Wolf Connection's 8-Week Program: Evaluation Results

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Executive Summary: Evaluation Design



Background

Wolf Connection is a sanctuary for wolves and wolfdogs that also provides community programming to strengthen the humananimal bond and connection with nature. The 8-week program is a partnership with a local high school that allows at-risk youth to participate in increasing levels of wolf immersion and self-discovery activities. Wolf Connection has partnered with Wolf Pack Evaluation Services (WPES) to investigate the implementation of program activities and achievement of intended outcomes.

Pathway of Change

The Pathway of Change describes the supplies used to run the 8-week program, the students' journey through program activities, and the destination students reach after the program ends. This is represented by three concentric pathways: individual, group, and environment.

Key Evaluation Questions

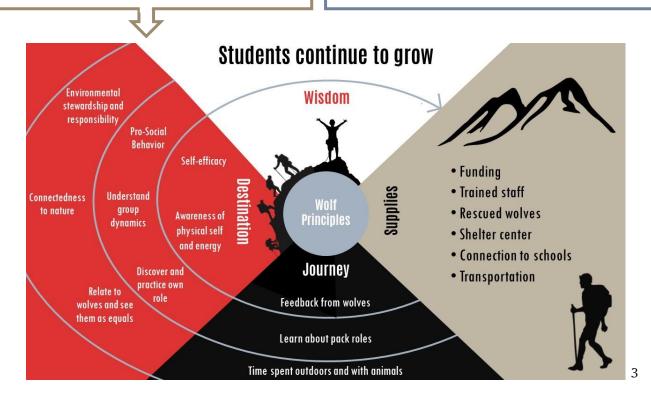
- 1a. To what extent are students engaged in program activities?
- 1b. What activities do students connect the most with and why?

2. After completing the program, to what extent do students grow in...

- a. Self-reflection and insight?
- b. Prosocial behavior?
- c. Connectedness to nature?
- d. Ability to continue growing organically?

Methods

- Program observations
- Student pretest and posttest surveys
- Teacher pretest and posttest surveys
- Student focus group



Executive Summary: Evaluation Results

How do students relate to program activities?

Students demonstrate high affective and behavioral engagement during the program, which increases slightly over time. Students especially connect with activities involving wolves, both wolf interactions and learning the wolves' stories. Students feel the most beneficial activities allowed them to open up, connect with others, and work towards accomplishing a task.

Additional Insights

Overall, students demonstrate potential for long-term change. They have a strong connection with the wolves and Wolf Principles. Staff expect maturity and respect from students, and students appreciate and connect with staff. Students wish there was more time for end of day activities.

Future Directions

Providing students additional program time could strengthen positive outcomes. Expectations for chaperones should be clearly articulated, and curriculum should remain focused on self-reflection and connecting with wolves. Future evaluations can supplement current results as well as investigate longterm outcomes.

After participating in the program, to what extent do students grow in...

Self-Reflection and Insight

> Prosocial Behavior

Connectedness to Nature

> Continued Growth

Students demonstrate greater self-reflection and note that prior to program participation, they were not truly aware of who they were. They became more trusting and in touch with their emotions.

Claremont

Students are interacting more productively with teachers and peers. Students report helping others more often and behaving calmly across situations. Participating students bonded as a group.

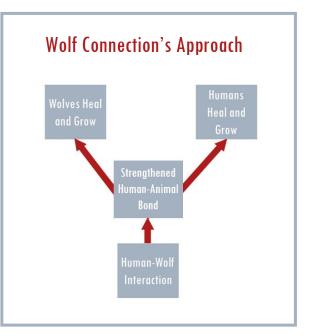
Spending time outside was a new experience for students. They came to respect wolves and reported feeling closer to the natural world. They now seek out nature experiences.

Students indicate a desire to continue abiding by the Wolf Principles. They report practicing meditative moments of silence on their own time. Many want to return to Wolf Connection to volunteer.

Introduction

Founded in 2009, Wolf Connection is a sanctuary that rescues abused and neglected wolves and wolfdogs. The rescued wolves often come from domestic situations where they were forced out of their natural roles into contexts that were psychologically and sometimes physically damaging. Wolf Connection gives these wolves a second chance, while also running a variety of programs designed to strengthen the humananimal bond.

The ranch specifically houses wolves with traumatic pasts, and parallels are drawn between the wolves' histories and the past experiences of



program participants.¹ Wolf Connection's 8-week program involves partnering with a local charter high school for students who have experienced behavioral problems at mainstream schools. The

Jennifer and Wolfee enjoy a hike at Wolf Connection's 165-acre ranch, located in Acton, California.



students often come from difficult home situations and attend the 8-week program in partial fulfillment of a requirement to return to mainstream high school. This empowerment program encourages students to reflect on their own development: where they have been, where they are now, and who they might possibly grow into. The aim is to facilitate selfreflection and self-discovery in the students, and to teach them tools for healing and positive change to use after leaving the ranch. Up to fourteen students are bussed to the program once a week for eight weeks to participate in lieu of their regular school day. Program activities vary organically depending on the needs of students in a given cohort. However, the curriculum always includes several core program activities: meditations; guided discussions on the wolves' stories; Medicine Wheel and journey stone awareness exercises; activities connecting students to the natural world; exploration of personal qualities; hiking; teamwork exercises; reflective homework;

and a final self-reflective project. Each week focuses on one or two Wolf Principles, which originated from the founder's years of experience working with wolves (see Appendix A). Similar

animal and nature rehabilitation programs have demonstrated success in improving social behavior, global functioning, and increased self-awareness and acceptance.^{2, 3}

Just as they help nurture people and wolves in their growth, Wolf Connection is interested in growing as an organization to better aid participants. They have collaborated with an external evaluation team—Wolf Pack Evaluation Services (WPES)—to continue improving the 8-week program. This purpose of this evaluation is to explore short-term participant outcomes and provide Wolf Connection with useful feedback on program components to improve future program iterations.

Pathway of Change

The 8-week program is intended to start students on a journey of continual growth, therefore WPES is using the symbol of a Medicine Wheel to describe this process. The Medicine Wheel is a powerful metaphor representative of an endless cycle of change, often described by the movement of the sun across the sky or the changing of the seasons. Wolf Connection uses the Medicine Wheel in program activities to ground students in their self-exploration, making it an appropriate tool for representing the growth students should experience over the course of the program.

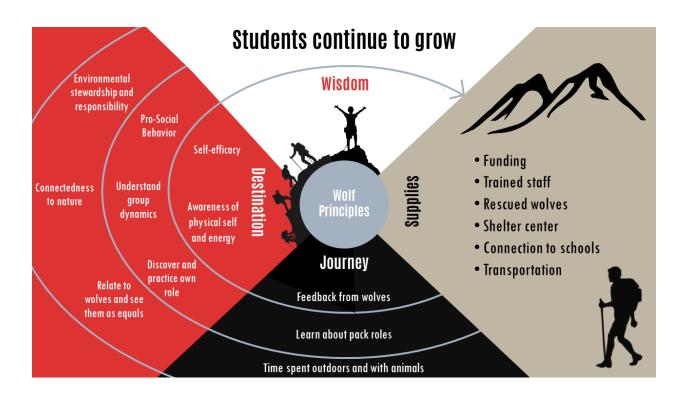
The Pathway of Change (also called a logic model or program theory) is a visual depiction of the program; it describes program activities, the outcomes anticipated in



Luna is a young wolf, fairly new to Wolf Connection's pack. She is learning how to relate to others and discover her pack role alongside program participants.

students, and how that growth is expected to occur. Mirroring the form of a Medicine Wheel, the Pathway of Change developed for Wolf Connection's 8-week program starts in the east and progresses clockwise to the north, describing:

- the **Supplies** (Inputs) Wolf Connection uses to run its 8-week program;
- the **Journey** (Activities) the program participants take part in;
- the **Destination** (Outcomes) participants learn and grow towards by completing the program;
- the **Wisdom** (Impact) the program hopes students can achieve through continued self-reflection past the end of the program.



There are three pathways shown in the Pathway of Change. The innermost pathway describes the participants' journey of self-discovery. Through interaction with the wolves, youth are encouraged to develop an awareness of their bodily movements and energy level, as well as how those in turn affect the animals' behavior.⁴ The program also aims to increase participants' self-awareness⁵ and self-acceptance⁶ through guided meditation and discussions with staff about participants' actions. By practicing these skills over the course of eight weeks, Wolf Connection hopes students will continue to grow in awareness, both of how their behavior impacts themselves as well as others around them.⁷

The middle pathway describes the participants' interactions with others. They hear about the wolves' traumatic histories and recovery stories, and are asked to relate the wolves' stories to their own or those of friends and family. Wolf Connection hopes identification with the wolves will lead to students connecting with a particular pack role (Alpha, Beta, Omega, etc.). There is an emphasis on the importance of each role, no matter which it may be. Using activities that emphasize the practice of their role through teamwork, Wolf Connection believes students will discover how they can contribute to a community.^{8, 9} Wolf Connection hopes both identifying with the stories of the wolves and working with supportive Wolf Connection staff and volunteers will facilitate the development of positive social skills.

The outermost pathway describes the students' relationships to the natural world. The program uses interaction with animals, as well as outdoor activities, to encourage participants to connect with the natural world and to feel that they are part of something larger than themselves. This can lead to increased connectedness to nature, which is associated with pro-environmental behavior.¹⁰

These three pathways are not totally distinct but are represented separately in the visual for simplicity's sake. The intent is to depict only the strongest connections between activities and outcomes. Interaction between pathways is expected; for instance, students' self-knowledge can affect their relationship with others, and their connection with nature and the wolves can motivate them to be more self-reflective. WPES encourages Wolf Connection to continue refining the Pathway of Change over time.

Evaluation Design

Several key questions were collaboratively developed to guide the evaluation of Wolf Connection's 8-week program. WPES felt it was important to examine the extent of student engagement in program activities to determine whether students were engaged enough to absorb each activity's value (Question 1a). Wolf Connection is interested in student perceptions of program activities (Question 1b) as well as student growth over the course of the program (Question 2a-d). The Pathway of Change was used to identify anticipated program outcomes, and Questions 2a-d were designed to explore if students have, in fact, grown in each of these outcome areas.^{11, 12} For more information on evaluation approach and design, see Appendix B.

Question 1: How do students relate to program activities?

- a. To what extent are the students engaged in program activities?
- b. Which elements of the program do students connect the most with and why?

Question 2: After participating in the program, to what extent do students grow...

- a. In self-reflection and insight?
- b. In prosocial behavior?
- c. In connectedness to nature?
- d. In ability to continue growing organically?

The Evaluation Crosswalk diagram describes which evaluation questions are answered by which methods. Questions are addressed through multiple methods to provide a more complete picture of results. WPES conducted observations, student surveys, teacher surveys, and a focus group. The data from each method were collected, analyzed, and then interpreted in relation to the results of the other methods. When multiple methods show similar results, the strength of conclusions drawn increases; if results conflict, this indicates a need for future investigation.¹³

Evaluation Crosswalk	Program Observations	Student Pretest & Posttest	Teacher Pretest & Posttest	Focus Group
lab. Engagement				
2a. Self-Reflection and Insight				
2b. Prosocial Behavior				
2c. Connectedness to Nature				
2d. Ability to Continue Growing Organically				

The evaluation was conducted from January to March of 2017. Initially, 12 students were selected to participate in the 8-week program. All attended the same high school for at-risk youth. Participants in the January-March session were all male. By the end of the program, only eight students remained due to drop-out. These eight students graduated from the program, meaning they completed the final individual self-reflective project and the graduation hike.

Observations

Trained observers in alternating teams of two observed a total of four days of program activities. For each activity, observers rated the groups' average level of affective, behavioral, and cognitive engagement.¹⁴ Descriptions of activities and additional notes were also recorded. After the conclusion of the program, observers rated the average engagement level of individual students as either high, medium, or low (for complete observation method, see Appendix C). Engagement levels were summarized by activity type and program week, and observation notes were searched for recurring themes (for complete observation analysis, see Appendix D).

Student Surveys

A short survey was administered before the start of the program, and again at the end. The survey addressed concepts related to the Pathway of Change: awareness of self,¹⁵ connectedness to nature,¹⁶ and capacity for continued growth.¹⁷ On the first survey, students also reported their primary reason for program participation, and on the second survey, students were given the opportunity to make additional comments about the program (for complete student survey instrument, see Appendix E). To assess change over time, students' individual scores were

compared from before the program to after (for complete student survey analysis, see Appendix F).

Teacher Surveys

A short survey was distributed to the students' high school teachers both before and after the 8-week program. The survey addressed students' prosocial behaviors as a member of a community¹⁸ (for complete teacher survey instrument, see Appendix G). To assess change over time, teachers' ratings of individual students were compared from before the program to after (for complete teacher survey analysis, see Appendix H). Because surveys for only half the graduated students were completed after the program, results should be interpreted with caution.



Wolf behavioral specialist Renee with Wolfee, one of the first wolves students interact with during the 8week program.

Focus Group

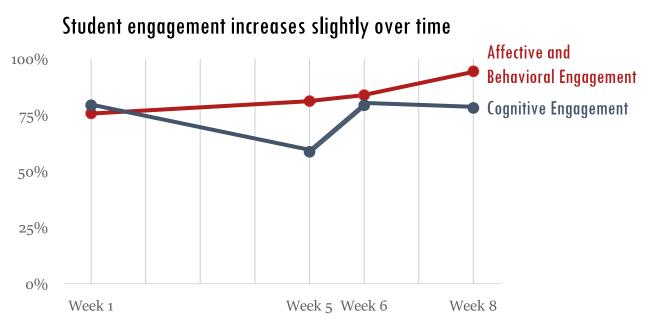
After the completion of the 8-week program,

a focus group was conducted with seven of the eight program graduates. Several guiding questions asked participants to reflect on their experience at Wolf Connection (for complete focus group methods, see Appendix I). The focus group was audio recorded, transcribed, and analyzed for overall themes as related to the key evaluation questions (for complete focus group analysis, see Appendix J). Themes not directly applicable to key evaluation questions were noted as additional insights and future directions.

Findings

1a) What is the extent of student engagement in program activities?

Generally, students had vivid memories of their experiences at Wolf Connection. They talked about the program with excitement, and expressed great satisfaction with their experience. Students were engaged in the program's activities, both in their behavioral and emotional



participation. This affective and behavioral engagement increased slightly over the course of the program. Students' intellectual engagement with the content was also strong, and generally consistent over time. The observed high engagement is especially notable given that program participants are at-risk high school boys.¹⁹ Most activities that are central to the 8-week program's curriculum demonstrated high student engagement, suggesting that the core program components are reaching and impacting the students.

Students who cited internal motivations for participating in the 8-week program (e.g., "I want to better myself") had higher individual engagement levels than those who reported external motivations (e.g., "I want an expulsion erased"). However, motivation and engagement levels were not related to rate of graduation.

1b) Which elements of the program do students connect the most with and why?

Wolf Interactions and Wolf Stories

Students expressed that the wolves in the program impacted them in a positive way. Even those initially worried about interacting with the wolves came to appreciate them and recalled their experiences with the animals fondly. When reflecting on wolf interactions, students had vivid expressions and reactions. Interacting with the wolves was a highlight for students, especially when it involved going into their enclosures; engagement was high during these activities.

