

OWLS Evaluation Framework

In partnership with the Canadian Ecology Centre (CEC), the School Board will implement the *Outdoor Ways of Learning and Sharing* (OWLS) program in primary and intermediate classrooms for # schools. This pilot program is intended to deliver interdisciplinary outdoor learning experiences to students and professional growth for educators. The North Bay Parry Sound District Health Unit will support the evaluation of the pilot program during the school year.

Learning objectives

There are many benefits to learning in and spending time in nature. The learning experiences that occur throughout the learning cycle can be documented, making possible connections to many areas including:

- **social/emotional development and executive function skills** (specifically response inhibition, sustained attention and emotional control)
- **the development of literacy** (specifically oral language development, tier 2 vocabulary - words with a wide range of application that allow students to describe concepts in a detailed manner - i.e. equal, improve, etc. - developing the skills in service of reading comprehension and generating/communicating ideas in writing.)
- **the development of mathematics behaviours,**
 - Comparing and ordering quantities (multitude and magnitude)
 - Estimating quantities and numbers
 - Decomposing wholes into parts and composing wholes from parts.
- **environmental stewardship** (stronger connection to nature, increased environmental values and pro-environmental behaviours.

Two programs are offered:

The OWLS **outreach program** consists of 2 learning experiences in which CEC educators model outdoor ways of learning for school educators.

The OWLS **mentorship program** consists of 4-6 learning experiences that allow CEC educators and school educators to engage in a cycle of co-planning, co-teaching and co-reflecting. In both the outreach and mentorship programs, CEC educators will model how to embed reflection opportunities from the 3 parts of the Experiential Learning Cycle (Participate, Reflect, Apply). Each learning experience will be approximately one learning block in length and will primarily take place outdoors on school property.

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Evaluation Outcomes

- a) Program was implemented as planned
- b) Program impacted **educators'** beliefs about outdoor learning
- c) Program impacted **educators'** knowledge/understanding of how to integrate outdoor education in their practice
- d) Program impacted **educators'** confidence in leading outdoor learning
- e) Program impacted **educators'** intent to integrate outdoor learning in their practice
- f) Program impacted **student** behaviours (executive functioning)
- g) Program impacted **student** learning (literacy and math)
- h) Program impacted **student** appreciation for environment/nature
- i) Program was enjoyed by **students**

Data Collection Strategies

Each participating group will be assigned an ID number associated with the school/class/teacher to track collection of assessments.

1. Pre-program survey

Completed by: educators

Time point: Prior to first session (1x)

Purpose: baseline assessment of current educator practices, learning goals and anticipated student outcomes

Questions:

- 1) How many times within a 5 day cycle do you currently take your learning outside? [0 times, 1-2 times, 3-4 times, 5 or more times]
- 2) What factors are enabling/supporting you to take learning outdoors?
- 3) Do you currently experience any challenges or barriers in taking learning outdoors?
 - a) Yes No
 - i) If yes, please expand.
- 4) Please indicate your level of agreement with the following statements about the potential impact of outdoor learning on student outcomes.
 - a) Intentional outdoor learning provides the opportunity to optimize academic achievement.
 - b) Intentional outdoor learning provides the opportunity to enhance personal development strategies (e.g., leadership, critical thinking, spatial skills).
 - c) Intentional outdoor learning provides the opportunity to demonstrate and develop stewardship in nature.
- 5) What are your educator learning goals in participating in this outdoor learning program? [open ended]
- 6) What change(s) do you hope to see in your students by participating in this program? [open ended]

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2. Post-session survey

Completed by: classroom educators

Time point: after each session

Purpose: educator observations of student learning, reflection of session success and challenges

Questions:

- a. I was able to co-plan this week's session to the extent I desired. [agreement scale]
- b. I was able to co-facilitate this week's session to the extent I desired. [agreement scale]
- c. I was able to co-reflect on this week's session to the extent I desired. [agreement scale]
- d. The CEC educator modeled how to embed reflection opportunities from the 3 parts of the Experiential Learning Cycle (Participate, Reflect, Apply). [agreement scale]
- e. Identify at least one success that stands out from this week's session. This can be a student, classroom, or personal success. [open ended]
- f. Identify one challenge that stands out from this week's session. [open ended]
- g. Is there anything else you would like to share about this week's session? [open ended]

3. In session observations

Completed by: public health and/or school board lead

Time point: during each session; if feasible

Purpose: to observe and document student learning (interactions, reactions, behaviours, thought process related to numeracy and literacy concepts)

See appendix to view suggested tool.

4. In-session photographs (school board permission forms: teachers to ID students without consent)

Completed by: Educators

Time point: throughout sessions

Purpose: to document the outdoor learning experience; to compliment the other evaluation strategies

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5. Post-program survey

Completed by: Educators

Time point: Shortly after last session completed (1x)

Purpose: to understand educator perception of student learning, to understand educator knowledge, confidence and intent to continue with outdoor learning

Questions:

- a. What key observations in classroom behaviours/interaction did you notice:
 - During sessions?
 - Post sessions (throughout remainder of day)? (open ended)
- b. What key observations in student learning did you notice:
 - During sessions?
 - Post sessions (throughout remainder of day)? (open ended)
- c. What key observations did you notice in how students responded to various forms of the Experiential Learning Cycle (Participate, Reflect, Apply)? (open ended)
- d. Please indicate your level of agreement with the following statements about the potential impact of outdoor learning on student outcomes.
 - Intentional outdoor learning provides the opportunity to optimize academic achievement.
 - Intentional outdoor learning provides the opportunity to enhance personal development strategies (e.g., leadership, critical thinking, spatial skills).
 - Intentional outdoor learning provides the opportunity to demonstrate and develop stewardship in nature.
- e. After having completed the program, I have an increased understanding of how to continue with outdoor learning. [agreement scale]
- f. After having completed the program, I have increased confidence in continuing with outdoor learning. [agreement scale]
- g. After having completed the program, I have an increased understanding of how to embed reflection opportunities from the 3 parts of the Experiential Learning Cycle (Participate, Reflect, Apply). [agreement scale]
- h. After having completed the program, I intend to incorporate more outdoor learning into my curriculum. [agreement scale]
- i. If this program was to be repeated, what key change would you make?
- j. Is there anything else you would like to share about your experience participating in the outdoor learning program that was not captured in the evaluation?

All surveys would be available through the Health Unit's online account. A separate link would be available for each item (where applicable).

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In Session Observations

Teacher:

Session#:

Class size/adult ratio:

Class assignment/unit:

ID Number/grade:

DATE/time:

Weather conditions:

Please note your observations and reflections about the **student learning experience** in the following areas:

Executive Function Skills <i>(e.g. response inhibition, sustained attention, emotional control)</i>	Literacy Skills <i>(e.g. tier 2 vocabulary)</i>	Mathematics Behaviours <i>(e.g. comparing, estimating quantities, wholes and parts)</i>	Environmental Stewardship <i>(e.g. appreciation for nature)</i>

NOTES: