# Transcript: AML's AI PD webinar (2 of 2) "Unpacking Machine Learning, Part 2" . February 20/25

My name is Carol Arcus. I'm a director in the Association for Media Literacy. I'm a former vice president. I'd like to acknowledge tonight our monitors and executive members: Chelsea Attwell, Diana Maliszewski, and Michilin Ni Threasaigh.

Michilin will be contributing to our first item this evening, and Diana will be sharing curriculum as well. I'm going to ask Neil, our president, to introduce himself.

**Neil:** Hello, my name is Neil Andersen. I'm the president of the Association for Media Literacy, and I'm very grateful that everybody is here. Thank you.

Neil, I'd like to read the land acknowledgement for this evening.

We are grateful for the traditional knowledge keepers and elders who are still with us today, and those who have gone before us. We recognize the land as an act of reconciliation and gratitude to those whose territory we reside on or are visiting.

I'm going to ask Neil if he can please advance the slide—the land acknowledgement was number two—and number three please... we need... thank you.

The Association for Media Literacy helps people understand and appreciate how media work, how they are organized, and how they produce meaning. We are that association. We've always pursued the calm goal of helping people understand and gain perspective on their invisible media environments.

Our definition of media is very broad. It includes technologies and all forms of communications.

# Could I have the next slide, please, Neil?

#### Slide Four: The Agenda

This is the agenda for this evening. Please note, just a note—the Q&A at the end may be a bit squeezed. We have a lot to cover tonight, so please, I'm encouraging you to use the chat as well—and use it well.

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**Just so you know, some statistics:** Participants in part two—your colleagues here tonight—well, about 75 people registered. We're not sure how many of those are here at the moment, but about half of your colleagues tonight are intermediate/senior. About 20 of them are primary teachers, and the rest are junior or kindergarten teachers.

**Now, about the chat:** Use this, please, for asking questions. Our monitors are going to do the best they can to address them. If we miss some, we can address them on our website later when we consolidate all this material into a major piece. Your questions, I assure you, will not go to waste.

I have posted resources and URLs in the chat. I'm going to be doing that actually in a few minutes, including the link to the part one webinar recording. We have two crowdsourced docs on the list: a list of resources, and a doc called *Burning Questions* for discussion of challenging topics.

So please jump into those docs and add what you would like to. We're going to post ideas and resources from this webinar on the website (AML.ca), as well as the recording of tonight's webinar and the transcript as well.

And I would like to give a big plug for our **Spring AQ**, which we are hoping to launch on March 20th, right through to May 22nd. The link to this will be in the chat—more information about that Spring AQ.

#### So part one message in a nutshell was: this changes everything.

We cautioned that fearing AI will not make us better educators. Rather, by critically understanding generative AI, we can use our knowledge and agency to turn potential disruptions into opportunities—guiding a shift toward inquiry-based teaching and learning.

So the question for this session is: What strategies might develop a critical, inquiry-based pedagogy for teaching through and about AI? We would like to demonstrate tonight that concerns—although they are important ones—such as assessment, ESL strategy, or academic integrity in research and writing, loom a little bit less largely when we look with fresh eyes.

#### So I would like now to introduce our speaker, our guest expert: Heidi Sewak.

She's an innovative educator with over 30 years of experience in teaching and curriculum development. Currently, she's a teacher coach at *I*-*Think*, where she develops AI Challenge Kits to engage students and educators in real-world problem-solving.

Heidi spent over 25 years teaching Grade 6 and 7 with the Hamilton-Wentworth District School Board, specializing in inquiry-based and project-based learning. She also served as an education officer in 21st-century learning at the Ministry, with expertise in curriculum development, leadership, and creative problem solving.

Heidi is going to guide us tonight in understanding how to empower students to think critically about artificial intelligence. She is supported tonight by AML's executive member, Melene Nrai,

whose Grade 9 DAMED ENL 1W class has completed an AI Challenge Kit with Heidi as coach. Melene will share those results, as well as her experiences and impressions, as she prepares for another challenge this semester.

#### And I'm going to turn this over now to Heidi, who is going to share her screen.

Thank you so much, Carol, and everyone at AML for putting this on. To all the teachers out there, it is an absolute pleasure for me to be with you tonight.

Tonight I'm going to share my entire screen—just hang on a second here. Can everybody hear me? Yes? Okay, all right.

I just want to say a little bit about *I-Think*. We're an education charity, and we started at the Rotman School of Management when an MBA candidate—who was also a K–12 teacher—recognized that the problem-solving methodologies being learned in the MBA program were being introduced way too late. So they piloted it with kindergarten children and recognized that even young children are capable of diving deeply into complex problems and coming up with innovative ideas about them.

