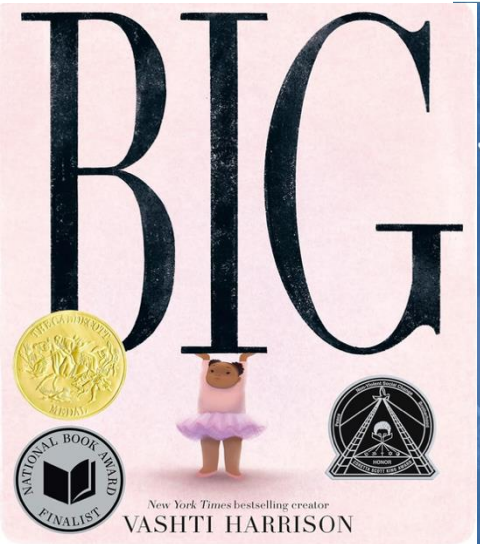
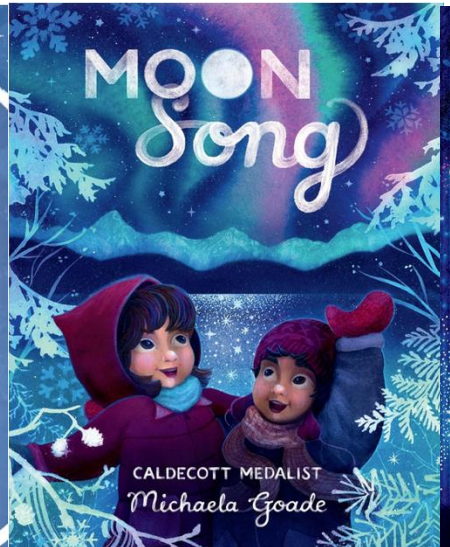
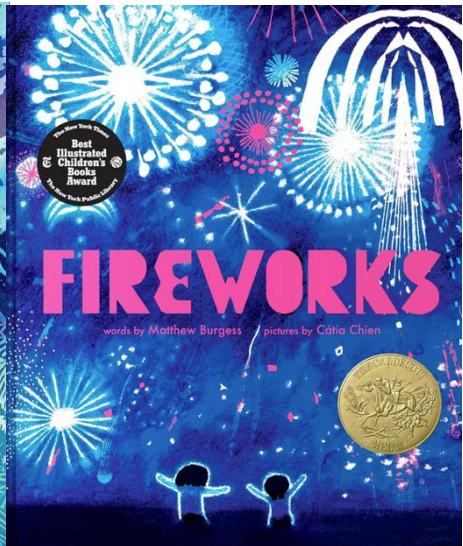
Searching for the Science **in stories**

BCTELA Conference 2026









who we **are**



Wendy Simms
VIU Professor
Science Education



Lora Halladay
VIU Teacher Candidate
Language Studies



Ana Vieira
VIU Professor
Literacy, Language & Learning

SNUNEYMUXW FIRST NATION

Tsleil-Waututh Nation
PEOPLE OF THE INLET

Skwxwú7mesh Úxwumixw
Squamish Nation

xʷməθkʷəy̓əm
MUSQUEAM INDIAN BAND

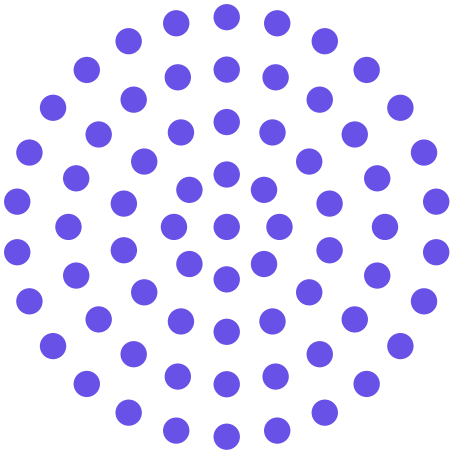
PISA 2025: Students' reading and mathematics performance declined sharply across the OECD

Press release 8 September 2026

25-point decline
in average OECD reading performance, 2018–2025

¾ of countries/economies
with comparable data showed significant declines

Lowest OECD average
reading performance recorded in PISA



OECD, PISA 2025 Results

Literacy in BC: Why should we pay attention?

GRADE 4: ABORIGINAL

School Year	Writers Only #	Participation %	Emerging #	Emerging %	On Track #	On Track %	Extending #	Extending %
2020/21	3,590	63	996	28	2,355	66	239	7
2021/22	3,898	71	1,530	39	2,116	54	252	6
2022/23	4,137	74	1,709	41	2,225	54	203	5
2023/24	4,101	77	1,686	41	2,242	55	173	4
2024/25	4,360	83	2,286	52	1,916	44	158	4

GRADE 4: NON-ABORIGINAL

School Year	Writers Only #	Participation %	Emerging #	Emerging %	On Track #	On Track %	Extending #	Extending %
2020/21	22,964	64	3,664	16	15,660	68	3,640	16
2021/22	25,428	70	5,856	23	16,288	64	3,284	13
2022/23	26,354	72	6,414	24	16,620	63	3,320	13
2023/24	29,883	78	7,912	26	18,777	63	3,194	11
2024/25	32,913	84	11,376	35	18,710	57	2,827	9

2024/25 Grade 4 Literacy

48%
Aboriginal students
On Track or Extending

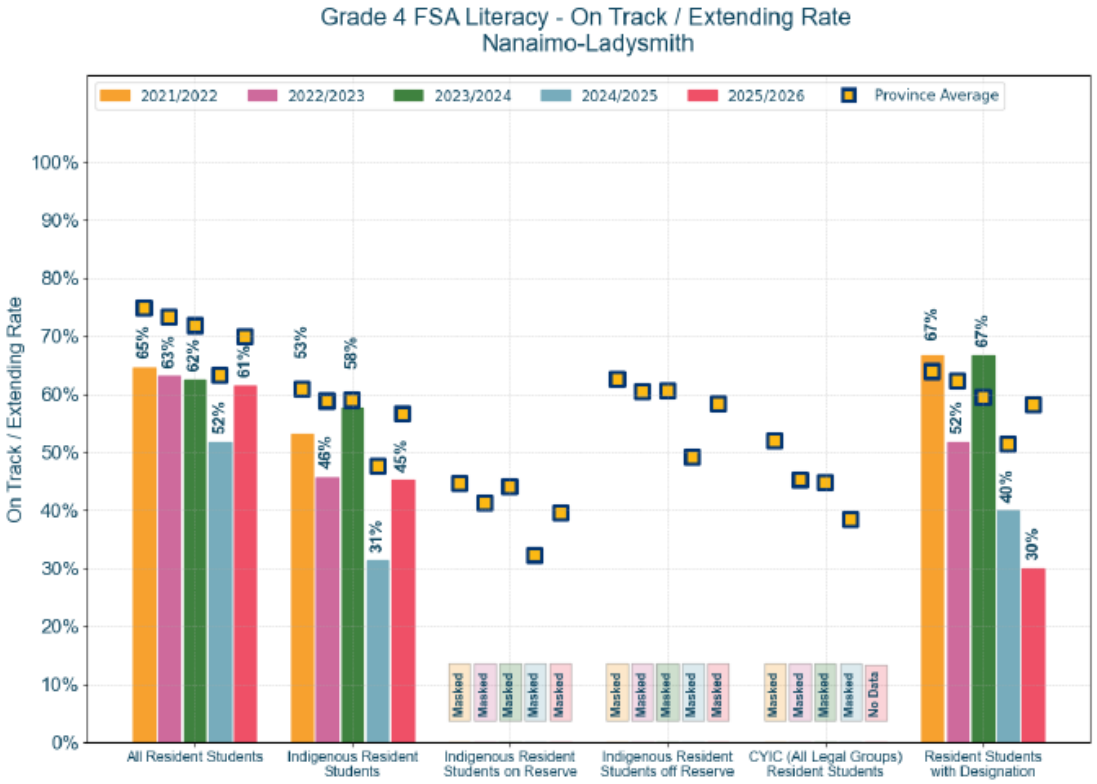
66%
Non-Aboriginal students
On Track or Extending

18-point gap
Participation: 83% vs. 84%

The concern is not only declining literacy achievement. These outcomes also reveal a persistent equity gap.

