
A model of an integrated ecologically-based counseling and recovery program is explored as a means of incorporating educational and psychological nature-connecting methods and materials with traditional recovery activities for people at risk and as a preventative. The first part of the program introduces high-risk high school students, most of whom have low self-esteem, to elements of nature. The second part of the program focuses on reducing chemical use and irresponsible relationships in at risk students. Phase 1 of this part involved 3 weeks of play and creativity in natural settings. Phase 2 involves specially designed nature reconnecting activities to reduce stress and attune participants to nature. Phase 3 consists of a 5-day "ropes course" where students practice teamwork, use problem solving skills, and work on fear and stress reduction skills. The goal is to further reduce stress, and help them experience power, joy, and trust. Results of the project are overwhelmingly positive. Significantly increased scores on the Barksdale Self-Esteem Index are recorded. The results suggest that the project, used in conjunction with daily stress situations instead of artificially programmed stress activities, can serve as an ecologically sound citizenship education preventative for chemical, food, and social and environmental abuse. (KW)
Reconnecting with Nature: Educational self-esteem sensory activities for reducing drug use and irresponsible relationships in students at risk.

Kurtland Davies, M.A. Counselor  
Pan Terra High School

Michael J. Cohen, Ed.D.  
University of Global Education

ABSTRACT

An integrated ecology recovery program incorporates educational and psychological nature connecting methods and materials in traditional recovery activities for people at risk and as a preventative. It introduces a nature centered way of thinking that supports responsible behavior by allowing recognition, acceptance and celebration of our sensory attraction inheritance from nature. The applied ecopsychology project effectively unites a student’s wellness, spirit and education with the natural environment resulting in lowering depression and drug use and raising self esteem and environmental literacy.

PART ONE: Outdoor Attractions


As if the wisdom of nature has us in mind, the rain clouds part and sunshine-washed blue sky lets the local park lume in its inherent beauty. In attendance here are a co-ed group of at-risk high school students along with their teachers, their counselor and myself, a guest instructor.

Smoking cigarettes and hesitating to get too close to me or each other, the group gathers within hearing distance at my request. My challenge is to introduce some elements of reconnecting with nature to these students as well as demonstrate the value of the process and its remarkable effects (Cohen, 1995). The significance of this demonstration is that this group, with the exception of its teachers, consists of victims of Western Culture’s nature-separated dream; they are young people fed up with school. They are either chemically dependent, in grief, unwed mothers, violent, harboring food disorders, apathetic or a combination of these troubles. Most have low self esteem. All are traditional school dropouts now attending an alternative education program that sponsors this nature connecting hour in the park with me. Many parks are closed at night because of the threat from the presence of people at risk, people this group represents.

We gather together around a picnic table and I ask the students and staff to think about a conversation that recently occurred. I say:

Last week, a student, named Bill, told me that he was positive that nature was unfriendly, dangerous and "a bitch". Bill said he went on a camping trip this fall, he climbed up a cliff and felt scared of nature because if the rock crumbled or he made a false move, nature would injure or kill him. While he climbed the cliff, nature rained on him and he got wet and chilled. Another day he was hiking without a shirt and it got so cold and windy he nearly froze. Oh yes, also he walked balancing on rocks by a rushing creek, a slime grew on one rock, he slipped on it, fell in the water and was practically washed away. It reminded him of when the waves almost carried him away on the beach last summer and then he got poison ivy too. ‘For sure, nature is no friend.’ he said”.

Smirking, but concerned, the students tell me Bill was a either freak or just trying to be cool or macho. They ask if this "dude" was doing drugs, "Something is wrong with the dwebe because he put himself in dangerous situations, and rather than see what a jerk he
is, he blamed his troubles on nature." they conclude. They summarize that Bill was a danger to himself, it was not nature's fault that all this bad stuff happened.

I say to these students and teachers: "The nature connecting activity we will do now asks you to avoid Bill's nonsense. What I want you to do is be sensible in nature. Look around this natural area and find a place that attracts you because it feels like you'll enjoy it and because it is safe. By yourself, sit in that area, or explore it for ten minutes, try to really know it many ways, through touch, taste, smell and sound as well as sight. Then we'll get together and share what happens during this short solo."