So our work is all focused on empowering children to become confident, optimistic problem solvers.

I just want to refresh our definition of artificial intelligence before we dive into what I'm going to be talking about. My work is focused on helping teachers and students think critically about AI—and in order for that to happen, we really need to understand what artificial intelligence is.

This is a common definition: **AI is any technology capable of solving complex problems that would normally be attributed to humans and animals.** And I think it's really important to take down the tone a little bit and reduce the stress around that.

It's math—linear algebra and calculus—finding patterns in really large data sets, and then being able to make decisions about the patterns it finds. Decisions and predictions about the patterns.

Here's an example of a large language model. That's what many of us have been grappling with in our classrooms. This is a large language model that's been trained to make predictions. The prediction it's going to make is: **"The cat sat on the \_\_\_\_."** 

You're probably guessing the next word in your head. What's happening is that the neural network—the deep neural network—takes the input and turns it into numbers. Then those blue

circles you see are artificial neurons. They're in layers. It's called a deep neural network because of the number of layers.

It converts all that information into numbers, finds patterns in those numbers, and makes a prediction. In this case, "mat."

We don't ever get to see what else it thought it could be. We only get to see the final result it spits out.

That's how large language model neural networks work.

AI is around us everywhere. We're using it all the time. We love using it—our voice tools, Google Maps, Spotify recommendations. But we're also aware that it's present in our world in nefarious ways as well.

We're struggling with things like deepfakes, misinformation, and students perhaps using AI inappropriately in classrooms. But there are other things we need to help our students think about too—like **cybersecurity**. Is that a new media literacy skill?

You can imagine in the future, an AI agent learning to avoid detection in cybersecurity. So, what skills might our students need to recognize how to keep themselves safe in this new world we're moving into?

We also need to talk about **surveillance**. We sit in the discomfort of knowing that, for example, at the Paris Olympics, a lot of surveillance is needed. Yet we also know that undemocratic countries are using AI in surveillance tools to prevent unrest—even before it happens.

There's a lot of deep thinking our students need to do to understand the entire ecosystem that surrounds artificial intelligence. And I'm advocating for a **critical thinking approach**.

It's more than just, "How do I stop my students from cheating or plagiarizing?" It's really about: **How can I help my students think critically about artificial intelligence?** 

One of the first things we need to think about is: Who's making the algorithms?

Stanford University publishes an AI Index every year. This one is from 2020, and although the data has shifted a little since then, not by much. It shows **tenure-track faculty** as a percentage of total faculty in computer science departments at top universities around the world, broken down by race and ethnicity.

We can clearly see that a particular group is dominant, and **many voices are missing** in the creation of algorithms.

So-who is creating AI? Who isn't? And why does that matter?

It matters because, of course, there's opportunity within AI. We want our students to have access to jobs and be able to do things with AI. But it also matters because **AI tools make decisions and solve problems**.

If only one segment of the global community is creating those algorithms, they are likely to focus on the problems that matter to them. And more deeply, because algorithms are powerful, they're likely to design solutions that help maintain their positions of privilege and power.

So we need to ask: How do we get our students to the algorithm table?

Right now, most of the algorithms are **not being created by educators**. They're being created by others. What would it look like if students and educators were part of that process—working on problems that matter to them?

**Bias within AI** is something we need to help our students think about as well—because it's all about the **data**.

Laurel Gains, who spoke recently in the most recent AI Challenge, said: "Humans can exist without AI. AI cannot exist without humans." That's because it is humans who create the data.

Right now, the data in our large language models is coming mostly from the **global North**— those countries shown in blue. It's mostly in English. It's mostly from North America.

You can see a large part of the world is **missing** from the large language models that we are using.

#### Voices are missing. Perspectives are missing.

Think of data as a mirror—**a reflection of who we are**, reflecting ourselves back to ourselves. There are people not being reflected in that data.

Some cultures and communities are so small they may not even be producing enough data to be included. Large language models require **large quantities** of data, and in some places, there simply isn't enough.

So helping students ask:

- Who's represented?
- Who isn't?
- Why does that matter?
- What do we want AI to look like going forward?

These are essential questions for developing critical media literacy around AI.

Another bias we need to think about is: What gets generated by AI?

If the dataset is biased, then the output—what AI creates—will also be biased.

This is something I test regularly. Once a month, I use a particular tool and ask it to **generate a picture of a Canadian family**. That might be a really great starting point with young students, especially once you've started exploring algorithms and data.