Source: BC Ministry of Education and Child Care, Aboriginal Report: How Are We Doing? (November 2025)

Literacy in BC: What does it look like in SD68?



2025/26 - On Track or Extending

All Grade 4 students - 61%
Indigenous Grade 4 students - 45%

Too many students are not yet meeting literacy expectations; Indigenous learners continue to experience a substantial achievement gap.

Nanaimo Ladysmith Public Schools. (2026). *Enhancing student learning report: September 2026.*

Literacy in BC: What does this mean for us?

The data point to two challenges: **strengthening literacy outcomes for all students** and **addressing persistent inequities for Indigenous learners**.

Literacy development doesn't happen only during the literacy block.

Students need many opportunities to read, talk, listen, write, build vocabulary, and develop knowledge throughout the school day.

Science gives us a powerful context for doing this.

”All teachers are literacy teachers”

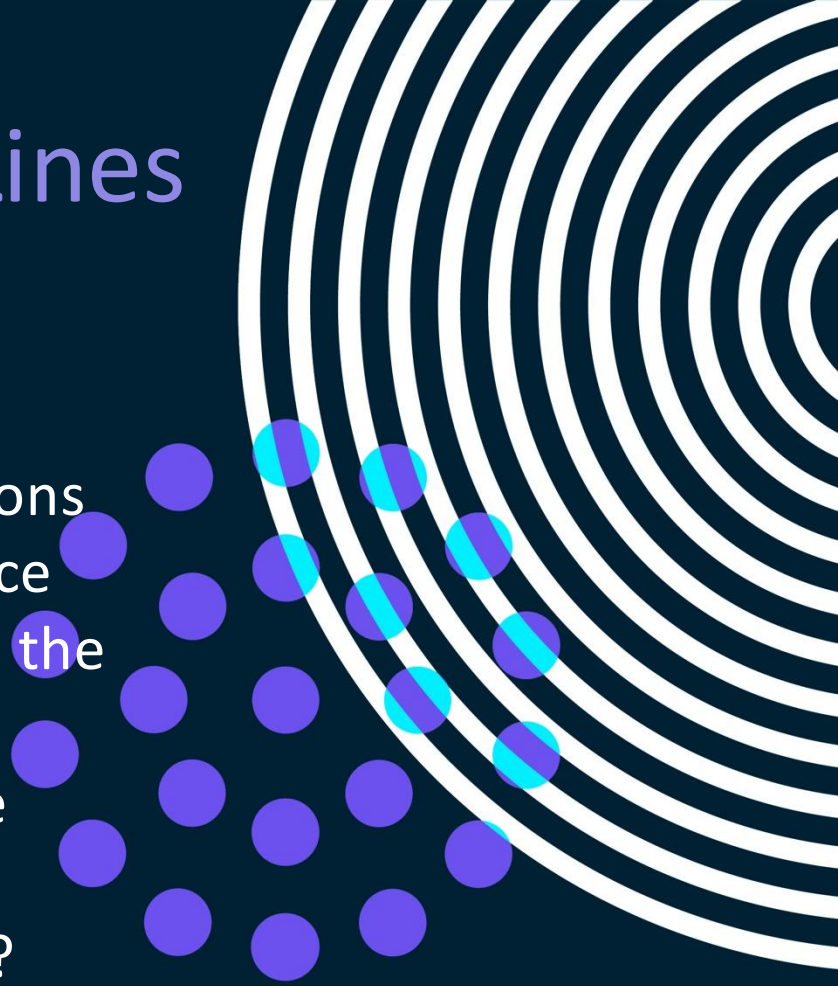
- Nanaimo Ladysmith Public Schools (SD68)

Integrating science and literacy has a **synergistic effect**

Benefits science learning & literacy skill development.
Improves attitudes towards science & reading.

Science Between the Lines

1. Form a group of 4 people
2. Read aloud a book, closely examining words and illustrations
3. Identify which of the K-4 science curriculum “tags” are visible in the story
4. Brainstorm how you might use this book to teach science
5. What literacy links do you see?



