

**DEC Al Literacy Framework** 

## Al Literacy For All

## **DEC Leadership Note**



The rapid rise of artificial intelligence is redefining the way we work, learn, and innovate. For higher education the challenge is clear: Al is no longer a future concern—it is an immediate imperative. Institutions that fail to equip their students and faculty with Al literacy will struggle to remain relevant.

Al literacy is as fundamental as digital literacy was a generation ago.

The **DEC AI Literacy Framework** is a response to this urgent need. Developed in consultation with leading institutions worldwide, this framework provides a structured, actionable, and adaptable guide to ensuring that all individuals gain the AI knowledge and skills they require to thrive.

We felt the need to not just prepare students and faculty to use Al in a higher education context, but as a fundamental literacy that serves as a foundation for future productivity and prosperity. We reviewed a number of existing frameworks and considered how these can be improved and refined for higher education and beyond - into the world of work.

To this end, one of the unique and defining features of the Digital Education Council Al Literacy Framework is the **Domain Expertise** pillar. This builds on fundamental literacy encouraging Al literacy that is relevant for any field of work or study.

Al has the potential to amplify human capability, but only if we build Al literacy that fosters informed, ethical, and strategic decision-making. We encourage all institutions of every shape and size from all over the world to join our effort to use technology to positively impact humanity.

Alessandro Di Lullo

Chief Executive Officer

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1. Al Literacy: Why Is It Important?

## Individuals and Employers Call for AI Literacy





#### Uncertainty around AI skills and knowledge

While many use AI tools for greater efficiency and productivity in their studies or work, majority of users are still uncertain or lack confidence in their AI competencies.

Our <u>Global AI Surveys</u> show that uncertainty primarily comes from low levels of perceived AI proficiency and understanding of guidelines<sup>1</sup>

#### **Major Implication**

#### **Alldiots**

The phenomenon of "Al Idiots" refers to individuals who increasingly are over-reliant on Al to handle daily tasks, with an inability to critically evaluate or supplement the output of these tools.



#### Al skills are in-demand, but the supply is insufficient

Al skills and Al-adjacent competencies are in demand, as Al use is increasing. Businesses are keen to unlock potential gains in productivity and innovation.

Despite Al being regarded with growing importance across industries<sup>2</sup>, the supply of individuals with these competencies does not match up to the demand yet - 48% of students do not feel adequately prepared for an Al-enabled workforce.<sup>3</sup>

#### **Major Implication**

#### How to acquire and demonstrate Al skills?

As AI develops and is increasingly integrated into the workplace, there is demand for professionals to acquire and demonstrate AI competencies.

<sup>&</sup>lt;sup>1</sup>Digital Education Council, Global Al Faculty Survey, 2025.

<sup>&</sup>lt;sup>2</sup>The Future of Jobs Report 2025. World Economic Forum. https://www.weforum.org/publications/the-future-of-jobs-report-2025/

<sup>&</sup>lt;sup>3</sup>Digital Education Council, Global Al Student Survey, 2024.

## **Objectives of Al Literacy**



#### What Al literacy can do

Guide individuals to acquire knowledge of Al

Equip individuals with knowledge of Al functionality and capabilities, as well as what different Al tools can do to help enhance human abilities and work.

Build the foundation for appropriate Al use

Help ensure that Al is used responsibly and appropriately, with consideration for potential ethical implications of using Al, such as misinformation, plagiarism, and Al's societal impact.

Enable desirable human-Al collaboration

Enable greater application of key human skills such as critical thinking, creativity, and adaptability with the use of AI, ensuring humans stay at the core of AI development.

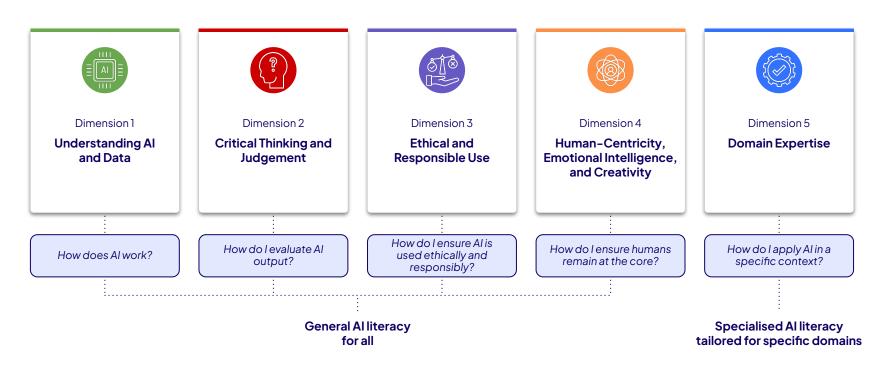


## 2. DEC Al Literacy Framework

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## 5 Dimensions of the DEC Al Literacy Framework

Al Literacy (Digital Education Council, 2025): The essential knowledge and skills needed to understand, interact with, and critically assess Al technologies. Al literacy includes the ability to use Al tools effectively and ethically, evaluate their output, ensure humans are at the core of Al, and adapt to the evolving Al landscape in both personal and professional settings.



