

INSIDE THE CLASSROOM WITH *GenAI* and THE TEACHER



A great life skill is the ability to be innovative, flexing both the mind and imagination. Appleby College has long had the reputation of being an innovator – of adopting new ways of thinking, and of embracing change.

Over the past few years, a major changemaker in education has been the application of Artificial Intelligence (AI), or more specifically, Generative AI (GenAI), a subset of AI that focuses on creating new content by learning from existing data.

By personalizing learning experiences, enhancing accessibility and providing real-time feedback, GenAI is revolutionizing the landscape of education. It's an incredibly powerful resource that can be used to help teachers improve their pedagogy and practice, and most importantly, enhance student learning.

While many of Appleby's faculty members have familiarized themselves with mainstream applications, with some early adopters exploring and experimenting with various GenAI tools specific to individual disciplines and subject matters, extensive work across all subject areas is being done in establishing policies and guidelines for how GenAI is to be used when it comes to course development and assessment creation.

In English, as an example, the department is researching, practicing and exploring GenAI and the implications it could have for teaching and learning English, as they continue to focus on developing critical thinking and media literacy skills, and emphasize process work (brainstorming, drafting and revisions) as students practice writing.

To continue to build on GenAI knowledge amongst faculty and staff, and to help model that use for students, employees will have access to GenAI professional development starting in the 2024-25 school year. This will include the continuation of GenAI working groups as well as the introduction of learning opportunities focused on GenAI literacy and competencies.

One of the benefits of GenAI is its ability to provide personalized learning experiences such as generating exercises that can be adapted to a student's

performance, ensuring they are always challenged at an appropriate level while also helping connect students to one another.

"I have some students who easily associate with each other, and some students who aren't as comfortable, which can be challenging when trying to design group work assignments," shared **Cynthia Shi**, mathematics and computer science teacher. "I've used GenAI for group work recommendations on specific parts of a lesson and the results have been very useful – providing me with ideas I had never thought about previously."

In some Advanced Placement (AP) subjects, GenAI applications such as Microsoft Copilot have been used to produce effective AP questions that mimic the AP exam, helping students improve their knowledge and understanding of the material and in turn apply their learning and communicate it more effectively.

The goal, in all cases, is to work with the technology so that it is helping improve student learning, while also equipping students with the skills and understanding to prepare them for future careers. While exploring the application and use of GenAI, great care is also being taken to ensure data privacy and security.

"We know that AI will help improve teaching and learning, so GenAI tools should become imbedded in our practice," said **Dr. Carlos Heleno**, assistant head of school, academics. "We also know that the GenAI tools available today are the worst they will ever be, even though they are very good. So, we can only expect they will become exponentially better, which ultimately results in increasing our effectiveness in teaching and learning. Thinking of my own practice – the end goal shouldn't be about improving a lesson that I've always done, it should be about innovating new learnings that we haven't conceived yet."

And what of the fear of GenAI replacing teachers? The reality is that GenAI further reinforces the vital role teachers play in the student learning experience. It's simply a member of the team.

"I've always found the nature of Appleby to be about the relationship with our students and our colleagues. And in that context, GenAI reinforces that relationship through its ability to provide things we might be missing," shared **Calvin Armstrong**, mathematics teacher, who primarily uses GenAI in lesson planning and activity generation.

"We would never let GenAI interpose itself between the teacher and the student. It is there to support the conversation, the collaboration. When it comes to assessment – well, we are the ones sitting beside our students, reflecting on their work and deciding their level of progress, and not the GenAI. But GenAI can point out things that we may miss simply because of human nature."

CALVIN ARMSTRONG
mathematics teacher