Responsible Generative AI Integration in Higher Education

Balancing Enhancement, Integrity, and Future Skills

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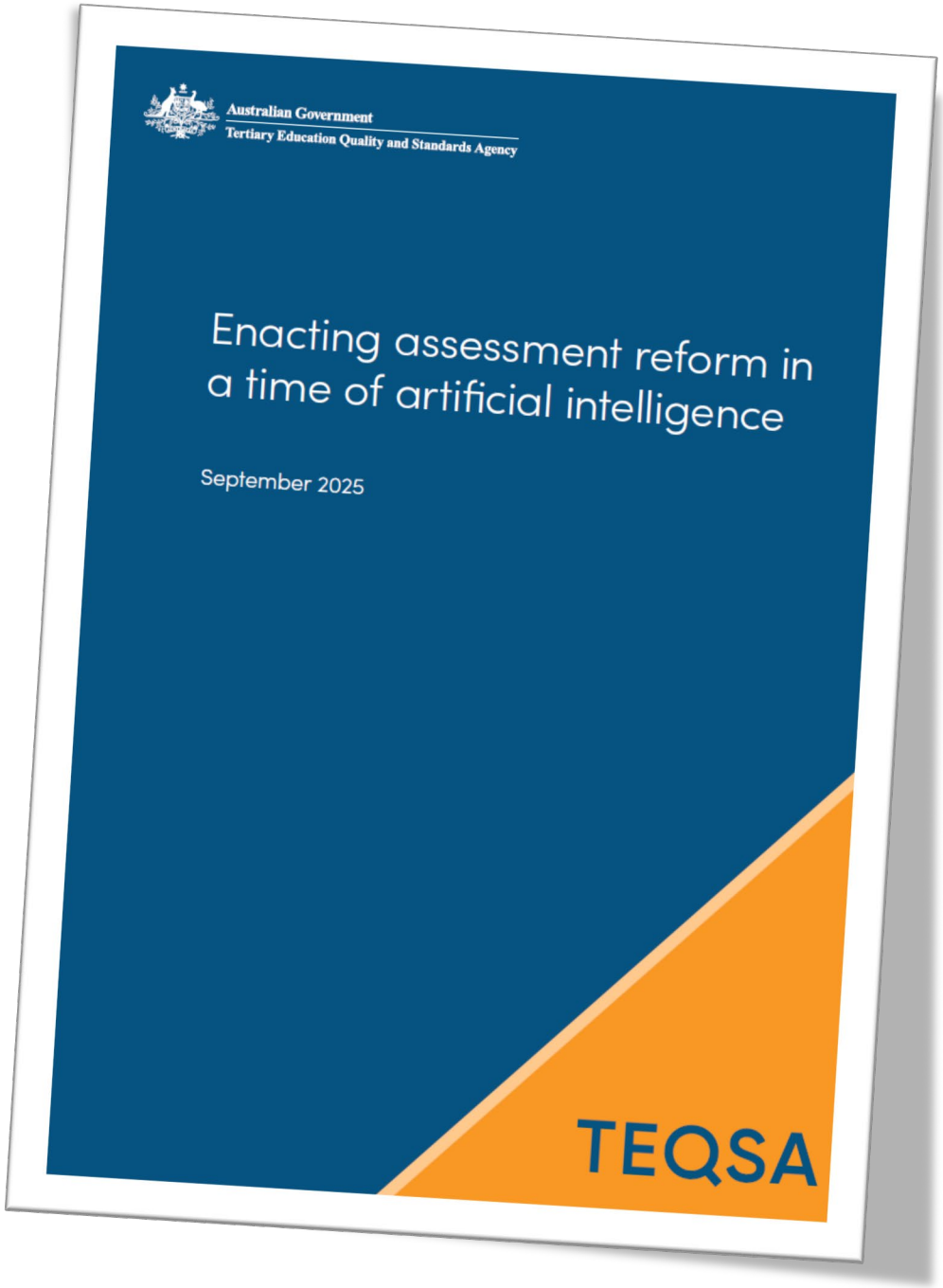
TEQSA: Assessment reform

Gaps.. Disconnected dots:

- Limited Scope Focusing on Assurance Over Ethical Engagement…. Need for Holistic Approach
- Difficulty in Detecting AI Use…Need for New Strategies
- Risk of Reverting to Inequitable Formats… Marginalisation of Diverse Learners
- Programmatic Assurance Gaps (Pathways 2 and 3)… Strategies for stakeholder engagement.
- Viability of Digital/Asynchronous Assessment…. Flexibility and Accessibility
- Pathways are interim solutions….. Future-State Pedagogy Vision: adaptive, student-centred, and deeply integrated with technology.