## **5 Al Literacy Dimensions Defined**



#### **Literacy Dimensions**

#### **Definition**

#### **Understanding AI and Data**

How does Al work?

Encompasses understanding how AI systems work, the principles of data collection, processing, and interpretation, and the implications of AI-generated output. Proficiency in this area enables individuals to critically engage with AI tools, assess their capabilities and limitations, and make informed decisions about their use.

#### **Critical Thinking and Judgement**

How do I evaluate AI output?

Focusses on the ability to evaluate Al-generated content, discern biases, and apply logical reasoning when using Al in decision-making. It includes skills such as verifying sources, identifying misinformation, recognising limitations in Al-generated insights, and ensuring that human judgment remains central to Al-supported processes. Critical thinking ensures that Al is used as a tool for augmentation rather than blind reliance.

#### **Ethical and Responsible Al Use**

How do I ensure AI is used ethically and responsibly?

Covers the ethical considerations and governance frameworks necessary for responsible AI adoption. It includes understanding AI ethics principles (such as fairness, transparency, accountability, and privacy), recognising potential risks (such as bias, discrimination, and misinformation), and implementing responsible AI use practices. It also involves navigating regulatory and institutional guidelines to ensure compliance and integrity in AI applications.

## Human-centricity, Emotional Intelligence, and Creativity

How do I ensure humans remain at the core?

Emphasises the importance of human skills in an Al-driven world, including empathy, adaptability, communication, lifelong learning, and mindset. As Al automates tasks, human-centred skills become critical in maintaining ethical decision-making, fostering inclusive and diverse Al practices, and ensuring Al aligns with societal values. It also includes managing Al's impact on human interactions and well-being in educational and professional environments.

#### **Domain Expertise**

How do I apply Al in a specific context?

Focusses on the specialised knowledge and skills required to understand, assess, and manage the impact of AI within a specific academic or professional context. It includes the ability to critically evaluate AI applications within a given discipline, adapt AI tools to enhance professional practices, and navigate domain-specific ethical, regulatory, and operational challenges.

## **DEC Al Literacy Framework**



#### **Competency Level**

			Level1		Level 2		Level 3
		Dimension 1 Understanding AI and Data	Al and Data Awareness	 	Al and Data in Action	 	Al and Data Optimisation
	?	Dimension 2 Critical Thinking and Judgement	Question Al Output	 	Evaluate Al Output	 	Challenge Al Output
Dimension 3 Ethical and Responsible Us  Dimension 4 Human-Centric		Understand Risks	 	Apply Responsible Practices	 	Shape Responsible Practices	
		Dimension 4 Human-Centricity, Emotional Intelligence, and Creativity	Awareness of Human-Al Interaction	 	Al as Collaborative Tool	 	Develop Human-Centred Al Practices
		Dimension 5 <b>Domain Expertise</b>	Applied Al Awareness	 	Al Application in Professional Contexts	 	Strategic Al Leadership

## Dimension 1: Understanding Al and Data



	Level 1 Al and Data Awareness	Level 2 Al and Data in Action	Level 3 Al and Data Optimisation
Description	Individuals develop a basic understanding of Al concepts, how Al systems function, and the role of data in Al decision-making.	Individuals can select AI tools for real-world tasks, understand how AI models work, and assess the role of data in AI performance.	Individuals critically engage with AI systems, assess their technical capabilities, and strategically integrate AI into decision-making.
Examples of Competencies	<ul> <li>Define Al and its key components (e.g. machine learning, automation).</li> <li>Identify common Al applications in daily life.</li> <li>Understand the basics of how Al processes data to generate output.</li> </ul>	<ul> <li>Explain how AI models process data and generate output.</li> <li>Identify factors affecting AI performance, such as data quality.</li> <li>Understand how to apply AI tools to automate or support professional tasks.</li> </ul>	<ul> <li>Compare different Al models and their applications for a variety of tasks.</li> <li>Integrate Al into workflows for enhanced efficiency.</li> <li>Communicate Al system capabilities and limitations to others.</li> </ul>
Examples of Actions for Progression	<ul> <li>Engage with foundational Al training materials, including introductory online courses or textbooks.</li> <li>Learn basic data concepts, such as structured vs. unstructured data, and how Al systems process information.</li> <li>Explore and experiment how Al systems use training data.</li> <li>Experiment with widely available Al tools (e.g. Al chatbots, translation tools, and recommendation systems) to observe how they function.</li> </ul>	<ul> <li>Conduct comparative analysis of different Al models to evaluate their accuracy and limitations.</li> <li>Use Al-driven analytics tools (e.g. machine learning models, Al-powered data visualisation, or automated reporting tools) to extract insights from datasets.</li> <li>Learn about data management systems and how Al interacts with structured datasets.</li> <li>Work with datasets in Al applications, focussing on improving data quality for better Al performance.</li> </ul>	<ul> <li>Lead projects involving Al integration, ensuring effective use of data pipelines and model selection.</li> <li>Lead discussions or training sessions on Al integration, ensuring stakeholders understand Al strengths and limitations.</li> <li>Contribute to institutional or policy discussions on Al and data governance.</li> <li>Develop strategies for handling large datasets, and improve Al performance for the institution.</li> </ul>