In ten minutes, the group returns. Changes in them are immediately apparent. Most are at ease, smiling and not shy about getting close so they can hear each other. "Is anybody missing?" I ask. They look around and even though they had never been together as a group before, they somehow know that Charley and Sarah are not there, As we do a head count, from different directions first Charley then Sarah come into view .

"Can you tell each other how you feel and what you think right now?" I ask the group. They respond as follows:

I feel really peaceful, this little park is peaceful.
I feel part of something.
I had a good time.
It was so beautiful.
I trust that tranquil place and nature.
I felt parts of myself that have been missing since I was younger.
I feel happy right now.
I like being here now with the group more.
Right now I feel like I'm being, simply truly being.
I think we shouldn't smoke while going into nature.
I picked up some garbage, it was a downer seeing it.
I feel more alive and like living.
I feel centered.
We should do this activity further from the city, from the noise and houses nearby.
I wish I could live like this all the time.
I'd like to get a job where I work outside in nature and help protect it.
I feel gentle right now, yet I was uncool when we first got here.
I feel like doing things that wouldn't hurt this place, that would respect it.
It would be less expensive to live close to nature. I'd be willing to risk it.
I feel pure and clean even though I've been sitting in dirt.
I sense a certain spirit here that I don't feel elsewhere.
I sense that how we think and feel right now is a fact as real and true as $2 + 2 = 4$

There's part of me that feels like ET, Nell, or Bambi, that feels like an outcast at school but feels wonderful and right at home here.

The teacher who leads the grief group at school notices that a pine tree has been planted in the park as a memorial to someone. It stands by itself in the middle of a lawn near a plaque. This attracts and saddens her. "I think the pine must be lonely," she says. "It's not in a forest of trees, in a community."

I ask the group "If you were that pine tree, what might you be experiencing at this moment." Here is what they say:

I'd like the joy and warmth of the sunlight
I'd have the fun of the wind blowing through me.
I'd feel close to the soil, supported, rooted, grounded.
I wouldn't feel competitive because I'd be so far away from the roots of trees in the forest.
I'd be happy that I lived in a protected park area, I wouldn't worry about being hurt or cut down.
I'd enjoy the sound of birds singing and children laughing here in the park.
I would be proud that somebody noticed me and cared about me and thought of me as memory to somebody they loved.
I'd dance in the beauty of all the sparkling drops of water on my limbs.
I think I would be happy because I'm not in the shadow of all the large forest trees. I'm a pine tree and I usually can't grow in the shade of other trees.

Due to my introductory story about Bill, from this hour in nature we feel attracted to nature and to each other, for we have found something basic in common. We conclude that our "civilized" way of thinking and existing, to our loss excessively separates us from nature. We recognize that we learn to live out society's stories about nature that do not tell us how to seek, no less lovingly and responsibly relate to nature in people and places. These stories often stress us, they devalue natural aspects of ourselves and thereby lower our self esteem. We observe that getting in tune with nature by safely enjoying its attractions has a profound positive effect upon the way we feel and act. We affirm that we trust our moments connected to natural attractions in the environment and each other.

The group looks forward to continuing this nature connecting activity class during the coming school year. Adult or student, they say they want to learn additional activities and ways of thinking that would let Earth teach them how to intensify and preserve the good way they think and feel in this moment.
Discussion
Not by accident, the right touch of nature works a magic that may be activated as a preventative. For example, throughout the year, participants of all ages on Project NatureConnect Email or correspondence courses respond as these students did. Using a self guiding training manual, each participant individually, or with a partner, does one of 107 nature-connecting activities. Then by Email, letters or telephone they validate their thoughts and feelings from doing it to 6 other people on the course, some of whom may live in different countries, others just down the street. Participants complete the activity by sharing with each other what they think and feel about the letters and calls they receive from each other. They end up gaining support from nature and each other and teach the process to others as well.

