

Paddling the Severn



Süigwan 2025 Education Directors' Forum

Ai Empowering Indigenous Education

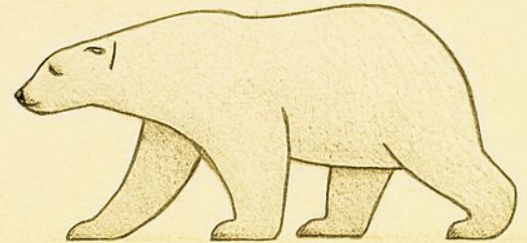


By White Rabbit Edu

Land Acknowledgement

Thank you for the opportunity to meet today. I recognize the important connection your community has with the land and waters of Northern Ontario. This land is the homeland of the Fort William First Nation, signatory to the treaty.

This relationship provides a valuable foundation for educational experiences that are meaningful and grounded in place.





ALEX SHORT

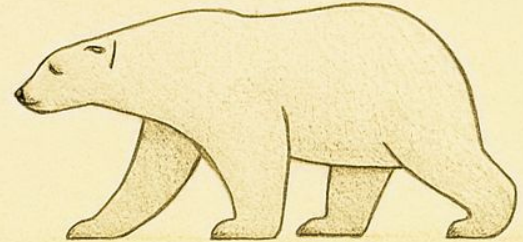
Former teacher in Cat Lake, now focused on professional development and helping educators use technology to boost student success. Passionate about practical tools that make teaching easier and learning stronger.

Who are we



KEITH ATWOOD

President of White Rabbit EDU & AC5. I work with northern schools to make tech simple, reliable, and actually useful. I build systems, train staff, and fix messes others leave behind. I'm here to show how AI can support the real work teachers do—not replace it.



Telling a story with Ai

In this slide show we hope to give you an insight in some new tools and resources that didn't exist a few years ago and are rapidly changing.

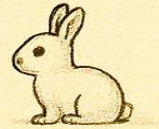
We will briefly be covering examples of how this technology can be used in a school setting and areas that should be considered as we move forward.



Severn River

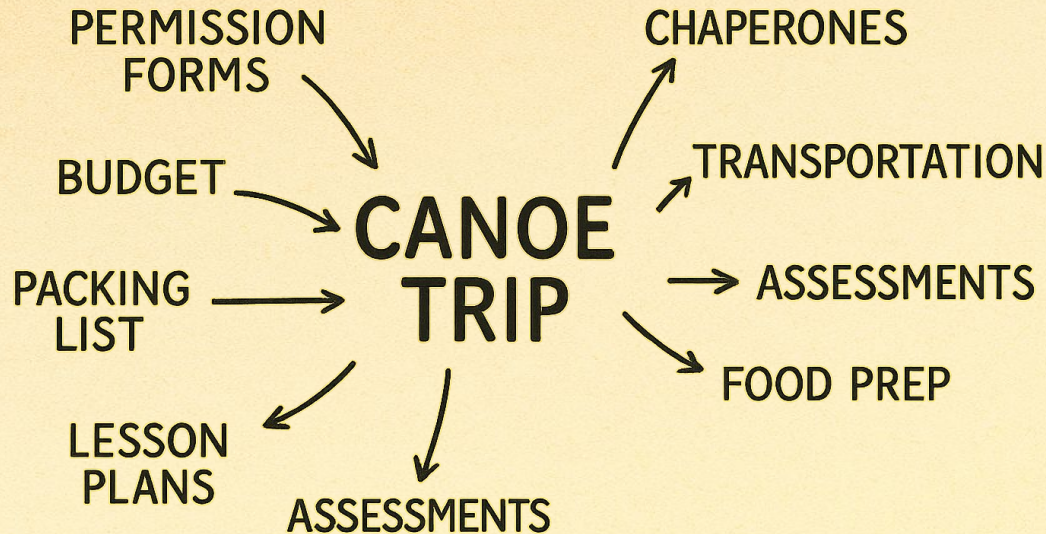
As an educator...
land based learning...