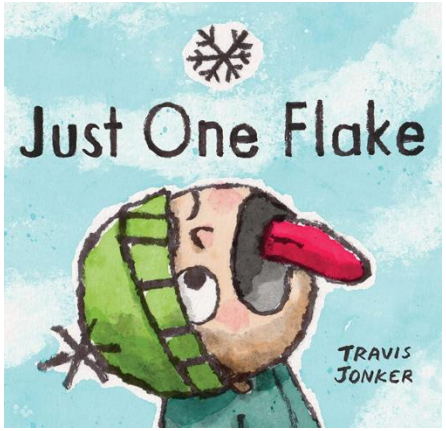
Activity Debrief

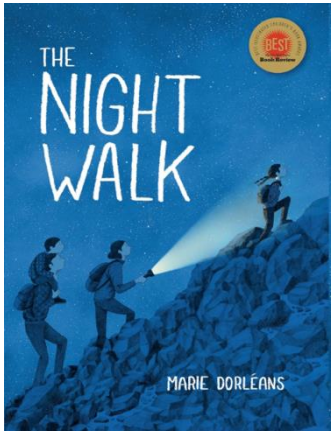
I used to think…
Now, I think…
I am wondering about…

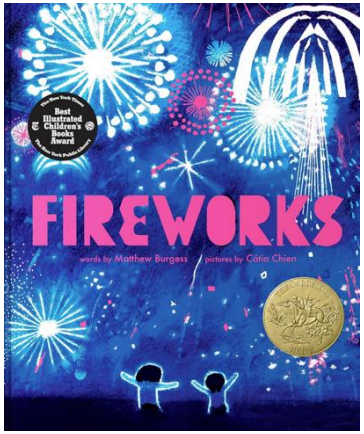


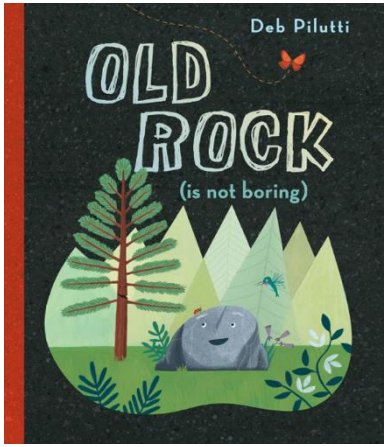
- **searchable database** of picture books
- Each book has science & ELA **curriculum tags** and a written review
- We are currently **pilot testing** the site (~40 books & growing)

Grade 3 - Thermal energy can be produced and transferred

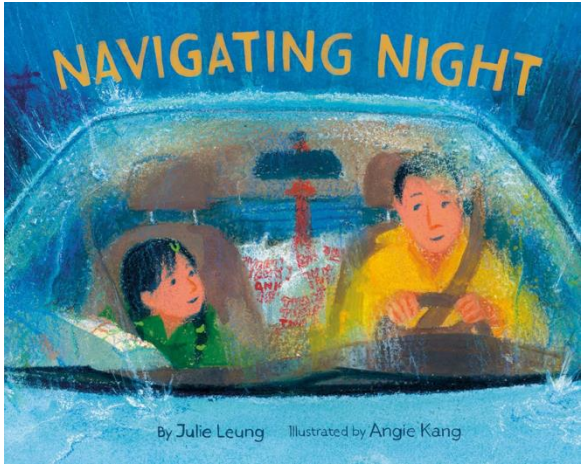


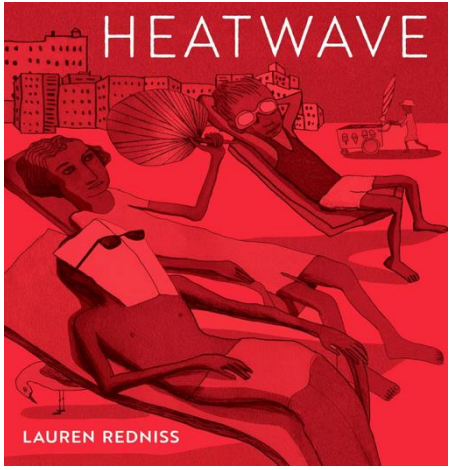












Using the Database

- Scenario 1: I am a Grade 3 teacher starting a unit on “Thermal energy and how it can be produced and transferred”
- Scenario 2: I am a non-Indigenous teacher looking for authentic Indigenous resources to support my practice.
- Group 3: My students are doing science experiments in class, and I want to showcase science competencies.
- Group 4: I want to incorporate ELA curriculum into my science block.
- Group 5: I checked a few books out of the library for social emotional learning but want to now use them for science and ELA.