Recognizing the preventative potential of this process in a community, in part 2 of this study we incorporate it as tool in a recovery program, with excellent results.

PART TWO: Reducing Chemical Use and Irresponsible Relationships

Introduction
In the spring of 1995, a group of 8 poverty level drug affected high school "at risk" students participated in an experimental 10 week nature-centered multisensory counseling program. Its purpose was twofold: First to disconnect participants from dependency on drugs and alcohol; second to reconnect participants' inner nature with the natural environment to rejuvenate their natural wisdom and resiliency.

One day, during a tag game, Sara was hit in the face with a nerf ball. She was not hurt, but immediately started screaming at John, who had thrown the ball. John yelled back and Sally took his side, joining in the noise. Kurtland, the counselor, yelled "STOP!," and gathered all of them into a circle.

What unfolded was a series of "stories" that had taken each student out of the moment and into the past without them being aware of it. Immediately before the incident, they were enjoying the interactive flow of their natural senses of fun, community, power, movement and balance, to name only a few. Then an innocent event disintegrated that flow in one second.

Kurtland asked Sara what feelings she was experiencing. She recognized anger, fear, frustration, humiliation. He asked her if these feelings were familiar. She quickly realized that she was reliving feelings she had as a child when she was hit in the face by an abusive family member. This and similar situations created one of her stories, which is: "Something is wrong with me. I don't fit in. I will be punished." She reacted, not to the present situation, but to the old story, triggering other stories in her friends.

When John became the target of Sara's attack, he went into his own story. When he experienced abuse as a child, he learned to survive by fighting back, arguing, and provoking conflict from his story: "I'll get hurt if I don't defend myself. No one will help me." Sally soon became aware that she was playing out her story of rescuing and codependency: "If I take care of him, he'll take care of me." Jim and Alisha began to understand that when strong negative emotions are expressed, their stories tell them: "The safest thing to do is to hide." Jim felt powerless in the face of beatings by his stepfather and Alisha learned early to make herself small and fade into the background in order to survive in an alcohol- and family system.

As the group members shared the feelings that were stimulated by their old memories, they saw how we all carry unresolved "life stories" that have pain attached to them. They learned how we hide these stories in our unconscious to avoid feeling their pain. When a situation reminds us of a similar past one, our unconscious mind tries to protect us by reacting to an old story. Our reactions are fixed and automatic. Even when we are involved in a supportive situation, unexpected stress triggers similar stress stories. We relive the unresolved pain attached to these memories until we move into new stories that assure us of the safety available in the present moment.

Framework
This nerf ball incident occurred during a project designed for "students at risk." The goal of Project Reconnect was to disconnect participants from drug use and reconnect them to the natural world, their own true nature and their natural sense of community. The theoretical framework of Project Reconnect was taken from Dr. Michael Cohen's Applied Ecopsychology model, which suggests that intimate contact with nature puts people immediately in touch with an innate wisdom that effects a deep healing of self (Cohen, 1995).

The stories carried by the students in Project Reconnect, like all stories, are carried in their new brain, the more recently evolved neocortex. In the new brain, we become conscious of the world through the senses of language, reason and consciousness, senses that produce our spoken and written stories. Our old brain consists of the reptilian and limbic systems, the sensory and emotional centers of the brain. The old brain in people and the rest of nature operates within
the same parameters. Both are bound by and function through attraction energies. These attractions are sensory natural loves, for example thirst, the love of water—that not only operate through individual organisms but are finely woven into a global ecology web that connects all of life as a living system. (Cohen, 1994)