## **Dimension 2: Critical Thinking and Judgement**

	Level 1 Question Al Output	Level 2 Evaluating Al Output	Level 3 Challenge Al Output
Description	Individuals can identify key evaluation criteria for Al output and understand that Al-generated content may contain biases or errors.	Individuals critically assess AI-generated content using established evaluation criteria and identify biases or inconsistencies.	Individuals demonstrate expertise in evaluating Al-generated output with rigorous methodologies, interrogating Al's reasoning processes, and assessing Al's impact on human cognition.
Examples of Competencies	<ul> <li>Understand the importance of verifying Al-driven insights with human judgement.</li> <li>Understand basic evaluation criteria for Al-generated content, such as accuracy, consistency, and source reliability.</li> <li>Identify a number of inconsistencies or biases in Al-generated content.</li> </ul>	<ul> <li>Apply evaluation frameworks to assess the validity of Al-generated insights.</li> <li>Identify and articulate biases or inconsistencies in Al-generated output.</li> <li>Compare Al-generated information against multiple independent sources for verification.</li> </ul>	<ul> <li>Apply logical reasoning to understand how AI generates responses, analyse the strengths and weaknesses of different AI models and their output, and effectively build upon them.</li> <li>Effectively leverage AI capability to enhance critical thinking skills.</li> <li>Recognise and manage the nuanced impacts of AI in complex, high-stakes situations.</li> </ul>
Examples of Actions for Progression	<ul> <li>Study introductory materials on Al reliability and accuracy metrics.</li> <li>Compare Al-generated content with verified sources to identify discrepancies.</li> <li>Engage in case studies where Al-generated information led to errors or misinterpretation.</li> <li>Explore Al tools to assess their reliability and accuracy.</li> </ul>	<ul> <li>Develop structured evaluation rubrics for assessing Al-generated output in an academic or professional setting.</li> <li>Conduct comparative studies of different Al models to assess reliability across domains.</li> <li>Engage in interdisciplinary discussions on Al evaluation methodologies.</li> <li>Start applying Al assessment frameworks to real-world scenarios.</li> </ul>	<ul> <li>Conduct independent evaluation of Al tools, comparing their output across multiple sources for consistency and accuracy.</li> <li>Refine evaluation methodologies based on exposure to new Al advancements and emerging best practices.</li> <li>Publish assessments or research papers critically examining Al reliability in a specific domain.</li> <li>Apply advanced Al evaluation frameworks to real-world professional, research, or policy contexts.</li> </ul>

## Dimension 3: Ethical and Responsible Al Use



	Level 1 Understand Risks	Level 2 Apply Responsible Practices	Level 3 Shape Responsible Practices
Description	Individuals understand fundamental AI ethics principles and can recognise potential risks, such as bias, misinformation, and discrimination.	Individuals apply ethical principles and frameworks to evaluate and mitigate risks associated with AI use in various professional and academic settings.	Individuals demonstrate expertise in evaluating, shaping, and advocating for ethical AI policies, governance frameworks, and institutional best practices.
Examples of Competencies	<ul> <li>Define key Al ethics principles (e.g. fairness, transparency, accountability, privacy).</li> <li>Recognise how Al systems can perpetuate bias and inequality.</li> <li>Identify ethical concerns in Al-driven decision-making (e.g. hiring, surveillance, law enforcement).</li> </ul>	<ul> <li>Assess Al systems for compliance with ethical standards and legal frameworks.</li> <li>Identify and mitigate risks related to bias, discrimination, and data privacy in Al applications.</li> <li>Implement strategies to ensure fairness and accountability in Al decision-making.</li> </ul>	<ul> <li>Critically evaluate ethical implications of Al adoption at an institutional or societal level.</li> <li>Contribute to the development of Al governance frameworks and ethical Al policies.</li> <li>Provide guidance on ethical Al adoption in professional, academic, or policy environments.</li> </ul>
Examples of Actions for Progression	<ul> <li>Study introductory materials on AI ethics, including case studies of ethical failures in AI.</li> <li>Reflect on personal experiences using AI tools and consider ethical implications.</li> <li>Analyse a real-world case study where AI ethics were challenged, such as biased hiring algorithms or misinformation spread by AI</li> <li>Engage in discussions on ethical dilemmas involving AI decision-making.</li> </ul>	<ul> <li>Conduct ethical impact assessments for Al applications in an organisation or research setting.</li> <li>Engage in interdisciplinary discussions on responsible Al use across different sectors.</li> <li>Reflect on internal guidelines for the ethical implementation of Al in a professional or academic environment.</li> <li>Apply ethical Al principles in project development or policy analysis.</li> </ul>	<ul> <li>Draft or contribute to ethical Al guidelines within an organisation, academic institution, or regulatory body.</li> <li>Publish research, reports, or policy papers analysing ethical Al challenges and solutions.</li> <li>Conduct workshops or training sessions on ethical Al adoption.</li> <li>Collaborate with Al ethics advisory groups or contribute to national or international policy discussions.</li> </ul>

