Impetus

After a successful 2-day Teacher Symposium offered in Halton, 2014, recommendations were made to extend similar opportunities to meet the needs of students in the SHSM-Environment program, “Following through on the foundational Teacher’s Symposium project held in 2013-14, as described in Section A.2 Background, the Recipient will host a Specialist High Skills Major (SHSM) Student Conference on Lake Ontario in May 2015, involving approximately 80 students, 20 teachers, and Great Lakes professionals.”

Objectives

“The purpose of the SHSM Student Conference is to build on the success of the Teachers Symposium event, and to create opportunities for Grades 11-12 SHSM students to explore their region’s connections to their Great Lake. The conference will require students to work on a Great Lakes-focused project during the school year, so the results of their work can be showcased during the event.

To prepare students for their participation in the conference, the Recipient will work with teachers to identify guest speakers for the classroom to help students deepen their awareness of their Great Lakes unique attributes (e.g., geography, history, culture, etc.) and to broaden their understanding of the issues currently facing the lake (e.g., invite a scientist to explain how excessive algae is formed and how it impacts ecosystem health).”

Approach

As part of the Teachers Symposium in 2014, recommendations on how students could benefit from a similar event were reviewed with two thoughts specifically being of high priority: “...increase experiential learning opportunities and Great Lakes experiences for students [and] ensure SHSM Environment Programs promote all pathways and career opportunities.” These two recommendations became the foundation of the design approach taken to meet the specific needs of a grade 11/12 SHSM-Environment, student audience. Our priorities included content delivery in a variety of formats that would be interactive, practical and engaging for the students as well as ease of process and participation for both students and teachers. Included were, pre-planning discussions with the partnering school boards to establish current needs of both students and teachers in the Toronto SHSM-Environment programs with the goals of determining that which would offer the greatest impact for students and teachers. Guidance was also forthcoming from the Ministry of Environment and Climate Change as well as the Ministry of Education, both of which were in attendance at the 2014 symposium and able to offer numerous insights into the content and context with which the recommendations were made.
**Successes**

The *My Great Lake, My Future: Student Conference* was a success from all perspectives as indicated through feedback from teachers, students and partners. Some of the greatest and most impactful successes are shared below.

**Venue/ Location**

One of the greatest challenges of holding such a conference in the urban space of Toronto is access to affordable conference space as well as access to outdoor, green and blue spaces. To overcome this challenge it was vital to draw from existing partnerships and utilize TRCA lands. Harbourfront Centre provided the perfect space for appreciating views and access to Lake Ontario and was able to provide the amenities that reduced the impact of logistics and was impressive for all participants. Being right on the edge of a Great Lake in an urban city centre whilst discussing our impact on and relationship with the body of water provided a powerful reminder for students of just how important and meaningful a resource they have available to them. One student insightfully noted that they, “...would definitely keep the locations of the conference the same. I have never been to Harbourfront Centre in the morning, and it was lovely to see the stillness of Lake Ontario.”

The afternoon sessions were held at Tommy Thompson Park, approximately 10 minutes from Harbourfront Centre. This space is conveniently located a short bus ride from the Harbourfront Centre and allowed the space, freedom and access to specialists required to create rich learning experiences for students. Some students noted that the highlight of their day was, “…walking through the birch-forest area of Tommy Thompson Park” and teachers noted that activities on the Lake at TTP provided students an opportunity to develop a, “Greater appreciation for the environmental issues that impact the Great Lakes watershed that we all live in.”

Using a combination of Harbourfront Centre and Tommy Thompson Park contributed to achieving the objective in overcoming the misconceptions surrounding access in urban areas to outdoor, green and blue spaces, as noted in a sentiment by a lead teacher, “Students got to hear career advice from leaders of local environmental organizations, then got to have a taste of life in environmental work and connect the activities to the bigger picture of environmental protection. And it was all done in and around downtown Toronto!”

**Panel Discussion (morning)**

Both teachers and students alike responded positively to the industry experts’ careers panel discussion, with a lead teacher stating, “I think the morning part excited the students. They were happy to see that environmental education could lead to a career,” and another commented that, “The panel discussion gave students some direction regarding how to go about planning their careers, provided examples of local issues which society is addressing and gave insight that protecting the environment and having a successful career can coincide.”

Students stated that the highlight of their day was, “When we got to interact with the panelists” and “...learning about different university programs and pathways I can take involving environmental concerns. It was inspirational and useful.”

