

2026/06/22

Tomorrow's scientists:

How a new program at SNOLAB is
engaging youth in STEM

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Education & Outreach

Land acknowledgement

SNOLAB is located on the traditional territory of the Robinson-Huron Treaty of 1850, shared by the Indigenous people of the surrounding Atikameksheng Anishnawbek First Nation as part of the larger Anishinabek Nation.

We acknowledge those who came before us and honour those who are the caretakers of the land and the waters.

The program idea – develop curiosity!

- To create a scientific method focused program
- Reach students when they are forming their science identity (Grade 4 – 8) to give them a positive science experience
- 2025/26 was the pilot year – we are solidifying the program based on feedback and lessons learned

The goal – students design experiments

- Provide students with the information and support to develop short-term experiments to take place at SNOLAB. Designed by students and performed by our staff. Controls in classrooms.
- Modeling the process of science but making it fun! Get students experimenting; collaborating; sharing and discussing results
- Mentorship from scientists, technicians, and lab staff

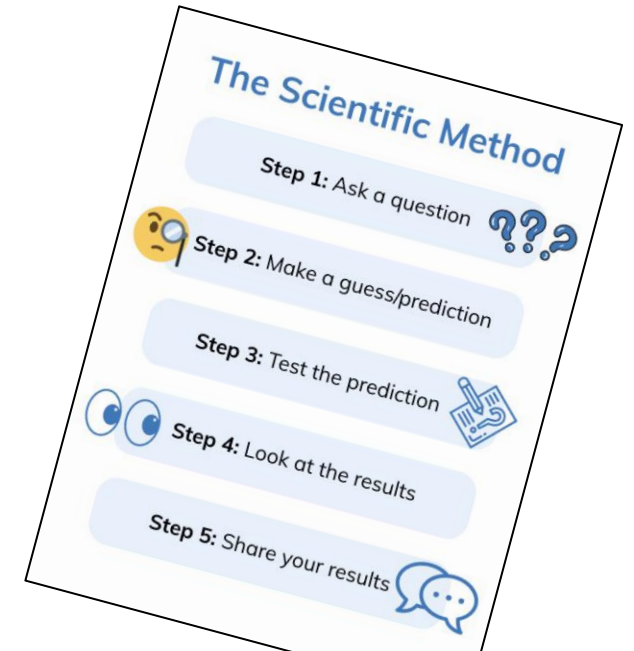
Program delivery

- 6 x 30 min sessions
- Each session had a hook and hands on component
- Simple activity supplies
- Pilot facilitated by us

