Science Ed K-8 - Reading & Viewing Schedule

Session	Read/Watch/Listen
1 (September 9) Welcome	**Optional viewing**: • **The Mind Explained: How to Focus** (S2 E1) • **How science literacy can save us from the internet** (Neil deGrasse Tyson) • **Loneliness** (Kurzgesagt) • **We Have to Talk About Weed** (Kurzgesagt)
2 (September 11) Indigenous Principles and Pedagogies: Reciprocity	**Read**: Chapter 6 - **West - Physical – Reciprocity** from the book - Leddy, S., & Miller, L. (2024). *Teaching where you are: Weaving Indigenous and slow principles and pedagogies*. University of Toronto Press. Also here: **West - Physical - Reciprocity** **Watch: Kinship and reconciliation in early childhood | Michael Redhead Champagne** **Optional viewing:** • (**Start at 3:55**): **Niigaan Sinclair on Education**. **Optional reading:** • Manitoba Education and Early Childhood Learning. (2022). **Mamàhtawisiwin: The wonder we are born with—An Indigenous education policy framework**. Province of Manitoba.
3 (September 16) Inquiry through an Indigenous Lens: Lighting the Fire and Sending Out Roots; The Flow of Knowledge and Breathing the World	**Read five short sections (with accompanying videos):** 1. **An Indigenous Lens on Natural Curiosity** (*Anderson et al., 2017, pp. 5-10). 2. **Lighting the Fire** (*Anderson et al., 2017, pp. 58-64) **Watch: Natural Curiosity: Lighting the Fire** 3. **Sending Out Roots** (*Anderson et al., 2017, pp.82-87) **Watch: Natural Curiosity: Experiential Learning** 4. **The Flow of Knowledge** (*Anderson et al., 2017, pp. 104-108) **Watch: Natural Curiosity: Integrated Learning** 5. **Breathing the World** (*Anderson et al., 2017, pp. 134-139) **Watch: Natural Curiosity: Moving Towards Sustainability** *Anderson, D., Chiarotto, L., & Comay, J. (2017). *Natural curiosity: The importance of Indigenous perspectives in children's environmental inquiry* (2nd ed.). Ontario Institute for Studies in Education, University of Toronto. **https://www.naturalcuriosity.ca/englishbook**

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	Optional reading and viewing: • Canadian Commission for UNESCO (CCUNESCO). (2021). **Land as Teacher: Understanding Indigenous land-based education**. • **Indigenous teachers are getting community-based training that keeps education close to home** (CBC News). • **Indigenous Ways of Knowing** (Background for Educators) (LSF). • **Indigenous Ways of Knowing** (Video) (LSF)
4 (September 18) *Introduction to the Wonder of Science*	**Read three sections:** Koch J. (2018). *Science Stories: Science Methods for Elementary and Middle School Teachers* (6th ed.). Cengage Learning. **(1. pp. 4-9; 2. 19-22; 3. pp. 68-74)** **Optional reading and viewing:** • **What is Climate Change and Why Care?** (LSF, pp. 3-5) • **How Does Climate Change Affect Our World?** (LSF, pp. 2-5) • **David Attenborough: A Life on Our Planet** • **Intro to the History of Science** (Crash Course)
5 (September 23)	**Field Trip: Fort Whyte Alive**
6 (September 25) Creativity	**Watch: Foodspiracy (The Nature of Things)** (CBC Gem) **Optional viewing:** • **Is Meat Really that Bad?** (Kurzgesagt) • **Explained - The Future of Meat** (S2 E3); **The End of Oil** (S3 E10) **Egg Drop Challenge** **Please bring your egg shuttle for the big event!**
7 (October 2) Communication	**Watch two short videos:** 1. **Can You Fix Climate Change?** (Kurzgesagt) 2. **We Will Fix Climate Change** (Kurzgesagt) **Optional viewing:** • **True Survivors (The Nature of Things)** (CBC Gem) **Optional reading:** • **Nature as a Classroom** (DSF) • **Framework for Learning** (MB Education)
8 (October 7) Citizenship	**Watch: Why Climate Action Is Unstoppable and "Climate Realism" Is a Myth** (Al Gore, TED) **Read:** Windschitl, M. (2023). *Teaching Climate Change: Fostering Understanding, Resilience, and a Commitment to Justice.* Harvard Education Press. (**pp. 97-111**)