How can we use the time we already have for [science] to create richer opportunities for children to read, talk, write, build knowledge and encounter different ways of knowing?

Stories by Design

1. In your group, look through your book collection.

2. Explore how these books could support the teaching and learning goals for your scenario.

3. Brainstorm how you might use them.



”All teachers are literacy teachers”

- Nanaimo Ladysmith Public Schools (SD68)



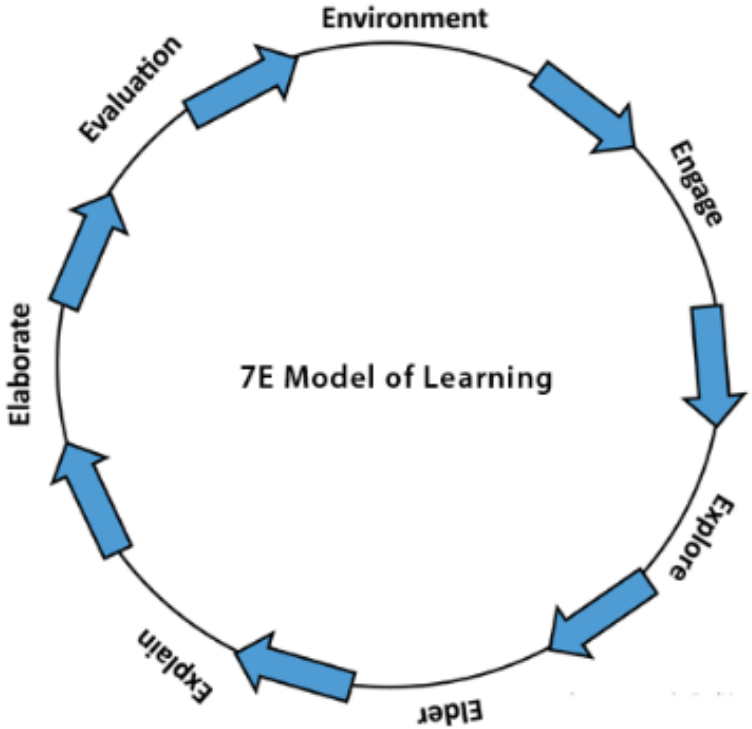
Questions?

