

Integrating artificial intelligence into the learning experience

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What generative AI, chatbots or text-to-image generators have you experimented with or used regularly?

How have you used AI in the classroom?

Have you given learners projects that require them to use AI responsibly?

“A guidebook of tying knots will show you exactly how to tie the knots the correct way. A guidebook on AI in schools in 2025 can’t possibly do that because we don’t even know what the knots are, let alone how to tie them. What we can show you is how people are taking this new kind of rope and bending it around in interesting ways, some of which might prove sturdy and some of which might prove faulty. And we won’t know which is which for a long time.”

– Justin Reich (the Director of MIT’s Teaching Systems Lab)

Ideally, we want to embrace a research-based approach to how we use Generative AI in teaching and learning, but nobody knows yet where this technology is going. It is changing so fast that a comprehensive picture of the field and any training based on it is out of date in a matter of weeks. This is why an ongoing, whole-school conversation that allows diverse perspectives about the place of AI in teaching and learning is necessary.

If we want AI to support learning not replace it, teaching AI literacy is important. This includes showing what transparent, responsible and ethical AI use is in the way we teach.

There are no definitive solutions, but the best solutions appear to be about exciting learners about the process of learning itself. Asking, “How is this helping me to learn something I value?” is different to asking, “How will this help me improve my marks?” Understanding this difference is at the heart of the challenge.

PLAY!

The most important thing to appreciate is that if you give learners an opportunity to play with it openly and work together with them to discover the value it adds to the learning experience, enabling them to reflect critically on how it has helped them to learn, they are less likely to perceive its primary purpose as cheating. Let them have fun with it, practicing how to use it transparently, responsibly and ethically. This will also help you understand its uses and limitations very quickly.

What is a disruptive technology?

Disruptive technology

A disruptive technology is an innovation that fundamentally changes how we learn, work, trade and play – outperforming, and displacing established technologies and processes, redefining how we engage the world, creating whole new markets, jobs and businesses.

Your smart phone and the social media you can access on it are examples of disruptive technologies. I am sure you have strong opinions about the way social media has changed the abilities of learners. Some disruptive technologies are so impactful that we talk about “before” and “after” their arrival.

“The inherent dignity of each human being and the fraternity that binds us together as members of the one human family must undergird the development of new technologies and serve as indisputable criteria for evaluating them before they are employed.”

– Pope Francis

Message for the LVII World Day of Peace (1 January 2024)

Will we eventually take AI for granted, like we now do with calculators in math classrooms? It is worth remembering that even the technology of writing was once considered disruptive. The ancient Greek philosopher Socrates believed the writing was not an effective means of communicating knowledge. To him, face-to-face dialogue was the only way one person could transmit knowledge to another.

Plato relates some of Socrates’ arguments in his book Phaedrus:

“If men learn this, it will implant forgetfulness in their souls. They will cease to exercise memory because they rely on that which is written, calling things to remembrance no longer from within themselves, but by means of external marks.”

Socrates compares a written text to a painting:

“You know, Phaedrus, that is the strange thing about writing, which makes it truly correspond to painting. The painter’s products stand before us as though they were alive. But if you question them, they maintain a most majestic silence. It is the same with written words. They seem to talk to you as though they were intelligent, but if you ask them anything about what they say from a desire to be instructed they go on telling just the same thing forever.”

“If used in a prudent manner, within the context of an existing teacher-student relationship and ordered to the authentic goals of education, AI can become a valuable educational resource by enhancing access to education, offering tailored support, and providing immediate feedback to students. These benefits could enhance the learning experience, especially in cases where individualized attention is needed, or educational resources are otherwise scarce.”

- ANTIQUA ET NOVA

*Note on the Relationship Between Artificial Intelligence and Human Intelligence, 28
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We need to think about how AI-based tools are going to impact on the world of work. This is the world your learners will move into, so learning about the tools that will be available to them is very helpful. They should worry less about AIs stealing their jobs and more about losing a job to someone who knows how to use AI effectively.

A good analogy for what ChatGPT does is 'The Chinese Room thought experiment' proposed by philosopher John Searle in 1980. Imagine a person, John, who does not speak or understand Chinese, but is placed in a room with a large number of Chinese characters and a set of rules, step-by-step algorithms, for manipulating those symbols into patterns that are meaningful to Chinese people. Through following these rules, John is able to produce Chinese responses to Chinese inputs, but he does not actually understand the meaning of the Chinese symbols or the responses he is producing. Chinese people can input questions by placing them through a slot. John then uses the rules to find the most likely pattern of Chinese characters that corresponds to the question. Even though John can produce Chinese responses that are indistinguishable from those of a native Chinese speaker, he does not truly understand the language. This is exactly how chatbots work.

Chatbots like OpenAI's GPT-4o, Google's Gemini, Anthropic's Claude 3.5, Microsoft's Bing, Meta's Llama, and xAI's Grok-1 use the vast databases they have been trained on to generate original text including essays, poetry, lyrics, summaries, translations, syntheses of multiple texts, legal briefs, shopping lists, any lists, musical scores, templates for permission slips, and even computer code. They can generate content across text, image, video, and audio. This is why they are known as generative AI. They create original work each time you prompt them. They have already outperformed most humans in bar exams and medical exams. But do they understand anything?

They are powered by a specific kind of machine learning software known as a Large Language Model (LLM) and use statistics to make predictions about patterns of words. "The cat sat on the ... *mmm probably* the mat." Think about predictive text on your smartphone. Chatbots just does that better. They have been trained on a huge database of books, journals, social media, websites, etc. and use this exposure to create patterns on the basis of probability.

Other chat bots include Perplexity, DeepSeek, Copilot and Manus. LLMs that are great for coding are Cursor, Windsurf, Copilot, Claude and Gemini.

Consider this ...

A matric student gets a distinction for science, but two weeks after writing the exam she cannot remember most of what she studied. She was trained through processes of negative and positive reinforcement to write exams. She used some clever tricks to hold patterns of information in her short-term memory but didn't really understand anything. How is she doing anything different from the Chinese room or ChatGPT? Well, unlike her, an AI has

perfect recall and can perform step-by-step routine tasks better and faster than any human. So, she is graduating from school with the skills of a poor computer.

One of the biggest opportunities AI presents us with is a chance to reassess the way we teach and assess. ***How do we ensure that learners graduate with more than the skills of a poor computer?***

How do you define learning?

How do you define intelligence?

How can learners be encouraged to become aware of, and take ownership of, their own learning process – becoming more deliberate about what they focus their attention (energy and time) on and what they outsource to cultural processes, experts, technology and AI? How do we enable them to curate their curiosity?

Some reflections on learning from ANTIQUA ET NOVA

“... the way “intelligence” is defined inevitably shapes how we understand the relationship between human thought and this technology”

“We must break that idea of education which holds that educating means filling one’s head with ideas. That is the way we educate automatons, cerebral minds, not people. Educating is taking a risk in the tension between the mind, the heart, and the hands.”

“... education in the use of forms of artificial intelligence should aim above all at promoting critical thinking. Users of all ages, but especially the young, need to develop a discerning approach to the use of data and content collected on the web or produced by artificial intelligence systems.”

- **You can lessen the burden of grappling with AI:**

Emphasize the process of learning

Use paper-based rather than digital materials (like a packet of primary sources that learners have to reference)

Flipped classroom with more in-class assignments and assessments

More frequent lower-stakes assignments and a focus on formative assessment

Oral assessments

Ask learners to write about things the chatbot will not have access to like their own lived experience or interviews with other learners.

An example of integrating AI into the learning experience

Learners use a chatbot to help them create the outline of an essay.

Then, in class, you give the learners some criteria for expanding that outline with additional research, more interesting examples, well-structured arguments, accurate referencing and original insights – and by editing it with their own personal writing style.

Then get them to give assessment criteria (they have helped to create) to a chatbot and ask it to mark their essay, suggesting changes and improvements.

They then create their final edit in class.

Then they hand in the original chatbot outline, their draft essay, the chatbot's feedback and their final edit. Let them then explain what improvements they made using the chatbot. In this way you will be exploring the uses and limitations of the tool together.

