school after completing the ABG program (pre-survey: 25.81% vs. post-survey: 35.48%). Youth were also more likely to report they would attend some college (pre-survey: 0% vs. post-survey: 3.2%) and receive a master's degree (pre-survey: 29.03% vs. post-survey: 32.36% at post) after completing ABG.

Mental Health

Participants completed a short screening for depression symptoms at pre and post survey. There was a large decrease in the number of participants reporting moderate or severe symptoms of depression.

Participants' report of suicide ideation and a plan for attempt decreased, with zero youth stating they had suicide ideation or a plan after completing the ABG program. **This highlights the important impact of the ABG program on youth's mental health outcomes.**

Figure 1. Youth reporting depressive symptoms decreased after completing ABG



Hopefulness

Participants completing the Apache hopefulness scale. They were asked to rate a series of statements on a five-point scale from “Not at all” to “A lot”, with 1 corresponding to lowest hopefulness and 5 the highest hopefulness. Overall, youth reported higher levels of hopefulness from pre-survey to post-survey (3.34 vs. 3.54). This indicates a **positive impact of the ABG program on youth’s hopefulness**, an important factor in youth’s mental health and overall wellbeing.

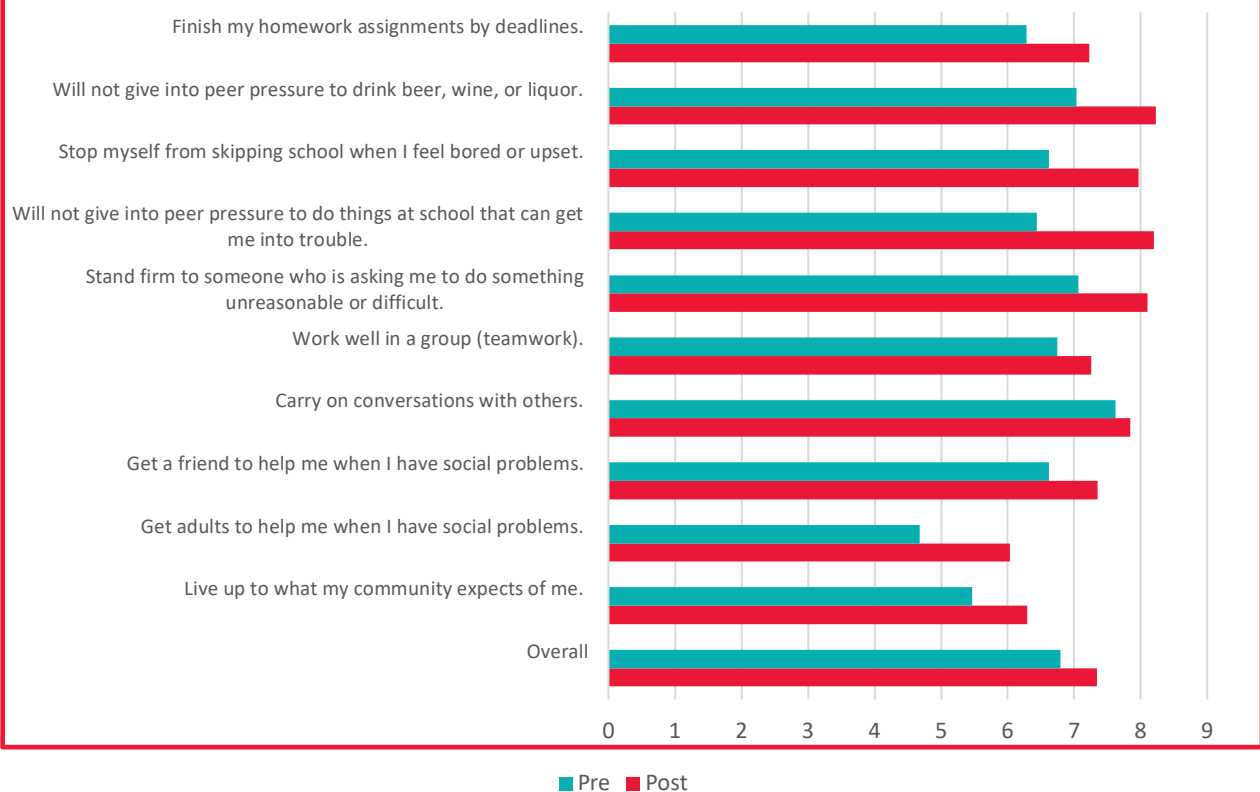
Connectedness

Pre and post-surveys asked each participant to agree or disagree on a five-point scale (from not true at all to very true) with statements concerning connectedness to their community. There was an **increase in reported community connectedness** between pre and post survey (3.49 vs. 3.92).