All creatures express their attractions through their natural sensitivities. We are not limited to the five senses we learned about in school, such as our perceptual senses of touch and taste. Cohen and others have identified at least 48 more sensations, from the primary drives such as hunger and thirst, to feeling senses such as trust, play and nurturing, to mental expressions of senses such as logic and language (Cohen, 1994). In a natural state, these senses flow back and forth in a vibrating balance, both within and between organisms. The ecological web of life is based on consensus. The word means “a general agreement,” and it comes from Latin words meaning “to feel with.” In consensus, every being in the system agrees at some deep level to participate fully in the process of community survival, growth and consent through their natural senses. For example, in mammals a fox may sense thirst so he moves to water and quenches his thirst. Attractions from a nearby rabbit intervene. Motions, smells, and hunger attract the fox toward food. Senses of distance, gravity, sight, place, community, belonging to a greater organism and others come into play. These interact and blend with similar attraction senses in a rabbit, and they eventually arrive at a consensus. This time the stressed rabbit may run out of immediate support energies and consents to join the survival of the fox; next time the rabbit may have more immediate support and outrun the fox. The fox eats the rabbit, after which perhaps attractions to rest, safety, and belonging come to him. All of these attraction sensitivities move to ensure the survival of the fox and the rabbit population. Through continual multisensory interactions, both animals are part of Earth’s ecosystem, an attraction system that wisely produces an optimum of life, diversity and beauty, without producing garbage, war or insanity.

**Theory**

The difference between people and the rest of nature is that humanity has learned to create and live by new brain stories about relating, whereas nature creates and lives through direct sensory attraction relationships.

Civilized humanity evolved from the same perfection of consensus attractions found in nature, yet we produce toxic garbage, addictive cravings, excessive violence, stress, depression and harmful dependencies. What has happened in society is similar to what happened to the students in Project Reconnect. In our civilization, a painful story was created that goes against the natural flow of life. The flawed story of "civilized" humans started when we embarked upon agriculture and the domestication of animals on a large scale. We created a story that says the stories our new brain makes up are the source of human survival: that nature is undependable and dangerous; we must conquer nature instead of living in interconnected harmony with it. In conquering nature we also conquer our own inner nature. We lose much of our sensory support and identity, and this causes us much pain (Cohen, 1993). As Michael Beckwith put it in a recent speech, "Modern man says, ‘Something is wrong with the world. How do we fix it?’ Indigenous people say ‘Something is right with the world. How do we connect with it?’" (Beckwith, 1995)

This "Conquer Nature Story" puts the new brain at war with the old brain and its sensory connections to nature. Today, people in the United States excessively enact our story of living indoors away from the rest of nature. Over 95% of our time is spent indoors or in cars. This separates us from the natural world and causes us to become further bonded to and dependent on the accouterments of our indoor existence. (Cohen, 1993)

As our separation from nature has increased, so has our destruction of the planet and consequently our sensory nature connected selves. Our indoor story has little regard for what is happening to our planet for it has lost sensory contact and empathy with it. When we do notice the problems we cause ourselves, the Conquer Nature Story assures us that our new brain stories of technology and science will come up with ways of restoring the damage in time, so that our indoor world will not be disturbed.

To summarize, the new brain stories of our indoor society assault nature and our sensory old brain. Because of this separation, we do not sense multisensory fulfillment as do the fox and nature centered people. Instead, we experience sensory shutdowns that produce wants that lead to excessive stress, pain, feelings of disconnection and emptiness. We unsuccessfully seek relief through insensitive violence, child abuse, suicide, greed and addictions of all kinds.

The students who entered Project Reconnect were "Indoor Sapiens", which means that they were cut off from the natural world and the many sensory attractions that could nurture and balance them. Reared in this atmosphere of stress and internal war, the students create and live in their stories of survival,
which remove them from enjoying their multisensory lives.

The solution is to call a truce between the old and new brain and begin a natural multisensory communication process. The process teaches the new brain to respect the sensory integrity of the old brain and nature. The way Dr. Cohen suggests we do this is to go into a natural area and use special nature reconnecting activities he developed. They put our new brain stories on hold and make immediate non language contact with the sensory attractions of the old brain in contact with nature. Then, to integrate the old and new brain, we thoughtfully talk about the sensations and feelings brought to us through this connection.