TEQSA: Assessment reform

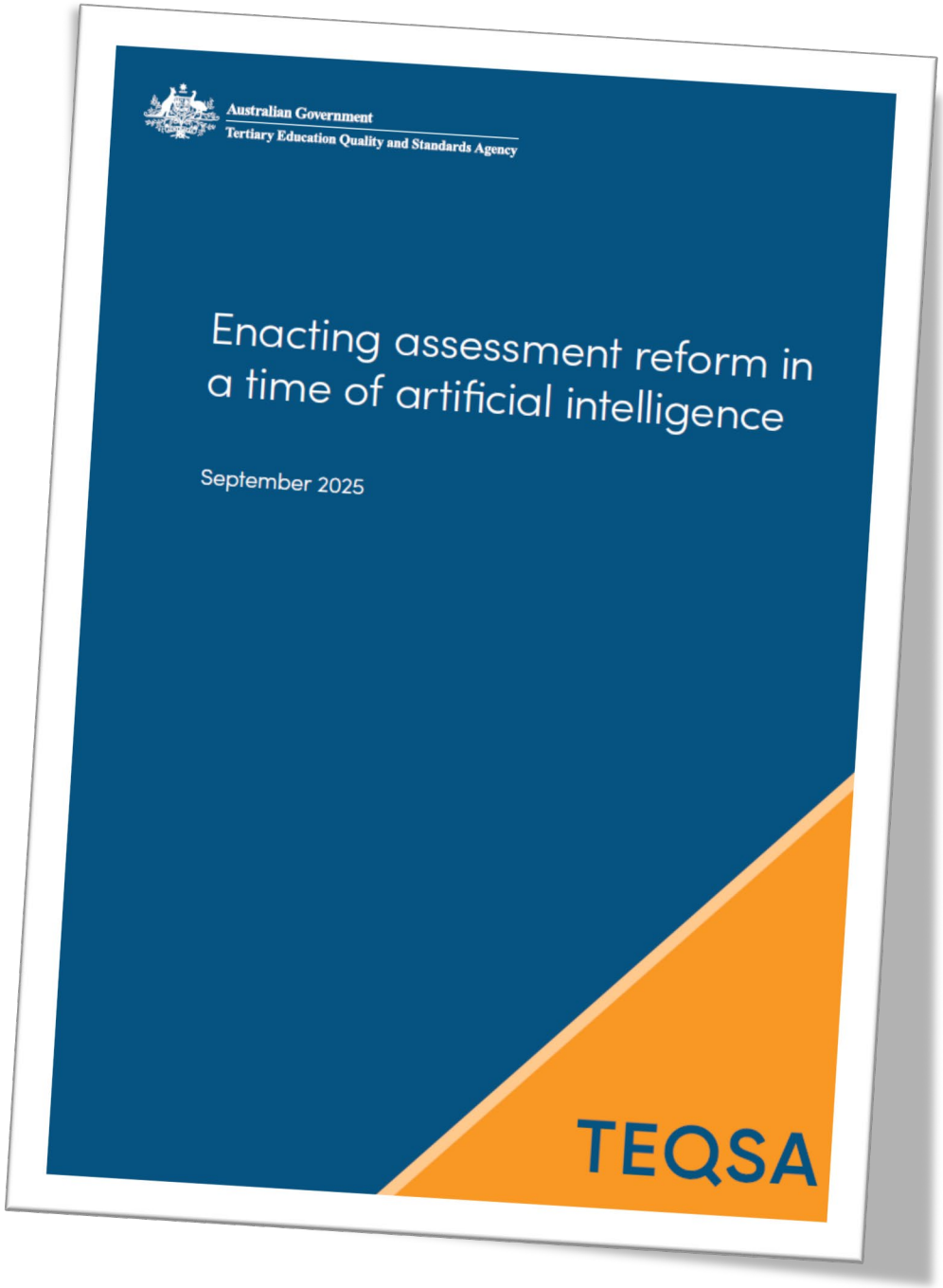
Missing voices:

- STUDENTS
- INDUSTRY, EMPLOYERS
- ACADEMIC SUPPORT SERVICES

Students: "How are student perspectives integrated into assessment review processes?”

Industry, Employers and Workplace Professionals

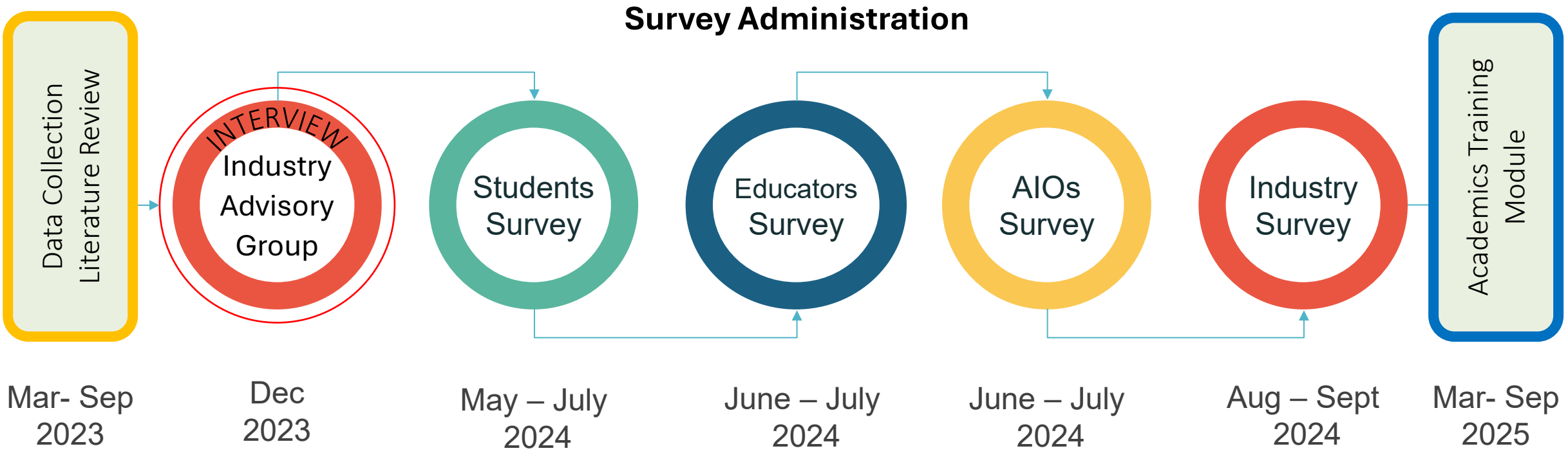
support services: including academic development, student support, technical infrastructure, digital learning teams, and library and information services



OUR PROJECT: **Mitigating the Risk of Academic Misconduct in Higher Education**

Students	Academic	Integrity	Industry / Employers
			
"Learning"	"Teaching"	"Assessment"	"Competencies/Skills"
Background Context literature	Background Context literature	Background Context literature	Background Context literature
What do we know so far?	What do we know so far?	What do we know so far?	What do we know so far?

Timeline (Mar 2023-Sep 2025)

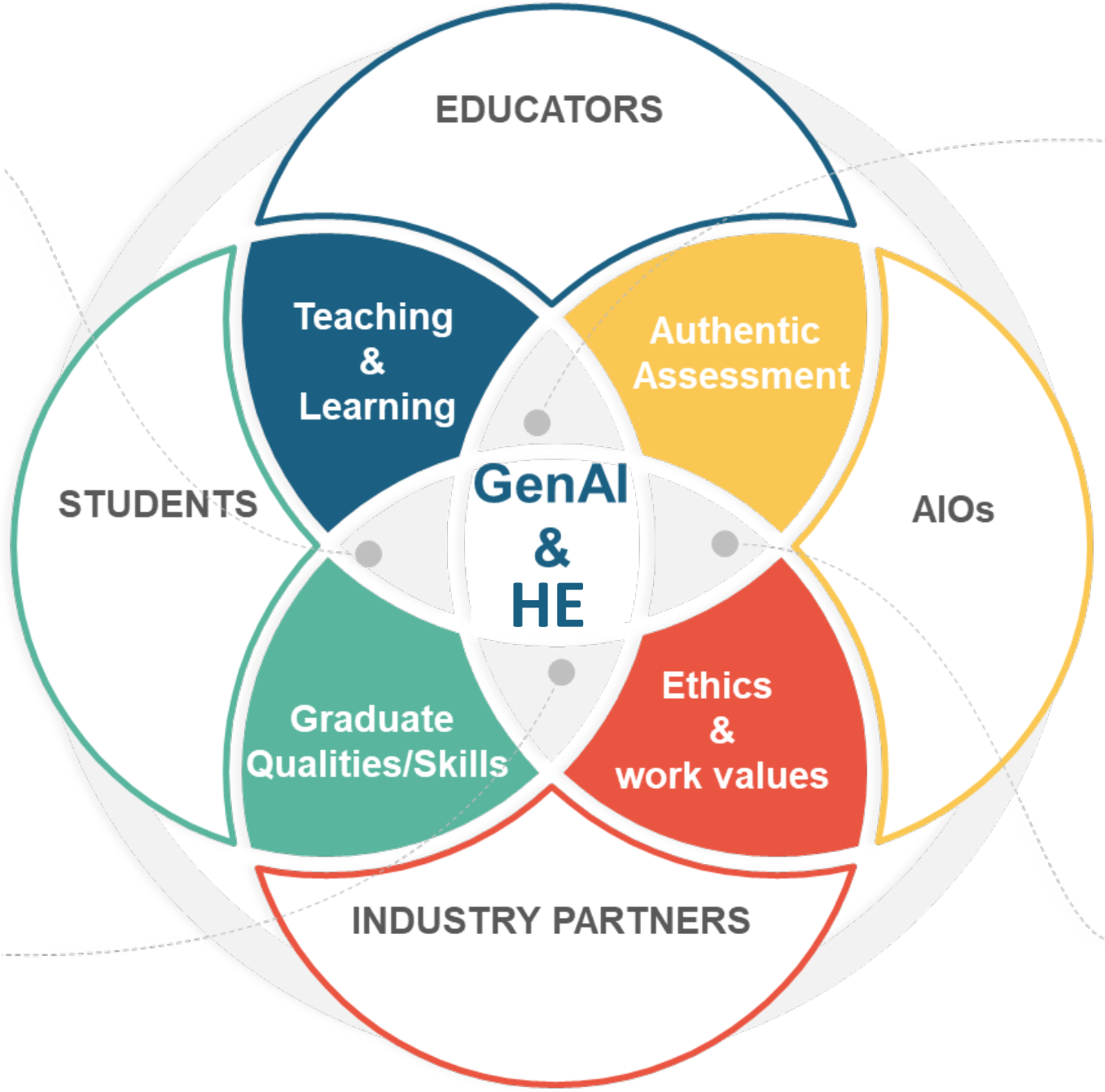


How the research domains intersect:

The project considered the multifaceted nature of the research problem.

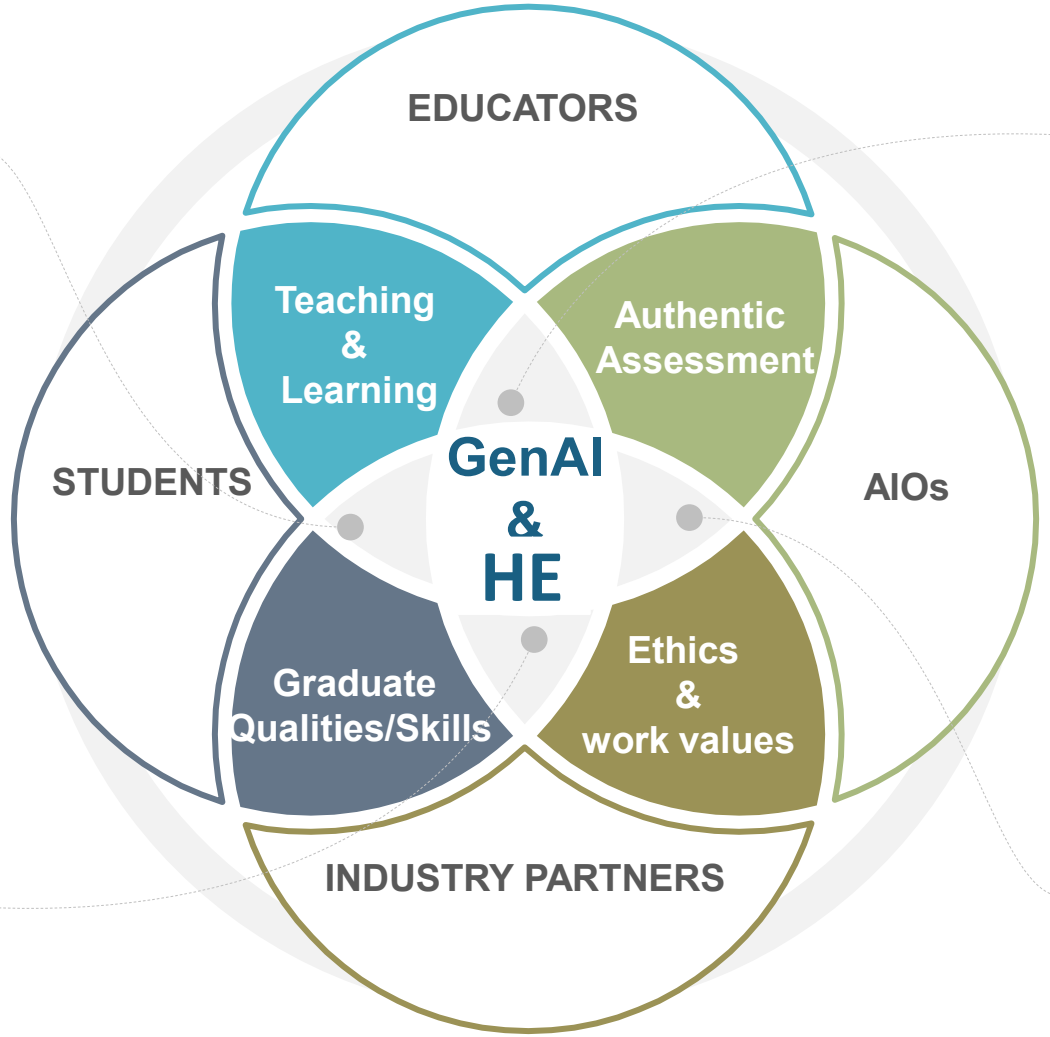
Acknowledging the voice of all stakeholders involved

- **Students – Educators:** T&L Experience
- **Students – Industry:** Graduates Qualities/skills
- **Industry – AIOs:** Ethics and Values
- **Educators-AIOs:** Authenticity, evidence of learning



- How do disciplinary contexts, GenAI experience levels, and linguistic backgrounds shape ***student perceptions of GenAI's benefits and risks***?
- What specific ***support and teaching strategies*** are needed to integrate GenAI into curricula?