Canoe trip



Severn River

Taking this idea of going on a canoe trip to implementing it takes planning, approvals from both administration, parents and support with implinenting



Feasibility

A canoe trip from **Bearskin Lake** to **Fort Severn** (both in Northern Ontario) would be an **extremely long and remote wilderness journey**, typically covering **700–900 km** depending on the route taken. This route would likely follow a combination of rivers and lakes — possibly parts of the Severn River system — and would involve numerous portages, whitewater sections, and exposure to harsh weather conditions.

Estimated Duration:

- **Experienced paddling group:** 25 to 40 days
- **Student group (Grade 7–8):** Likely **not feasible** in its entirety. For a student expedition, you'd realistically plan:
 - A **segment** of the Severn River system (e.g., 3–7 days)
 - Fly-in / fly-out to key access points



Feasibility

✓ Suggested Student-Friendly Option

Fly-in/out section: Paddle a portion of the Fawn or Severn River that can be:

- Completed in **5–7 days**
- Supported by floatplane drop-off and/or pickup (e.g., via Sandy Lake, Big Trout, or Fort Severn airstrips)

Example:

- Fly to **Whitewater Lake** (headwaters of Severn River)
- Paddle a **week-long section downstream**
- Arrange **floatplane pickup** at an accessible location

○



New Route



New Route



Budget

Canoe Trip Budget: Whitewater Lake to Severn River (~7 days)

Category	Estimated Cost	Details
Flights (Floatplane)	\$10,000 – \$14,000	Charter flights from Big Trout Lake to Whitewater and pickup at a downstream point (varies based on aircraft size and distance)
Canoe Rentals	\$1,800 – \$2,400	6 canoes @ ~\$50–\$70/day x 7 days
Guides/Staff	\$4,000 – \$6,000	1–2 certified wilderness guides including transport, food, and pay
Permits / Insurance	\$500	Liability, park access, emergency evacuation insurance
Food & Meal Supplies	\$1,200 – \$1,500	Dehydrated meals, snacks, bulk food, stoves, fuel



Budget

Canoe Trip Budget: Whitewater Lake to Severn River (~7 days)

Pre-Trip Training Days	\$1,200	2–3 days of canoe skills and safety training locally
Camping Gear Rental/Supplies	\$1,000	Tents, barrels, tarps, safety kits, paddles, PFDs
Contingency Fund	\$1,000	Weather delays, damaged gear, minor emergencies
Safety / Communication	\$500 – \$700	InReach device, emergency satellite phone, first aid kit

Total Estimated Budget:

\$22,200 – \$29,300

(Approx. \$1,850–\$2,450 per student)



Letter to Parents

Education Centre

P.O. Box 123
Big Trout Lake, ON P0V 1G0
Phone: (807) 555-2311
Email: info@wahwahtayedu.ca

May 16, 2025

Dear Parents and Guardians,

We are thrilled to announce a unique and exciting learning opportunity for our Grade 7 and 8 students: a **5–7 day canoe trip** beginning at **Whitewater Lake**, the headwaters of the Severn River.

This adventure will provide students with hands-on experiences in land-based learning, environmental education, and traditional travel routes. With a focus on teamwork, personal growth, and connection to the land, students will paddle as a group through one of Northern Ontario's most beautiful and culturally significant river systems.

We are committed to ensuring this experience is both safe and meaningful. If you have any questions before receiving the forms, please don't hesitate to contact us.

Thank you for supporting this opportunity to help our students grow, lead, and learn in a way that connects them to the land and to each other.

Miigwech,

[Your Name]

Trip Coordinator / Teacher
Wahwahtay Education Centre



Letter to Parents

Education Centre

P.O. Box 123
Big Trout Lake, ON P0V 1G0
Phone: (807) 555-2311
Email: info@wahwahtayedu.ca

May 16, 2025

Dear Parent/Guardian,

Your child has the opportunity to participate in a 5–7 day canoe trip focused on outdoor education and land-based learning. The group will travel by floatplane to Whitewater Lake and paddle a portion of the Severn River. Trained staff and certified guides will accompany the group. Safety protocols and emergency communication will be in place.

Student Information

Student Name: _____
Grade: _____ DOB: _____
Health Card #: _____

Medical Details

Allergies or health concerns? No Yes: _____
Medication (if any): _____

Emergency Contact

Name: _____ Phone: _____
Alternate Contact: _____ Phone: _____

Consent







- I give permission for my child to participate in the Severn River canoe trip.
- I understand floatplane transport is involved and safety measures will be in place.
- I have provided accurate medical and contact information.

Parent/Guardian Name: _____
Signature: _____ Date: _____










Teacher/Chaperone Packing List – Severn River Canoe Trip

Documents & Essentials

-  Emergency contact list (all students)
-  Student health info & consent forms
-  Itinerary and route map
-  Satellite communicator (InReach or SPOT) or VHF radio
-  Notebook & pen/pencil
-  Personal ID & health card

Canoe / Camp Gear

-  Paddle (plus one spare)
-  PFD (properly fitted)
-  Dry bag (x2 – 20L+)
-  Waterproof map case
-  Tent (shared or solo) + ground tarp
-  Sleeping bag (3-season)
-  Sleeping pad (lightweight + packable)





Teacher/Chaperone Packing List – Severn River Canoe Trip

Packing list Teacher



Food & Cooking Meal plan and checklist

- Group stove + fuel
- Lightweight pots & utensils
- Lighter + waterproof matches
- Cutting board + knife
- Dish soap, scrubber, and towel
- Water purification (filter/tablets)
- Snacks or personal food
- Bear barrel or dry food storage bag



Emergency & Group Gear (carry or confirm who carries)

- First aid kit (group-sized)
- Extra paddle
- Repair kit (duct tape, zip ties, rope)
- Emergency shelter/tarp
- Whistle
- Knife/multitool
- Group water filter or tablets
- Laminated safety/emergency plan



Clothing (*Avoid cotton – choose quick-dry or wool*)

- 2 quick-dry shirts
- 1 long-sleeve shirt (sun or bug protection)
- 2 pants or shorts (quick-dry)
- 1 fleece or hoodie (warm layer)
- 1 rain jacket (waterproof)
- 1 rain pants (optional but recommended)
- 1 hat (for sun)
- 1 toque (for cold nights)
- 4–5 pairs of socks (wool/synthetic)
- 4–5 pairs of underwear
- 1 swimsuit (optional)
- 1 pair paddling shoes (closed-toe, water-ready)
- 1 pair camp shoes (croc/runners)

Sleeping Gear

- Sleeping bag (3-season)
- Sleeping pad
- Small pillow or stuff sack with clothes

Personal Items

- Toothbrush & toothpaste
- Biodegradable soap
- Towel (small, quick-dry)
- Hairbrush or comb
- Sunscreen (SPF 30+)
- Bug spray (with DEET or picaridin)
- Lip balm (with SPF)
- Hand sanitizer
- Toilet paper in Ziploc bag
- Menstrual supplies (if needed)

Packing list Students

Do NOT Bring

- Electronics (phones, tablets, games)
- Candy or scented items
- Knives or tools (provided by staff if needed)
- Expensive or valuable items



Learning Goals



A Quick History of AI

From the Turing Test to ChatGPT—AI's evolution from concept to classroom tool.

- ◆ **1. Smarter AI Models (GPT)**

New “Transformer” tech makes AI understand and write like humans.

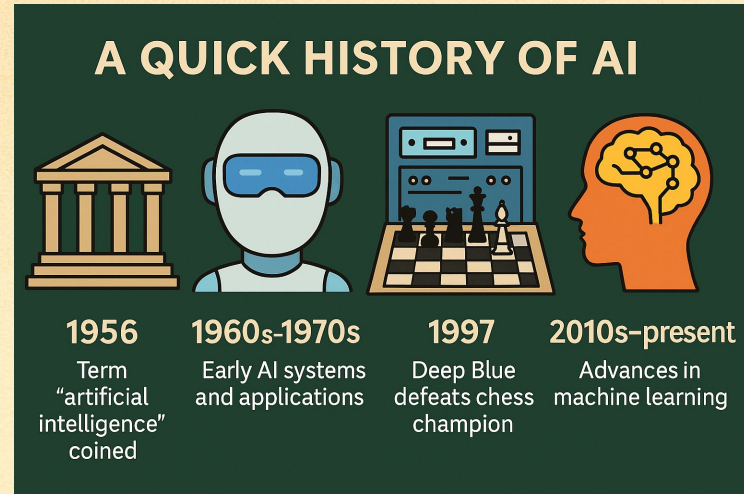
- ◆ **2. More Data + Faster**

Computers

AI trained on the entire internet using supercomputers.

- ◆ **3. Human Feedback**

People helped teach AI to give better answers.



Types of AI in Education

Generative

Creates new content automatically

MagicSchool.ai generates lesson plans, report comments, or quizzes from a prompt.

Predictive

Forecasts outcomes from data

PowerSchool with AI analytics predicts student dropout risk based on attendance, grades, and behavior.

Assistive

Supports tasks with accessibility

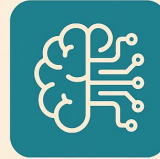
Speechify reads text aloud for students with reading challenges or visual impairments.

Visual

Interprets images and video

Google Lens or Seeing AI identifies objects, text, or math problems using a device camera.

Types of AI in Education



Generative



Predictive



Assistive



Visual



Why Schools Should Care

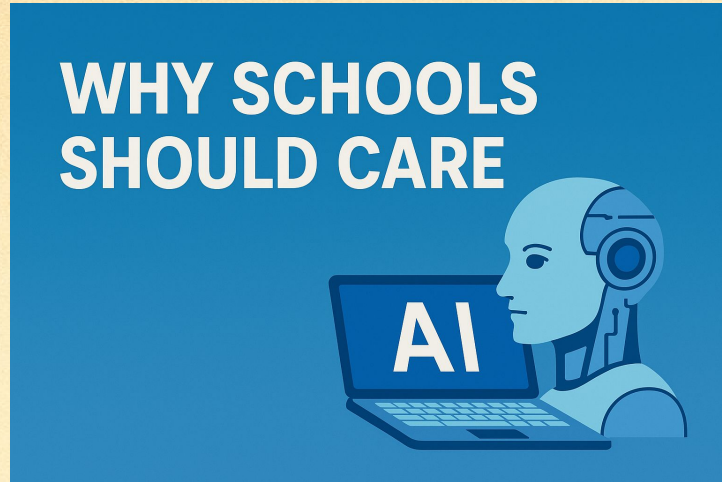
Save time, personalize learning, close gaps, prepare students for real jobs

Teachers using MagicSchool.ai report saving **5–10 hours per week** generating rubrics, report card comments, and differentiated lessons.

A school in Alberta used **Speechify** and **Grammarly EDU** to help students with learning disabilities become independent writers for the first time.

Schools using AI analytics in **PowerSchool** or **BrightBytes** detected patterns in attendance and flagged at-risk students **weeks before staff noticed**.

In New York, **Khanmigo (Khan Academy's AI tutor)** was piloted to provide **1-on-1 math coaching**—something normally impossible in large classrooms.

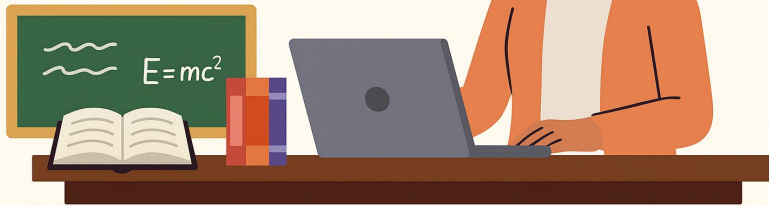



For Teachers


Generate lesson plans, quizzes, report card comments. Differentiate for reading levels. Save time for real teaching.


For Teachers

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quizzes, report card comments.
Differentiate for reading levels.
Save time for real teaching.



 **Generate differentiated lesson plans** using tools like MagicSchool.ai or Diffit, adjusting for grade level or reading ability instantly.

 **Use AI for personalized feedback** on student writing via Grammarly EDU or ChatGPT to help with constructive, rapid assessment.