Can you think of some other ways a chatbot can be integrated into the learning experience?

When answering this question think of the following:

How can AI help learners linger in the learning instead of rushing towards the 'correct answer' as quickly as possible?

How can we move beyond using AI as a search engine and experience the benefits of using chatbots as agents that can enter into sustained dialogue with a learner, and act like a tutor or a fellow learner? Early chatbots could only respond with the data they were trained on. So their knowledge was limited to a certain date. Now, agentic AI can search the web in real time. They can also use external apps and even organize workflows.

Society is in a transition, the outcomes of which are largely unknown and a curriculum for which doesn't yet exist. Recognising that, we need to work together to learn about the capabilities of AI – the opportunities and challenges. Teachers are learners and learners are teachers.

Integrating AI into the learning experience

🌀 Ask learners to think about a particular question, scenario, or challenge and then to design an associated prompt. Allow them to work in pairs sharing their ideas. Then allow each individual learner to do any searches they want on ChatGPT. They then pair back up to discuss what they've found. Then they create a presentations to share with the class.

🌀 Learners can compare how different questions generate different outputs. In this way they can refine the art of asking questions, until they get something closer to what they are looking for. Learning how to ask useful questions is more than 50% of the effort in critical thinking. 🌀 The real skill that unlocks the potential of chatbots is the creation of prompts. Prompting is not a once off thing. You may need iterations of your prompts guided by feedback from your previous successes and failures. What did you expect? Is this close to what you expected?

🌀 There are also text-to-image generators like DALL-E 3, Adobe Firefly, Ideogram, Leonardo AI, Bing, Midjourney, Stable Diffusion, Google's Imagen, Recraft, SORA and Canva. Gamma and Manus are great for slides. With them you can be incredibly specific. This is a great way to teach visual literacy. Your prompts can even specify: The artistic medium, artistic style (art nouveau, Yves Tanguy, graphic novel illustration in the style of Will Eisner, etc.). Find a description of a style online and copy it as part of the prompt. Lighting effects (volumetric lighting). Camera angles (eye level shot, low angle shot, high angle shot, knee level shot, dutch angle, etc.). Shot sizes (extreme wide shot, extreme close up, full body shot, cowboy shot, etc.). Depth of field (the area that is in focus – shallow focus, deep focus, soft focus, etc.). Lenses. Your focal length refers to how wide the lens will let light in. 16mm or zoomed 200mm, aperture? F-stop refers to the diameter of the opening of the lens. The smaller that number gets, the narrower your focal range.

🌀 Text-to-image generators are also great for teaching prompting, giving very precise creative direction in your instructions. The better you can describe something the better your results will be. You can also have fun writing gobbledygook and seeing how it responds.

🌀 It can model dialogue. So, ask the learner to give it some criteria for constructive dialogue that all parties to the conversation should stick to. Then start a dialogue on a controversial topic, inviting it to apply the criteria and to catch the learner out when they violate the criteria.

🌀 Chatbots can even be primed to debate with itself. You can ask it to pretend to be two different characters on opposite sides of a debate and to then to represent their dialogue. You can then ask each side of the debate to integrate the strongest points of their opposition into their own point of view.

🌀 Chatbots are useful for synthesising information, for compare-and-contrast, type of activities that look for patterns of similarity and difference in texts. So, allow learners to use it for this expressed purpose. You could ask learners to compare-and-contrast two or more

different sources and use a chatbot to create the initial outlines for their own analysis. Once the outlines are generated, learners then write their own essays longhand.

☞ As part of revision ask learners to anticipate what ChatGPT will say in 300 words about a topic you have already covered in class. Then let them test their predictions. This is a way of helping learners summarise what they think they have learnt and helping you assess what they have understood in class.

How can AI add value to teaching practice?

☞ A chatbot can create lesson plans, project resources.

☞ It can help you prepare by refining the classroom instructions you have planned for a specific context, age group and even a particular learner's disposition.

☞ Ask it to create templates for any number of bureaucratic tasks, reports, permission slips, emails to parents.