Labyrinth

Students expressed strong appreciation for the labyrinth activity—a reflective walk in a circle of stones. Interestingly, the labyrinth had both one of the highest engagement ratings as well as the lowest: students were distracted when walking the labyrinth with others, whereas when students walked the labyrinth alone they were highly engaged. Walking through the labyrinth alone facilitated self-reflection; students walked intentionally, appeared contemplative, and voiced

the activity's impact directly after exiting. When later asked if there was anything students wanted to add to the program, a chorus of voices went up: "We wanna build the maze here—the labyrinth!" "We wanna make a labyrinth here... at [school]."

Activities that Involve: Opening Up

Nearly every student expressed that before the 8-week program they had difficulty opening up to both peers and adults. However, over the course of the program, students became more willing to share experiences and emotions. Activities that students felt emphasized this included: the rock activity (carrying and releasing their metaphorical burdens), which they described as "powerful"; writing poetry to share their feelings and struggles; and the word selection activity, where they identified words that represented the labels they placed on themselves. Students were highly engaged in both the poetry project and the rock hike, which appeared to help them to share their thoughts and feelings openly with their classmates.

Activities that Involve: Connecting to Others

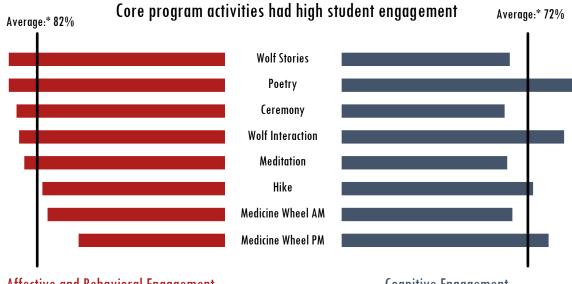


Students honored late pack member Chance by hiking with his brother Koda to his burial site and placing a special rose quartz stone on his grave.

Students grew close to one another over the course of program participation and valued the camaraderie they built. As one student noted, "[Going to Wolf Connection, you] need to get that real connection. Like how we did. Like now, we all like, now we all, we squadron... We squad... When we say squad, it's... it's pack now. We the pack!" Activities that helped them build this connection included hikes where they encouraged each other to reach the summit, the rock activity, where they bonded over releasing their burdens, and Chance's ceremony honoring a wolf who passed away.

Activities that Involve: A Sense of Accomplishment

Students gained a sense of accomplishment from completing activities at Wolf Connection. Projects served as a point of pride for students and seemed to promote group bonding. The final hike up the mountain and the more physically demanding projects were challenging and exciting to students. Correspondingly, observed engagement was high during hike activities, especially the long graduation hike on the final program day.



Affective and Behavioral Engagement

Cognitive Engagement

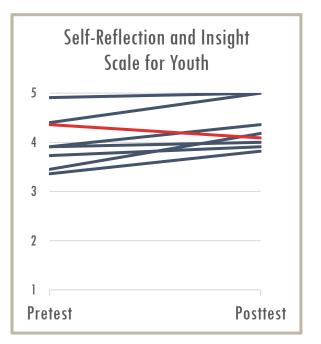
*Average is across all activities, while only core program activities are depicted in graph bars.

Students were disappointed they couldn't finish more projects. As one student mentioned, additional time at Wolf Connection could improve this, noting, "I think eight weeks is kinda short. ...Probably more like 12 weeks, 'cause, we never actually got to build the bridge... They kept on making us start stuff but we ain't get to finish it." This disappointment at not being able to complete the bridge project suggests students enjoyed the task, however, observers rated this activity low on engagement. Students may have seemed less engaged in the bridge construction because it was the final activity of the day and they felt rushed.

2a) To what extent do students grow in self-reflection and insight?

Students left the program with higher levels of self-reflection. This included access to their own emotions, opening up to and trusting others, and learning how to be themselves. During the focus group, the graduates talked openly about their own feelings. The students' ability to state their emotions out loud demonstrates a degree of self-awareness.

Students felt the Wolf Principles were useful tools for self-reflection; they referenced the impact of the Principles spontaneously during the focus group. One participant mentioned using the principles to explore a personal strength that he may have been unaware of before, explaining, "Wolves are always aware of their surroundings.



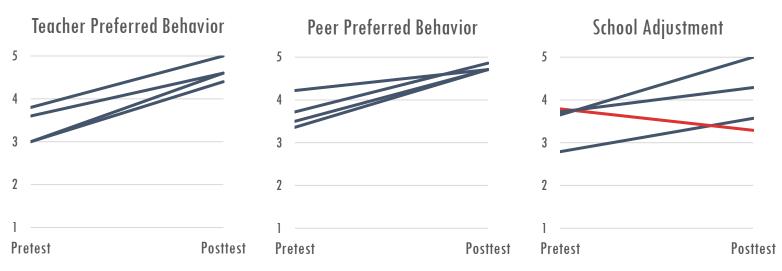
'Cause, I've always been super attentive when I was like, little... like, I would like point things out that no one else noticed." This suggests that the Wolf Principles can and do become part of the identity of students. Reflecting on the Principle that *Wolves always give 150%*, one student stated, "Now that we know we can give more than 100%, you can always apply that to your everyday life." Wolf Connection helped him understand that he had the ability to dedicate himself to his goals. Getting to know oneself was a particularly strong focus of the program, and students felt they learned about themselves through participation. "I think, uh, Wolf Connection actually helped us with [the 'wolves are okay with who they are' Principle], because, I think, some of us weren't really sure who we were," one student admitted.

The participants were clear that learning to open up had not been easy, yet it seemed to become part of their group dynamic as the program progressed. Over the course of the program, students began to talk more about themselves, mentioning uncomfortable or even traumatic aspects of their lives. When asked how future program participants might change, several mentioned learning to open up and trust each other.

2b) To what extent do students grow in prosocial behavior?

Students interacted more positively with others after participating in Wolf Connection's 8week program. Teachers noted students were engaging in less aggressive behavior and reacting more appropriately to conflict. Similarly, the students reported that adults in their lives noticed a difference in their actions. As one student explained:

> "My mom told me I changed, yesterday. She said you grown up on me. She said ever since you went to that Wolf Connection you started helpin' out more... she was like ever since you went to Wolf Connection you started picking up more and started being quiet like... I used to be everywhere in the house, I be bouncing off walls now I'm just chilling just sitting... I changed. I know I changed."

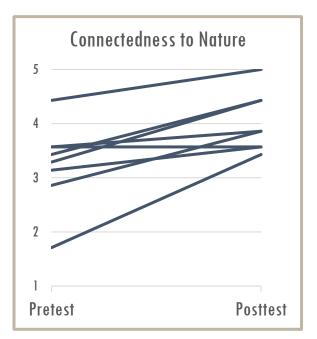


Teachers also rated the students as behaving in more positive ways towards their peers at school. Students themselves felt they learned how to open up to new people. This was especially evident when observing the relationships between program graduates. During the focus group, they spontaneously decided to wear their Wolf Connection shirts to school every week. They repeatedly referred to themselves as a pack, demonstrating both their group bond and connection to the program itself. They also felt they learned to "work as a team." When one student was touting their accomplishments during the rock activity, bragging, "Me and him was the first person to go up there," another student quickly countered with, "Well you should've been the first people to come back down [to help the others]!"

Teachers reported growth in students' positive school behavior, such as turning in homework on time and listening carefully to teacher directions. Students did not mention school in the focus group, other than when they expressed a desire to build a labyrinth on campus grounds.

2c) To what extent do students grow in connectedness to nature?

Students grew more connected to nature over the course of the program, feeling increasingly like they belonged to nature and nature belonged to them. The students had not spent very much time outdoors prior to visiting Wolf Connection, noting that "it was different" being at the ranch. One student compared it to his usual environment at school, explaining "the difference for me was that, here you have the noise of the AC, you have the clicking of the clock, you have people talking—out there, yeah you have people talking but you're *in* nature, you hear the stream, the river, you can hear the birds, you can hear the animals... you can hear *everything*." They felt inspired by this new environment. As one



student described, "you feel like, when you're out there—if you wanna go do something, you… put it in your head and you're gonna achieve it. Here, it's like… I'mma try?… Yeah, like I'mma try. There, it's like okay, I'm gonna do it."

Wolf stores and wolf interactions were rated as some of the most engaging activities, and students were excited to recount their experiences with specific wolves, such as commenting on each of their personalities and which was their favorite. While they initially were intimidated by the presence of wolves, they eventually grew comfortable around them. One student noted that, "First it was like oh snap, like, watch out for the wolf. Now it's like it's just a wolf there. A wolf's just there like what's up. Just pet him."

Students reported continuing to seek out nature experiences on their own. Multiple students sought out local trail near their homes. Students also discussed petting their family dogs the way they were taught to pet wolves, demonstrating that experiences learned at Wolf Connection were being applied to daily activities.

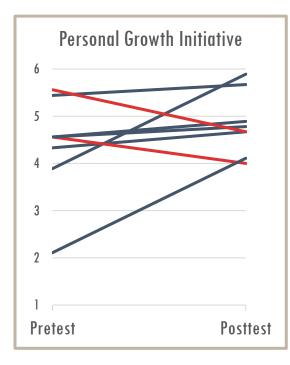
2d) To what extent do students have the ability to continue growing organically?

Students show potential for continued growth past the end of the program. Regarding the Wolf Principles, students want to "Live 'em!," "Commit to it," and "Mix them into your



Shadow is discovering her own role at Wolf Connection, teaching participants that they can move beyond roles they were forced into to discover a more authentic expression of themselves.

everyday life." As one participant noted, "I think we're gonna do it unconsciously. It's just gonna be something we do." This desire to continue abiding by the Principles suggests students' personal growth will continue after the conclusion of the program. Additionally, the desire to build their own version of the meditative labyrinth at their high school demonstrates an intent to extend their



experience beyond Wolf Connection's ranch.

Students also report their habits changing as a result of the program. Many have integrated meditative moments of silence, practiced each morning at Wolf Connection, into their daily routine. While the moments of silence took different forms for different students, their practice shows students are making time for themselves. In addition, students reported their loved ones have noticed a difference in their behavior: acting calmer, more relaxed, and helping out around the house more than before. One student mentioned he does not go out on the streets anymore, a finding of potentially enormous implications for life trajectory that could be further explored in future evaluations. On both the pretest and posttest, students scored high in their ability to set and pursue goals. There was no significant increase in scores over time. This could be explained by the students' desire to give "good" answers on the pretest, but more reflective and insightful answers in their posttest responses. It is also possible students already possessed goal setting ability at the program's start and continued to have this same ability at the program's close; especially given that the school principal selects participants he deems most likely to benefit from the experience. Future surveys could address goal content as opposed to goal-setting.

Additional Insights

Staff Effectiveness

Wolf Connection staff connect with students through their honesty and genuine concern.



Annie was rescued from a fur farm and is now opening up to both humans and other wolves. She is known for her warrior spirit, and program participants were honored to witness Annie start a pack howl in their presence.

Students look up to staff as role models and are hyperaware of their actions. Program staff share their feelings openly, are respectful and honest with the students, and expect this mutual respect and honesty in return. Modeling this open and honest behavior is vital in a program that is encouraging participants to develop the same skill. Staff demonstrate care for students, ensuring that they are challenged to grow and feel safe to do so.

Staff leveraged difficult events into learning opportunities for participants, relating them to the Wolf Principles or adapting the week's activities. For example, when the group disrespected social norms for bathroom hygiene, Wolf Connection staff turned these issues into supportive learning opportunities about personal responsibility.

Timing Concerns

Lack of time was generally an issue, both daily and over the course of the program. The tardiness of the high school staff was the main contributing factor to this problem. Rushing to complete the day's activities caused some confusion regarding the instructions and intent of a particular activity, reducing student engagement. Students felt the impact of lack of time, expressing disappointment in not being able to complete certain projects.

Future Directions

Extending Outcomes

Students may benefit from additional time during the 8-week program, through longer days, increasing the number of days per week, or increasing the number of weeks. This will give students more opportunities to practice living the Wolf Principles over the course of their experience, connecting with staff, and completing projects as a community. Extending total program time may improve the ability for this unique experience to have its full effect.

Awareness of Context

An awareness of the curriculum goals and activities at the partnering high school could improve the impact Wolf Connection



Maggie has endured her share of difficult times. She lived the first year of her life under a porch and was later attacked by other wolves at another rehabilitation center on the East Coast. Maggie is known for her resilience and can teach participants that it's possible to thrive after hardship.

has on students. Minimizing overlap of similar activities could enhance student growth in many areas, and maximize the limited amount of time Wolf Connection has to positively influence students. A better understanding of school curriculum might also avoid conflicting lessons and activities that could undermine both (such as back-to-back strenuous physical activities, or lessons on effective ways to show emotions). Increasing the synergy between the school's and Wolf Connection's curriculums will benefit both to increase the impact on student growth.

Role-modeling

Staff engagement appears to be an important contributor to student engagement: observation and focus group data suggest that students are highly sensitive to staff behavior,

"I want everybody to know I said thank you, and I would want to come back. I wanna come back, and just... tell them I love everybody." -Student which can direct the degree to which students participate in program activities. It is recommended that adult role-models, including high school chaperones, continue to stay reflective about what type of behavior they are modeling. Role-modeling includes both physical behaviors (e.g., staying silent on a silent hike) and emotional states (e.g., staying focused and calm when stressed or tired). The importance of modeling constructive behavior should be emphasized to role-models who are new to the 8-week program.

Continued Evaluation

While it is important to note that the results from this small sample are not widely generalizable, the results are encouraging. Future evaluations can build on the results of this study to explore additional areas of student growth, strengthen the current results using information from other groups of students, and identify the long-term reach of the program on student outcomes. Funding dedicated to such investigations can enable Wolf Connection to make informed changes about the 8-week program, and improve the strength of the program and its impact on students.

Parting Message

Participating in Wolf Connection's 8-week program positively impacted participants. Though initially unsure of what to expect of the wolves, students were captivated by their presence and enjoyed learning from their stories. Loving and supportive staff challenged and encouraged student's growth in many dimensions. Over the course of the program, students connected with each other, learned how to support their teammates, and began to open up and develop a sense of trust. They began to experience and appreciate the natural world all around them, feeling a greater sense of responsibility toward the environment. Students expressed that their time at Wolf Connection helped them to learn who they are as unique individuals, and how to feel okay with themselves. The Wolf Principles have also stayed with the students, and have helped them begin to change their thoughts and habits for the better. When asked if there was anything else they would like to share about their experience at Wolf Connection, one student earnestly replied:



"It's gonna be remembered. It's gonna be remembered."

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Appendix A: Wolf Principles

- Wolves are totally okay with who they are. Always.
- And in order to be okay with who they are, wolves know who they are first.
- Wolves give 150% to everything they do, so they choose carefully what they agree to do.
- Wolves communicate effectively. They keep it honest and real.
- Wolves are not worried about how they look or what others think.
- Wolves mate for life, so their bond with each other and the pack is sacred.
- Wolves collaborate and work together. They know that together they will succeed.
- Wolves understand the power of diversity and celebrate being different.
- Wolves use each individual's gifts and talents for the benefit of all.
- Wolves know how to lead and how to follow. You can't lead if you don't know how to follow.
- Wolves don't blame others. They own their part without giving their power away.
- Wolves deal with all situations in their lives and move on.
- Wolves let go of the past and make room for new things in their lives.
- Wolves "update the files" constantly. They deal with what's in front of them each time.
- Wolves understand they are part of everything around them.
- Wolves are gentle with the environment.
- Wolves explore all the time. They don't come with judgements and pre-conceived ideas.
- Wolves are always open to learn new things.
- Wolves are always aware of their environment and seek balance with everything there is.
- Wolves respect and honor their bodies. They know that without a healthy and capable body, they are nothing.
- Wolves are into being, not into doing.

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Appendix B: Evaluation Approach and Design

Wolf Connection has demonstrated an interest in improving the outcomes of their program. In the past, the program administered pretest and posttest surveys to students involved in the 8-week program and their high school teachers. The survey questions addressed students' behavior and performance in the classroom environment. Results have been unclear: students rated themselves lower on the program's desired outcomes from pre to post, although teacher surveys showed improved student outcomes. Program staff suspect that students are becoming more self-aware as a result of the program, and thus rate themselves with more awareness of their behaviors and social standards after engaging in the program.

Wolf Pack Evaluation Services (WPES) attempts to build upon and expand these assessment efforts. Additionally, the program will be most effective when students are fully engaged in its activities, so it is also important to assess levels of student engagement. The current evaluation provides Wolf Connection with useful information for refining the 8-week program so that it can be even more impactful. Additionally, this information can serve as a foundation for any future evaluations Wolf Connection may choose to pursue, which might establish an even more direct link between program activities and outcomes.

WPES used a Theory-Driven approach to the evaluation of Wolf Connection's 8-week program. This approach begins with identifying and refining the "program theory," or the reasons why the program is expected to work given the program activities and desired student growth outcomes. Wolf Connection's program theory is visually represented by the Pathway of Change, which depicts how beginnings of personal growth should lead to more concrete, behavioral change through continued engagement and reflection. Next, questions of interest were collaboratively refined and prioritized based on this pathway. Finally, the evaluation was designed to effectively and efficiently answer these key questions.ⁱ

This evaluation seeks to understand student outcomes as well as student engagement in program processes. Therefore, WPES used a mixed method design to collect and analyze both rich qualitative data and broader quantitative data. A mixed-method design is well suited to answer the questions raised from a Theory-Driven approach;ⁱⁱ while quantitative methods assess overall trends across a group, qualitative information can explain and provide a deeper understanding of those trends.ⁱⁱⁱ Multiple methods were used to answer each evaluation question to support and explain the results of the other methods.

ⁱ Donaldson, S. I. (2012). *Program theory-driven evaluation science: Strategies and applications*. Routledge.

ⁱⁱ Chen, H. T. (2006). A theory-driven evaluation perspective on mixed methods research. *Research in the Schools*, *1*3, 75-83. doi:10.1002/ev.1072

^{III} Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

Appendix C: Observation Method

A total of four program days were observed by evaluation team members using a standardized protocol to record student engagement by activity. Each observation day lasted from approximately 9 AM to 2 PM. Observed days were selected using a maximum variation sampling method: the first and last days were included to observe any extremes in student engagement, and the other two days were selected to capture a central component of the program (i.e., the Rock Hike/Ceremony) and an experimental component (i.e., Bridge Project). Observers each attended two sessions in rotating pairs, such that no two program days were observed by the same pair. Observers each completed one observation protocol per program activity, where they recorded activity start time, end time, description, engagement ratings, and additional notes.

Observation Procedure

- One observation guide will be completed per activity.
- Record activity name, start time, end time and content.
- Record engagement and notes on activity as a whole, rather than a snapshot.

Affective Engagement: Do the students appear to be exhibiting emotions appropriate to the activity?

Behavioral Engagement: Do the students exhibit appropriate behaviors to the activity? (i.e. if meditating, student should be breathing slowly, eyes closed, not fidgeting, etc.)

Cognitive Engagement: Does the student respond in a manner indicative of taking the material seriously (e.g., respectfully, relevant, introspective)? This may be N/A if the activity does not call for verbal expression or reflection.

Observation Guide

Date	Observer			
Activity Name				
Start time:	End time:			
Content Description				
E	ngagement			
	Percent of engagement	Notes		
Affective (appropriate emotions for activity)				
Behavioral (appropriate behavior for activity)				
Cognitive (questions asked, deep conversations)				
Implen	nentation			
List staff members present and roles				
Notes regarding staff modeling engagement behaviors, approach responsiveness, and rapport with students				
Thoughts on criteria for effective engagement				

Appendix D: Observation Analysis

Quantitative observation analyses described activity frequency and length, as well as addressed affective, behavioral, and cognitive engagement by day, time of day, and by activity. Qualitative observation analysis searched for emergent themes in the qualitative observation data. These mixed method strands were combined in the interpretation of results, along with the results from the surveys and focus groups, to obtain a complete picture of the program to answer evaluation questions 1a and 1b: "What is the extent of student engagement in program activities," and "Which elements do they connect to and why?"

Descriptive Statistics

Overall, a total of 30 events were observed over the course of four days for a total of 13 hours and 45 minutes. Three observed days had seven, eight, or nine events recorded; the final day had just three. Because of participant attrition, 12

Date	Observation	Program Week
1/24/17	1	1
2/23/17	2	5
3/2/17	3	6
3/16/17	4	8

students were observed on Week 1, and eight were observed on Week 8. Events of the same activity type were combined to calculate total observed time for each activity. Fifteen different activities were observed across the four program days: Five activities occurred on three days each, two occurred on two days each, and eight occurred one day only. Hiking occurred on three days and was 37% of the total observed activities time across all four days; this larger proportion was in part due to the long graduation hike on the last day. Some activities were only conducted once by definition (for instance, Welcome can only occur as the first activity on Week 1), and some happened only once during this sample of four days (e.g., Instructions and Homework) but that does not mean that it is fully representative of the amount of time given in the program overall. Additionally, informal conversations occurred with students during lunch or as part of side conversations with staff but were not part of the observers' purview and thus were not officially recorded.

Engagement

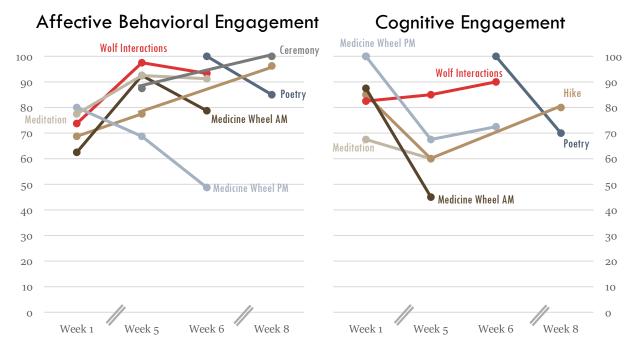
Interrater reliabilities were calculated for all three engagement constructs (affective, behavioral, and cognitive). Given the moderate to high correlation between the raters on each construct (affective: r = .72; behavioral: r = .82; cognitive: r = .59), ratings were averaged into a single rating for each construct per event. A discriminant validity analysis was then conducted to assess the degree of overlap between the constructs. Given the correlation coefficients between affective and behavioral (r = .72), as well as additional line charts showing similar patterns (not shown), the data suggest that that these two constructs are similar enough to be considered affective-behavioral engagement in the remaining analyses. However, the cognitive

Activity	Description	Number of Days Observed	Total Observed Time (minutes)	Percentage of Total Observed Time
Hike	All hike activities	3	306	37.1 %
Poetry	Sharing their individual projects	2	75	9.1 %
Meditation	Circle up and centering	3	73	8.8 %
Wolf interactions	Encounters during hike and in enclosures	3	67	8.1 %
Medicine Wheel AM	Morning check-ins	3	44	5.3 %
Homework	Short discussion about handing in homework	1	40	4.8 %
Labyrinth (alone)	Contemplating the maze by self	1	40	4.8 %
Ceremony	Includes Chance's Memorial, Rock Release, and Graduation	2	39	4.7 %
Wolf Stories	First introduction to the wolf compound	1	35	4.2 %
Medicine Wheel PM	Afternoon check-in	3	30	3.6 %
Project	Constructing and placing bridges as a group		27	3.3 %
Crap Jobs	An alternate activity for those without homework	1	20	2.4 %
Labyrinth (others)	Introduction to the maze with a partner	1	12	1.5 %
Welcome	First introduction to Wolf Connection	1	10	1.2 %
Instructions	A brief discussion regarding behavior	1	7	0.8 %

construct is distinctly separate from affective (r = .27) and behavioral (r = .12). Additionally, the cognitive construct had several missing values in the field observations: recorders were reluctant to rate cognitive engagement for events that did not elicit overt displays of cognition (e.g., during some activities the students were not asked specific questions or did not offer their thoughts, but this did not mean they were not cognitively engaged). Therefore, for the remaining analyses, the variables of interest were affective-behavioral and cognitive, with a smaller degree of confidence in the conclusions drawn about cognitive given its missing information.

Given the relative infrequency of similar activities happening across days, engagement as related to week observed could not be analyzed statistically. Instead, line graphs were created and interactions between day and engagement across activities were inspected (see charts below). A line graph showing average engagement of activity as appropriately weighted by amount of time spent involved in that activity was also created (see page 11). This weighted engagement by weeks shows moderately-high to high engagement for both dimensions across all weeks. Overall weighted program engagement across all weeks was calculated: 82.62% for affective-behavioral, and 72.25% for cognitive. It is possible that the cognitive engagement construct would be higher if not for the missing and inexact observations.

By visual inspection of the weighted engagement and engagement by activity, it is possible that there is a slight increase in affective-behavioral engagement over the weeks. However, this increase is not consistent across activities and no interaction effects of activity and engagement are suspected. Cognitive engagement does not appear to be affected by day of observation.



Note: Only activites rated on multiple days are shown. Ceremony occurred on multiple days, but was only rated on cognitive engagement one day and is thus absent from that graph.

28

A two-sample t-test of unequal variances was conducted to analyze what effect, if any, time of day (morning or afternoon) had on engagement. The effects were not significant for both affective-behavioral ($\alpha = .05$, p = .17) and cognitive ($\alpha = .05$, p = .84) engagement, suggesting that there was no effect on student engagement by time of day. It does not appear that students gained or lost interest in activities over the course of the day, and therefore no interaction between type

of activity and time of day is present. Average affective-behavioral engagement and cognitive engagement ratings were compiled for each activity observed (see table). Core program components (in blue) were identified by WPES as those that are integral to achieving intended student outcomes. It is notable that no program component that is central to the intervention received an engagement rating lower than 62. Of these core activities, Wolf stories, Poetry, Ceremony, and Meditation had high affective-behavioral engagement (between 87 and 93); Poetry (90) and Wolf stories (86) received the highest cognitive engagement. The closing Medicine Wheel received the lowest affective-behavioral rating (66); however, this could be due to the physical exhaustion of the students on Week 3, as recorded by the observers on that day. It is worth

Activity	Affective and Behavioral	Cognitive
Welcome	100	100
Labyrinth (alone)	99	N/A
Crap jobs	95	N/A
Wolf stories	93	65
Poetry	93	90
Ceremony	90	63
Wolf interactions	89	86
Instructions	88	60
Meditation	87	64
Hike	80	74
Medicine Wheel AM	78	66
Project	71	42
Medicine Wheel PM	66	80
Homework	60	50
Labyrinth (others)	41	N/A

noting that this same activity received a relatively high cognitive engagement (80), suggesting that even though the students might be somewhat restless, they are still engrossed in the activity. Also of note is the new activity Labyrinth, broken down by "alone" and "with others." While this activity failed to engage students when others were a distraction, it was engaging as an individual activity.

Qualitative Analyses

After conducting observations, all four observers collectively rated the overall engagement of ten students (two students were not involved in the program long enough to rate): three were highly engaged, three displayed a medium level of engagement, and four had low levels of engagement. These ratings were then used in the analysis of student and pre- and posttest surveys. An inductive thematic qualitative analysis was also conducted on the notes observers recorded, and themes were identified regarding staff behavioral modeling and activity effectiveness. The qualitative analysis contributed to the

Staff engagement
Time management
Staff rapport with students
Behavioral management techniques

Additional Insights section of the report, to our understanding of why certain activities were missing the cognitive rating, and as triangulation of the results of the focus group.

Appendix E: Student Pretest and Posttest Survey

Wolf Connection Student Survey

What is your name?

We are interested in your thoughts and experiences. You might disagree or agree with any of the statements, there are no right or wrong answers. Please read each of the following statements carefully and circle the number that represents **your behavior**, **thoughts, and feelings this past week**.

		Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
1.	I examined my feelings	1	2	3	4	5
2.	I thought about how I felt about things	1	2	3	4	5
3.	I found it interesting to examine what I thought about	1	2	3	4	5
4.	I took time to think back on my thoughts	1	2	3	4	5
5.	I felt a need to understand how my mind worked	1	2	3	4	5
6.	I was interested in studying my behavior	1	2	3	4	5
7.	I spent time "self-reflecting"	1	2	3	4	5
8.	Select disagree for this statement to show us you are reading the questions	1	2	3	4	5
9.	It was important for me to try to understand what my feelings meant	1	2	3	4	5
10.	I thought about my thoughts	1	2	3	4	5
11.	It was important for me to understand how my thoughts arose	1	2	3	4	5
12.	I thought about why I behave in the way that I do	1	2	3	4	5

	Strongly Disagree	Disagre	Neither e Disagree nor Agree	Agree	Strongly Agree
13. I feel connected to the natural world around me	1	2	3	4	5
14. I feel part of the same world as the plants and animals	1	2	3	4	5
15. I think animals are intelligent	1	2	3	4	5
16. I feel connected to plants and animals	1	2	3	4	5
17. I feel I belong to Nature and Nature belongs to me	1	2	3	4	5
18. I feel part of the natural world	1	2	3	4	5
19. I feel part of the natural world like a tree is a part of the forest	1	2	3	4	5

Please circle the number that best represents **how you feel right now.**

Continued on next page \rightarrow

Please circle the number that best represents how you <u>feel right now</u>. Please look carefully: the response options have changed!

	Definitely Disagree	2	Somewhat Disagree	Somewha Agree	t Mostly Agree	Definitely Agree
20. I know how to change specific things that I want to change in my life	y 1	2	3	4	5	6
21. I have a good sense of where I an headed in my life	ר 1	2	3	4	5	6
22. If I want to change something in my life, I start the process	1	2	3	4	5	6
23. I can choose the role I want to have in a group	1	2	3	4	5	6
24. I know what I need to do to get started toward reaching my goals	1	2	3	4	5	6
25. I have a specific action plan to help me meet my goals	1	2	3	4	5	6
26. I take charge of my life	1	2	3	4	5	6
27. I know what my unique contribution to the world might be	1	2	3	4	5	6
28. I have a plan for making my life more balanced	1	2	3	4	5	6

29. [Pretest only] What is the <u>number one reason</u> you decided to participate in Wolf Connection?

29. [Posttest only] Is there anything else you would like us to know about your time at Wolf Connection?

Thank you! Your responses are greatly appreciated!

