AI Bytes

Making Sense of Artificial Intelligence in Literacy and Basic Skills Education

A Contact North | Contact Nord and Literacy Link South Central publication

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Literacy Link South Central

Welcome to *AI Bytes*, your curated guide for adult literacy educators navigating the fast-evolving world of artificial intelligence.

In the 18th century, "reading mania" gripped European society. Critics feared that novels like Goethe's The Sorrows of Young Werther were corrupting minds and driving unhealthy obsessions. This moral panic, as History Today notes, marked our first collective anxiety about information's power over unprepared minds.

Today, we face a similar moment with AI agents: autonomous digital systems that don't just respond to commands but act independently, make decisions and learn from experience. Unlike the chatbots you may know, AI agents can manage complex tasks, collaborate across platforms and work alongside humans. AI agents are showing agency capabilities independent of human input.

For adult literacy educators, this isn't just another technology trend. According to the World Economic Forum, 39% of core job skills will change by 2030. Nvidia CEO Jensen Huang envisions workplaces where 50,000 employees collaborate with 100 million AI agents. If this is our future, how do we prepare adult learners to thrive alongside intelligent machines rather than be displaced by them?

Inside *AI Bytes*

This is the eighth of 11 bulletins to be released between 2024 and 2026. It offers valuable insights and resources for adult educators, with a focus on Literacy and Basic Skills (LBS) programs.

Meet the *AI Bytes* team

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* This bulletin is edited by Contact North | Contact Nord.

Bridging the digital divide: We've done it before, and we can do it again!

Remember the early days of the pandemic? The world went digital overnight, and for many, it felt like learning a new language in real time. In that moment of upheaval, adult literacy educators became essential digital bridge builders, quietly and powerfully guiding learners through a landscape they'd never navigated before.

As educators, you helped decode QR codes for vaccine appointments. You aided in the mastery of video conferencing to keep learning alive. You supported learners as they filled out digital forms for jobs, benefits and vital services. These weren't just technical tasks. They were lifelines. And they revealed a deeper truth: for many, the challenge wasn't just about reading and writing. It was about being digitally excluded from a world that had suddenly moved on.

Now, we stand at another threshold. AI is quietly embedding itself into everyday life from how we schedule meetings to how we learn, work and communicate. And once again, the pace is fast. The language is unfamiliar. The divide is growing.

Keeping AI grounded in human-centred learning is no easy task. It asks us to turn complexity into clarity, and to create space for learners who may already feel left behind before they've even begun. But we've done this before — not only during COVID, but in our daily efforts to empower learners. **We know how to meet people where they are.** We know how to build bridges, not just between devices and platforms but from anxiety into the realm of possibility. And we know that digital inclusion isn't a milestone but a daily act of care.

Keeping up with AI is hard, but it's possible. One learner at a time. One conversation at a time. One day at a time.

Together, we carry this new journey forward.

AI vs. automation: Why the difference matters

What do we really mean by “AI”?

The word AI is everywhere, and it’s transforming how we work, live and interact with technology. But with all the buzz, the term can easily lose its meaning. I was reminded of this recently when someone described a scheduled phone reminder as “using AI.” It’s a fair observation: After all, a machine is doing something for you. But this statement also reveals a common misunderstanding.

As AI becomes mainstream, we see a blurring of the line between what the public understands as automation versus intelligence. And to be fair, definitions about such distinctions vary. Some frameworks classify even basic rule-following systems as AI agents. Technically, these systems sense and act in response to their environment, which qualifies them as agents. But for many people, the term “AI” implies something more: systems that can reason, learn and adapt.

That’s why it’s helpful to think of AI as a **spectrum of intelligence**: a technology that is moving from simple commands to expressing genuine autonomy.

Let’s consider the difference between automation and AI by looking at three levels of technological action.

Level 1: The alarm clock

The alarm clock is a form of simple automation. It does exactly what it’s told — no more, no less. Think of a classic alarm clock: you set it for 7:00 a.m., and it goes off at 7:00 a.m. There’s no context, no adaptation and no intelligence. It follows a rigid, pre-programmed rule.

Level 2: The smart alarm clock

The “smart” alarm clock is a form of “AI-powered” automation. It can understand a natural language command like, “Wake me up at 7:00 a.m. tomorrow.” To perform this task, it uses a small amount of intelligence (like natural language processing) to execute a single action. It’s smarter than a basic alarm clock, but it’s still just a one-off command. It can’t reason about your schedule or learn your habits.

Level 3: The AI agent at work

This is where things get truly interesting. An AI agent is like a personal assistant that can reason, plan and learn to manage your entire schedule. For example, it might notice you’re running late for an appointment and proactively message you with a faster route or even reschedule your next meeting.

This is the leap from a task-doer to a goal-driven problem solver; it is a system that acts on your behalf with intelligence and autonomy.

Let’s explore these concepts in more detail.

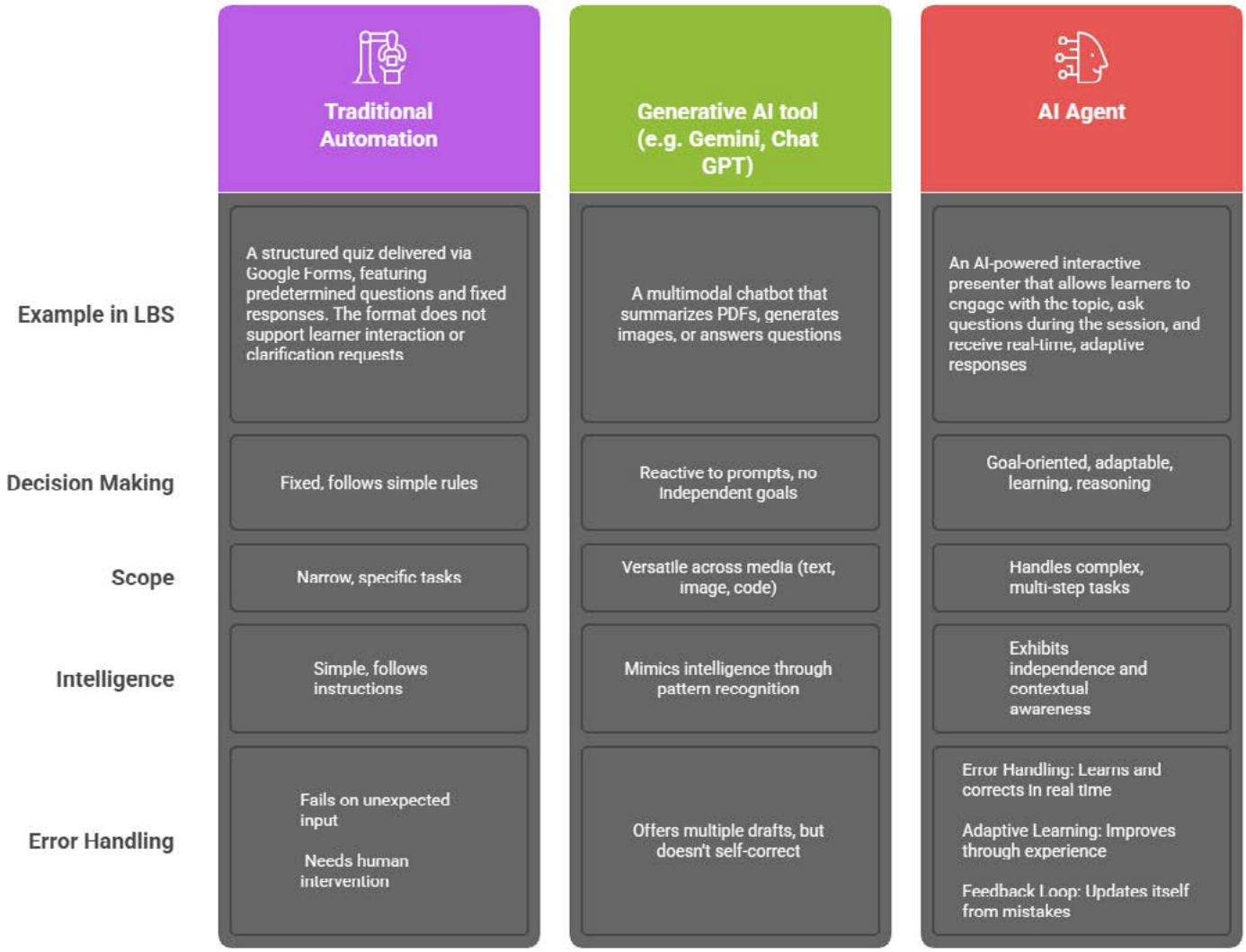
🛠️ **Automation.** Automation follows pre-programmed rules. Think of your thermostat adjusting the temperature at a set time, an email filter sorting messages or an ATM dispensing cash. It’s efficient, but it doesn’t learn or adapt.

🧠 **Artificial intelligence.** AI learns, adapts and makes decisions based on data. It’s why Netflix recommends shows you’ll probably like, how your GPS reroutes you around traffic, and why language translation tools get better with time. AI is dynamic, and it improves with experience.

Under the AI umbrella, there are several key categories:

Generative AI: These systems create new content such as text, images, music, code or video based on patterns learned from data.

Large language models (LLMs): A subset of generative AI, LLMs are trained on massive text datasets to understand and generate human-like language. They can answer questions about various subjects, provide directions, summarize documents, write essays, letter or code, and much more. Examples include ChatGPT, Claude, and Gemini.



AI agents: AI agents take things a step further to act autonomously. They're built on top of models like LLMs and generative AI tools. They're orchestrators that use these models as components to achieve goals.

For example, an AI agent might:

- Schedule meetings by checking multiple calendars
- Research jobs that match your evolving skills
- Manage workflows across different platforms

They don't just learn, they act on that knowledge to get things done!

Understanding AI agents

What makes AI agents different?

AI agents extend LLMs and generative AI by introducing:

- **Autonomy:** They operate without constant human input, making decisions based on goals.
- **Planning & reasoning:** They break tasks into steps, evaluate progress and adapt strategies.
- **Tool integration:** They use external tools, search engines, APIs and databases to complete tasks.
- **Memory & context:** They maintain state across interactions, enabling long-term coherence.
- **Multi-modal capabilities:** Some agents combine text, vision, and audio to interact with users more naturally.

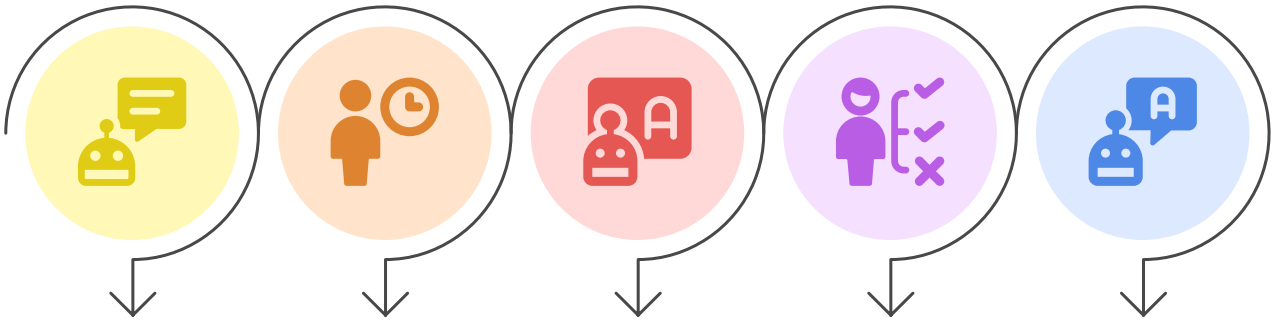
IBM's AI agent types

As AI agents become more central to business and education, it's no surprise that companies are developing their own frameworks to define and deploy them. From Google's multimodal agent architecture to Dataiku's operational lens, each model reflects the unique priorities of its creators.

For educators, this growing landscape of frameworks can feel overwhelming, but it presents a valuable opportunity to explore diverse perspectives. Among the many AI frameworks available, IBM's cognitive-based classification stands out for its clarity and educational value. It offers a compelling structure for instruction by categorizing agents into five distinct types, from simple reflex agents to adaptive learning agents. This progression provides a foundational lens through which learners can grasp the mental mechanics behind AI behavior. By illustrating how systems think, reason, and evolve, the framework serves as an ideal entry point for introducing these concepts in educational environments.

AI is accelerating so rapidly that new capabilities tool use, memory and multi-agent collaboration often leap ahead of the frameworks meant to support them. That's why we're seeing such a proliferation of new models and methodologies: **companies are constantly reinventing their approaches** just to keep pace. Prompt engineering alone has produced countless frameworks!

Engaging strategically with the fast-moving world of AI is no small feat for LBS, especially when its foundation rests on fixed frameworks and structured delivery. But this moment also presents a rare opportunity to evolve. Although experimentation may feel unfamiliar, even uncomfortable, it's precisely what this AI landscape demands. By embracing flexibility and curiosity, LBS can reimagine its role not as a follower of change but as a shaper of it. **The path forward isn't about abandoning structure but about expanding it to include innovation, iteration and bold thinking.**



Simple Reflex Agent

Responds to current input using fixed rules, lacking memory or learning capabilities.

E.g. An automated email responder exemplifies this, replying with a standard message.

Model-Based Reflex Agent

Uses internal memory to track past states and predict outcomes effectively.

E.g. A classroom attendance system flagging repeated absences showcases this agent.

Goal-Based Agent

Makes decisions based on achieving a specific goal strategically.

E.g. An AI tutor selecting learning modules to help master a skill is an example.

Utility-Based Agent

Evaluates multiple options to choose the most beneficial and optimized one.

E.g. A recruitment AI ranking job candidates based on qualifications demonstrates this.

Learning Agent

Learns from experience and feedback to improve its performance over time.

E.g. An AI writing assistant improving feedback based on learner revisions exemplifies this.

Building an agent? Things to consider

What if the most repetitive parts of your day — managing your calendar, scheduling meetings, sharing information about upcoming workshops, registering learners for classes — could be handled by an **extension of yourself?** This goes far beyond simple automation. It's the reality of having a personalized AI agent.

- Imagine an AI-powered agent designed to help users explore learning and employment pathways related to LBS: It uses a large language model (LLM) to interpret user requests and generate relevant queries
- It integrates with external APIs to retrieve data on post-secondary programs, job training and employment opportunities, leveraging public datasets from sources like Government data | ontario.ca
- It applies optimal prompting techniques to ensure accurate and context-aware responses (see The AI Prompting Playbook)
- It uses reasoning to compare options and deliver personalized recommendations based on user goals, location and background
- It can learn from user feedback to refine future suggestions, if configured to do so

Creating AI agents that work for us, not against us

AI makes mistakes, and that's precisely why human skills are more critical than ever. We're not just users; we're the essential check-and-balance system that catches and corrects AI's imperfections.

Common failure points

Just like humans, AI can have a bad day. You'll need to know what to look for:

- **Misunderstanding context:** AI can be very literal. It might take an instruction exactly as written, missing the implied meaning or a subtle nuance a person would grasp instantly.
- **Outdated information:** AI's knowledge is only as current as its training data. If you're working on a fast-moving topic, its decisions might be based on old information.
- **Bias amplification:** AI can unintentionally reflect and amplify prejudices present in its training data. Spotting and correcting these biases is a vital human role.
- **Technical glitches:** From system outages to connectivity issues, AI agents are still susceptible to the same technical problems that affect all software.

Things to know:

- Many of the most advanced AI agents require monthly subscriptions, and premium features can get expensive fast. These costs can quickly add up, creating a financial barrier to entry.
- Those who can afford these tools gain a significant advantage. This can lead to skill premiums for AI-literate workers and create access gaps for low-income, rural, and older learners.

Are you an AI agent manager?

If you've built, or are planning to build an AI agent, your responsibility goes beyond development. Your must ensure the agent is working with you, not against you. This means designing it to amplify your goals, not complicate them. Here's how to make sure your AI agent stays aligned, accountable and truly useful:

- **Regular check-ins:** Schedule time to review the agent's activities. Don't just set it and forget it.
- **Alert systems:** Set up notifications to let you know when the agent hits a problem or an unusual result.
- **Override capabilities:** Make sure you have an easy way to stop or modify the agent's actions at any time. You should always have the final say.
- **Backup plans:** Always have an alternative approach ready for when an AI fails. What will you do if the system goes down?

Find more tips on responsible use of AI here.

Protecting learner privacy in AI-enhanced learning spaces

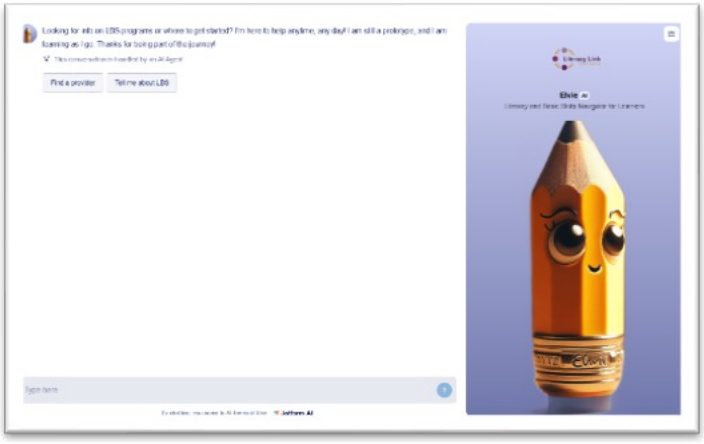
AI agents can be incredibly useful in supporting learning, but they also come with important responsibilities, especially protecting learner privacy. Here are a few considerations to keep in mind as you design your system.

- **Use trusted platforms:** Choose tools from reputable providers with clear privacy policies.
- **Avoid storing sensitive data:** If using voice-based tools, opt for those that process data temporarily without saving recordings. Inform learners if their voice is being recorded or shared.
- **Use anonymous profiles:** Create learner profiles using initials or nicknames instead of full names to keep data secure.
- **Get informed consent:** Before starting, explain how the AI works and what data it uses. Offer learners the choice to opt in or out, and provide alternatives.
- **Limit data sharing:** Keep AI interactions within secure, password-protected environments and avoid sharing learner data with third parties.
- **Use AI as a helper, not a tracker:** Frame the AI agent as a partner for empowerment, not a tool for evaluation. A human always performs the final assessment.