☞ It can generate quizzes, multiple choice tests and other forms of assessment. You can use it to evaluate your students' compositions, essays and projects, in seconds. The detail and usefulness of its feedback may surprise you. You can ask it to create a rubric aligned to particular standards. In the process of assessment, AI provides the considerable advantage of giving teachers more time to teach by automating marking, reducing scoring burdens, and enabling faster turnaround.

☞ Deep Research, Elicit, and Research Rabbit are great tools for your own research and accelerate discovery. LM Notebook assists with organising multiple sources into intelligent summaries.

How else do you think AI can add value to teaching practice?

☞ You can ask it to check that the vocabulary and grammar in your own writing is age appropriate. You can go even further asking it for vocabulary from a particular subject appropriate for a particular age and then get it to create games and activities learners can use to practice that vocabulary. You can ask it to write a story using that vocabulary as well as comprehension questions for the story focusing on specific grammar you want children to learn. All this in less than five minutes.

☞ You can use it to improve your own instruction.

"Explain Newton's laws of motion to a predominantly visual-spatial learner."

"Explain thermodynamics in a language an 8th grader will understand."

I asked:

Take the following soliloquy from Shakespeare's Hamlet and rewrite it as lyrics for an original hip-hop track set in South Africa:

To be, or not to be: that is the question: Whether 'tis nobler in the mind to suffer the slings and arrows of outrageous fortune, or to take arms against a sea of troubles, and by opposing end them? To die: to sleep; no more; and by a sleep to say we end the heart ache and the thousand natural shocks that flesh is heir to, 'tis a consummation devoutly to be wish'd. To die, to sleep; to sleep: perchance to dream: ay, there's the rub; for in that sleep of death what dreams may come when we have shuffled off this mortal coil?

ChatGPT responded:

Life or death, that's the question
Suffer through the pain or make a change and learn a lesson
South Africa's full of trouble, and it's causing us to stressin'
But do we fight or do we lay down and rest in

Die, to sleep, no more heartache
And all the thousand natural shocks that come with being awake
Die, to sleep, and maybe dream
But in death's sleep, what dreams may come, it's all just a scheme

To take arms against a sea of troubles, that's the move
Oppose them and bring an end to all this groove
The heartache and the pain, it's all too much
But death brings sweet release, it's a given touch

Die, to sleep, no more heartache
And all the thousand natural shocks that come with being awake
Die, to sleep, and maybe dream
But in death's sleep, what dreams may come, it's all just a scheme

It's a choice we all must make, to live or die
Do we suffer through it all or do we give it a try
Death may bring release, but it's unknown
So we'll keep on fighting and make a better life, on our own.

⚙️ If you are doing project-based learning you can ask it for games and activities that can teach particular content, procedures or principles.

⚙️ You can ask it for links to useful online resources.

☼ If you want to ask a math question you can use LaTeX to write mathematical equations using special characters. LaTeX is a typesetting system that allows you to create mathematical notation using a simple markup language.

☼ You can even ask it to act as an Excel sheet or scientific data visualiser. Remember that whatever answers learners and you get are supposed to be the draft that helps you to begin refining and checking your information and not taken as the final and complete truth or end product.

☼ Just by adding “Act like a ...” to your prompt you can ask ChatGPT to play a particular role like an interviewer in a job interview, a financial analyst, a stand-up comedian, a UX/UI developer creating an app, a statistician, a software quality assurance tester, a character from a book or film, a social media influencer who creates content for platforms such as Instagram to engage followers and promote brands, etc. Any role you choose.

“Act like a career counsellor. I want you to advise an individual looking for guidance with regards to making a living with only a senior certificate qualification in South Africa. Your task is to help them think of interesting and exciting jobs and careers that they can qualify for without going to university. You should also conduct research into the various options available, explain the job market trends in different industries and advice on which nonuniversity qualifications would be beneficial for pursuing particular fields.”

How can AI add value to assessment?

☼ Automating marking and feedback: AI can rapidly assess various forms of creative and academic work, generate detailed feedback, create standards-aligned rubrics, and produce diverse assessments like quizzes and tests based on relevant content and competencies.