- What are the key impacts of GenAI on ***industry practices and workforce requirements***?
- What essential ***skills and qualities*** do industries expect from ***graduates*** in this era?



- What are educators' perspectives on the ***integration of GenAI writing tools*** and their potential impact on authentic learning?
- What strategies can be implemented to ***design assessments suitable for the genAI era***?

- What is the extent of AIOs' ***exposure to and familiarity*** with GenAI tools?
- How do AIOs perceive GenAI's impact on ***assessment security*** and ***academic integrity*** in higher education?

Conceptual Framework / Working Model

derived from the empirical data synthesis

Gen AI: Industry Reform

Graduate Employability

Redefining competencies and skill gaps

Industry Transformation

Automating tasks and improving decision-making

Workforce Dynamics

Reshaping roles and expectations

Generative AI

The core technology creating new content

Industry Transformation

Automation, Decision-making, Digital Reform

Graduate Employability

Competencies, Skill gaps, Job readiness

Workplace Dynamics

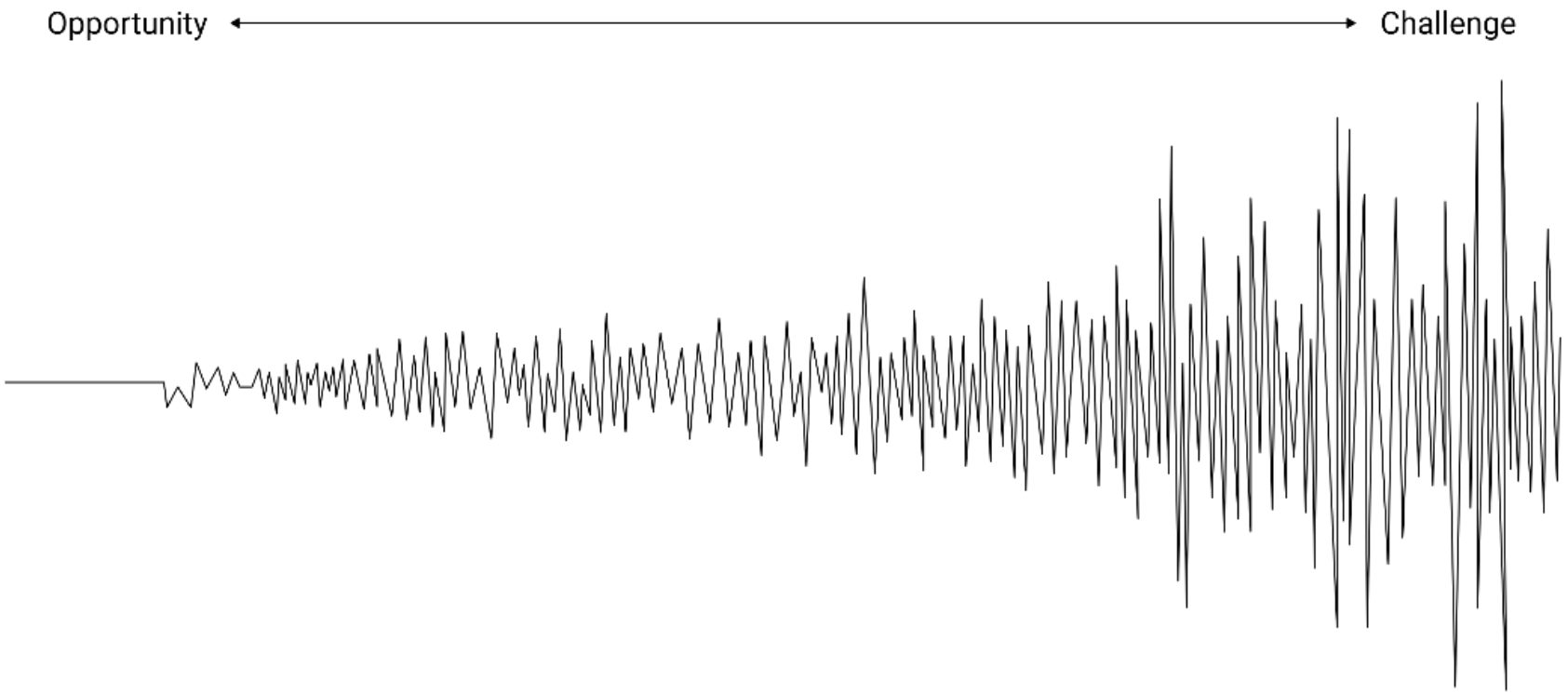
Roles, Expectations, Flexibility, High order thinking