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	Optional listen: • Palmer, M. (Host). (September 18, 2023). *Teaching Climate Change with Dr. Mark Windschitl* [Audio podcast]. Trending in Ed with Mike Palmer. **https://trendingineducation.com/2023/09/teaching-climate-change/**
9 (October 9) Connection to Self	**Read:** **1.** **^**8 Case: I'm Not Stupid in *Your* Classroom! - Deborah Hanuscin **2.** **^**9 Commentary: Designing Equitable Science Instruction for All Students - Delinda van Garderen **https://link-springer-com.uwinnipeg.idm.oclc.org/book/10.1007/978-3-031-33418-4** ^Jeong, S., Bryan, L. A., Tippins, D. J., & Sexton, C. M. (Eds.). (2023). *Navigating Elementary Science Teaching and Learning: Cases of Classroom Practices and Dilemmas*. Springer. **Optional viewing:** • **Animal Pride (Nature of Things)** (CBC Gem)
10 (October 14) Critical Thinking	**Read:** Hobbs, R. (2026). **How do people become media literate?** (Chapter 14). In *Media Literacy in Action: Questioning the Media* (2nd ed., pp. 357-387). Rowman & Littlefield. **Optional viewing:** • **Breaking Boundaries: The Science of our Planet** • **The Tipping Points of Climate Change — and Where We Stand | Johan Rockström | TED**
11 (October 16) Collaboration	**Read:** Sperry, Chris, and Cyndy Scheibe. *Teaching Students to Decode the World : Media Literacy and Critical Thinking Across the Curriculum*. First edition., ASCD, 2022. (**chapter 2**) **Preview for the next session**: Green, J. (2019). **Crash Course Navigating Digital Information Preview**. CrashCourse. **Optional reading:** • **How to protect yourself from false health information spreading online** (CBC News) **Optional viewing:** • **Rebellion (The Nature of Things)** (CBC Gem) • **Shared Planet: Forests (Nature of Things)** (CBC Gem
12 (October 21) Navigating Digital Information	**Watch five short videos:** 1. Green, J. (2019, January 8). **Introduction to Crash Course Navigating Digital Information #1.** CrashCourse. **2.** Green, J. (2019, January 15). **The Facts about Fact Checking: Crash Course Navigating Digital Information #2**. CrashCourse.

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	3. Green, J. (2019, January 22). **Check Yourself with Lateral Reading: Crash Course Navigating Digital Information #3**. CrashCourse. 4. Green, J. (2019, January 29). **Who Can You Trust? Crash Course Navigating Digital Information #4**. CrashCourse. 5. Green, J. (2019, February 5). **Using Wikipedia: Crash Course Navigating Digital Information #5**. CrashCourse. **Optional viewing**: ● Smooth, J. (2018, February 27). **Introduction to Media Literacy: Crash Course Media Literacy #1**. CrashCourse. ● Smooth, J. (2018, March 20). **Media and the Mind: Crash Course Media Literacy #4**. CrashCourse. ● Smooth, J. (2018, May 1). **The Dark(er) Side of Media: Crash Course Media Literacy #10**. CrashCourse. ● Tavlin, N. (2015, August 27). **How false news can spread**. TED-Ed.
13 (October 23) Evaluating Evidence, Photos and Videos, and Data; Navigating Clickbait and Social Media	**Watch five short videos:** 1. Green, J. (2019, February 12). **Evaluating Evidence: Crash Course Navigating Digital Information #6**. CrashCourse. 2. Green, J. (2019, February 19). **Evaluating Photos & Videos: Crash Course Navigating Digital Information #7**. CrashCourse. 3. Green, J. (2019, February 26). **Data & Infographics: Crash Course Navigating Digital Information #8**. CrashCourse. 4. Green, J. (2019, February 26). **Click Restraint: Crash Course Navigating Digital Information #9.** CrashCourse. 5. Green, J. (2019, March 12). **Social Media: Crash Course Navigating Digital Information #10.** CrashCourse. **Optional viewing**: ● Smooth, J. (2018, May 8). **Media Skills: Crash Course Media Literacy #11.** CrashCourse.

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	• Smooth, J. (2018, May 15). **Future Literacies: Crash Course Media Literacy #12**. CrashCourse. **Optional reading:** • (Kozak & Elliot, 2014, pp. 5-31) [**Connecting the Dots**] • (Kozak & Elliot, 2014, pp. 32-51) [**Connecting the Dots**]
14 (October 28) - Group Presentation - Group A	**Optional viewing:** • **Shared Planet: Cities (Nature of Things)** (CBC Gem) • **The Nature of Things: Suzuki Signs Off** (CBC) • **AI: Humanity's FInal Invention?** (Kurzgesagt)
15 (October 30) Group Presentation - Group B	**Optional viewing:** • **Manufactured Landscapes** (CBC Gem) • **The Water Crisis** (Explained; S1 E2) • **Is it Hard to Be Green?** (LSF video)
16 (November 4) Group Presentation - Group C	**Optional listening:** • Buckiewicz, A. (2024, April 19). *An Indigenous ecologist on why we need to stop and listen to save the planet*. Quirks and Quarks (CBC Radio). **https://www.cbc.ca/radio/quirks/indigenous-scientist-earth-medicine-1.7178030**
17 (November 6) Group Presentation - Group D	**Optional viewing:** • **Denmark's Forest Kindergartens** and **The Rise of Forest Schools** • **Jane talks Roots & Shoots with Jimmy Fallon** **Optional read:** • **Roots and Shoots Program**, scroll down and click on • **Are you an adult champion? Get started here**.
18 (November 13) *Generative AI for Educators* Goodbye for now	**Asynchronous Online Session - post your completed AI Foundations for Educators Workbook and Certificate of Completion, along with your Participation Rubric Self-Assessment, in the Participation folder on Nexus** **Optional viewing and reading:** • **Curb Your Carbon** (CBC Gem) • **Is it Hard to Be Green?** (LSF, pp. 2-4) • Blenkinsop, S., & Kuchta, E. (2024). *Ecologizing education: Nature-centered teaching for cultural change*. Cornell University Press. **pp. 1-39**. • **The Reason You're Alone** (Kurzgesagt) • **The Best Way to Boost Your Immune System (With Science!)** (Kurzgesagt) • **How Does Addressing Climate Change Make Us Healthier?** (LSF, pp. 2-5)