

TRACKS 2011

By: Joanne Defosse
and the TRACKS team

Editor's Note:

Joanne worked with TRACKS for a semester in 2011 prepared this report for the program. This report reflects her perspectives and experiences in engaging in a background research project with us and presents her suggestions for improvement in the research process and the program we are trying to create.

Joint Efforts:

My name is Joanne Defosse, and I identify as being Indigenous. Currently, I am in my fourth year of an Honours BA at Trent University. TRACKS project manager, Kristeen McTavish, alongside the course instructor, Kaitlin Breton-Honeyman, asked me to join their effort in researching Indigenous youth programs and develop some ideas about bringing a youth program to Trent University. The Indigenous Environmental Studies (IES) Program at Trent has been a large proponent of this effort as the program supports “two-ways of knowing”. I believe I was chosen for this role because of my current status as an undergraduate major in Indigenous studies, my experience from my career as a social worker at a treatment facility for aboriginal youth, and my understanding of the two very different types of knowledge systems (Indigenous knowledge and science). The key reason for putting this youth camp together is to let children explore the common grounds of two worldviews: Western math and science, combined with Indigenous knowledge. The youth at this camp will then be able to bind their conclusions together and get an understanding that two ways of seeing allows for a greater depth of knowledge. This allows students to explore the differences between worlds, and

allowing their similarities to be enriched. It is important to note that the prior Indigenous knowledge the youth have will be harnessed and respected, and they will be enriching their skills in science by “turning-on” their cultural expertise. If two ways of knowing can be achieved in the process of this camp experience, it would allow for holistic worldviews to be shared with Western knowledge.

Location:

“Trent University is known for its stunning wildlife sanctuary lands and its sacred sites which include a Sweat Lodge, a Tiipii, a ceremonial space (Nandimowin) and a performance space (Nozhem) which is accessible to all students. Trent also supports Elders/Traditional peoples of various Indigenous Nations around the world. In these different settings people are valued for their fluency in their oral and written languages (Mohawk, Cree, Ojibway etc...), and their ability to transmit Traditional Knowledge between themselves and other students. Trent also has a Faculty of Environmental Science. These labs are housed with supplies and instruments ideal for testing, experimentating, and explorating theory. State-of-the-art analytical facilities provide resources and equipment which are conducive to hands-on experimentation and primary research. These various types of facilities mirror the values/principles of the IES outreach program the design of the math and science camp for Aboriginal youth is a project designed to make learning about math and science fun” (TRACKS, 2010).

Tracks Camp Role & Mission:

When Tracks Youth Camp will get up and running: the student participants can have the opportunity to talk to various camp counselor, volunteers, camp workers, and community members who are involved with Indigenous environmental science projects. This will showcase how the knowledge of the Western science and Indigenous knowledge systems mesh. It will also be a great way to introduce children to community role models and leaders to discuss the different careers that are successful in joining these two worlds together. Other students that are attending Trent University can discuss different projects, and research they have been exposed to or may be currently working on in Peterborough and Kawartha area communities. TRACKS vision of this program is to create a camp experience designed to provide an opportunity where Indigenous youth can pursue their interests in math and science in an environment where these fields are intimately linked to their daily lives and cultural experiences.

Possible Programming:

The program has found a natural home within Trent University, as here we have been promoting collaborations with traditional knowledge and environmental science for some time

now, both internally and externally. The IES program continues to look for ideas and resources on how to weave these valuable knowledge's together. TRACKS will ideally be an over night camp, but keeping in mind that all education will have a strong sense of a holistic approach. Also, by gathering educational indigenous knowledge orally and traditionally and by combing science and math to these teachings, it aims to increase the representation of Indigenous people in science careers long term.

A large survey questionnaire was sent out through mail, e-mail, and fax and hopefully we will be able to look at all suggestions/advice given to us by other camps, and offer a large amount of information to the youth campers while on premises at Trent . During the campers time at Trent they will also be questioned about the possibilities of post secondary education and their career ideas in order to get a sense of what type of curriculum will be important during their stay at TRACKS camp.