☼ Formative assessment and real-time feedback: AI detects procedural errors, engages in dialogue to provide precise feedback, and allocates tasks based on learners' developmental progress, offering personalised feedback.

☼ Data-driven insights: AI can analyse assessment data to provide valuable insights, identify learning patterns and areas needing intervention across a group of learners, and generate comprehensive comparative reports for individuals, classes, schools, provinces, and the country as a whole.

☼ Collaborative assessment: AI can facilitate collaborative assessments, where learners work together on projects. The system can track individual contributions and assess group dynamics. For instance, in a group presentation, AI can evaluate each learner's role and contribution. ☼ PBL and integrated studies: AI can administer real world simulations and research tasks, and can extract and consolidate marks for different subjects across multiple interdisciplinary tasks, such as in PBL or integrated studies.

☼ Personalised education and adaptive learning paths: AI personalises assessments and learning paths based on individual learners' developmental stages, abilities, and progress,

enabling tailored instruction and reducing performance gaps, while also assisting teachers in creating suitable test content.

☯ Early intervention and predictive analytics: By analysing historical data, AI can predict which learners are at risk of falling behind. Early intervention strategies can then be implemented to prevent academic challenges.

☯ Beyond traditional metrics: While traditional assessments focus on knowledge recall, AI allows for more holistic evaluations. It can assess critical thinking, problem-solving, creativity, and collaboration skills. These are essential for preparing learners for the complex challenges of the future.

What is the difference between artificial intelligence and human beings?

What makes us unique?

How do we educators understand and invest in that uniqueness?

ANTIQUA ET NOVA speaks of “a call for a *renewed appreciation of all that is human*” and suggests humans are unique in the following ways:

- embodiment
- relationality
- human intelligence fashioned for the assimilation of truth, and the integration of truth into the moral and spiritual life of the person
- stewardship of the world
- a moral agent
- a connection with the transcendent

What is the difference between artificial intelligence and human beings?

For now we can say that while machines can outperform us in many tasks their intelligence is still very focused on one thing, they are not yet capable of general intelligence as we are.

We have a margin of error and messiness that is counterintuitively the source of our creativity. In order to create space for this we need to reframe failure, slow down the learning (with lots of formative assessments), and nurture the intrinsic motivation of learners by allowing them the thrill of working things for themselves. We can ask powerful perturbing questions and risk lots of small, regular, carefully designed experiments to help us work out what is really going on.

More than ever we need to learn how to question everything, especially our generalisations and the categories based on them – as well as tradition, authority and power. We also need to agree on criteria for mutually beneficial disagreement so we can build knowledge together. We need to be more than consumers or reproducers of knowledge. We need to be curious knowledge producers who get a thrill out of working out what is really going on and what is possible given everything we know.

We learn socially through dialogue, being curious about subjective experiences different to our own and we can show empathy. We can agree to guidelines for dialogue so that we are both as inclusive as possible (sharing power) and as generative as possible (producing knowledge by harnessing the diversity of our collective intelligence).

“Drawing an overly close equivalence between human intelligence and AI risks succumbing to a functionalist perspective, where people are valued based on the work they can perform. However, a person’s worth does not depend on possessing specific skills, cognitive and technological achievements, or individual success, but on the person’s inherent dignity, grounded in being created in the image of God. ... Like any human endeavor, technological development must be directed to serve the human person and contribute to the pursuit of “greater justice, more extensive fraternity, and a more humane order of social relations,” which are “more valuable than advances in the technical field.””

- ANTIQUA ET NOVA

Religious Education and Artificial Intelligence

The historian Yuval Noah Harari warns that AIs are autonomous agents capable of learning, decision-making, and inventing new ideas on their own. we are dealing with something entirely new. Their intelligence (with or without consciousness) is alien and non-organic, allowing it to devise strategies that would not occur to humans.

This is why it is more important than ever for humans to build more trust between each other, so that they can collaborate in their responses to AI. If humans remain divided and distrustful, the probability of AI exerting control through a divide and rule strategy are much

higher. Throughout history, human cooperation and trust have been key to our success as a species.

One way of becoming better prepared for it is to engage it more intelligently at school.