Activities
Project Reconnect students experienced many of Dr. Cohen's activities, and as their old and new brain communicated, their stress seemed to melt away. They particularly enjoyed the guided nature walk activity. One student closed his or her eyes, eliminating dependency on the sense of sight, while another acted as "nature guide." Neither could speak, which prevented new brain communication, so the guide had to direct by touch only. The guides led their partners into the world of smell, touch, taste, moisture, and many other senses of nature. If the guides wanted their partners to see something, they squeezed their shoulder. The "blind" partner opened their eyes for only a second and then shut them. After ten minutes, the students switched roles. The numerous natural sensations that this activity awakened began to bond the partners to each other and to nature. They rediscovered their many hidden natural senses.

Because we learn to think in language, it was important to talk about each activity afterward. The new brain validated the sensory attractions of the old brain, which added greatly to each experience. From this process, old abuse stories were exposed and the seeds of new stories were planted in the enjoyment of nature-connected moments. In one activity, the students went into a natural area to find a specific attraction such as a brook, tree, flower or stone. When they found the attraction, they completed the following sentence. "I like _______ (the attraction) because _______." As they shared their sentences with each other, they were reminded that they, too, are nature. They were asked to repeat the sentence, changing it to say, "I like myself because _______," using the same list of attributes. At first, they resisted, not believing their own words, but they soon began to see the truth in their statements since they were nature too. Each statement they made about themselves felt good. In the above activity, Eileen was attracted to a delicate wildflower "because it is beautiful and perfect." When she said "I like myself because I am beautiful and perfect," she quickly added, "and no one tells the flower that it's ugly and a drug addict." Nature was telling her that she was beautiful and perfect, but her old story was telling her she was ugly and defective. As she talked about this old story and allowed herself to feel the hurt it had caused her, a space was made for a new healthy story to grow within her. She became more aware of, energized and supported by the natural environment.

Often, the stories of "students at risk" block their natural senses of trust, power, community, nurturing, boundaries, grief and pain, among others. This triggers the natural empathy, community and nurturing attractions of the staff to enable these students to responsibly participate in our local community. We developed a program specifically designed to work with and recover these natural senses.

The design of Project Reconnect incorporated three phases. Phase One involved three weeks of play. There was no pressure to do; rather, only encouragement to be --to be creative and playful. In this safe and supportive environment, many story-blocked natural senses were unleashed and rejuvenated. Stronger senses of trust and community began to develop. Also, a sense of grief was opened up as the students felt the pain of frequently abusive childhood experiences and the loss of the childhood fulfillment of their many natural attractions. Our challenge was to get the students into the present moment where they could rejoice because they could now choose to feel these multisensory attractions and then actually fulfill them.

Phase Two helped students to reconnect to their old brain ways of knowing, to begin to make peace with them and integrate them with their new brain stories. Dr. Cohen's activities were formally introduced during this phase and continued to be used throughout the rest of the program.

Phase Three consisted of five days on a challenge course (known as the "Ropes Course"), where the students learned team work, problem solving and how to release stress and fear to find power and joy. In this phase, one of the biggest challenges for the group was the five foot trust fall. Not many groups take on this initiative because of its high challenge to each individual's hurt senses of trust and its requirement for a well focused, efficient and trustworthy team. The task is for each person to climb up to a five foot platform, turn and face away, and, on a signal, fall backwards into the arms of his/her teammates. This was a particularly productive initiative. Each student was taken out of the moment by their new brain story.
which produced fear by telling them they would be injured. Stories of past betrayals flooded their consciousness. They spoke their fears out loud. Their teammates responded to their own natural attractions to nurture and support them by allowing them to feel their emotions fully and reassuring them. They also spoke these out loud. Each student was eventually able to get back into the immediate moment of natural attraction to their senses of safety, trust and belonging and fell into the support of their community. As with the fox and rabbit, everyone’s natural senses gave consent to cooperatively fulfill themselves by and through everyone involved in the community. Afterwards, each participant, including the instructors, felt a sense of exhilaration and personal power.

On the last day of the roped course, each student consented, to their own level of personal challenge, to complete certain activities on the “high elements.” Some walked poles and wires suspended 25 to 30 feet in the air. Some jumped off the top of a 25 foot pole onto a trapeze. During these activities, fears were induced by stories that block fulfillment of many senses, such as distance, place, gravity, community and trust. Their new brain was attracted to reason in order to guide them safely. It created new stories to make sense of the situation by relying on their restored old brain natural senses of community, trust, belonging, consciousness, balance and self as well as those of their reconnect group.

