AI, higher education work

Tech revolution is deepening student versatility, learning

Your Turn

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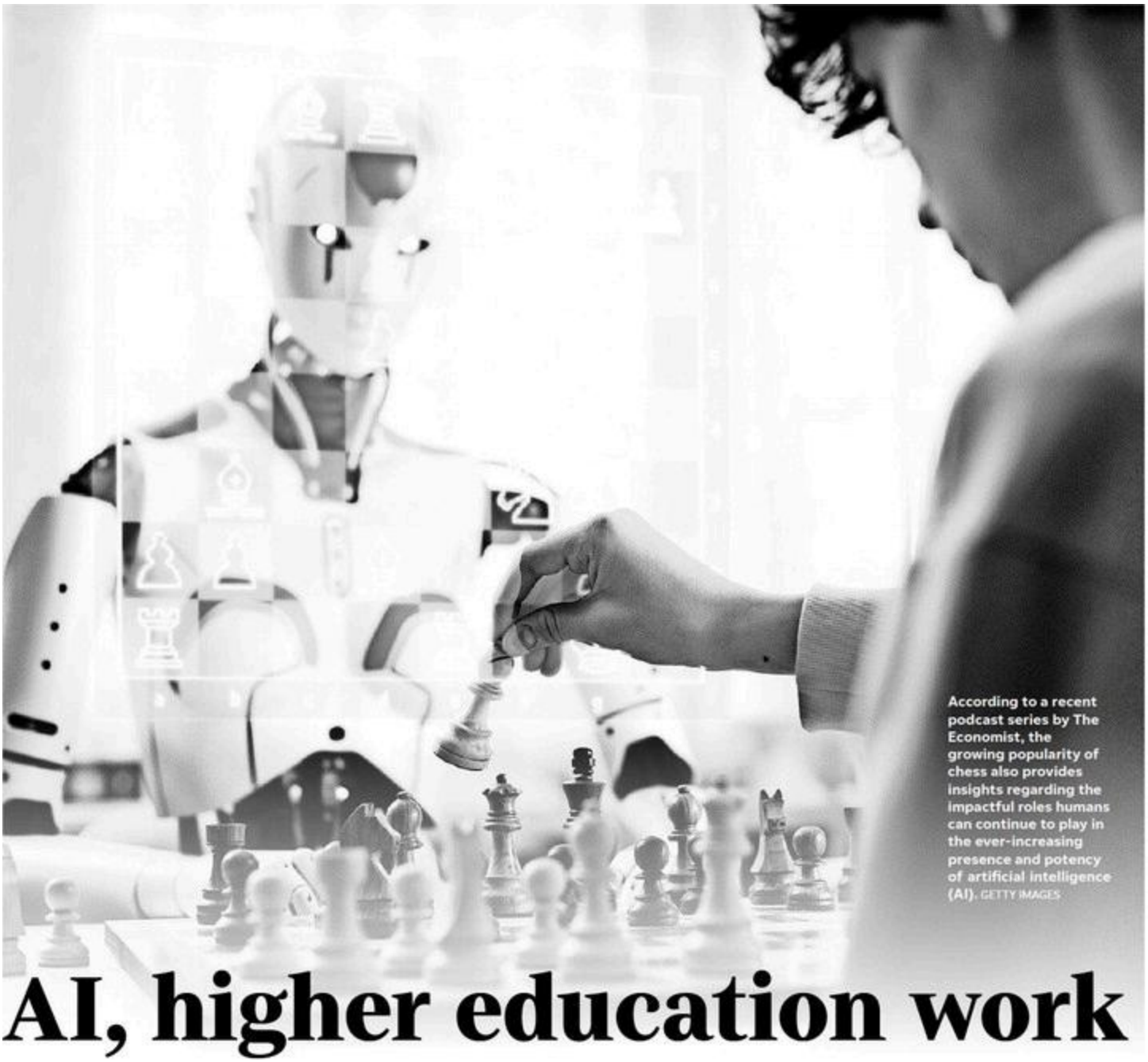
Guest columnist



According to a recent podcast series by The Economist, the growing popularity of chess also provides insights regarding the impactful roles humans can continue to play in the ever-increasing presence and potency of artificial intelligence (AI). Getty Images

Nearly 30 years ago, a computer first defeated the reigning world chess champion: IBM's Deep Blue bested Gary Kasparov in 1997.