Bonus tip: You can turn this into a valuable lesson by helping learners understand their own digital rights, including how to protect their data, recognize safe platforms, and advocate for themselves online.

Curious to test an LBS prototype agent, or build one yourself?

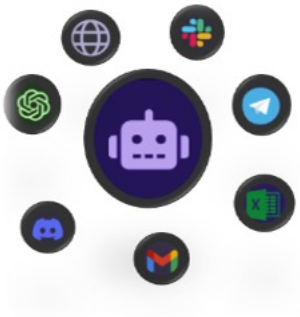
Say hello to Elvie LBS, your friendly Literacy and Basic Skills Navigator! Elvie is here to help learners find service providers, access registration links and discover everything LBS has to offer. She's still learning (just like us!), and the more you chat with her, the smarter and more helpful she becomes. Curious about what Elvie can do? Try asking her about training modules or even to help you book an appointment, then watch her in action. You might be surprised how helpful she can be! The more you ask and correct, the faster she learns! Click here to try our newest prototype!



AI agents aren't just smart, they're connected

With the right setup, they can show YouTube videos, share links, display PDFs, schedule appointments and even integrate with platforms like WhatsApp, Zoom and more. Whether you're teaching, collaborating, or automating tasks, these agents adapt to your workflow and extend their capabilities through seamless integrations. The possibilities? Limitless. It all depends on how you configure them! You can create your own with these no-code resources!

Suggested tools:



- Jotform AI Agents: Quick to set up, packed with ready-to-use templates, and available on a freemium plan.
- n8n: A bit more complex to set up, but incredibly powerful. Build AI-driven workflows and connect with over 422 apps and services. Free trial available.

Preparing for an AI-collaborative future

The rise of AI agents represents more than technological change. It's a transformation in how humans and machines work together. Just as you guided learners through the digital challenges of the pandemic, you now have the opportunity to help them navigate this new landscape.

The goal isn't to create AI experts, but to develop AI-literate citizens who can collaborate effectively with intelligent systems. Your learners need to understand not just how to use these tools, but how to maintain their agency, make ethical decisions and contribute uniquely human value in an AI-enhanced world.

The future of work isn't humans versus machines; it's humans with machines. Your role as educators remains crucial: helping learners build the critical thinking, communication and problem-solving skills that make them irreplaceable partners in this collaboration.

Up next, how LBS can use AI every day, and integrations in your computers and personal devices.

AI Bytes tools for LBS

We're excited to share our favourite tools, and we'll keep sharing more as AI continues to evolve and deliver powerful new solutions. Many of these tools offer generous freemium options or come at a low cost, making them accessible to a wide range of users. As always, be sure to review each business's terms of service before diving in. The AI landscape is moving fast, with businesses rapidly enhancing privacy protections and expanding capabilities at lightning speed. Stay curious, stay informed and keep exploring! Download your copy here!

descript

Edit audio and video by editing text. Create accessible content with AI avatars, instant podcasts, and articles. https://www.descript.com/

GAMMA

Create stunning presentations and documents in minutes, not hours. This AI-powered tool takes your topic, outline, or keywords and instantly generates visually rich, interactive content. https://gamma.app/

Gemini

Turn your photos into imaginative, AI-powered creations. Remix reality with ease. New Nano Banana is available here: https://gemini.google/overview/image-generation/?hl=en

Napkin

Instantly visualize notes. Napkin AI turns your scattered ideas into clear, visual notes and insights. https://www.napkin.ai/

Jotform

Automate customer service, sales, or HR tasks. Plug-and-play virtual assistants that work across websites, chat, phone, and even WhatsApp. https://www.jotform.com/agent-templates/

Reading Recomendations

AI for Education

Emphasizes ethical and responsible use of AI in education, aiming to bridge gaps in accessibility and personalization. https://www.aiforeducation.io/

Educraft

Check out 200 AI reviewed globally by Educators. Educraft's reviews are thorough, often based on user feedback and practical applications. https://educraft.tech/

AI for Educators Book by Matt Miller - Ditch That Textbook

Offers great insights, tools and examples to support your AI journey. https://ditchthattextbook.com/ai-edu/

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AI collaboration note: This bulletin was crafted from our own ideas and expertise, with AI tools used to source new data, explore additional perspectives and generate graphics. It's a blend of human creativity and machine collaboration, with the human part leading the way.