Life skills

Pre and post-surveys asked each participant to express confidence in a set of social and life skills on an 11-point scale from “Cannot do at all” to “Highly-Certain can do.” Participants **overwhelmingly reported increases in these life skills** after participating in the ABG program. Participants reported improved skills and perception across community, school

Figure 2. Youth reported improved life skills and ability to stand up to peer pressure after completing the ABG program



and family domains. They reported they felt as though they were better equipped to have others help them, including adults helping with a problem (6.37 vs. 6.84) and when they have social problems (4.68 vs. 6.03.). They also felt as though they could more easily make and keep friends after completing ABG (6.68 vs. 7.97) Overwhelmingly, participants reported they were **better equipped to say no to peer pressures after completing ABG**. This includes peer pressure related to smoking cigarettes (+.60), drinking alcohol(+1.2), using drugs including marijuana(+.68) and having sex (+.69). See **Figure 2** for selected life skills and peer pressure variables.

Economic Empowerment

We asked each participant to agree or disagree on a four-point scale (from strongly disagree to strongly agree) with statements concerning economic empowerment. Youth reported a slight increase in economic empowerment following ABG (2.84 vs. 2.89).

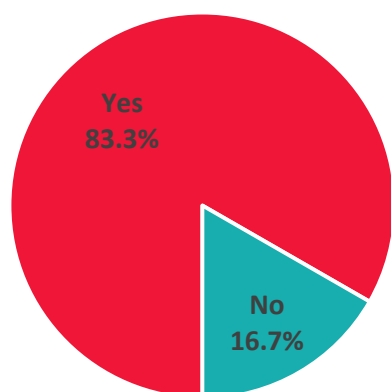
Knowledge outcomes

As part of the pre and post surveys, each participant took the same 29-question knowledge quiz. It covered various aspects of entrepreneurship, including goal setting vocabulary, and steps in creating a business. There was 4.33% average **increase in the knowledge score from pre to post survey**.

Sharing Information

In the post survey, most of the participants said they discussed what they learned with another person (83.3%). The most common types of people the participants discussed it with were a friend (50.0%) and a parent or guardian (50.0%). The most common types of information shared were “How to make a monthly budget” (91.7%), “How to make a business plan” (91.7%), “How to set goals” (66.7%), “How to be an active listener” (75%), “How to solve problems” (75%), and the importance of saving money (66.7%).

Figure 3. Almost all participants talked to someone about what they learned in the ABG program



- 50.0% talked to a **friend**
- 50.0% talked to a **parent or guardian**
- 25.0% talked to **family member their age**
- 41.7% talked to **another family member** (not parent/legal guardian)
- 8.33% talked to a **classmate**
- 25.0% talked to a **participant in the program**

Program Feedback

Participants rated various aspects of the program by agreeing or disagreeing with various statements (from strongly disagree to strongly agree). They also rated the helpfulness of different aspects of the program from 1 “Very unhelpful” to 5 “Very helpful.” Overall, youth enjoyed the program and found it helpful.

- ✓ 58% said they would recommend this program to their friends
- ✓ 66% said the program helped them
- ✓ 84% stated the materials and activities conducted during the lessons were helpful
- ✓ 82% said the lesson facilitator was helpful
- ✓ 84% said the information presented was helpful

ACTIVITY 4: FUTURE IMPLEMENTATION OF THE ABG PROGRAM

In light of the success and enthusiasm of the ABG program in the Chinle community, the following is planned for 2020:

- Implementation in three local schools for the 2020-2021 school year. This will include determining the best format for the program in each school and adapting the curriculum to fit this format
- Implementation through three residential summer camps in the following locations: Pinon Community School, Dine College and one additional location in the Chinle area. Through these camps, we aim to reach at least 30 new youth.

Johns Hopkins Center for American Indian Health

ABOUT JOHNS HOPKINS CENTER FOR AMERICAN INDIAN HEALTH

The Johns Hopkins Center for American Indian Health is an independent center within the Department of International Health of the Johns Hopkins Bloomberg School of Public Health with offices in Arizona and New Mexico, as well as a Great Lakes Hub in Duluth, Minnesota. Our mission is to work in partnership with tribal communities to design public health programs that raise the health status, self-sufficiency, and health leadership of Native people to the highest possible level.

The Center was founded in 1980 by Dr. Mathuram Santosham and currently works with 120 tribal communities in 17 states to develop, evaluate and scale interventions to promote the health and wellbeing of Native peoples.

References and Appendices

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APPENDICES

The following documents are attached

- Summary of the ABG program outcomes(handout)
- Summary of ABG program outcomes (full sized poster)
- A one-page overview of the ABG program
- Description of partnership between Chinle Health Promotions and Johns Hopkins Center for American Indian Health
- Poster presented by the Chinle Health Promotions and Johns Hopkins ABG teams at the Indian Health Service Behavioral Health conference held in May 2019.