## Dimension 4: Human-Centricity, Emotional Intelligence, and Creativity



	Level 1 Awareness of Human-Al Interaction	Level 2 Al as Collaborative Tool	Level 3 Develop Human-Centred Al Practices
Description	Individuals have a foundational understanding of how AI affects human decision-making, communication, and emotional intelligence.	Individuals integrate human-centred skills into Al-assisted environments to promote responsible, ethical, and inclusive Al use.	Individuals advocate for human-centred Al approaches, ensuring Al remains a tool that complements rather than replaces human skills.
Examples of Competencies	<ul> <li>Recognise how Al influences human behaviour, decision-making, and interactions.</li> <li>Identify situations where Al may lack human sensitivity (e.g. Al-generated feedback, automated decision-making).</li> <li>Understand the importance of empathy and adaptability in Al-augmented environments.</li> </ul>	<ul> <li>Apply effective communication strategies and human-in-the-loop strategies when using Al tools in professional and educational settings.</li> <li>Identify opportunities to enhance human-centred skills and foster creative thinking with Al, and propose strategies for continued development.</li> <li>Assess Al tools to ensure inclusivity for different user groups.</li> </ul>	<ul> <li>Develop Al-driven workplace or education policies that safeguard human agency in decision-making.</li> <li>Establish guidelines for using Al in professional or educational environments that ensure Al complements, rather than replaces, human interaction and creativity</li> <li>Conduct empirical studies or pilots testing the impact of Al in human-centred roles</li> </ul>
Examples of Actions for Progression	<ul> <li>Observe how Al influences human interactions in customer service, education, or workplace settings.</li> <li>Reflect on personal experiences when using Al-powered communication tools (e.g. chatbots, virtual assistants).</li> <li>Engage in discussions on the limitations of Al in recognising human emotions.</li> <li>Explore literature on the psychological and social impact of Al in human interactions.</li> </ul>	<ul> <li>Develop case studies on human-centred AI practices and their impact in different industries.</li> <li>Participate in collaborative projects where AI is integrated into human-driven decision-making.</li> <li>Explore frameworks for ensuring that AI tools respect social and cultural norms.</li> <li>Analyse the impact of AI on workforce skills and creativity, and propose strategies for maintaining essential human abilities.</li> </ul>	<ul> <li>Lead research or policy development on the role of emotional intelligence in Al-driven work environments.</li> <li>Create training programmes focussed on balancing Al integration with human-centric skills.</li> <li>Engage with industry or academic stakeholders to define best practices for human-Al collaboration.</li> <li>Create reports or guides advocating for human-centred Al principles in education, governance, or business.</li> </ul>