A suggested breakdown of the camp schedule :

- 8:30am- scared fire to open up the day
- 9-10 Breakfast
- 10-11:45am-activity in regards to math-science and Indigenous knowledge
- 11:50-1pm-Lunch
- 1-2:45pm-Testing the theory or lab time to process data, and make notes
- 2:50-3:30-back to tent to recap and write in journals of day to day activity
- 3:30-4:30 cabin time free time
- 4:30-5:30-dinner time
- 5:30-6pm clean up time
- 6-7 large talking circle to discuss the daily activity and all else
- 7-8:30-campfire
- 8:30-9:30 free time or nightly activity
- 9:35pm-back to tent to retire for the night



Why the collaboration of these two knowledgeable worlds:

We are very lucky students to have the support to bring this kind of camp to Indigenous communities and youth. With the abundance of culture through the IES program and within the Indigenous Studies department itself, we have a world of knowledge right under our fingertips.

Dan (Roronhiake:wen)Longboat, Director of the Indigenous Environmental Studies Program explains to me that “to recognizing the differences between culture and environment we need to create integrative thinking that brings knowledge systems together in order to resolve the world’s environmental problems. There is a necessity for bio-cultural restoration within both cultures, which is based on principles that recognize Indigenous cultures being tied to a certain landscape. Meaning when land is degraded so is our human condition, and vice versa. And addressing environmental problems we need to educate ourselves with thinking skills that brings together- human health, ecology, and environmental science methodology, but also incorporating culture knowledge and spirituality to help provide grounding for me the student. While I will be apart of the IES program I will see a much broader perspective that develops integrative thinking if I continue to work in Indigenous communities, but also gain a unique set of knowledge and skill sets to help our people”. (Longboat, 2008) David Suzuki (2010) has said “Too often, we undervalue the contribution of aboriginal traditional ecological knowledge in our debates about resource extraction, wildlife management, and land-use planning. We must remember that aboriginal people were actively involved in managing the earth and all its regions long before western science or industrial development came along. Scientist information has been encoded in indigenous peoples' languages and has been passed on through stories and place names. Indeed, indigenous peoples have been mapping out landscape and resources of Mother Earth to a much greater extent than scientists had previously understood. And with this we must ensure that wilderness and wildlife conservation, including creating new parks and protected areas, recognizes indigenous rights to land and water and includes the involvement of indigenous peoples”. TRACKS camp will also aid Elders and Indigenous students to continue to promote their own knowledge and never forget to give thanks to all living things like explained in the "Ohenton Kariwahtekwen" in Mohawk or in English-"Thanksgiving Address".

In the longhouse when we recite the address the guest speaker will give thanks and gather our minds to the people then focus our thoughts and prayers to:

- the Mother Earth
- water
- fish life
- Plants
- food plants
- Medicine plants
- Insects
- animals-2-4-6-8-legged
- Trees
- Birds
- Winds
- Grandfather Thunder/thunder beings
- Brother Sun
- Moon-grandmother
- Stars- spiritual beings

- Elders
- unborn children
- Ancestors
- Our people of the longhouse/Clans
- The Creator

Because of the strong sense of connection with all living things, and that all that the Creator gives us has a spirit, we are inspired to stay strong to that connection between us and them.

Performance:

This is a summary of why the tracks project is an outstanding one to be promoted here at Trent University campus. One of the many highlights of the program running at Trent university campus is the idea that youth are exposed to two different ways of knowing at a place that fosters indigenous environmental studies

Many indigenous students will be hired on as instructors for the camp and using their knowledge and experience, campers will have a first hand look at an indigenous student leader. Students will leave the camp with the knowledge and understanding of what IES and TRACKS are highlighting: two alternate ways of knowing that in turn give rise to appreciate of Indigenous knowledge and science at the same time.