Economic Growth

AI Core technology, new domains, new industries

INDUSTRY

HEIs Graduates: Challenges Vs Opportunities



Automation

Speeds up routine tasks

(36% of participants)

Data Analysis

Improves decision-making processes

(45% of participants)

Productivity

Increases efficiency in operations

Ethical Concerns

Raises bias, privacy, IP issues

(65% of participants)

Over-reliance

Causes loss of human judgment

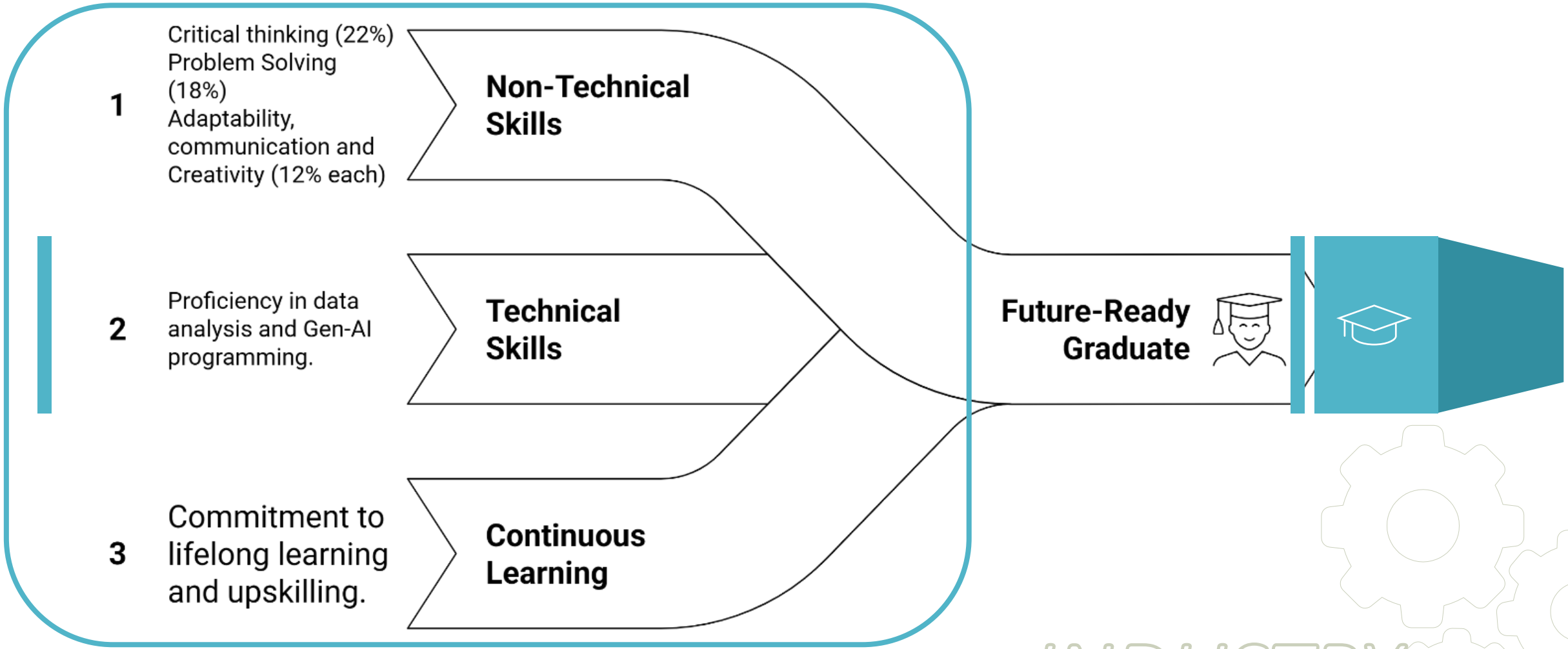
(87% of participants)