 **Create interactive quizzes or presentations** with Curipod or Quizizz AI that align with Ontario curriculum outcomes.





For Admin Staff


Automate scheduling, emails, reports. Analyze patterns in attendance or student data. Support onboarding. Budgeting and Funding applications.

- Automate scheduling, emails, reports.
- Analyze patterns in attendance or student data.
- Support onboarding.



 **Use AI email tools** like ChatGPT or Copy.ai to draft routine communication (e.g., attendance notices, newsletters, reminders).

 **Apply predictive analytics** to flag at-risk students based on attendance, grades, and behavioral patterns (e.g., Microsoft Power BI with AI insights).

 **Automate form responses and documentation** with tools like Zapier + GPT to streamline onboarding, leave approvals, and policy summaries.




For Students


Writing support, math help, language tools, assistive tech. Must be guided to avoid misuse.


For Students

- Writing support, math help, language tools, assistive tech.
- Must be guided to avoid misuse.



 **Use ChatGPT or Grammarly** to help structure essays, brainstorm ideas, or correct grammar before submitting writing assignments.

 **Access math tutoring tools** like Khanmigo or Photomath to understand steps, not just answers.

 **Utilize AI translation tools** like DeepL or Google Translate to support multilingual learners in understanding class materials.



Examples from the North

Story creation based on legends. Translation of local languages. Resume help and confidence building.

Examples from the North

- Story creation based on legends
- Translation of local languages
- Resume help and confidence building

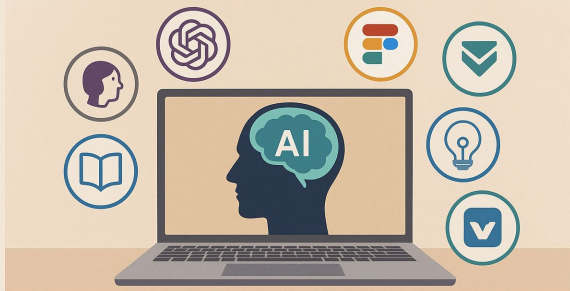


"When we teach with our stories, we carry our language—and our identity—forward."



AI Resources for Schools

Free and Paid External AI Systems for Education



Free:

- *ChatGPT*
- *Canva*
- *Diffit*
- *SlidesA*
- *Khan Academy*

Paid:

- *MagicSchool*
- *Grammarly*
- *Curipod*
- *Turnitin AI detection*








The Risks

Bias, misinformation, cheating, privacy concerns. Needs human supervision.

The Risks

Bias, hallucinations, misinformation, cheating, privacy concerns. Needs human supervision.

		
Bias	Hallucinations	Misinformation
		
Cheating	Cheating	Privacy

"AI is a tool, not a truth."



Safe and Smart Use

School policies. Digital literacy. AI as a support tool, not a replacement.

Safe and Smart Use

School policies. Digital literacy.
AI as a support tool, not a replacement



"Teach students to drive the tool, not be driven by it."



Indigenous Perspective

Protect cultural data. Respect traditional knowledge. Indigenous-led AI development.

Anishinaabe technologists are building **language models trained on community-approved content**, with ethics guided by Elders and traditional knowledge systems.

Communities in B.C. use AI-powered apps to help youth learn and speak Hul'q'umi'num', Tsilhqot'in, and others.

AI transcription tools (like Whisper by OpenAI) can be **trained locally to transcribe and translate oral stories**—while storing them on community-controlled servers.

Indigenous Perspective

Protect cultural data. Respect traditional knowledge. Indigenous-led AI development

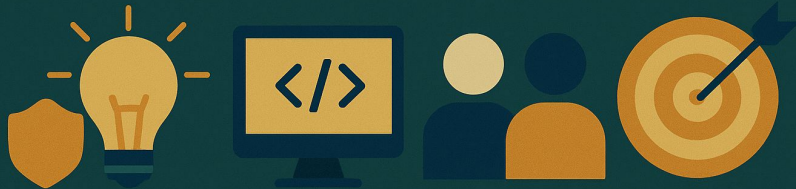


AI and Future Jobs

Future jobs need creativity, coding, collaboration, and critical thinking. Start teaching now.