## **Dimension 5: Domain Expertise**



	Level 1 Applied Al Awareness	Level 2 Al Application in Professional Contexts	Level 3 Strategic Al Leadership
Description	Individuals develop a basic understanding of how Al is used in their specific field and can identify relevant Al tools and applications.	Individuals can effectively use AI tools to support tasks, optimise workflows, and improve decision-making within their discipline.	Individuals develop advanced expertise in Al applications within their discipline, ensuring Al is effectively integrated into strategic decision-making.
Examples of Competencies	<ul> <li>Identify key Al applications relevant to a specific domain (e.g. Al in medicine, law, education, finance).</li> <li>Recognise how Al is transforming professional roles and industry standards.</li> <li>Understand the basic limitations of Al when applied in a particular field.</li> </ul>	<ul> <li>Select and apply Al tools that enhance efficiency and accuracy in a professional or academic setting.</li> <li>Assess the strengths and weaknesses of Al applications within specific processes or parts of the value chain.</li> <li>Integrate Al insights into professional decision-making while understanding Al's role as a complement to human expertise.</li> </ul>	<ul> <li>Evaluate and refine AI adoption strategies within the field, considering regulatory, ethical, and operational constraints.</li> <li>Lead the implementation of AI-driven innovations in a professional or academic context.</li> <li>Develop training materials or guidelines to enhance AI literacy among peers and colleagues in the field.</li> </ul>
Examples of Actions for Progression	<ul> <li>Explore and experiment with domain-specific Al tools.</li> <li>Participate in discussions or case studies related to Al applications in the field.</li> <li>Engage in introductory training sessions focussed on Al for a specific sector.</li> </ul>	<ul> <li>Implement Al-powered solutions in professional workflows, assessing their impact on efficiency and accuracy.</li> <li>Compare multiple Al tools within the field to determine best-fit applications.</li> <li>Conduct small-scale research or pilot projects testing Al solutions in a specific professional setting.</li> </ul>	<ul> <li>Conduct industry-level assessments of AI adoption trends and their impact on professional practice.</li> <li>Publish findings on AI applications in a particular field through research, white papers, or industry reports.</li> <li>Participate in advisory or policy groups to influence AI adoption and governance at an institutional level.</li> </ul>



## 3. Al Literacy for Faculty

## **Domain Expertise for Faculty**



Top Skills for Faculty to Define Domain Expertise of Al Literacy



## **Dimension 5: Domain Expertise for Faculty**



	Level 1 Foundational Applied Al Awareness	Level 2 Al Application in Teaching and Learning	Level 3 Strategic AI Leadership in Higher Education
Description	Faculty develop a foundational understanding of Al's impact on higher education, their discipline, and student learning.	Faculty integrate Al tools into their pedagogy to enhance student engagement, assessment, and personalised learning while maintaining academic integrity.	Faculty lead institutional AI adoption, contribute to AI curriculum development, and innovate pedagogy using AI-driven methodologies.
		Example of Competencies	
Facilitating student critical thinking and learning	<ul> <li>Identify how AI impacts the ability of students to think critically.</li> <li>Recognise how students engage with AI-generated content and the risks of over-reliance.</li> <li>Introduce AI-awareness activities to help students distinguish between AI-generated and human-generated content.</li> </ul>	<ul> <li>Design learning activities that challenge students to critically assess Al-generated content.</li> <li>Embed Al literacy into assignments, requiring students to evaluate Al sources, biases, and reliability.</li> <li>Teach students frameworks for verifying Al-generated claims and distinguishing Al assistance from original thought.</li> </ul>	<ul> <li>Develop institutional strategies to integrate critical thinking into the curriculum as a core academic skill.</li> <li>Lead faculty training on embedding Al-critical engagement into assessments and learning activities.</li> <li>Conduct research on Al's impact on student cognitive development and critical thinking skills.</li> </ul>
Promoting AI & digital literacy	<ul> <li>Introduce students to basic Al concepts, applications, and limitations.</li> <li>Explain how Al systems generate output and highlight potential biases in automated decision-making.</li> <li>Guide students in navigating Al-powered tools.</li> </ul>	<ul> <li>Embed Al and digital literacy into course curricula, ensuring students can assess Al use in their studies and field.</li> <li>Teach students to critically analyse Al-generated data, algorithms, and their real-world implications.</li> <li>Encourage students to experiment with Al tools while maintaining academic integrity.</li> </ul>	<ul> <li>Contribute to the development of institution-wide Al and digital literacy programmes.</li> <li>Design Al literacy frameworks that are embedded across disciplines and degree programmes.</li> <li>Contribute to national or global discussions on Al literacy education in higher education.</li> </ul>

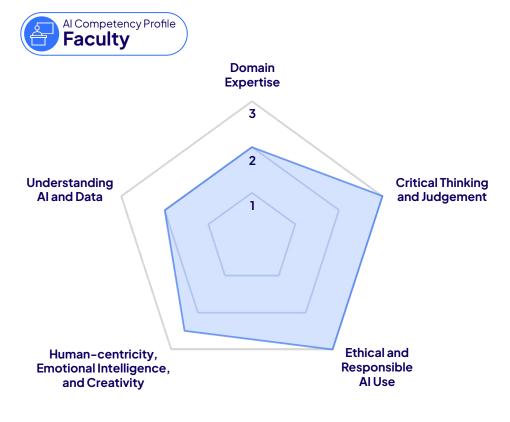
## **Dimension 5: Domain Expertise for Faculty (Continued)**