Analysis & Overview:

The concept of TRACKS was still in its infancy when I began my research on similar ventures for Aboriginal youth programs. Keeping this in mind, the goals I set to accomplish exceeded expectation. I also was given resources for this project after it had already gone through its initial development phase, which means that much more time that I am able to dedicate will be needed to finalize parts of the initiative. One major theme that needs attention is the idea of a working group that is able to set aside time for ideas promotion, program structure, and proposed session dates.

Course requirements and objectives

- Building Relationships
- Technology Learning
- Readings (10-15 in total)
- Ongoing Journal
- Life experiences-Hands on camp
- Course papers 2
- Weekly meetings
- Initial Introduction letter created by Joanne to accompany the survey in mailing etc.

- Faxing/Emailing/Postal mailings for Survey
- Waiting on Survey Results from participants
- Final Presentation
- Final paper

Out of all experiential efforts we did accomplish, I do believe the one of our luckiest experiences occurred when I attended Wabano March Break camp where I was able to incorporate myself into the already established camp. It was great to see the end product of a camp experience since my work was just beginning with circulating surveys and making introductions to other similar camp programs. This camp is one of the few that already has created a week long experience for youth ages 14 to 17 incorporating science and indigenous knowledge . The key difference between Wabano camp and TRACKS is that each day is dedicated to all science or all indigenous knowledge.

At the end of the week all the experiences were amalgamated to hear all the learning together as a whole group. The Wabano camp included 30 aboriginal youth, which were a mixture of girls and boys. I was part of a group called the Wolfpack, which included seven boys. Large group activity sharing took place as well as initial small group discussion. This involved talking about what we learned as individuals incorporating science and the indigenous knowledge.

From this experience I would say that a critical element is a wrap up at the end of the day to find out what the youth are taking away from the various types of activities they participated in while at TRACKS.

Personal Experiences and Observations:

One major question that I wanted to research while at Wabano camp is how the youth (both the male and female) like doing western science and indigenous knowledge together. Mainly, were they open minded to what they were learning, were they invested in learning some of the aspects of science, and just basic youth comments while doing the activities. While I was there I did not hear one rude comment, or any disrespectfulness towards the activities at the camp! With the high level of enjoyment and positive comments I heard, I knew that the message behind the TRACKS camp is a strong one. The atmosphere, the energy, and the excitement of the youth while I was observing their activities was astonishing Some activities included melting the ice from the water of the mountains where we live and the differences in tree height and how this relates to use.

The youth did not exclude themselves from any activity and really got their hands dirty and participated and all educational activities. Being a Social Support Worker I don't even think that the youth realized that they were doing educational activities because they were enjoying themselves so much. To detail the living arrangements of the camp, I would first talk about how

great the cabins worked and the bunks for sleeping were ideal. The campsite and size were also well thought out but a major obstacle turned out to be the weather. The weather was one of the main points of contention that could not be controlled and due to the rain and the ice. There was so much ice coming from the main camp area, Turtle camp, that we had to walk up an extremely icy hill daily. There are ways to combat this problem though, like choosing an alternate size or changing the time of year the camp occurs. You would never be able to tell we were against the weather, the campers never complained and the youth did daily activities in various locations. There was always a spiritual activity at the end of the day to help the campers reflect on what they learned.

Even in a private conversation with Melissa (Youth Team Lead and Camp Coordinator of Wabano Aboriginal Health Services of Ottawa, Ontario) she explained to me some solid answers to our unsolved puzzle at this point in the TRACKS project . For instance, she suggested not to give out a survey longer than five questions to other similar organizations because these become too time consuming.

Survey:

The importance to our survey is to gain knowledge and information to help us move towards the next steps in TRACKS, and to see what works and what doesn't for similar initiatives. It has been suggested to first build up a professional relationship with other camps and agencies and then, send an initial introduction letter, 5 important questions, and contact information.

With this we can start up a professional resource database about what our plans are and share activities and curriculum with other camps. When Melissa saw the survey questions that had been generated she concluded that she would never have time to complete our survey of forty questions. This brings me back to the importance of personal connections since some of these questions go into great detail about programming, staff, and personnel. Creating distinct relationships at an individual level would make it more likely for organizations to share their non-published information/documents/resources.

Throughout my experience at Camp Wabano I continued to reflect on the importance of relationship building. Becoming part of the team that initially started TRACKS was challenging at first but through ongoing discussion, reading resources, and understanding perspectives I was able to appreciate individual team member's strengths.

So to conclude on my experience observing and taking part in a similar camp experience I realize that Trent is the perfect place to provide opportunities for aboriginal youth. It's hard for me to walk away from a project like this with so many avenues for this project with now seeing the possibilities of a future project at Trent, and also the personal love for today's youth.

Recognitions:

Now to continue to touch on what we did achieve in the twelve weeks of my assignment. Major highlights include: building relationships, learning new technology, reading, ongoing journaling, life experiences, hands on camp, course papers, weekly meetings, initial introduction letter for accompany survey in mailing etc, faxing/e-mailing/postal mailings for survey, waiting on survey results for participants, final presentation, and now final paper! I would like to target specifically 3 readings that I found insightful.

The first is the Manua'o Lecture Series, including Professor Dan Longboat's thoughts. This reading was very important in putting a project like TRACKS together, because Dr. Dan Longboat is a current professor at Trent and is willing to contribute to the knowledge that will arise as this camp develops. In addition to this he has insight on the importance of weaving indigenous knowledge and science together. In environmental science it is key to involve indigenous peoples, like the diagram of behaviors' and attitudes that use beliefs and culture then the environment, they all work together they, all make sense together, the whole becomes greater than the individual parts.

We need to keep on trying to better the world and try to open the students' eyes to see these inserts like math-science and Indigenous knowledge can be a bigger part of the whole working idea for a better tomorrow. More importantly, make mother earth a workable enjoyable and beautiful world. Along with this first reading, this second one elaborates on the key points of the first one, but mixing it up with current insight. This article, "Defining Science in a Multicultural World: Implications for Science Education", is significant to the first nations people in regards to economic development, environmental responsibility, and cultural survival. I really enjoyed how this article highlighted the importance of drawing on knowledge from each of the four directions and calling for greatness from indigenous people of different cultural background. All three topics, economics, environment and culture are all valued by Indigenous peoples who are looking forward to "survive" and gathering this information in these subject areas to aid day-to-day routines. This reading is significant because it states that for first nations people this threat is real and that's where the respect comes in the understanding of a past present and future of the environment.

The last reading was intense and expressed exactly what we are trying to incorporate when it comes to TRACKS: "*Cultural Studies of Science*." This highlights TRACKS goals of meaning: grasping the scenes of two important knowledgeable worlds involving one another with the outcome to possibly open eyes. I also believe that a strong argument of this article is that we need all four directions (colors of the world) to come together and "Share". By share I mean sharing important knowledge on how to work in partnership with one another and come up with solutions to environmental damage, and the reason behind it and possibly why it is happening. Another major argument of the article emphasizes working as a team using proper

protocols and respect values can make this “tradi-ecological” team work wonders. It can also open doors to possible reasons why having the knowledge from Elders and Indigenous people who know the land and environment work better together. “First Nations students generally eject assimilation into the culture of western science, they tend to become alienated from western science in spite of it being a major influence in their lives; personally and educationally. Alienation reduces their effectiveness or “legitimate peripheral participation” in community matters related to science and technology. As adults alienated students will not possess the cultural capital to participate effectively in western society, again showing just how important a program like TRACKS is.”

We can conclude that we have heard back from six other camps or Health Services that are incorporating these principles into healthy wellness campaign while concurrently incorporating science and indigenous knowledge. These contacts are a critical start with the next step happening this summer to incorporate more feedback from the survey or to the time to set up phone or e-mail correspondence. In regards to the survey I have a few suggestions based on conversations I had with community members. They suggested much of the same I have suggested before, to initially first establish contact through a phone call and then follow up with an e-mail of 5 key questions. Below are the 5 major questions I believe are important to ask.