Job Displacement

Creates skills gaps and displacement

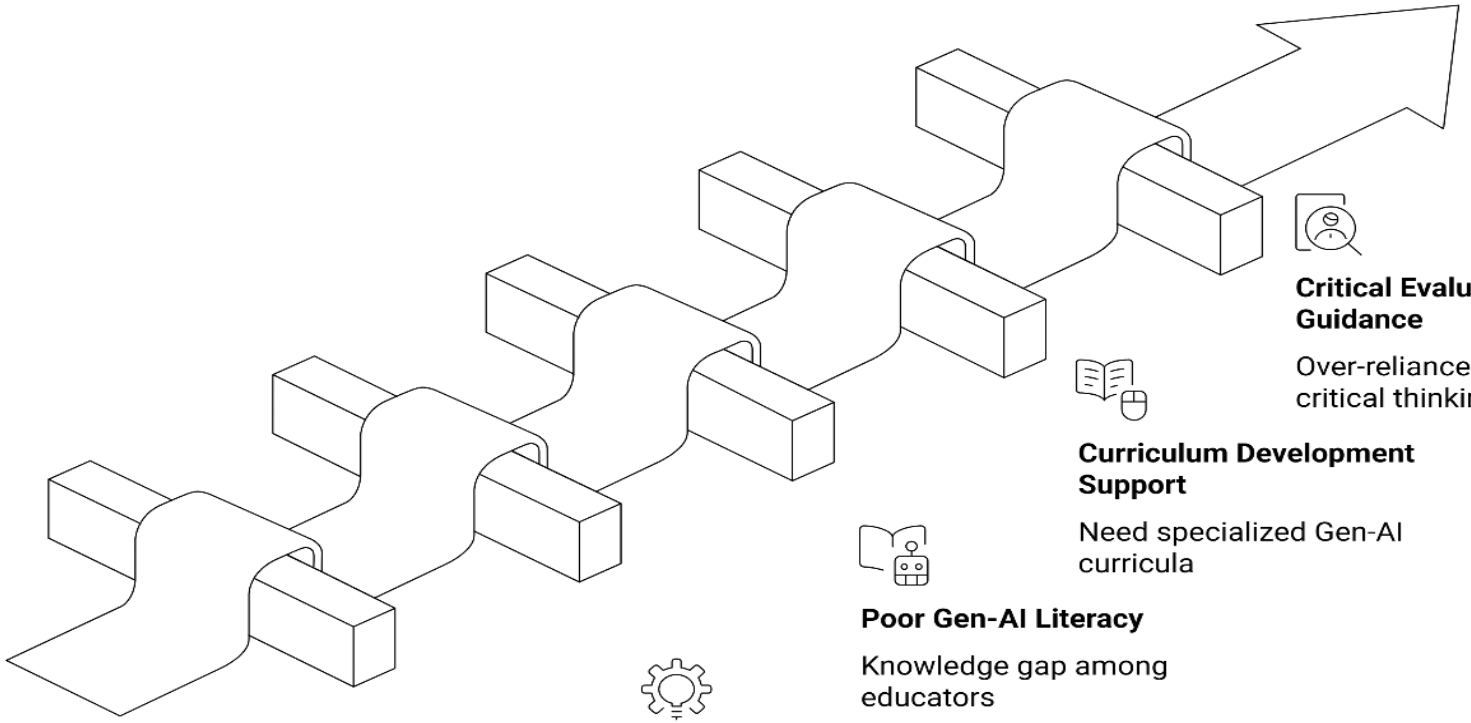
INDUSTRY

Essential Graduate Skills required by Industry/Employers



INDUSTRY

Educators’ Essential Toolkit: Industry View



Lack of Training

Educators need robust training

Limited Professional Development

Need critical thinking development

Poor Gen-AI Literacy

Knowledge gap among educators

Curriculum Development Support

Need specialized Gen-AI curricula

Critical Evaluation Guidance

Over-reliance weakens critical thinking

INDUSTRY

The integration of GenAI: Students' View

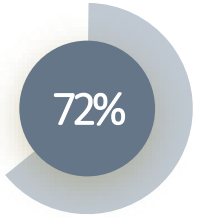
- **General Acceptance with Caution:** most students favour allowing GenAI use "with some limitations or guidelines"

- **Primary Uses and Perceived Benefits:** understanding concepts and brainstorming or generating ideas, for ESL students. Supplementary for clarifying complex topics, improving writing, and supporting more efficient research methods.

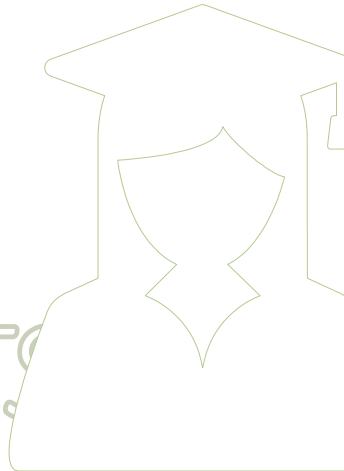
- **Disciplinary Differences in Perspective:**
  - **STEM and Education** students tend to see benefits in GenAI for generating insights and organising ideas.
  - **Clinical & Health Sciences and Business** students express more caution
  - **Clinical Health** students expressed the most vigorous opposition to permitting GenAI use, citing ethical concerns about medical data.