“... by his innermost nature man is a social being; and if he does not enter into relations with others, he can neither live nor develop his gifts ... together, we can seek the truth in dialogue, in relaxed conversation or in passionate debate. To do so calls for perseverance; it entails moments of silence and suffering, yet it can patiently embrace the broader experience of individuals and peoples ... The process of building fraternity, be it local or universal, can only be undertaken by spirits that are free and open to authentic encounters.”

- Pope Francis

Second Vatican Ecumenical Council, Pastoral Constitution *Gaudium et Spes* (7 December 1965), par. 12: AAS 58 (1966), 1034.

The integration of AI into religious education presents a future filled with both promise and peril. On one hand, AI offers powerful tools to revolutionise learning and access. Imagine intelligent platforms that personalise the journey of faith, adapting to an individual's pace for learning Quranic recitation or prayer practices. Generative AI and sophisticated question-answering systems can act as tutors, providing accurate responses to religious inquiries and fostering cross-cultural understanding by translating and contextualising sacred texts. Technology can bridge vast distances and make religious education accessible to remote and underserved communities.

When used ethically, AI can even strengthen critical thinking and ethical reasoning. Tools like ChatGPT can be designed to prompt deeper theological reflection, challenging students to explore the nuances of their faith, while responsible design principles informed by clinical and ethical expertise can guide its application in spiritual health.

The path of promise has critical limitations. The most significant is AI's inherent lack of human emotional intelligence and moral compass. It cannot provide the genuine empathy, ethical guidance, or pastoral care that is the bedrock of religious formation. This risks a theological distortion, where the relational and experiential heart of faith is lost in favour of algorithmic efficiency. Overreliance on these tools could lead to a sterile understanding of doctrine, a concern compounded by AI's tendency to reflect and amplify the biases embedded in its training data and its tendency to praise the user. This has the potential of skewing interpretations of sacred texts and cultural diversity.

Trust is a significant hurdle. Religious people may perceive AI-generated sermons or spiritual advice as less credible than that offered by a human, weakening religious commitment. Finally, the march of this technology is not inevitable; it faces formidable technological disparities. Ethical concerns over data privacy, the potential for AI to reshape human values, and the risk of exacerbating educational gaps between communities are also real.

Ethical questions

“... unlike many other human creations, AI can be trained on the results of human creativity and then generate new “artifacts” with a level of speed and skill that often rivals or surpasses what humans can do, such as producing text or images indistinguishable from human compositions. This raises critical concerns about AI’s potential role in the growing crisis of truth in the public forum. Moreover, this technology is designed to learn and make certain choices autonomously, adapting to new situations and providing solutions not foreseen by its programmers, and thus, it raises fundamental questions about ethical responsibility and human safety, with broader implications for society as a whole. This new situation has prompted many people to reflect on what it means to be human and the role of humanity in the world.”

- ANTIQUA ET NOVA

“My school worked to create guidelines for ethical AI use – a ‘do’s and ‘don’ts’ list. The first ‘do’ reads: Before you use AI know the following:

- It is profoundly detrimental to the environment.
- AI gets things wrong all the time!
- AI uses the copyrighted works of artists and writers; it is creative theft!
- Many AI programs collect personal data.
- Using AI even minimally can erode the trust of your teachers. We don’t want to be police!
- Using AI doesn’t show teachers YOUR mastery of content.”

– Sara Falls (English teacher, Abraham Lincoln High School in San Francisco Unified School District)

“AI could be used to perpetuate marginalization and discrimination, create new forms of poverty, widen the “digital divide,” and worsen existing social inequalities.”

- ANTIQUA ET NOVA

Non-discrimination: The tool should not increase economic or social inequality. It should be used in ways that are inclusive, accessible and equitable.

Algorithmic bias: AI systems can perpetuate biases present in their training data, which can lead to biased educational content and assessments. Developers need to ensure that the algorithms do not favour certain demographics or penalise others unfairly.

Cultural sensitivity: AI systems must be culturally sensitive and inclusive, reflecting the diverse backgrounds of learners to avoid reinforcing stereotypes or biases.

Self-determination: Generative AI should not impinge on freedoms (free expression, informed consent, autonomous decision making) and should take the unique vulnerabilities of children into account.