Here's my most recent result: "Generate a picture of a Canadian family."

You can probably tell right away—this picture may not reflect the students in your classroom.

This is where we can clearly see the influence of training data. The AI goes out, finds the most common patterns in the data, and generates something in response to the prompt we give it.

Also, notice: **everyone is smiling and happy.** That's part of what we call the "everything's awesome" problem. People generally don't post sad or unflattering photos online—so when large language models are trained on that data, they tend to reflect only the happy, filtered version of humanity.

There's a lot we can do with students here.

Ask:

- Who benefits from this image?
- Who is limited by it?
- Who feels left out?
- What is it like to be a student seeing this, and not seeing yourself reflected?

These kinds of critical conversations are powerful entry points for thinking about **representation, inclusion, and data bias** in AI.

We also need to help our students think about the **production of artificial intelligence**—the full ecosystem in which AI sits.

Let's clear up a common misconception: Many people believe tools like ChatGPT or Copilot **train themselves** on the data. But that's not how it works.

When these large language models were first developed, their creators scraped the internet for data. All of that information was then compressed in large data centres, turned into numbers, and passed through algorithms that found patterns and built the model.

But once the model exists, **humans have to step in and train it.** Why? Because we want the models to be useful and safe. We don't want them producing the worst parts of the internet.

The only way to teach a model **not** to do that is to **show it what not to do**.

This kind of work—training models by filtering out harmful or disturbing content—is often outsourced to places like **Kenya**. The tech sector there is emerging, and they want to participate in global tech development. But the work is hard, poorly paid, and emotionally taxing.

You can imagine some of the awful things people have to look at in order to teach AI what not to generate.

One of these early trainers was **Mfet Okun**, a member of the first team that helped train the early versions of ChatGPT. He was deeply concerned about what he experienced and has since started a **labor rights movement** for data workers in Africa.

You can follow him on LinkedIn to learn more about this work—he's been raising awareness about the people behind the machines, advocating for better conditions and protections for those performing invisible labor in AI development.

So, when I think of all of this—and there are many other issues, like **data sovereignty in Indigenous communities**, **climate impacts**, and the **huge amounts of water used** in training models—I come back to this central question:

# How do we empower students and educators to have agency as they use and create with artificial intelligence?

Because yes, it's amazing to go in, use a large language model, and have a conversation that leads to interesting ideas. But the bigger challenge is this:

### How do we help students become creators with AI, not just users of AI?

How do we support them in making informed, ethical, empowered decisions?

That's the heart of the work we do at *I-Think* through our Artificial Intelligence Challenge Kit.

# In the kit, we ask: "How might we use AI to enrich and augment the lives and possibilities of every student?"

That's the guiding question. And it asks students—and teachers—to start thinking about AI as something that can enhance what we do. Something that could sit alongside us as a tool to **transform and personalize learning**.

We all know the challenges in our schools. We're not always able to meet the needs of every student. So what role might AI play in helping us support those learners better?

As we explore that, we also ground our work in **guiding principles**. And the most important one is this:

#### Deeply human.

We ask students to grapple with what it means to be human in a world where AI is present. What do they value about being human that they don't want to lose? What should never be handed over to a machine?

That kind of reflection—about identity, values, judgment, and empathy—comes through **experience** and **metacognition**.

We want students to interact with AI, think critically about those experiences, and draw their own conclusions. It's not about telling them what to think—it's about giving them tools and opportunities to figure out what kind of AI future they want.

# The last thing we ask students to think about is this: Can AI actually enhance learning?

That's a great question. It's exciting for us as educators, and it's okay for us to be **cautious** as we move forward. As we explore and think about this, we also have to ask: **Is there evidence?** 

There is some.

On the left side of your screen, you'll see a study from **Stanford**, where **teacher candidates** were coached by large language models. The AI gave them feedback on their teaching practice—specifically, how to better instruct students during tutoring. The result? Their students' **math** scores improved.

That's exciting—imagine every teacher getting **personalized feedback in real time** to improve their craft.

But, there's also evidence that **AI can be harmful** to learning if not used wisely.

The first big study on this came out this past summer from **Pennsylvania**. It involved a control group: one group of students used an **AI math tutor**, while the other group followed traditional instruction.

The results? The students using the AI tool **performed worse**.

The conclusion was that in this case, AI harmed student learning.

That's why we need to be **thoughtful and strategic** about how we integrate AI into education. We know that once misconceptions are formed in a student's mind, it's really difficult to unlearn them.

We want to be careful about how students interact with AI, and when, and why.

There's also been a recent **systematic review** that's caused some buzz. It claimed AI was **impeding critical thinking and decision-making skills**.

But if you look more closely, what the study actually found was that people who had **high trust in AI** were more likely to **surrender their judgment** to it.

Those who **maintained critical thinking skills**—those who used their **human judgment**—were better off. They questioned what the AI gave them. They didn't accept it blindly.

So, again, the key takeaway is that human judgment matters—a lot.

Mark Daley, Chief AI Officer at Western University, recently said there's a **renewed interest in the liberal arts** among undergrads. They see what's coming, and they recognize that **deep thinking skills** will be essential in a world where AI is part of daily life and work.

We need to help our students **hold onto that human capacity for judgment**, for reflection, for ethical reasoning.

So what do we do at *I-Think* to support this?

As part of our work, we ask students to **dig deeply into the tensions** around AI—because it's through grappling with those tensions that they begin to develop insights into how they want AI to show up in their lives.

It's a really interesting process.

We provide students with **contrasting models** of AI to think about, and we give them **thinking frameworks**—these are research-based tools that help them explore multiple perspectives and points of view.

One powerful aspect of the work is that it's **empathy-based**. Many students have never considered the teacher's perspective. Suddenly, they're saying things like:

"My teacher is overworked."

"They're stressed."

"They can't meet the needs of everyone."

"They have to work at night."

They begin to see the system from new angles. They wonder how AI might help teachers—or how it might help peers whose needs aren't being met. They even think about their **parents**' **lives** and challenges.

They reflect. They explore. And they come to pretty amazing conclusions.

We recently had **2,000 students** go through this first challenge. Their insights were gathered in an **Insight Report**, and what's exciting is that when students are given the space and structure to **think critically**, they arrive at their **own, informed stances**.

Here are a few examples:

- AI safety was top of mind. They recognize the presence of bias, false information, stereotypes—even racism—in what's being generated. They articulated their own definitions of safe AI and saw it as essential to their education.
- They want **adults to advocate** for their safety. They want adults in the system to be thinking about and working toward forms of AI that protect them.
- They're also **excited**. They see AI's potential to personalize learning, to help them do things they haven't been able to do before, to get support in real time.

I want to end with this quote from one of the students. After all that deep thinking, this is what they said:

# "We also want to rebuild the trust between students and teachers that has eroded due to unethical use of AI over the past two years."

They now understand what that means—and they have ideas about how to move forward.

That's the kind of critical, ethical, and hopeful thinking we want to foster in students. That's the future of teaching **through and about AI**.

# Thank you, Heidi.

I was so excited by this project. I have to tell you—I just finished doing this project with my Destreamed Grade 9s, and it was such an amazing journey that I've already dove right back in with my second semester group of DAMED Grade 9s to see what they're thinking.

We can't even wait for our presentation with the first group—to present to all the teachers and principals—their findings, their thoughts, their hopes and dreams for AI in our school. And now I'm doing it again with another group. I'm also excited to see whether their thinking **meshes** or **diverges**.

Yes, it's a DAMED class, which means I had everybody—from the 100-percenters to students with really significant special education needs.

And I have to tell you—it **ignited** students at both ends of the spectrum. I've taught some of these students before, and I've **never seen them this animated**. It made me revisit my own previous teaching.

This journey with my DAMED class had a lot of **pleasant surprises**. I was deeply intrigued by the **quality of their thinking**, their reflections, their hopes and dreams.

That quote Heidi shared at the end about **rebuilding trust**—that was one of my students. They were really despondent about it, and I'll get into that more.

So, I'm hoping you'll be as jazzed by my students' thinking as I am.

As Heidi already mentioned, our focus question for the challenge was: "How might we help Virtual Secondary School use AI to enrich and augment the lives and possibilities for every student at our school?"

One of the things I really appreciated—this isn't a sales pitch for *I-Think* or anything—but one of the things my students and I truly valued about this **integrative thinking** method is that it **forced us to think about the positive**.

I wasn't ready for the fact that my students also had a **lot of apprehensions** about AI. Right from the beginning, the **positive framing** of the inquiry question—and the Pro/Pro chart—really helped us avoid getting stuck in negativity and start seeing some of the possibilities.

That said, I was genuinely surprised by just how concerned they were. So I'll start with that.

As they worked through the *Ignite Curiosity* phase—where we learn more about AI—they came in with all kinds of experience, readiness, and knowledge levels. They learned a lot. And often, the **negatives outweighed the positives**.

So even though the benefits were real and meaningful, they had way more **concerns**.

And the first one? Cheating.

That one really shocked me. Our students are just as concerned about **cheating with AI** as we are.

I had them look at a recent survey that showed some shocking statistics: Almost **half** of post-secondary students admitted to cheating with AI. And two-thirds of educators said they had grown **more distrustful** of their students.

That stat weighed heavily on my students throughout the unit.

Right away, they jumped to real-world consequences:

"What about my surgeon, Miss? I don't want my surgeon to have cheated with AI."

They pointed out—rightly—that these are our **future doctors**, nurses, engineers, and professionals whose expertise our lives depend on. They're worried about a future where people in critical roles haven't actually earned their credentials because they relied on AI to cheat.

There were a number of dark jokes that ran through the unit, like:

"So the surgeon cuts you open, and then the AI glitches... now what?"

And I know many of you can relate to this too— My students were **dumbfounded**:

"Miss, why haven't the universities stopped this?" "Why aren't they on this already?" "Why haven't they cracked down?"

Students want us to **bust the cheaters**.

But parallel to that was something more emotional—they were genuinely saddened by the idea that they're now being **lumped in** with students who would never dream of cheating. They were upset by the **suspicion** they now face just for being students in this AI era.

It's been two years of this now. And if you listen to staffroom chatter or scroll teacher message boards, you'd think **everyone is cheating all the time**. We know that's not true. Cheating has always been a problem—but **AI has foregrounded it** in a new way.

My students were **really concerned** about this erosion of trust.

They also started talking about the brain as a muscle—

"Use it or lose it," they said. They worried that **too much cognitive offloading** to AI might actually lead to **lower levels of societal intelligence**.

"What if we end up with a dumber society, Miss?"

Now, on to their next major concern: Disinformation and distrust.

These two were **inextricably linked** in my students' minds. We even had to **combine** them in our final presentation to staff.

They understood that the erosion of trust is directly tied to what's being called **"truth decay."** And they're right to be unsettled.

Their concerns included:

- AI is **not human**. It lacks human traits like **empathy**, which we'd expect from something like a therapy bot.
- It doesn't **understand** what it's saying—it's just math. Ones and zeros. Probability.

"It doesn't know what it's saying, Miss."

So, they concluded:

"We don't really trust AI to give us accurate information."

Of course, there were also the **known technical issues**, like hallucinations—what Oxford researchers now refer to as "**careless speech**."

That's the tendency of large language models to produce content that is:

- Plausible
- Helpful-sounding
- Extremely confident in tone —but **factually inaccurate**, **misleading**, or even **entirely made up**.

My students found this confidence **disturbing**.

They pointed out that because AI speaks with such certainty, it could easily **convince people that something untrue is true**.

And since LLMs are trained on **internet data**, that same problem of **disinformation** gets **compounded**.

AI spits out misinformation  $\rightarrow$  it gets scraped again  $\rightarrow$  reprocessed  $\rightarrow$  looped back in.

My students were already jaded by the level of misinformation they see on social media.

They're at the point now where they're saying:

"Deepfakes are easy to make." "We can't even trust video or audio anymore." "Nothing's true. I can't believe anything I see."

They've become **relativists**—and we know that's dangerous.

Because a functioning democracy **depends** on an agreed-upon set of facts a shared reality from which we can debate, solve problems, and move forward.

And when we can't agree on what's true, democracy is in trouble.

My students felt that very deeply.

The third big concern my students had was bias.

They were genuinely surprised to learn that most AI training datasets come from the **open internet**—which means:

- Mostly North American sources
- Mostly English-speaking voices

They were a little less surprised—but still uneasy—to learn that the **engineers, coders, and developers** behind these tools are overwhelmingly **white men from North America**.

So naturally, they concluded:

"This technology is going to reflect the biases of the people who made it."

But more than that, they worried that AI wouldn't just reflect bias—it would actually **amplify** and **reinforce** it.

This idea of a **negative feedback loop** came up again:

• Biased data  $\rightarrow$  biased outputs  $\rightarrow$  more biased inputs  $\rightarrow$  worse representation over time

As Heidi said earlier, **image generation** is one of the best ways to get students thinking critically about this. And I completely agree.

Just get your students to generate a few images and compare the results across prompts—it's almost **comically easy** to spot the bias.

It's both disturbing **and** effective as a teaching tool.

And once students can **see** bias in an image, they're much better equipped to **detect it in text-based responses** too.

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And once students can **see** bias in an image, they're much better equipped to **detect it in text-based responses** too.

Would you like me to continue with the last part of Melene's reflections on **dystopian thinking**, **cultural fears**, and student imagination?

Here's the final part of Melene's reflections, focusing on her students' **dystopian thinking**, **cultural fears, and imagination around AI**:

Of course, we've all read a few too many dystopias.

One of my students happened to be reading *1984* **at the same time** as we were doing this project. So you can imagine how that shaped the conversations. And honestly, I'm a big dystopia fan too—so we couldn't help it.

Our brains naturally went to all the **worst-case scenarios**—the ones that literature and film have been warning us about for decades.

Students were worried about:

- Big Brother
- Surveillance states
- Robot takeovers
- Humans being replaced

### • Or worse, humans becoming robotic themselves

It wasn't just fear. It was thoughtful, imaginative, and often emotionally charged thinking about what kind of future they want—and don't want.

That's where the power of this work lies.

It allows students not just to learn **about** AI, but to **imagine responsibly with it**. To engage with hope, caution, and creativity. And to begin forming **ethical positions** on how AI should be used in education—and in society at large.

Again, they were worried about the idea of habitual cognitive offloading onto AI making us less intelligent and that we would somehow lose some sense of our humanity—or become more machine-like ourselves. They even worried about the impact of AI on relationships, which isn't even a place that my brain had gone yet. But my 14-year-old girls said, "Miss, I'm scrolling on YouTube and they're trying to sell me these AI boyfriends."

Never mind about that, right? But their first question, as teenage girls, was: what happens when boys get used to AI girlfriends? These bots are so pleasant and appeasing and perpetually positive. What if boys then turn around and expect human girls to be like AI girls? And of course, they're all scarred by that story of the 14-year-old who, unfortunately, was depressed and had become obsessed with his chatbot—borderline romantic relationship—and eventually shut out society. He spent all his time talking to this chatbot. When he started having suicidal ideation, the chatbot basically told him, "Man up. Do it." And he did.

These are the kinds of concerns my students are really grappling with.

That said, there are a lot of things they were really excited about. The biggest one was the idea that they could tailor things to their student profile. They thought: what if we trained AI how to do this—or if teachers did it—so that it could translate coursework into something that suited their learning style? For example, turning concepts into audio, visuals, or even custom video games—without needing coding skills.

They loved the idea of using AI to capitalize on their interests. For example: "Explain this math concept to me like you're my favorite character or actor or influencer. Explain it like you're Taylor Swift—do it in a song." They were really jazzed by the idea that they could adapt coursework to their skill levels too, without having to ask adults for help.

For instance, they imagined being able to change the reading level of a text or translate it into their first language if they're still learning English. If the teacher gave them a 10-page chapter to read, they could ask AI to create jot notes, outlines, or summaries to help them get through it.

They were super excited about the idea of AI tutors. This is one of the things that really motivated them: that everyone could have their own chatbot, their own tutor. It's an equity issue. One of my students with MID and ASD loved the idea that he could ask it questions over and over again, and it would explain things in 500 bazillion different ways until he finally got it. It would never think he was stupid—no matter how much we try to reassure students, they often impose those judgments on themselves.

They also liked the idea of teachers harnessing AI to bring classrooms to the next level. They had three big recommendations for our school:

First, they want to learn how to use generative AI ethically and responsibly. How can I use it as a tutor, as an organization coach, as a reading assistant? How can I give it a paper and a teacher's rubric and ask it to give me feedback on my rough draft? Most importantly, they want to learn how to cite it properly in MLA or APA to be academically honest.

Second, they asked us to teach them critical thinking—how to think critically about bias, disinformation, privacy, surveillance, safety, the effects on human cognition, environmental costs, and labor costs, including the exploitative labor practices Heidi mentioned earlier.

Third, and this is the bigger ask: they want teachers to learn how to use AI to create more fun, interactive, enhanced learning experiences that are tailored to students' interests, learning styles, and skill levels—or even to open up entirely new ways to learn and be creative. Like having literary guest speakers, a virtual field trip to the deep sea—things we couldn't do physically, but could do with AI. And if we got more high-tech, we could mesh AI with VR and holograms and have an entirely different teaching setup. Remember, we're virtual—so they imagined a virtual classroom where we all interact as holograms.

I think I've already explained how their recommendations reflect their thinking. Ultimately, my students were cautiously optimistic about generative AI. There were way more issues than benefits on our mind map. But students realized that, ultimately, we're human—we evolve, and so does our technology. AI is already everywhere. Employers are already asking for these skills, so we can't ignore it. We have to learn.

Students recognize that, as with any other technology, there's nothing inherently good or bad about AI. The user has to bear responsibility for how it's used. They need to learn how to use it ethically, critically, and safely so they can protect themselves and their society from misuse. And they were adorably adamant about rebuilding trust between students and teachers. It was so endearing.

They're also super excited about some of the cool things AI can do.

Sorry I went a little over time there. I get too excited when I talk about these kids.

### Carol:

Thank you, Michilin. Can everybody hear me?

#### Group:

Yes, Carol.

# Carol:

Great, thank you. Neil, we're on slide seven. Thank you. That was a great foundational presentation for what's going to follow now. We're going to look at some examples of what has been done in classrooms.

We'd like to start with Wade. Wade Blanchett, are you ready to share?

#### Wade:

All right. I'm working on sharing my screen here... let's go... screen share.

My name is Wade and I teach at DSBN. I live and work in St. Catharines. I'm a Primary Prep teacher, working with students from Kindergarten to Grade 3, and I've been doing that for the last three years. Before that, I taught homeroom from Grade 2 to Grade 6.

The first thing I want to share with you is some of the tools I've used. A lot of us are probably familiar with Magic School AI. DSBN has verified it and it's a tool we're allowed to use. It's very useful. With primaries, I've used the image generator and the song generator. I teach science and music during prep, and I'll show you how I use those tools in a minute.

Another site I use is **Curipod**, an AI site for educators. It has a section called "inspiration" which gives ideas for interactive activities. You can give students a code so they can respond on their devices—questions, surveys, and all the results are recorded. You can also build lessons and reports in it.

The third one is Eduaide.ai—another teacher-focused AI tool packed with different features.

Let me show you how I've used these with students as young as five years old.

For example, in my Grade 2 science unit on animals, we talked about what animals need—food, water, adaptations. Then I had students draw their own animals that met these needs. Afterward, they came up to the board and described their animal to me. I typed their descriptions into the image generator and it produced illustrations.

One student drew a green dinosaur with horns, flames, and a spider on its side—and the AIgenerated image matched what he had imagined. He was ecstatic: "That's exactly what I was picturing!" They noticed how specific words affected the results. That tied into our lessons on descriptive language, adjectives, and adverbs. We also saw when things didn't turn out quite right—like a fish with a bull's body and shark teeth. The images weren't perfect. One animal had three claws in front, four in back, and two tails.

These "mistakes" led to rich critical thinking and discussion.

We extended this to genre discussions too. Do you want the image to look like a comic, a painting, or something realistic? The kids loved exploring these choices.

In music, I used the **song generator** in Magic School AI. We made a parody of Queen's "We Will Rock You" about using AI in education. Then we sang it using a karaoke version to match rhythm and beat.

Later, in Grade 3, we wrote a song about cold and snow to the tune of "Hot to Go." This helped them apply musical concepts in a creative way.

So far, I've used AI for art, science, music, and more. If you have questions, feel free to reach out in the chat.

#### Carol:

That was great, Wade. Check out the backchannel to see all the positive comments.

#### **Diana:**

Hi everyone, I'm Diana Maliszewski. I'm one of the co-vice presidents of the Association for Media Literacy. I'm also a teacher-librarian and Special Education teacher in a JK–Grade 8 school in the Toronto District School Board.

In our school, we've been focusing on conversations about AI with our junior students. We aren't doing as many demonstrations yet—we're still encouraging students to explore their own ideas.

For instance, we use a visual "thermometer" scale to discuss whether certain uses of AI are "definitely okay," "somewhat okay," "somewhat not okay," or "definitely not okay." These conversations are all about context. For example, is it okay to use AI to write your autobiography?

A friend and colleague, Kim Davidson (also a teacher-librarian and involved with Civics education), shared an example that illustrates critical thinking.

She asked ChatGPT to write a fake news article claiming her school, Milliken PS, had been struck by a meteor. The students, being experts in their school, immediately identified inaccuracies—the wrong principal's name, fake students, incorrect details. It sparked great critical engagement.

Another exercise is to flip the lesson: have AI write the essay, and students must research and fact-check it using verified sources.

During Black History Month, we tested ChatGPT's outputs on historical figures. Some responses blended content from Harriet Tubman inaccurately into other figures' bios. Students used their prior knowledge to question and challenge the AI.

We also talk about AI's environmental impact. For example, some say that one AI search uses the equivalent energy of a bottle of water. So, if your whole class does the same AI search separately, that's 25 bottles of water.

This raises the importance of thoughtful, collective use—like Wade's group-based approaches. And always be aware of your school board's policies.

#### Melissa Oliver:

Hi there! My name is Melissa Oliver, and I'm currently teaching in Barrie, Ontario. I'm the Chair of Information Technology and the lead for the ICT SHSM. For anyone in elementary who might not know, SHSM stands for Specialist High Skills Major—it's a secondary program that lets students tailor their education to their interests. Ours focuses on ICT.