Immediately following the panel discussion, many panelists noted anecdotally how pleased they were with the level of engagement and interaction from the students. Panelists have since enquired about how to remain involved in the event, and throughout the school year. One panelist endorsed the experience fully with the comment, “Looks like the students are taking over the world, thank goodness!”. Throughout the discussion students were encouraged to engage with the panelists by asking questions via twitter or a roaming, wireless microphone. By offering both modes of communications to students, it allowed all learning styles to fully participate in the activity.
Catering

Providing food to students throughout the day was a factor we were certain would please them! Upon students’ arrival, there was a buffet breakfast with assorted healthy options including fruit and yogurt. It is well known that a healthy breakfast creates a strong foundation for learning, so it was imperative that this benefit was provided to all students, especially considering the early pickups and long day ahead. Additionally a healthy lunch was provided that catered to most dietary restrictions. Meals were provided by the venue’s in-house food services team and the menu was created based on the budget proposed. Additionally, the venue location provided the perfect backdrop to the day and offered an outdoor space for students to enjoy breaks and the beautiful view. A student noted that one their favourite parts of the day was, “Eating lunch outside…”11 while another noted among their highlights of the day was the, “delicious food provided.”12

1. West Nile Virus & Public Health: Students met and interacted with a TRCA technician in Environmental Monitoring and Data Management and were given the opportunity to experience some of the job as they scooped samples from still water. They also had their science-knowledge tested by the technician through some fill in the blank and true/false questions. Some students reported that they wanted to do that for their job!

2. Tern Shelter Building for Water Fowl: At this station, students picked up a hammer to help build a season worth of shelters for migratory birds at TTP! While building, students were able to access experts like TRCA’s Environmental Technologist in Restoration Projects to discuss careers working with migratory birds and in green spaces such as TTP.

3. Restoration Site Tour: This tour invited students to preview a space that is in their own city but that many reported zero to limited awareness of. The tour provided students information on the development of the site, current uses, long term plans, and how a career in the environment may lead to a job working outside at a beautiful site such as TTP.

4. Fish and Shoreline Study: With the use of TRCA’s electro-fishing boat and a team of TRCA staff, students were able to see and touch species that actually live in the lake, while learning how their future can hold a career that allows them to interact with those species and contribute to their habitats’ restoration and/or maintenance.

Hands-on Activities

The conference committee, in partnership with TRCA internal experts, developed four stations through which students rotated, gaining a glimpse into the everyday lives of those who have made their careers in the environmental sector. The four stations were:
Challenges

Some of the challenges faced by the TRCA while organizing this conference were specifically related to the logistics of living and moving in a highly urbanized centre that is densely populated (specifically, transportation routes and timing related to pick up and drop off schedules of multiple schools). Additional challenges may be common regardless of urban or rural venues, such as registrations and media releases. Recommendations based on the planning experience of this conference are bolded.

Toronto Transportation

With two buses budgeted for five schools within two Toronto school boards, it was anticipated that traffic would be a factor when transporting students to and from the event. Road construction and traffic created a delay to the start of the event. However, having anticipated that there was likely to be a delay; adjustments could be made to ensure the impact on our schedule was minimized. Be wary of over-planning your day for this reason. It is very important to collect contact information from each lead teacher as well as provide your information to those teachers and the bus company so that everyone stays connected during transport times.

Registration

When working with multiple school boards, it was understood that each school and board had unique forms to be completed in order for students to be granted permission to participate. When combined with the CA's requirement for specific information regarding dietary restrictions, accessibility, media release, etc., a lot of paperwork and collection is created for all parties involved! This will most likely stay true in any region, with any school/board—plan for this; enquire early with participating schools/boards to ensure you plan enough time to collect all required paperwork.

School Scheduling

SHSM programs are operated at various levels (board and school), which means that how one school runs their program may be entirely different to another within the same school board. Enquire early with your participating schools regarding current scheduled events that may impact the participation of students in the SHSM program at the Student Conference. Depending on how each school operates the program, the logistics surrounding the lead teacher communicating and collecting information from students can vary widely.

Media Releases

You may not receive a 100% student buy-in rate in regards to signed media releases. To assist with image use, create a plan that visually identifies and separates students that cannot be on film, without marginalizing those students that did not submit releases. A photo of each student that does NOT have consent form image usage will help identify students who may actually be in group photos, allowing those photos to be removed from any circulation and avoid mistaken publishing.

You can do it too!

See the attached event planner.

1(HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO as represented by the Minister of the Environment and Climate Change., Grant Funding Agreement. Toronto: N.p., 2014. Print., 2014)
2(HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO as represented by the Minister of the Environment and Climate Change., Grant Funding Agreement. Toronto: N.p., 2014. Print., 2014)
3(Conservation Halton, 2014)
4(Student, 2015)
5(Student, 2015)