

UNESCO AI COMPETENCIES FOR STUDENTS

HEXAGONAL THINKING
WORKSHOP CARDS

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AI competency framework
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USING THESE CARDS

Hexagonal Thinking is a Design Thinking strategy for making connections between ideas.

Cut out the competency cards and make some blank hexagons to write on.

Put your target content/skills/lessons on the blank cards.

Select the competencies that can suit your learning, and align with content.

The edges are where they interact with each other.

This might help you find creative connections and ideas.



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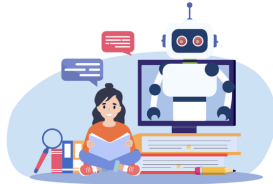
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CREDITS

These cards are based on the
UNESCO AI Competency
Framework for Students (2024).

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Education
2030

Read the full
framework from
UNESCO.



unesdoc.unesco.org/ark:/48223/pf0000391105

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WHAT'S ON THE CARDS?

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ABOUT THE CARDS

Summary information about each competency.

FRONT

UNDERSTAND

**HUMAN
AGENCY**

HUMAN-CENTRED
MINDSET

UNESCO AI COMPETENCIES FOR STUDENTS

LEVEL

CODE

BACK

CG4.1.1.1

Foster an understanding
that AI is human-led.

COMPETENCY
STATEMENT

DOMAIN

LEVEL

For more details about each
competency & level, read the full
framework from UNESCO.

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Graphic
Library

CONNECTION HELPER

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CONNECTION HELPER

Poe AI Bot to help make connections for teaching.



This Poe Bot can help you make connections between your lessons/content and the competencies. Scan to try, or: ifyouseme.ai/guidance

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CG4.1.1.1

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CG4.1.1.2

Facilitate an understanding on the necessity of exercising sufficient human control over AI.

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CG4.1.1.3

Nurture critical thinking on the dynamic relationship between human agency and machine agency.

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APPLY

HUMAN ACCOUNTABILITY

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CG4.2.1.1

Develop a view that human accountability is a legal obligation of AI creators and AI service providers.

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CG4.2.1.2

Generate the understanding that human accountability is a legal and social responsibility when using AI in making decisions about humanity.





APPLY

HUMAN ACCOUNTABILITY

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CG4.2.1.3

Nurture the personal attitude that human accountability requires personal competencies to steer the purposeful use of AI.

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CREATE

AI SOCIETY CITIZENSHIP

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MINDSET

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CG4.3.1.1

Foster awareness of being
a critical AI citizen.

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CG4.3.1.2

Nurture personal and social responsibilities in AI societies.

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CG4.3.1.3

Nurture the sense of self-actualization as an AI citizen and the lifelong learning attitude to AI.

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UNDERSTAND

**EMBODIED
ETHICS**

ETHICS OF AI

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CG4.1.2.1

Illustrate dilemmas around AI and identify the main reasons behind ethical conflicts.

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ETHICS**

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CG4.1.2.2

Facilitate scenario-based understandings of ethical principles on AI and their personal implications.

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ETHICS**

ETHICS OF AI

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CG4.1.2.3

Guide the embodied reflection and internalization of ethical principles on AI.

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APPLY

SAFE & RESPONSIBLE USE

ETHICS OF AI

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CG4.2.2.1

Foster self-awareness and habitual compliance with ethical principles for the responsible use of AI.

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SAFE & RESPONSIBLE USE

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CG4.2.2.2

Offer opportunities to reinforce self-discipline in the responsible use of AI.

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SAFE & RESPONSIBLE USE

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CG4.2.2.3

Deepen practical knowledge on the safe use of AI and awareness of locally applicable regulations.

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CREATE

ETHICS BY DESIGN

ETHICS OF AI

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CG4.3.2.1

Build awareness and understanding on 'ethics by design'.



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ETHICS BY DESIGN

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CG4.3.2.2

Develop a critical attitude to the ethics-by-design principles behind existing AI systems and algorithms.



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ETHICS BY DESIGN

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CG4.3.2.3

Cultivate social responsibilities to uphold 'ethics by design' in regulations on AI.



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UNDERSTAND

AI FOUNDATIONS

**AI TECHNIQUES
& APPLICATIONS**

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CG4.1.3.1

Exemplify the definition
and scope of AI.

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CG4.1.3.2

Develop conceptual knowledge on how AI is trained based on data and algorithms.

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CG4.1.3.3

Foster open-minded thinking on AI and an interdisciplinary foundation for AI.

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APPLICATION SKILLS

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CG4.2.3.1

Offer opportunities to strengthen knowledge and skills on data modelling, engineering and analysis.

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CG4.2.3.2

Provide opportunities to acquire age-appropriate technical skills in AI programming.

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CG4.2.3.3

Encourage students to develop analytical and synthesis skills to leverage open-source datasets and AI tools.

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CREATE

CREATING AI TOOLS

AI TECHNIQUES & APPLICATIONS

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CG4.3.3.1

Challenge and enable
advanced skills to
develop task-based
AI tools.



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CG4.3.3.2

Enhance students' creativity in applying AI knowledge and skills to customize AI toolkits and coding.

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CREATING AI TOOLS

AI TECHNIQUES & APPLICATIONS

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CG4.3.3.3

Equip students with skills to test and optimize their self-crafted AI tools.

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UNDERSTAND

**PROBLEM
SCOPING**

AI SYSTEM DESIGN

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CG4.1.4.1

Scaffold critical thinking skills on when AI should not be used.

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SCOPING**

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CG4.1.4.2

Support the acquisition and reinforcement of skills in scoping a problem to be solved by an AI system.

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**PROBLEM
SCOPING**

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CG4.1.4.3

Develop skills on
assessing AI systems' need
for data, algorithms and
computing resources.

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APPLY

ARCHITECTURE DESIGN

AI SYSTEM DESIGN

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CG4.2.4.1

Scaffold the acquisition
of methodological
knowledge and
technical skills on
AI architecture.





ARCHITECTURE DESIGN

AI SYSTEM DESIGN

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CG4.2.4.2

Support the preparation of advanced technical skills and project management competencies needed by AI system building.

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CREATE

ITERATION & FEEDBACK

AI SYSTEM DESIGN

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CG4.3.4.1

Develop the skills to
critique AI systems.

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CG4.3.4.2

Support the building of technical skills and social responsibilities in optimizing, reconfiguring or shutting down an AI system.



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CG4.3.4.3

Foster students'
self-identities as
co-creators in the AI era.

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