	Level 1 Foundational Applied AI Awareness	Level 2 Al Application in Teaching and Learning	Level 3 Strategic AI Leadership in Higher Education
Innovating pedagogy	<ul> <li>Identify Al's potential to enhance pedagogy through automation, personalisation, and student engagement.</li> <li>Recognise opportunities to incorporate Al into classroom activities (e.g. Al-driven tutoring, automated feedback).</li> <li>Experiment with Al-enhanced lesson planning and assessment design.</li> </ul>	<ul> <li>Develop student-centred Al-enhanced learning experiences, using Al to support personalised instruction.</li> <li>Implement Al-driven learning analytics to inform instructional decisions and improve student engagement.</li> <li>Redesign assessments to align with Al's role in research and problem-solving, ensuring learning objectives remain relevant.</li> </ul>	<ul> <li>Lead pedagogical innovation initiatives using Al to enhance student success and faculty effectiveness.</li> <li>Conduct research on Al's impact on teaching and learning outcomes.</li> <li>Contribute to institutional strategies for Al-driven teaching transformation and faculty professional development.</li> </ul>
Adaptability and responsiveness to change	<ul> <li>Recognise how Al is transforming academic disciplines, the role of educators, and workforce expectations.</li> <li>Identify key Al trends relevant to one's field and their implications for students.</li> <li>Introduce some curriculum adjustments to reflect Al's emerging role in the profession</li> </ul>	<ul> <li>Update curricula to reflect Al-driven industry shifts, ensuring students develop future-ready skills.</li> <li>Continuously modify teaching methods and assessments dynamically to account for Al's evolving capabilities.</li> <li>Encourage students to reflect on how Al is shaping professional competencies.</li> </ul>	<ul> <li>Lead institutional efforts to align academic programmes with Al-driven changes in industry.</li> <li>Advocate for flexible curriculum models that integrate Al as a transformative force in professional education.</li> <li>Conduct research on the effectiveness of Al-enhanced curricula and evolving learning needs.</li> </ul>
Expertise in ethical and responsible AI	<ul> <li>Introduce students to fundamental AI ethics principles, such as fairness, transparency, and accountability.</li> <li>Identify risks of AI bias, discrimination, and misinformation in academic and professional contexts.</li> <li>Encourage discussions about ethical dilemmas arising from AI use in different fields.</li> </ul>	<ul> <li>Guide students in applying ethical frameworks to Al use in academic and professional settings.</li> <li>Require students to critically evaluate ethical risks associated with Al-generated recommendations and decisions.</li> <li>Ensure that Al-assisted assignments and projects incorporate responsible Al principles.</li> </ul>	<ul> <li>Lead institutional discussions on responsible Al adoption in education and research.</li> <li>Develop policies and best practices for ethical Al use in teaching, assessment, and institutional decision-making.</li> <li>Contribute to academic discourse on Al governance and regulation in higher education.</li> </ul>

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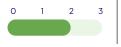
## Ideal Framework Mastery for Faculty



#### **Faculty Framework Mastery**

Faculty should aim for the following mastery levels of the DEC Al Literacy Framework:

#### **Understanding Al and Data**



Faculty should be able select AI tools for real-world tasks, and be able to assess the role of data in AI performance.

#### **Critical Thinking and Judgement**



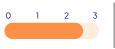
Faculty should be experts in rigorously evaluating Al-generated output, and be able to assess Al's impact on human cognition.

#### **Ethical and Responsible AI Use**



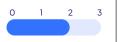
Faculty should be able to evaluate, shape and advocate for ethical Al use, governance frameworks and best practices.

#### Human-centricity, Emotional Intelligence, and Creativity



Faculty should advocate for and integrate human-centred Al approaches, and promote responsible and inclusive Al use.

#### Domain Expertise: Al Application in Teaching and Learning



Faculty should be able to integrate Al tools into their pedagogy to enhance teaching and learning, while maintaining academic integrity.



## 4. Al Literacy for Students

## **Al Literacy Framework for Students**



		Competency Level Competency Level		
	Level 1 Baseline	Level 2 Expected	Level 3 Forward-looking	
Dimension 1 Understanding AI and Data	Recognise Al's role in daily life, my studies, and society. Understand basic Al concepts and how Al systems use data.	Use Al tools for learning, research, and productivity. Understand Al limitations and biases.	Engage with Al implementation, optimisation, or customisation in my work. Strong technical understanding of Al models.	
Dimension 2 Critical Thinking and Judgement	Understand the importance of verifying AI-driven insights. Recognise when AI -generated content may oversimplify or misrepresent concepts.	Understand and apply evaluation criteria for Al-generated content, such as accuracy, explainability, bias, and source reliability.	Critically analyse the strengths and weaknesses of different Al models and their output in various contexts.	



Literacy Dimensions

Dimension 3
Ethical and
Responsible Use

Understand academic integrity in the age of AI. Recognise ethical risks such as bias, misinformation, and plagiarism.

Apply ethical Al principles in coursework and research. Use Al tools responsibly while maintaining academic integrity.

Contribute to AI ethics discussions, policies, or student-led governance initiatives.