AI and Future Jobs

Future jobs need creativity, coding, collaboration, and critical thinking. Start teaching now.



[Robots Picking Strawberries](#)



▼ Jobs AI May Replace (or Drastically Reduce)

These roles involve **repetitive, rule-based tasks**—easily automated:

1. **Data Entry Clerks** – AI can process forms and extract data instantly.
2. **Telemarketers** – Voice bots already outperform humans in cold calls.
3. **Basic Customer Support Agents** – Chatbots now handle Tier 1 support 24/7.
4. **Cashiers** – Self-checkouts + computer vision (e.g., Amazon Go) are expanding.
5. **Paralegals (Low-Level)** – AI tools can now draft legal documents and summarize case law.
6. **Proofreaders** – Grammarly and AI editors catch more than humans.
7. **Bank Tellers** – Mobile banking and AI assistants replace the need.
8. **Insurance Claims Processors** – Algorithms already review and approve claims.
9. **Fast Food Order Takers** – Voice AI and kiosks are replacing drive-thru workers.
10. **Simple Content Writers** – SEO blog posts, product descriptions, and social captions are increasingly AI-written.



Jobs AI Will Enhance (Make More Powerful)

These jobs require **human judgment, empathy, creativity, or strategic thinking**, and AI becomes a tool—not a threat:

1. **Teachers** – AI can help with planning, grading, and differentiation, freeing up time for real teaching.
2. **Doctors/Nurses** – AI can analyze X-rays and patient data, but humans still diagnose, treat, and comfort.
3. **Tradespeople (Electricians, Plumbers, Carpenters)** – Hands-on, situational jobs can't be done by AI (but AI may assist with diagnostics).
4. **Software Developers** – AI writes basic code, but devs will design, debug, and build more complex systems.
5. **Therapists/Counselors** – AI can't replace emotional intelligence or trust.
6. **Artists & Designers** – AI enhances creativity (e.g., Adobe Firefly), but people guide vision and nuance.
7. **Researchers** – AI helps synthesize info, but human insight still drives breakthroughs.
8. **Small Business Owners** – AI tools handle admin, marketing, and comms so owners can focus on service.
9. **Construction Managers** – AI helps plan and monitor, but people manage teams and logistics.
10. **Emergency Responders** – No AI can replace a firefighter, paramedic, or police officer in real-time crisis.



Jobs Not Easily Replaced by AI

Trades & Physical Work

- **Electricians, Plumbers, HVAC Techs** – Complex, hands-on work in ever-changing environments.
- **Carpenters & General Contractors** – Physical skill, problem-solving, and precision on-site.

People-Centered Roles

- **Teachers & Early Childhood Educators** – Emotional connection, classroom management, student trust.
- **Therapists & Social Workers** – AI can't replace empathy, intuition, or deep listening.

Emergency & Field Response

- **Paramedics, Firefighters, Police** – No AI can navigate chaos, trauma, or risk in real-time.
- **Search & Rescue** – Requires human adaptability in dangerous, unknown conditions.



Skilled Manual Labor

- **Welders, Mechanics, Heavy Equipment Operators** – High-precision physical jobs needing situational awareness.
- **Farmers & Foresters** – Environmental variability and hands-on decision-making.

Creative Visionaries

- **Writers, Filmmakers, Designers** – AI can suggest ideas, but humans give meaning, originality, and culture.
- **Entrepreneurs** – AI supports logistics, but vision and innovation remain human-driven.

Leadership & Strategy

- **CEOs, Community Leaders, Coaches** – Inspire people, make complex moral decisions, adapt to human behavior.

Key Traits AI Struggles With:

- Empathy
- Ethics
- Creativity (true originality)
- Manual dexterity in complex spaces
- Real-time human interaction



How to Prepare Students

Give guided access. Encourage experimentation. Focus on creation, not copying.



The Future of AI in the Job Market

AI is transforming the job market, automating tasks, and creating new opportunities. Educators play a critical role in preparing students for an AI-driven workforce.

The infographic features a woman with dark hair wearing a yellow jacket, sitting at a desk and working on a laptop. To her right is a brown briefcase and a small potted plant. Above her is a white house-shaped icon containing a blue robot head. The background is dark blue with orange decorative borders at the top and bottom.