The final phase of the project was a three day wilderness outing. Because of unexpected weather and terrain, the outing became a huge challenge, and each student was forced to go inward to find natural attractions for survival, strengths they did not know they had. They functioned like a healthy ecosystem. When one student got into trouble, another student was eager to help them through the crisis. They carried each others’ packs, encouraged each other when tired and gave each other a hand over steep parts of the trail. Every student later said that they did not want to let the group down. Their natural attractions to being in nature, community and nurturing the group pushed them onward when they wanted to quit. They felt closer as a group and stronger as individuals.

Discussion
Many outdoor education models teach students to manage stress by pushing through it, conquering it. For example, if you have a fear of heights, you face the fear by walking a cable high in the air. If you fear abandonment and injury, you dare to fall backwards into the arms of your teammates to establish trust. These are stressful experiences which can help build teamwork, trust, community and self-esteem. However, if these experiences are not put into the proper context or do not include sufficient emotional support, they encourage the “Conquer Your Fear” story.

When the Project Reconnect students experienced severe weather conditions and tough terrain on the trip and had to keep going, it could have reinforced their idea that nature is dangerous and hard and it is necessary to push through it and conquer it. It could have reinforced the dominant cultural stories of “just do it”, “no pain/no gain”, “winner takes all,” “nice guys finish last,” “don’t cry out loud,” etc. We create pain, fear and stress from our old cultural and family stories that push through our natural bonds, that separate us from our true nature rather than respecting them. This tends to perpetuate our painful separation from nature and our continued abuse of the environment and each other. This is why we added the energy of Dr. Cohen’s Applied Ecopsychology. Without this nature centered psychological element, outdoor education has the potential to add to our problems rather than ameliorate them.

Dr. Cohen’s ecopsychology story is not to conquer nature, but to flow, dance and balance with nature and each other, as do the fox and rabbit. It says that nature consists of attractions, that pain, fear and stress are natural attractions, part of nature’s perfection. These natural discontents are nature’s way of telling us we don’t have sensory support in this moment. They attract us to follow our other immediate natural attachments. On the trip, our discontents in nature intensified our natural attractions to nurturing, community and trust. They supported our fun and survival.

Findings
The results of Project Reconnect were overwhelmingly positive. The students’ growth was later reflected in the improved psychological test scores and analysis (Figure 1), which show lower depression and drug use and higher self esteem. The students now personally own activities and rationale for reconnecting with each other and with nature in the environment. Their challenge, and ours as instructors, is to continue to support each other and the environment as part of our daily lives.

The state of Earth and its people indicates that mentally and environmentally, we are distressed (Golman, 1993). This suggests that Project Reconnect used in conjunction with daily stress situations, instead of artificially programmed stress activities, could serve as an ecologically sound citizenship education preventative for chemical, food, social and environmental abuse.
### PRE AND POST SCORES ON SCALES AND INVENTORIES

<table>
<thead>
<tr>
<th>Student</th>
<th>Beck Depression</th>
<th>Stress Test</th>
<th>Coopersmith Self-Esteem</th>
<th>Barksdale Self-Esteem</th>
<th>Sleep Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>pre</th>
<th>post</th>
<th>pre</th>
<th>post</th>
<th>pre</th>
<th>post</th>
<th>pre</th>
<th>post</th>
<th>pre</th>
<th>post</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>11</td>
<td>0</td>
<td>19</td>
<td>8</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td>30</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>S2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV</td>
<td>12</td>
<td>2</td>
<td>20</td>
<td>12</td>
<td>10</td>
<td>5</td>
<td>22</td>
<td>36</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Improvement is indicated by an increase in score on the Barksdale Self-Esteem Index. Improvement is indicated on all other tests and scales by a reduction in score.

**Figure 1**

#### Analysis of Pre and Post Data

**Student #1** has shown a most impressive improvement in all areas. This was the student who struggled the most on the high elements of the challenge course and had the most difficulty hiking up the mountain in the Trapper Creek area.