Over the ensuing decades, it has become clear that machines are superior to humans at the Game of Kings. Yet, over that same period, the popularity of chess has soared. Partly this stems from the COVID-19 pandemic and the shift to more sedentary activities. Partly it is due to the acclaimed Netflix series 'The Queen's Gambit' that first aired in 2020. The series follows the life of an orphan chess prodigy striving to become an elite player while dealing with substance abuse issues.

According to a recent podcast series by The Economist, the growing popularity of chess also provides insights regarding the impactful roles humans can continue to play notwithstanding the ever-increasing presence and potency of artificial intelligence (AI). Educational institutions such as my own, Alfred University (AU), must be mindful of these insights as we prepare the current generation of students for the AI future that they will have to navigate.

Versatility: AI is changing the nature of work, but in patchy fits and starts rather than in a wholesale manner. It is good at performing certain well-specified tasks such as researching topics, summarizing sources and delivering back-end office record-keeping. It is less adept at dealing with multifaceted, dynamic tasks requiring versatility – scenarios where the system must make decisions based on changing contexts, where the complexity of the task increases over time or where the system must adapt to new information or changes in the environment.

Schools like mine can prepare students to succeed in the brave new AI world by encouraging a breadth of interests. Art and design students think differently than engineers. Business students apply conceptual frameworks that vary from those used by their counterparts in the liberal arts.

To more fully benefit from various perspectives, we encourage our students at AU to pursue double majors, combine a major with multiple minors and/or stay for an additional year to earn an MBA.

The number of college graduates earning compound majors/minors/degrees has been increasing. A recent Wall Street Journal survey finds that doing so enhances professional success. After all, a more diversified educational portfolio better insulates individuals against the risk of certain skills diminishing in importance in a dynamic economy. Most importantly, it enhances the versatility of our graduates with respect to being able to know what skills to apply to various tasks, notably more complex and fluid tasks.

Connections/Trust: Humans are social animals and, as such, we instinctively trust fellow humans more than machines. The ability to nurture social connections is a core value that educational institutions such as mine provide. Connections are developed with peer students as well as with faculty, staff, and alumni mentors. Fostering such interconnections builds the capacity to determine who and when to trust and helps individuals successfully overcome the personal and professional challenges that they invariably encounter. They are a key reason why students found value in returning to campuses post COVID, notwithstanding learning some helpful new technologies such as Zoom that we pivoted to during the pandemic.

Applied learning: We learn by doing. That is why at an educational institution such as AU we promote experiential, hands-on learning opportunities for our students – whether these be with more established technologies or through AI. We have introduced an AI minor in addition to exposing students through a variety of courses on how to manage AI agents and thereby best benefit from machine learning.

Judgment: Young people now learn how to play chess more rapidly and well thanks to the powerful technological tools available to them. Striving to become an elite player without accessing those tools is a fool's errand. That said, there remains the need for sound judgment for which tools are applied and when. To protect the integrity of the Game of Kings, for example, over-the-board, in-person chess tournaments require referees and extensive screening for banned devices such as smart watches and glasses. After all, the attraction of the game is seeing the best humans compete against each other.

While competing in business is different from playing chess, sound judgment is similarly required when it comes to deciding which technological tools to use when and how. David Deming, the Danoff Dean of Harvard College and a leading labor economist, finds that in simulated, team-based tasks, the best managers are those who have the judgment and social skills to figure out which team members should do what. This outcome holds whether a team member is a someone or something. The highest levels of management performance in Deming's lab simulations require being good at managing other people as well as AI agents.

While AI is the acronym used by the broader world to refer to artificial intelligence, we also take it to mean Alfred Intelligence on my campus. The better that campuses such as mine can deepen our students' versatility, human connectivity/trust, experiential learning, and judgment, the more successful they will be as graduates in today's AI-impacted world.

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