Here are my five example questions:

- WHERE DO THE PARTICIPANTS COME FROM?
- HOW MANY YEARS HAS THE CAMP BEEN RUNNING?
- HOW IS THE CAMP FUNDED/SPONSORED?
- WHAT OTHER RESOURCES WOULD HELP YOU IN PROVIDING THIS EXPERIENCE?
- WHAT ARE SOME OF THE CHALLENGES YOU FACE RUNNING THIS CAMP?

These are the questions that I would start off with building that positive respectable bond with other agencies that will offer the answers to these questions plus a mountain of other questions. In my brief time with Wabano camp the discussions with Melissa proved invaluable. One of the major suggestions I took away from these conversations was her advice to pair up with a camp that is already running similar programming. Another key idea would be to engage the Trent community to volunteer at TRACKS camp to act as role models for the indigenous youth in attendance.

Achievements:

It is wonderful that I can say that we have heard back from five participants from our survey but these participants haven't completed the survey itself just as of yet, but have offered to call us and chat about our camp ideas. Any project that deals with indigenous knowledge should be worked on in a way that includes a team base. This means building relationships with the team itself so that when working on this project there is a solid

understanding and respectfulness of one another. I had the enjoyment of getting to know Kristeen on a personal professional level to understand her views on indigenous knowledge into science knowledge and she got to know mine, and if we didn't take that time to get that common base relationship building then I would not have got a chance to go to Wabano camp.

Modifications:

When it comes to knowledge from both worlds we must show continued respect of all of the seven Grandfather teachings, especially when discussing the land and mother earth. This is especially important for aboriginal youth in order to promote various ways of thinking and learning. A couple of more suggestions when it comes to promoting and recommending the project:

- Make a project each year to include a 4th year student
- Keep in major points-like-daily journal writing about project and on going term papers and allow the student make list of current camps that are involving science and indigenous knowledge
- Weekly meeting out the door – this would mean more time spent for phone calls-emailing-community events and discussions with local communities who may know of people about this kind of project, plus take questions along –visit cities and community whom which would like to be involved-keep it to monthly meeting for review.
- Have a welcome session for student and project managers-everyone who is involved in the project-because when the student goes out into the field and discuss Tracks-they should have experience with whom they are working with
- Survey 5 major important questions - completed by student who is conducting the project for a year, and to be sent out in February for people whom you have been involved with through out the year to complete for you in a timely manner and the student can complete their conclusion to project!
- 2 end of term presentations. For up keep and focus
- Have fun and Respect Mother Earth!!

Building that positive relationship with the working team of TRACKS will make a better youth camp because the team is solid. That is one thing I observed at the Wabano camp, the initial camp people are like a family and when they branched out to other people volunteering within their camp they know those people since they've taken the time to build those relationships. It is important to have a team with a common goal in mind to represent youth.

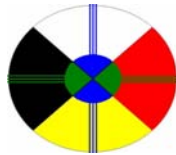
Speaking in regards to the academic side of the project, journaling was a positive piece for me because I like doing journal entries every day to keep me focused on what I need to do

next. This also went along with the weekly meetings with Kristeen to keep my mind fresh and on task and the constant emailing to keep in contact with Kristeen to keep my mind fresh and on task. I can honestly say that the only uneasy aspect of this project was a presentation I had to give in front of team members that I didn't know. I did work hard to put my best work on the table and consider myself a very bold person in this regard. I have a strong investment in this project because when this project is up and running I would like to be on their mailing list to bring participants to this camp.

Final Thoughts:

To have a camp like TRACKS easily accessible at Trent University not only excites me as a student, teacher, mother, and a social worker but as a community member who sees the importance of having accessible culturally relevant education for our youth. I hope I can continue to be of some assistance with the outcome of this project. It vibrates outcomes and liveliness at Trent University, and if at any time there is a need for help-I am offering it to my fellow TRACKS team; so we all can continue to promote tracks as a project with wishful thoughts that it will get off the ground and become a success at Trent U, plus promote a healthy educational tomorrow for our Aboriginal youth.

Nia'wen kowa
Joanne Defosse



Common
Ground
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