**Student #2** has also shown steady improvement in all areas, in particular on the Depression Inventory, even though she was unable to participate in the final hike due to family obligations.

**Student #3** has shown progress or stayed the same in each score. The Depression Inventory scores indicate more empowerment. This student showed a remarkable athletic ability and was extremely important to the group, especially on the challenge course. Although he showed no improvement in scores on the Coopersmith, there was one significant change. On the pre-test, he indicated that there were a lot of things about himself that he would change if he could, and on the post-test he indicated that this was no longer true.

**Student #4** shows significant improvement on all scales. This student, like student #1, had to go through a lot of fear on the ropes course and hiking down the Trapper Creek Trail.

**Student #5** missed taking a pre-test on stress. Those tests that were completed show improvement across the board. This student came into the program with a pretty healthy self-esteem. One reason is that he is the only student with a fairly stable home life.

**Student #6** has shown improvement in all areas except for the sleep inventory. This student is in foster care and has some mixed feelings about returning to live with her mother. She was the youngest of our group and gained a lot of confidence. However, her anxiety about her family situation continues to show up in her sleep patterns.

As the raw data easily shows, the group improvement was significant. The average scores changed...
dramatically. The group score on Beck's Depression inventory reduced from 12.2 to 1.5. Scores on the Stress Test went from 19.8 to 12. CooperSmith Self-Esteem Inventory changed from 9.5 to 5. Average scores of the Barksdale Self-Esteem Inventory rose from 22 to 36.2. (This is the test in which the rising score shows improvement.) Finally, the Sleep Inventory scores improved from 9.7 to 7.3.

In addition to the improved test scores, every students' attendance and academic progress improved while they were in Project Reconnect. No indications of chemical remission were observed 60 days after the program ended.

**Student Comments**

"The program has shown me a way to stay clean through supportive friends and alternative activities such as the ropes course, hiking, etc.... basically getting in touch with nature and having a sense of team work, knowing someone is always going to be there for me."

"I learned that there is more in life than drugs. And that life can still be good (better) without them. It also boosted my self-esteem and showed me it's okay to be me. I hope that this will be an option for others next year as well."

"We did many things that have helped me learn about myself. It has helped me overcome some great fears of mine. I used to be really insecure. Now I feel, and know, I can do anything I set my mind to. It has also helped me learn how to work as a group and be comfortable expressing my feelings. It was a great chance for me to become in touch with myself."

"It has helped me greatly in the past few months. It has kept me sane when I thought I wasn't and the group also reintroduced me to someone I haven't known in a long time: myself. A few of the most meaningful parts of this program were Project Adventure (ropes course), Hamilton and Eagle Creek hikes and the Trapper Creek trip. Project Adventure showed me I could do things I never thought of being possible. And the hikes taught me many important skills to survive in the wild. I also learned to appreciate myself as a part of nature. So, in closing, I really owe a lot to this program for what it taught me about myself, my friends and nature."

**REFERENCES**


**ACKNOWLEDGMENTS**

Project Reconnect was a joint program of Pan Terra Alternative High School, Vancouver, Washington and the Clark County Drug and Alcohol Center. The participants were below poverty level, drug or alcohol affected low motivated students that met for six hours a week in a drug and alcohol program at CDAC. This component of the Project, led by Ruth Queirolo and Cookie Quink, greatly contributed to its success. The ropes phase was guided by Project Adventure, Inc. staff members. Michael J. Cohen, Ed.D. Director, Project NatureConnect, acted as consultant and with Gaia Davies edited the manuscript. Catherine Freer Wilderness Therapy Expeditions provided excellent outdoor specialists who contributed to the survival and growth of the students and school counselor. The project utilized state funds provided through EPSDT and was administered through the Clark County Department of Community Services Alcohol and Drug Program. Kurtland Davies, School Counselor, Pan Terra HS, developed the play therapy and led it. Project NatureConnect activities, the ropes course and the wilderness outing. For further information, contact Kurtland Davies (360) 696-7288 or (360) 944-7178.