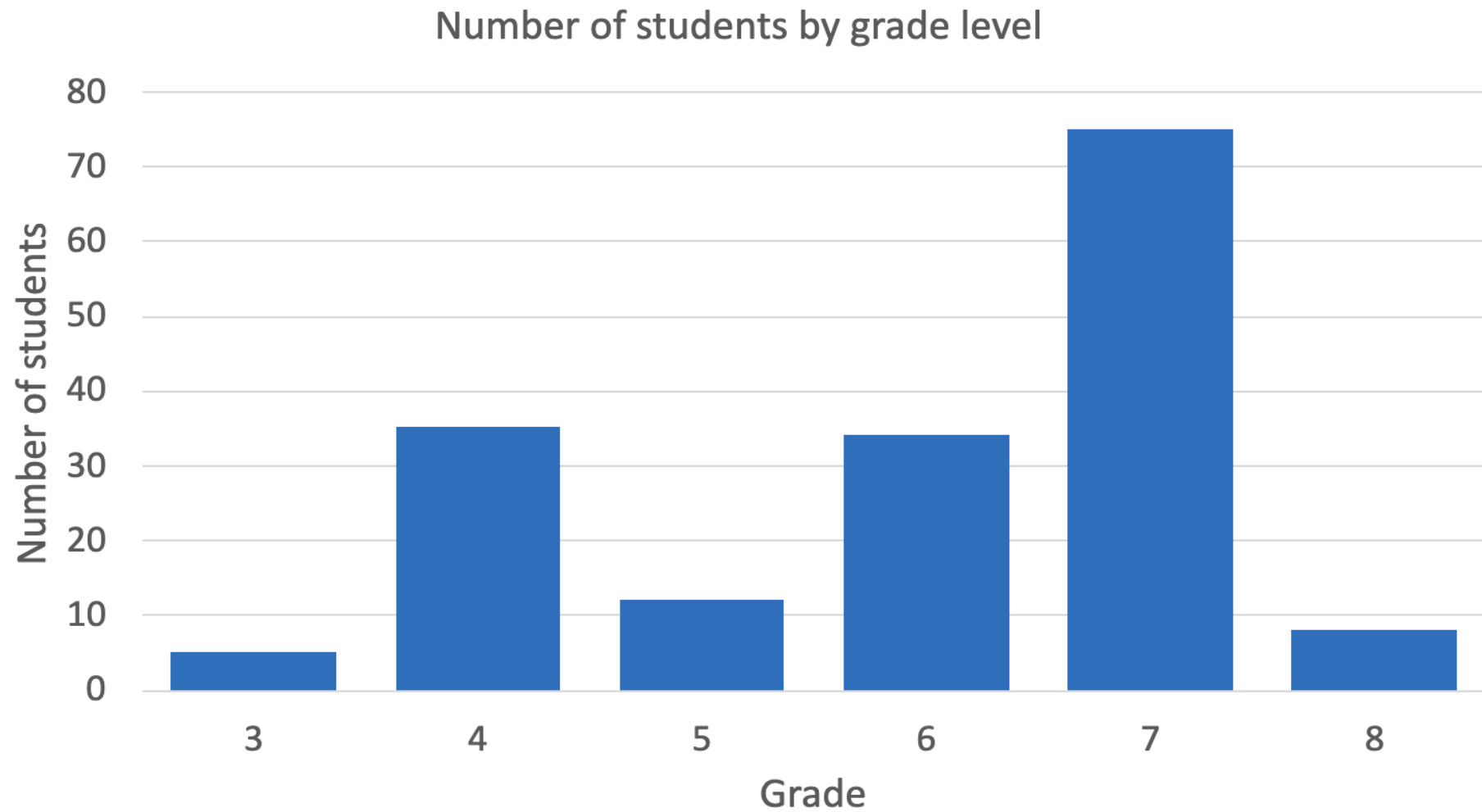


Program delivery

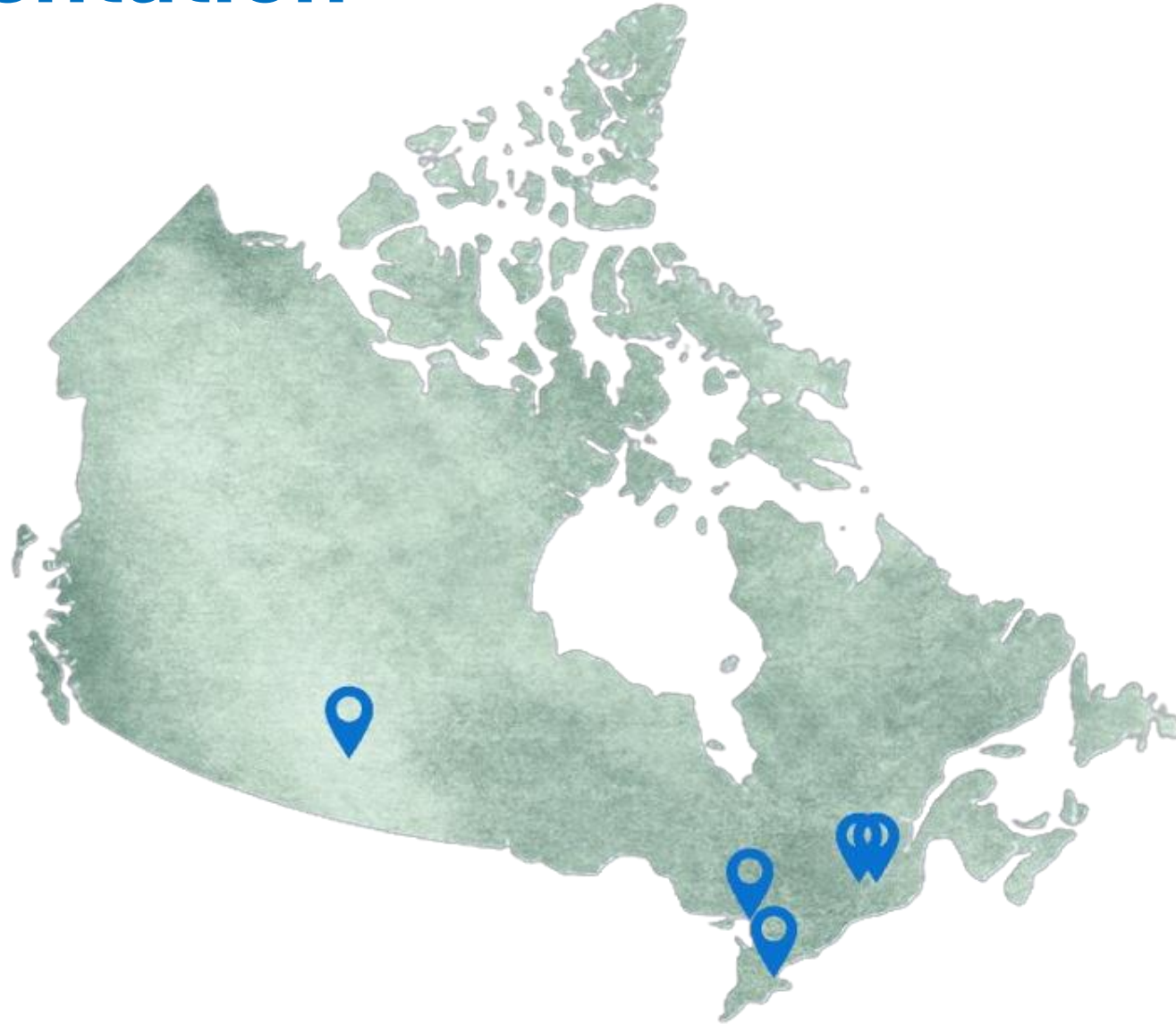
- **Session 1:** Introduction to the scientific method
- **Session 2:** Asking scientific questions
- **Session 3:** Introduction to SNOLAB
- **Session 4:** SNOLAB + the scientific method
- **Session 5:** Preparing SEEDLING idea for submission
- **Session 6:** Sharing your science!




Implementation





Implementation




Pre-survey

Nope


Meh


Yeah


YES!!


I like learning about science.

Mindset

I know a lot about science.

Confidence

I want to learn more about science.

Interest

Working in science sounds interesting to me.

Identity

Experiment selection

- Had 24 experiment submissions, 10 selected
- Met with members of our research team for review
- Consulted with lab departments as needed
- Provided feedback to all submissions, regardless if selected

An experiment example

The SNOLAB expert

- Does deep-underground air pressure squash the air bubbles inside a soft objects?
- **Hypothesis:** Due to the higher pressure, they will shrivel up
- **What happened:** When the air pressure increased from going underground, the marshmallow got smaller.



Post-survey

- Nearly identical survey to the pre-survey + option for comments
- Some themes in the feedback:

Students liked...	Areas for improvement
Hands-on experiments	More in-person interaction
Learning science	More hands-on experiments
Clear explanations	More program time
Virtual tour of SNOLAB	Technical issues

Post-survey: students

"It was great to learn a lot of things I didn't know"

"I loved how SNOLAB taught me to make a good experiment"

"I learned how to do different things that I would have never learned before"

Celebration of Learning

- All participating classes invited to participate
- Hybrid event at Science North (science centre)
- Indigenous knowledge sharing
- Live science demo



Celebration of Learning

- Science fair-esque with poster boards for each experiment + comment box
- SNOLAB staff attended to engage with students
- Interactive Padlet platform for remote students



Lessons Learned & Feedback

- All participating teachers provided positive feedback on the program
- Assessments for each session are in development
- Cross-curricular activities are in development
- Plan to create teacher manuals for more independent delivery

Looking ahead



Looking ahead

- Re-launching in the Fall as **Wonderground**, submission early 2027
- New website underway, adding two-way communication
- Website will host resources and experiment gallery
- Targeted recruitment for under-served communities

Thank you!

Educator newsletter sign up



Explore the experiments on Padlet



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