



Employability Skills

Academic Skills for Digital Era

BMSW4013

Ffion Cumberpatch

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Artificial Intelligence (AI) in Academy

Certificate of Higher Education

In the recent years, Artificial Intelligence (AI), in connection to the education field, learning perspective and institutional training environment has created debates and arguments in relation to the impact of (AIED) products on learning outcomes and academic integrity. Regardless of the concerns and arguments about misuse and over reliance on all this models, evidence suggests that this technology , can improve educational experience for both students and educators, when implemented in the right way (Holmes et al., 2022).We can argue that AI tools improve the learning curve at any level by focusing on increasing productivity in field like personalized experience , structured feedback approach , and helps any individuals, regardless of the field activities , while keeping and promoting academic integrity. In traditional education systems, the reality is that students learning styles and techniques are highly diverse and teachers often struggle to adapt, therefore by implementing AI in a structural and personalized way, the learning process became more efficient. Also, through complex assessment models, personalized interaction, tutoring and adaptive learning, both students and teachers can increase productivity exponentially (Kamalov, Santandreu Calonge & Gurrib, 2023).AI can help students to engage and absorb more information, by creating intuitive exercise, quizzes and interactive simulations. Another way is by providing visual representation on how AI efficiently improves student engagement and learning efficiency (Chen, Chen, and Lin, 2020).

Scenarios of AI education	AI-related techniques
Assessment of students and schools	Adaptive learning method and personalized learning approach, academic analytics
Grading and evaluation of paper and exams	Image recognition, computer-vision, prediction system
Personalized intelligent teaching	Data mining or Bayesin knowledge interference, intelligent teaching systems, learning analytics
Smart school	Face recognition, speech recognition, virtual labs, A/R, V/R, hearing and sensing technologies
Online and mobile remote education	Edge computing, virtual personalized assistants, real-time analysis

Another good example that arguably sustains the point view is (Birchenall,2025) the story of Phil Birchenall a father from Didsbury, England, where Phil, created an AI personalized tutor (based on his dog Izzy), that helped Daisy (his daughter) overcome and achieve better results at math, model that been implemented by many others. Intelligent tutoring systems show that students using AIED platforms gain a better understand about their knowledge gaps and learning perspective, therefore efficiently improves the result. AI can

overcome the administrative and repetitive tasks of educators, allowing them to focus on critical thinking and increase creativity in a structured way. When used accordingly, AI has the potential to revolutionize education, making it more inclusive, efficient, and effective. As all students, regardless of their level, have gaps in skills, knowledge or in a specific area, an important aspect is the ability to find and track progress, pinpoint areas where struggle, and offer effective resources or support to address those points. Through proactive approach AI can educate and improve student outcomes. While AI offers many benefits, impact on academic integrity has been a subject of continuous debate. While this is a valid concern, it highlights the need for clear guidelines and responsible use rather than dismissing the value of AI altogether. Despite any concerns or negative thoughts, AI is changing the Education sector, in a positive way, by adopting better engagement, efficiency and ethical responsibility. Both teaching and learning environments receive help from tools and models like: Chat GPT, Grammarly, Claude or Deep Seek. For non-native English speakers, those tools are particularly beneficial, as they provide real-time assistance, bridging more effective understanding between language barriers (Dodigovic, 2005). Plagiarism detection tools like Turnitin are essential in Academia because it helps institutions and teachers recognize and assess individual work and expose ethical misuse (Mouta, Pinto-Llorente & Torrecilla-Sánchez, 2023). Critics argue that some AI tools can be used by students without proper knowledge in functionality, therefore raising concerns about originality and effort. Despite the challenges, the benefits of AI in academia far outweigh the drawbacks. AI tools enhance learning outcomes and prepare students for modern technology worldwide. AI can transform academia and create an environment that supports student success and academic honesty. In conclusion, anyone with the right mindset and realistic approach into AI field, can gain valuable skills and knowledge on how to use it in an ethical way by respecting and following the necessary guidelines.

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