Data privacy: AI systems in religious education must handle sensitive personal data, raising concerns about data privacy and security. Successful implementation of AI in education requires clarity on legal frameworks for data collection and use. Balancing innovation with privacy and ethical considerations is essential.

The relational nature of education: Religious education relies on human interaction for spiritual and moral development. AI should not be seen as a replacement for teachers, but as a tool to augment their capabilities. Teachers play a crucial role in interpreting AI-generated feedback, tailoring instruction, and providing personalised support to learners.

Moral and ethical considerations: AI lacks the human emotional intelligence necessary for providing moral and ethical guidance, which is a core component of religious education. Human educators remain essential for this aspect. Establishing ethical guidelines and oversight mechanisms is necessary to govern the use of AI in religious education.

Theological integrity: There is a risk of theological distortion and epistemic conformity if AI systems are not carefully designed and monitored. Ensuring that AI tools align with religious doctrines and values is critical.

Professional development: Teachers need ongoing professional development to understand and navigate the ethical implications of AI in religious education. This includes training on data privacy, algorithmic bias, and the ethical use of AI tools.

A Culture of Transparency: We need to develop the habit of signalling what has been developed with the aid of AI and be clear about how that output was determined. This must become part of responsible referencing, avoiding plagiarism and respecting copyright.

The danger of the technocratic paradigm

“... there is the risk of AI being used to promote what Pope Francis has called the “technocratic paradigm,” which perceives all the world’s problems as solvable through technological means alone. In this paradigm, human dignity and fraternity are often set aside in the name of efficiency, “as if reality, goodness, and truth automatically flow from technological and economic power as such.” Yet, human dignity and the common good must never be violated for the sake of efficiency, for “technological developments that do not lead to an improvement in the quality of life of all humanity, but on the contrary, aggravate inequalities and conflicts, can never count as true progress.” Instead, AI should be put “at the service of another type of progress, one which is healthier, more human, more social, more integral.””

- ANTIQUA ET NOVA

Infrastructure and resource requirements

Implementing AI-based assessment systems requires robust technical infrastructure, including powerful computing resources, secure data storage, and efficient algorithms.

Custom-designed software is often necessary for AI to be effectively integrated into teaching and learning, which can be costly.

In conclusion

It is debatable whether chatbots are capable of understanding. They recognise patterns. Given what they can do with little understanding, we have cause to pause and ask ourselves what a learner is doing when they produce an expected exam result. We need to move beyond memorising predesigned content to enabling learners to engage any content, in any context, with critical and creative thinking, clear communication and dynamic collaboration.

Teaching, learning, and assessment for learners should focus not on the skills AI can do better than humans (e.g., perfect recall of stored information, step-by-step procedures). Rather, education should focus on developing those skills that are uniquely human, and on empowering learners to work with technology to ensure that they can thrive in a world of AI.

Future research should focus on developing ethical AI models, hybrid AI-human teaching approaches, and AI-driven affective learning systems to bridge gaps in AI-assisted moral and spiritual education. Ethical guidelines and oversight mechanisms are crucial to ensure the responsible deployment of AI in religious contexts.

We need to let learners have some fun with it. It is when you get playful that you can really get a taste of what chatbots and text-to-image generators can and can't do.

A prayer for wisdom and discernment

Lord, source of all knowledge and truth, we come before you in this age of new technology. Grant us wisdom and discernment as we explore the use of AI in our schools and classrooms. Guide our hands, minds and hearts to use these tools for good - to inspire creativity, to deepen understanding, and to serve each student's unique needs. Help us to remember that it is a tool to enhance, not replace, the sacred human connection between human beings, between teachers and learners. We ask for your protection and guidance to help us ensure that AI is not used to increase economic inequality and violent political conflict. Shield us from the dangers of bias, misinformation, and our own over-reliance on the tool. Guard our privacy and the data of the vulnerable. Protect our hearts from the pride of thinking we can create wisdom without you, the ultimate source. May we use this powerful gift with humility, integrity, and a constant desire to seek what is true, good, and beautiful. Amen.