Dimension 4
Human-Centricity,
Emotional Intelligence,
and Creativity

Recognise how Al affects communication, creativity, and human skills, and understand when human oversight is needed when using Al. Use Al as a collaborative tool to enhance creativity and problem-solving. Develop adaptability in Al-driven environments.

Support peers to focus on human-centred skills when using AI, ensuring that AI is used as a complementary tool.

Dimension 5 **Domain Expertise** 

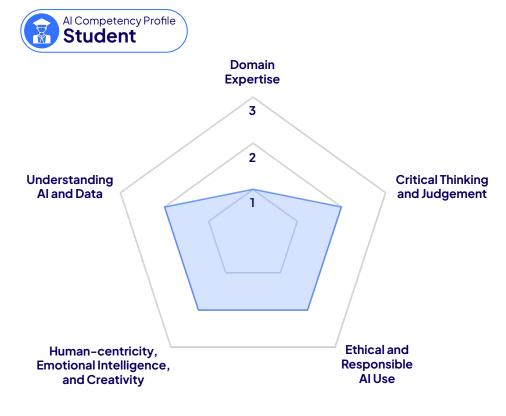
Identify Al trends and their impact on your future career. Understand how Al is changing the industry and what is expected by young professionals.

Use Al tools for field-specific tasks (e.g. Al for data analysis in business, Al-assisted research in sciences, Al for content creation).

Develop Al augmentation strategies for enhancing work and decision-making in professional settings.

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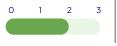
## Ideal Framework Mastery for Students



#### **Student Framework Mastery**

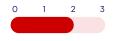
Students should aim for the following mastery levels of the DEC Al Literacy Framework:

#### **Understanding Al and Data**



Students should be able to use AI tools for learning, research, and productivity, and understand AI limitations and biases.

#### **Critical Thinking and Judgement**



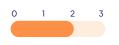
Students should be able to understand and apply evaluation criteria for Al-generated content, such as reliability and accuracy of source content.

#### **Ethical and Responsible AI Use**



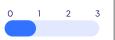
Students should apply ethical Al principles in coursework and research, and use Al tools responsibly while maintaining academic integrity.

#### Human-centricity, Emotional Intelligence, and Creativity



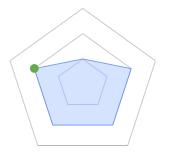
Students should use Al as a collaborative tool to enhance creativity and problem-solving, and be adaptable in Al-driven environments.

#### **Domain Expertise: Al for Career Readiness**



Students should be able to identify AI trends and their impact on future careers, and understand how AI is changing the industry and expectations.









#### Example of Teaching Strategy

#### Understanding AI Systems Through Data Exploration

Teach students how AI systems use data to generate output and how biases can emerge.

#### Classroom Applications

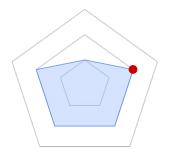
- Have students analyse datasets used in AI models and identify potential biases.
- Assign projects where students modify training data and observe changes in Al behaviour.
- Encourage students to critically assess sources of data and how they impact Al outcomes.

#### Mind Mapping AI Concepts and Interconnections

Combine visual and verbal representation to enhance comprehension of complex AI concepts.

- Ask students to create mind maps of AI technologies, ethical considerations, and real-world applications.
- Have students map relationships between Al models, data sources, and decision-making processes.
- Encourage students to present their mind maps in class for peer discussion.









#### Example of Teaching Strategy

#### **Evaluating AI Output for Accuracy and Bias**

 $\label{prop:lem:help students} Help \, students \, critically \, assess \, Al-generated \, content \, and \, recognise \, biases \, in \, its \, output.$ 

#### Classroom Applications

- Provide students with Al-generated articles or images and have them fact-check and annotate inaccuracies against key evaluation criteria.
- Use real-world Al-generated misinformation cases for group analysis and discussion.
- Have students compare Al output across different tools to assess reliability and consistency.

#### **Evaluating Misinformation in AI-Generated Content**

Train students to detect misinformation and misleading Al-generated content.

- Provide students with Al-generated content and have them verify its accuracy using trusted sources.
- Discuss strategies for detecting deepfakes and Al-generated misinformation.
- Ask students to compare Al output with traditional sources for reliability assessment.









#### Example of Teaching Strategy

#### Ethical Dilemmas in Al

Engage students in discussions on ethical dilemmas related to Al's impact on society and personal lives.

#### Classroom Applications

- Present ethical scenarios (e.g. Al's role in surveillance, bias in hiring algorithms, privacy concerns in Al-driven platforms).
- Facilitate group discussions, debates, and reflection exercises where students propose solutions.
- Allow students to present their perspectives through essays, posters, or creative storytelling.