Appendix F: Student Pretest and Posttest Analysis

Twelve students began the 8-week program at Wolf Connection. Prior to engaging in program activities, they completed a pretest survey which contained three scales: Self-Reflection and Insight Scale for Youth^{iv}, Connectedness to Nature Scale, ^v and Personal Growth Initiative Scale.^{vi} The Self-Reflection and Insight Scale for Youth as well as the Connectedness to Nature Scale were rated on a five-point Likert-type scale where 1 = Strongly Disagree to 5 = Strongly Agree. The Personal Growth Initiative Scale was rated on a six-point Likert-type scale where 1 = Definitely Disagree and 6 = Definitely Agree. One question served as an attention check and was not included in scale means. Students also responded to an open-ended question about their reason for pursuing this opportunity at Wolf Connection (in the prestest) and were provided space to add additional open-ended comments about their experience at Wolf Connection. A total of eight students remained in the program for its entirety and completed a posttest with the same three scales as the pretest.

Self-Reflection and Insight Scale for Youth

A mean was calculated from all items on the scale and used in subsequent analyses. Due to small sample size (n = 8), a nonparametric Wilcoxon signed-rank test was selected to compare change within individual students over time. There was a statistically significant increase in scores from pretest to posttest (z = 1.97, p = .049). This provides support for the idea that students become more reflective over the course of the program and begin to think about their thoughts and feelings. It should be noted that the pretest mean is still fairly high, so many students (who ultimately graduated) were very insightful and reflective coming into the program. The mean is very similar when including the students who failed to graduate as well, suggesting that levels of self-reflection and insight when entering the program are not related likelihood of graduation.

Pretest A	Porttost Mogn (SD)	
All Students $(n = 12)$	Graduates Only (n = 8)	Posttest Mean (SD) (n = 8)
3.99 (0.60)	4.00 (0.52)	4.30 (0.47)

^{iv} Sauter, F. M., Heyne, D., Blöte, A. W., van Widenfelt, B. M., & Westenberg, P. M. (2010). Assessing therapy-relevant cognitive capacities in young people: Development and psychometric evaluation of the Self-Reflection and Insight Scale for Youth. *Behavioural and Cognitive Psychotherapy*, *38*, 303-317.

^v Berto, R., Pasini, M., & Barbiero, G. (2015). How does Psychological Restoration Work in Children? An Exploratory Study. *Journal of Child and Adolescent Behavior*.

^{vi} Robitschek, C. (2007). Personal growth initiative scale (PGIS). *Psychology*, *46*, 159-172.

Connectedness to Nature Scale

A mean was calculated from all items on the scale and used in subsequent analyses. Due to small sample size (n = 8), a Wilcoxon signed rank test was selected to compare change within individual students over time. Participants significantly increased from pretest to posttest (z = 2.37, p = .018). This suggests that students are becoming more connected to nature over the course of program participation. When including students who did not graduate, the pretest mean increases slightly (M = 3.44, SD = .74). It may be that students who tend to overestimate their qualities on the pretest are less likely to open up and be successful in the program. However, this should be combined with data from future program cycles, as the sample size is too small to draw any definitive conclusions about whether pretest scores are related to graduation.

Pretest A	Posttest Mean (SD)	
All Students $(n = 12)$	Graduates Only (n = 8)	(n = 8)
3.44 (0.74)	3.25 (0.77)	4.02 (0.55)

Personal Growth Initiative Scale

A mean was calculated from all items on the scale and used in subsequent analyses. Due to the small sample size (n = 8), a Wilcoxon signed rank test was selected to compare change within individual students over time. There was no significant increase from pretest to posttest (z = .98, p = .325), though the mean did increase. The pretest mean was slightly higher when including students who failed to graduate (M = 4.62, SD = .96). This could indicate that students who overestimate their abilities at pretest are less likely to graduate, but is not conclusive. Present data can be combined with that from future program cycles to draw more definitive conclusions about whether pretest scores are related to graduation.

Pretest Mean (SD)		Posttost Moon (SD)
All Students $(n = 12)$	Graduates Only (n = 8)	Posttest Mean (SD) (n = 8)
4.26 (0.96)	4.38 (1.08)	4.83 (0.66)

Motivation, Engagement, and Graduation

Before beginning the program, students indicated their top reason for attending the 8week program at Wolf Connection. WPES coded these reasons as either internally motivated (e.g., "I want to better myself") or externally motivated (e.g., "I want an expulsion erased"). Three students cited external reasons and eight students cited internal reasons for participation (one did not list a reason). All three who cited external motivation were rated as exhibiting low overall program engagement. However, those who were internally and externally motivated graduated at the same rate (67% of externally motivated students graduated, and 75% of internally motivated students graduated, and the student who did not list a reason did not graduate). Levels of engagement did not reveal a pattern related to graduation either: two students who were not rated, one student who was highly engaged, and another student with low engagement each failed to graduate.

Appendix G: Teacher Pretest and Posttest Survey

Teacher Name:			Date:	
Student Observed:				
Indicate how frequently you have observed the student engage in the following actions <u>in the past week:</u>				
1. Other students see	k the student out to inv	volve him/her in activit	ies.	
Never	Rarely	Sometimes	Often	Frequently
2. The student uses f	ree time appropriately.			
Never	Rarely	Sometimes	Often	Frequently
3. The student share:	s laughter or jokes with	i peers.		
Never	Rarely	Sometimes	Often	Frequently
4. The student has good work habits (e.g., is organized, makes efficient use of class time).				
Never	Rarely	Sometimes	Often	Frequently
5. The student compromises with peers when a situation calls for it.				
Never	Rarely	Sometimes	Often	Frequently
6. The student responds to teasing or name calling by ignoring, changing the subject, or some other constructive means.				

7. The student accepts constructive criticism from peers without becoming angry.

Never	Rarely	Sometimes	Often	Frequently
8. The student socia	alizes with peers for ext	ended periods of time.		
Never	Rarely	Sometimes	Often	Frequently
9. The student initia	ates conversation with J	peers in informal situat	ions.	
Never	Rarely	Sometimes	Often	Frequently
10. The student liste	ens carefully to teacher	instructions and directi	ons for assignm	nents.
Never	Rarely	Sometimes	Often	Frequently
11. The student displays independent study skills (e.g., can work adequately with minimum teacher support).				
Never	Rarely	Sometimes	Often	Frequently
12. The student appropriately copes without aggression from others (e.g., tries to avoid a fight, walks away, seeks assistance, defends self).				
Never	Rarely	Sometimes	Often	Frequently
13. The student interacts with a number of different peers.				
Never	Rarely	Sometimes	Often	Frequently
14. The student can accept not getting his/her own way.				
Never	Rarely	Sometimes	Often	Frequently

15. The student attends to assigned tasks.

Never	Rarely	Sometimes	Often	Frequently
16. The student keeps conversations with peers going.				
Never	Rarely	Sometimes	Often	Frequently
17. The student inv	ites peers to soci	alize or share activities.		
Never	Rarely	Sometimes	Often	Frequently
18. The student doe	es assignments a	s directed.		
Never	Rarely	Sometimes	Often	Frequently
19. The student pro	oduces work of a	cceptable quality given her/h	is skill level.	
Never	Rarely	Sometimes	Often	Frequently
20. Any additional comments about the student that you think are relevant:				

_

Appendix H: Teacher Pretest and Posttest Analysis

Teachers rated students' prosocial behaviors before and after participating in the program. The teacher survey consisted of three subscales: Peer Preferred Behavior, School Adjustment, and Teacher Preferred Behavior.^{vii} Thirteen students (twelve participants and one alternate) each had two separate teachers rate them prior to participating in the program. Ratings were averaged across teachers for each student. Five posttest ratings from two teachers (four from one, one from another) were obtained after the program ended. One student had two ratings (an average was used) and three others had one rating each. Due to the low posttest response rate, statistical tests could not be conducted. Therefore, pretest and posttest means were compared to observe potential trends.

For students rated at both pretest and posttest, Peer Preferred Behavior increased greatly from before to after the 8-week program. This suggests that students are behaving more positively towards their peers after their participation in Wolf Connection, though additional data from future program iterations should be combined with present data to strengthen conclusions.