wendy.simms@viu.ca



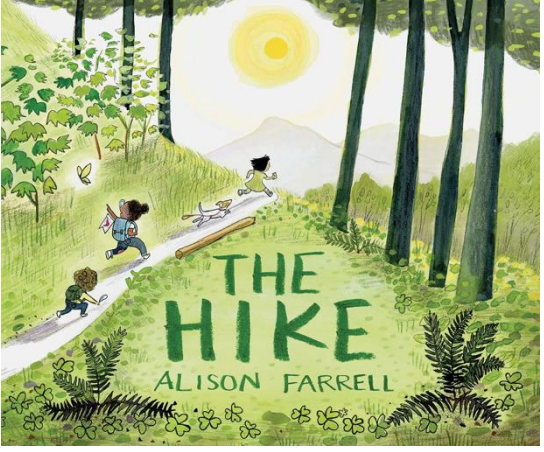


https://ngss.sdcoe.net

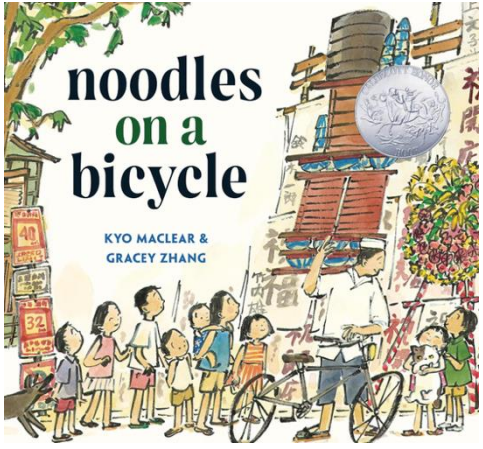


FNESC – Science First Peoples

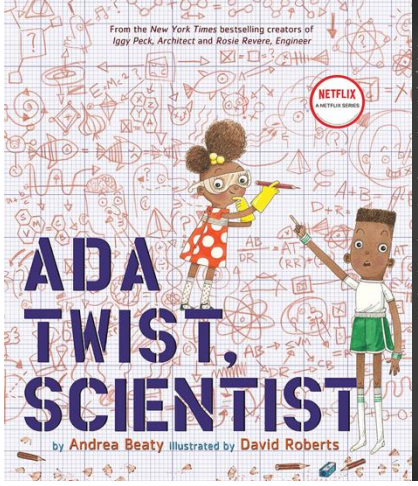
5E/7E Model

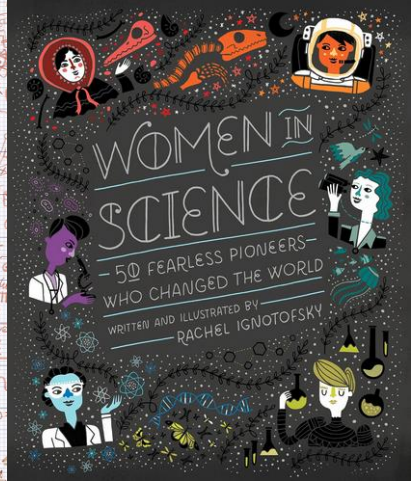


Environment

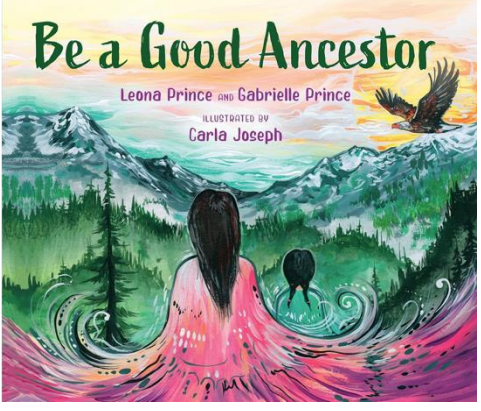


Engage

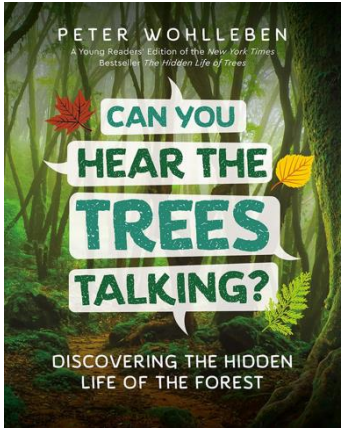




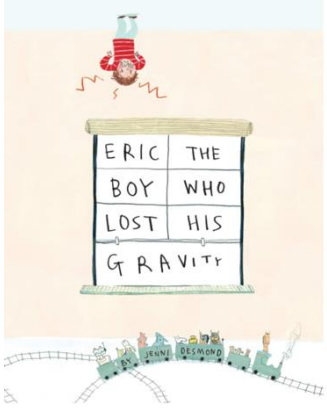
Explore



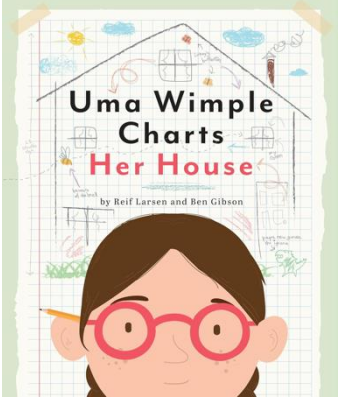
Elder



Explain



Evaluate



Elaborate