#### Case-Based Learning on Al Failures and Bias

Learning from real-world Al failures helps students grasp the importance of responsible Al design.

- Analyse well-documented Al failures (e.g. biased facial recognition systems, Al-generated misinformation).
- Guide students to propose alternative solutions ensuring fairness, transparency, and accountability.
- Have students research and present contemporary Al ethics cases.









#### Example of Teaching Strategy

#### Visualising Human Involvement in the AI Life Cycle

Help students understand human involvement in AI decision-making and its impact on businesses and society.

#### Classroom Applications

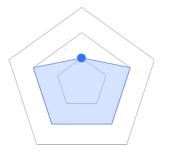
- Ask students to draw concept maps of human involvement across Al life cycle stages (data collection, algorithmic processing, decision-making, and evaluation).
- Include considerations such as data ownership, privacy, explainability, and human control.
- Encourage students to reflect on the consequences of losing human involvement at each step.

#### Al-Augmented Creative Problem-Solving

Explore Al as a tool for enhancing creativity and problem-solving while ensuring human-driven oversight.

- Assign projects where students use AI for creative tasks (e.g. AI-assisted writing, digital art).
- Facilitate discussions on how AI enhances creativity versus where human judgment remains essential.
- Have students critique Al-generated creative output and propose improvements.







#### Example of Teaching Strategy

#### **Industry Engagement and Career Readiness**

Prepare students for Al-integrated workplaces by exposing them to industry trends and required skills.

#### Classroom Applications

- Host guest lectures by professionals using Al in their fields.
- Assign industry-based projects where students apply Al tools to field-specific challenges.
- Encourage students to research Al-driven changes in their intended careers and propose adaptation strategies.

#### Al-Enabled Decision-Making in Professional Fields

Analyse how Al supports decision-making in different industries

- Assign case studies where Al-driven insights impact decisions in professional settings (e.g. medical, legal, or finance).
- Guide discussions on how AI can be used as an assistive tool rather than a replacement for professionals, focussing on the challenges for young professionals.
- Have students identify risks of automating decision-making without human oversight.



## 5. About DEC and Copyright Details

# Digital Education Council Executive Briefings

The Digital Education Council delivers monthly Reports and Executive Briefings to its members.

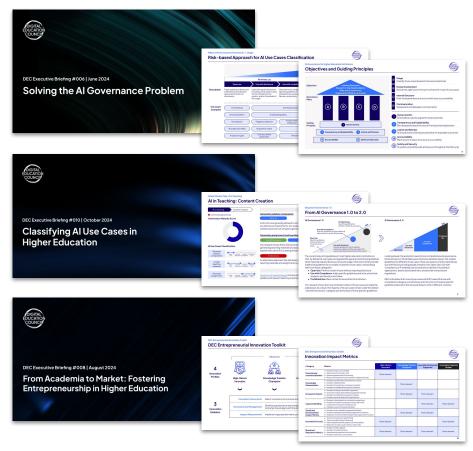
These Reports and Executive Briefings share key insights, practical frameworks and usable tools to support Al adoption, governance, and sustainable innovation in higher education.

Our members use these as key working documents to help them work through the transformation in the world of education and skills.

**Explore** 

#### **Examples of Executive Briefings**





# Digital Education Council Al Training

#### For Education Professionals: Certificate in AI for Higher Education

Designed to equip leaders, faculty, and administrators to effectively integrate Al into their institutions. The certificate covers essential Al concepts, practical applications, and best practices to enhance academic integrity, improve teaching and learning outcomes.

## For Students: Al Literacy for All

A white-label, foundational course designed to rapidly equip students with key knowledge and practical skills to navigate the impact of AI in their studies and career. It covers key concepts such as best practices for prompting, evaluate AI output, critical thinking, respect academic integrity, and emerging workforce skills.

## Course for Education Professionals



**Download Brochure** 

## Course for Students



**Download Brochure** 

#### **Experts include**





#### Sean McMinn

Director of the Center for Education Innovation Hong Kong University of Science and Technology





#### Erfan Mojaddam

Deputy Chief Academic Technology Officer and Director of Learning Technologies and Spaces **University of California, Berkeley** 





## Francesca Rossi Al Ethics Global Leader IBM



# Digital Education Council Meetings

#### **Thematic Working Groups**

DEC Thematic Working Groups serve as a global platform for collaborative discussions for DEC members, fostering knowledge sharing and establishing best practices to drive innovation. The Thematic Working Groups are focussed on practical outcomes and run on a one-year cycle.

#### **DEC Global Summit**

The DEC Global Summit is an in-person and outcome-focussed event exclusively for DEC members. The Global Summit is a key opportunity to address global challenges and explore actionable strategies for positive integration of digital and artificial intelligence technologies.

Become a Member

#### **Examples of Meetings**







## **Copyright and Contact Details**



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