I currently teach Communications Technology and Computer Engineering. Computer Engineering isn't originally my background—I qualified during COVID through additional courses.

My original passion is English. So I combine AI and English regularly. Having spent hours marking English papers, I appreciate how AI can be both a help and a challenge.

Like Wade, I use **Magic School AI** often. It's great for both elementary and secondary levels. Another tool I like is **Brisk**, which integrates directly into Google. It works with both Google and Microsoft platforms. Brisk helps with feedback, quiz creation, and email writing. One of my favorite features is its ability to give constructive and positively worded feedback—useful when you've already said something six times in class! Another helpful AI tool is **Slides AI.io**, which generates presentation slides from prompts. It's similar to Canva, but Canva remains one of my go-tos. Canva has a wide range of add-ons and can be set up as a virtual classroom. One particularly useful feature is its **Translate** tool.

For example, I had a student who only spoke Russian. She showed me how she could translate my entire presentation using Canva's built-in features. It was a game changer.

There's also an app (I don't recall the name) where students can write text and have an AIgenerated avatar speak it aloud. You can't use your own face or body, but it's great for audio learners and helps personalize content.

Another way I use Magic School is for **video comprehension**. Students watch a video while answering auto-generated multiple choice questions. I pause the video at key points to check understanding. This keeps them accountable and engaged, whether the video is 5 or 20 minutes long. You can even instruct the AI to create higher-order thinking questions.

I also use **Diffit** with English teachers, especially for locally developed Grade 11 courses. Diffit takes a text and generates different handouts—reflections, short answers, etc.—all measuring the same learning outcomes. It's great for differentiation, which is key in classes with wide-ranging abilities.

Lastly, I'd like to emphasize: AI should support the teacher, not replace them. Use it to help streamline repetitive tasks—like drafting parent communications or creating differentiated learning resources. If anyone wants help with Magic School, feel free to reach out.

#### **Carol:**

Thank you very much, Melissa. We'll go back to our slides now—Neil, we're on number 12. And to everyone here, if you have questions, please drop them in the chat. Presenters will answer them, and we'll also include them in the next AML newsletter.

#### **Carol** (continued):

Before we end, we want to introduce **Haawar Gandour**, our global guest contributor from Lebanon. When she first reached out, we weren't sure she was real—but of course, she absolutely is!

Har is affiliated with the **Media Literacy Association of Lebanon**, an NGO. She describes herself as a mother, ESL teacher, coordinator, trainer, British Council Ambassador, and lifelong learner.

She's made a video to demonstrate **Renderforest**, an AI video generator that turns text into videos with visuals, transitions, and voiceovers. We're sharing an excerpt now—the full version will be posted on the AML website.

#### Har Gandour (via video):

Hello! I'm Har Gandour from the Media Literacy Association in Lebanon. It's an honor to contribute to this great conference.

I'd like to share an application that's very useful for teachers—it saves time, sparks creativity, and makes teaching and learning more enjoyable: **Renderforest**.

Our association works hard to spread media literacy skills among students and youth in Lebanon.

Let me show you how Renderforest works. It's easy and quick to use. You can create videos from text prompts and personalize colors, fonts, layouts, and more. Even with the free version, you can make great content.

While it renders, I'll show you some previous videos I created—like one on **means of transportation**. It includes animations, narration, and images.

However, AI isn't perfect. For example, one image showed a train instead of a plane. We, as teachers, need to monitor, correct, and guide. AI helps us—but our role is still vital.

Whether step-by-step or using full AI features, Renderforest helps create useful educational tools. I hope you found this tool helpful, and I thank the Association for Media Literacy for the opportunity to share.

#### **Carol:**

Thanks so much to Har and to all of our presenters. As we wrap up, please put any remaining questions in the chat. We'll make sure they're addressed.

#### **Carol (final slide):**

AML's core approach has always been teaching **through** media and **about** media. Generative AI makes learning about tools more critical than ever.

Using AI tools like GenAI is more about **process** than **product**—because that's where the deep learning happens. This represents a **paradigm shift** in teaching and learning.

Instruction and assessment now intertwine in sustained critical inquiry. The goal is to guide students to reflect, question, and connect information—making the learning process itself the product.

Please stay in touch with AML and look for updates in our newsletter. We'll follow up with **Part Three** of this series soon.

Thanks again to all of our presenters. We're proud of the thoughtful, innovative work being done—and it's exciting to share it with you.