"AI is like a power tool—faster, smarter, but only in skilled hands."



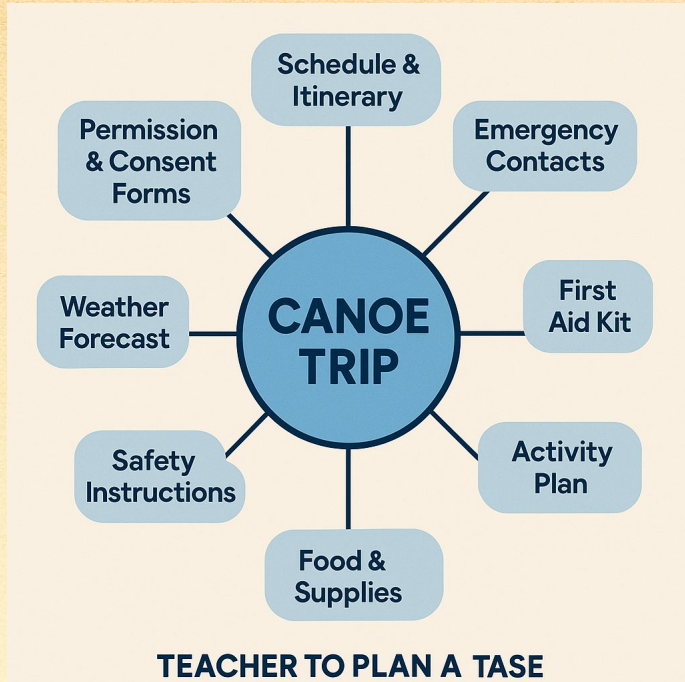
Final Thoughts



AI isn't something to fear—it's something to guide. Indigenous communities can lead with vision.

<https://www.firstvoices.com/pafnw-anihsinapemowin/>





Canoe Trip by: Ai



-  Backpack or dry bag
-  Sleeping bag & sleeping pad
-  Tent (shared or assigned)
-  Paddle & PFD (life jacket)
-  Headlamp or flashlight
-  Water bottle or hydration pack
-  Dry bags for clothes/gear








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-  Quick-dry shirt (2-3)
-  Quick-dry pants/shorts (2-3)
-  Swimsuit
-  Rain jacket & pants
-  Warm sweater or fleece
-  Toque or beanie (nights out)
-  Underwear & socks
-  Camp shoes/sandals
-  Closed-toe shoes for portaging




Gear









Food & Cooking
(if packing individually)

-  Lightweight mess kit (bowl, cup, utensils)
-  Snacks (trail mix, bars, jerky)
-  Meals (group-planned or assigned)
-  Stove & fuel (if assigned)
-  Bear-safe food container (if needed)
-  Dish soap & scrubber
-  Hand sanitizer (in ziplock)

Do NOT Bring

-  Backpack or dry bag
-  Quick-dry pants/shorts (2-3)
-  Swimsuit
-  Rain jacket & pants
-  Warm sweater or fleece
-  Toque or beanie
-  Underwear & socks
-  Camp shoes/sandals
-  Closed-toe shoes for portaging

- 
- 

-  Electronics (unless approved)
-  Valuables or jewelry
-  Cotton clothing (stays wet)
-  Scented items (attract animals)


Resources & Contact Info

AI Learning & Support


Khan Academy

 <https://www.khanacademy.org>


Khanmigo (AI tutor by Khan Academy)

 <https://www.khanacademy.org/khan-labs>

Speechify (text-to-speech support)

 <https://speechify.com>

Canva Magic Write (creative AI design & writing)

 <https://www.canva.com/features/ai/>

Top 4 AI Tools


MagicSchool.ai (teacher tools)

 <https://www.magicschool.ai>


Curipod (interactive lesson creator)

 <https://www.curipod.com>

ChatGPT (OpenAI)

 <https://chat.openai.com>

Diffit (differentiated reading support)

 <https://www.diffit.me>



Questions and Discussion

What excites or concerns you about AI in schools?