Pretest Mean (SD)		
All Students and Alternate (n = 13)	Students with Posttest Ratings (n = 4)	Posttest Mean (SD) (n = 4)
4.09 (0.66)	3.70 (0.38)	4.75 (0.07)

Peer Preferred Behavior Subscale

For the students with complete pretest and posttest data, School Adjustment went up slightly from pretest to posttest. This suggests students may be turning in homework and staying on task in the classroom at an increased frequency after program participation. Results, however, are not conclusive, and data should be combined with future program cohorts to strengthen conclusions.

^{vii} McConnell, S. R., Strain, P. S., Kerr, M. M., Stagg, V., Lenkner, D. A., & Lambert, D. L. (1984). An Empirical Definition of Elementary School Adjustment Selection of Target Behaviors for a Comprehensive Treatment Program. *Behavior Modification*, *8*, 451-473.

School Adjustment Subscale

Pretest Mean (SD)		
All Students and Alternate (n = 13)Students with Posttest Ratings (n = 4)		Posttest Mean (SD) (n = 4)
3.86 (0.68)	3.48 (0.47)	4.04 (0.77)

Students with complete pretest and posttest data show an increase in Teacher Preferred Behavior over time. This suggests that students are engaging less frequently in aggressive behavior and more frequently demonstrating mature reactions to conflict. Data from future program iterations could strengthen the certainty of these conclusions.

Teacher Preferred Behavior Subscale

Pretest Mean (SD)		
All Students and Alternate (n = 13)	Students with Posttest Ratings (n = 4)	Posttest Mean (SD) (n = 4)
3.76 (0.84)	3.35 (0.41)	4.65 (0.25)

Appendix I: Focus Group Method

A focus group was conducted with seven out of the eight students who recently graduated Wolf Connection's 8-week program (one did not attend school that day). The focus group was held during a school class period and lasted approximately one hour. Two facilitators guided the discussion, and two notetakers wrote notes. The session was audio recorded with verbal consent from participants. Students were provided food and beverages. Facilitators and participating students sat in a circle and notetakers sat off to the side. Facilitators aimed to model open behavior. Once students were settled, facilitators introduced themselves, led students in a guided discussion using prepared questions, and provided debriefing information.

Introduction

Hi guys! [Facilitators introduce themselves briefly, as do notetakers] This will be a 45minute conversation to hear how the program at Wolf Connection went for you guys. We are evaluators, which means we are working with Wolf Connection to help them continue improving their program. Because of that, we're interested in your experiences with them. To get the most out of the session, we will be recording the session, and taking notes. This will help us make sure we really understand how you feel about different parts of the program. But the recording won't be heard by anyone but us four on the evaluation team, and there will be no way to trace your identities back to your responses. Is everyone ok with us recording? [Obtain consent] Keep your friends answers confidential. Don't repeat anything that you've heard here to anyone, out of respect. You will not be forced to answer questions you don't want to answer. If you decide not to answer a question it won't hurt your relationship to Wolf Connection, the school, or your principal. Are there any questions? Great! Let's go around, and state your name, and the favorite thing you ate at Wolf Connection.

Focus Group Questions

- 1. What was your time at Wolf Connection like for you?
- Describe parts of Wolf Connection that made you to think in new ways/challenged you.
 Probe: For instance, when I went camping, I started thinking about how I was only one of many living things surrounding me.
- 3. Take a moment and think about a few people you spend a lot of time around at school, at home, or elsewhere. How would they say you have changed in the last month?
- 4. Imagine next year's group goes into Wolf Connection. What do you think they might learn? How might they grow?
 - Probe: For example, might they feel more connected to the natural world?
- 5. What would you have liked to be different and why?
- 6. Is there anything else you would like us to know?

Closing

Thank you for taking the time to help us today, and for taking the 8 weeks to work on yourself. It's been nice getting the chance to experience that with you guys. If you have any further comments or questions, we'll be sticking around for a bit longer. Also, you can contact us by email if you have anything else you want to add about the program [provide email address on whiteboard].

Appendix J: Focus Group Analysis

A recording of the focus group was transcribed and the transcript was coded by hand. Coders used the key evaluation questions as a deductive coding framework to identify themes; inductive themes were also identified by grouping other common student responses. Exemplar quotations relating to these themes were identified. All themes were then used to answer relevant evaluation questions, create additional insights, and determine future directions. Themes were sometimes applied to multiple evaluation questions when writing the report.

Туре	Related Evaluation Question	Theme
	1 ab. How do students engage and connect to program activities?	Program engagement
		Wolf stories and interactions
		Labyrinth
Deductive	2a. To what extent do students grow in self-reflection and insight?	Emotions and opening up
Deductive	2b. To what extent do students grow in prosocial behavior?	Connecting to others
	2c. To what extent do students grow in connectedness to nature?	Connecting to and appreciating nature
	2d. To what extent do students grow in ability to continue growing organically?	Change and growth
		Meditation and moments of silence
Inductive	N/A	Sense of accomplishment

Program Engagement (e.g., Wolf stories, Labyrinth)

Students reported enjoying the program activities, especially the wolves, the labyrinth, the bridge project, and the graduation hike. Some students were initially worried about interacting with the wolves, but had a change in perspective after some interactions; they realized that the wolves were not a threat, and had personalities and stories with whom they could identify. When discussing their interactions with wolves, every students had vivid expressions and reactions, demonstrating that their experiences with wolves were perceived as positive. Time spent with wolves was a highlight for students, especially when students were given the chance to go into their enclosures.

Emotions and Opening Up

Nearly every student expressed initial difficulty in opening up to themselves, adults, and others. However, over the course of the program, students increased their willingness to be vulnerable and share. Activities that students felt emphasized this included the rock activity, poetry writing, and the activity in which they selected words on the ground. The students were able to talk fairly openly about emotions throughout the course of the focus group.

Connecting to Others

The students spoke about how the program helped them connect with others. There was a sense of camaraderie and community between group members, and spoke about identifying as a "pack" after attending Wolf Connection together. Students mentioned having deep and meaningful and interactions with one another.

Connecting to and Appreciating Nature

Many students were introduced to the outdoors through their participation in the program. Though some found it challenging, all students appreciated the chance to be outside in the mountains. They felt aware of the nature all around them. Students strongly preferred learning in this environment over their classrooms, stating that it helped them think more clearly and was empowering. In addition, they were glad to get the chance to get outside and have some hands-on learning experiences, even in the more physically challenging activities. More than one student discussed seeking out local hiking trails near their homes.

Change and Growth

Students described how they have changed behaviors at home as well. Several described how Wolf Connection influenced their relationship with their dog at home, such as having scratched their dogs under the chin as you would a wolf. Most students mentioned that they are calmer, less self-involved, and help others more; students were able to recognize potentials they did not know they possessed. About half also expressed intentions to return to volunteer at Wolf Connection in December. Every student stated they plan to continue using the Wolf Principles in their daily lives.

Meditation and Moments of Silence

The students discussed moments of silence and adding them into their daily routine. One talked about meditating when he got home from school, another in the morning when waking up. Several mentioned it in conjunction with sleeping or listening to music. Students also expressed strong appreciation of and interest in the labyrinth activity, which helped with self-reflection. Several mentioned wanting to build a labyrinth at their school and integrating its use with rule reinforcement.

Sense of Accomplishment

Students connected with the sense of accomplishment that they gained from different activities across the Wolf Connection program. Though they expressed that hiking the mountain and working on the physically demanding projects were challenging, students were also excited that they were able to complete the hike and finish the teepee. Students were disappointed that they did not get to finish more projects, and suggested that more time spent at Wolf Connection might help to remedy this. The sense of accomplishment in finishing challenging projects created a sense of togetherness and pride among the students.