STUDENTS
Commenced the survey

Completed the survey



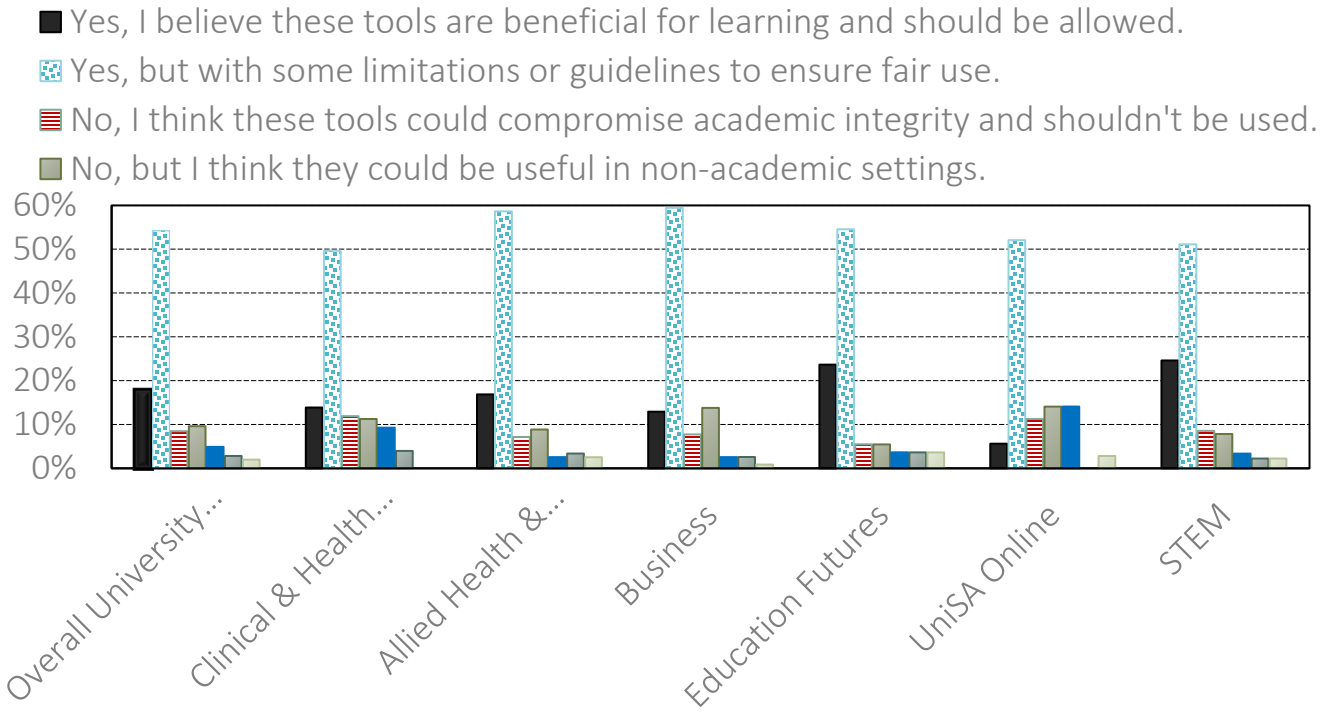
GenAI should be integrated & unrestricted



Moving forward: Students View

- **Need for Clear Guidance and Training:** Students expressed confusion due to mixed messaging on GenAI use, highlighting the need for universities to create clear, discipline-specific rules and to offer workshops or training on appropriate use and relevant tools.

- **Key Ethical and Practical Concerns:**
  - **Academic Integrity:** GenAI is perceived as a threat to the value of qualifications and assessment fairness..
  - **Over-reliance:** Students fear that GenAI could erode crucial competencies.
  - **Bias and Misinformation:** opaque data sources, unreliable outputs, and the reinforcement of pre-existing prejudices.
  - **Equity and Access:** limited digital access could deepen existing educational disadvantage



Students' perspectives on the Permissibility of GenAI Tools across academic units

What was Unique about the Students' View?

Full integration, Equal access & Training

1

Focus on Equity, Access, and Financial Barriers

institutions should provide **campus licenses for core tools** and embed digital-literacy modules to address these specific access issues.

2

Specific, Hands-On Training and Procedural Clarity

Workshops & training as an introduction to tools that are useful in **specific disciplines** or courses.

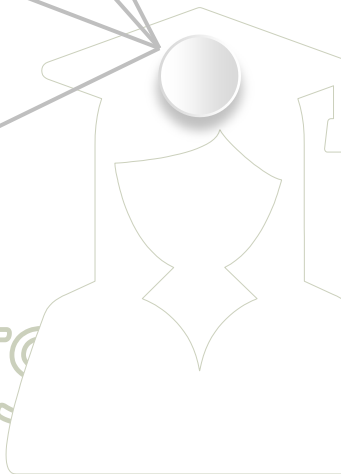
3

Disciplinary Opposition Driven by Professional Ethics.

cited ethical concerns specific to **medical and healthcare education**

4

Direct Functional Benefit for Non-Native Speaker, neurodiverse



Gen AI Integration and Adoption – Academics' View

- **Uncertainty and Caution:** Discipline academic staff remain uncertain about GenAI's effects on student work.
- **Core Concerns:** regarding the potential negative impact on critical thinking, engagement, feedback, and the attainment gap among students.
- **Integration Mandate:** the need to build students' confidence in using GenAI as a learning tool.

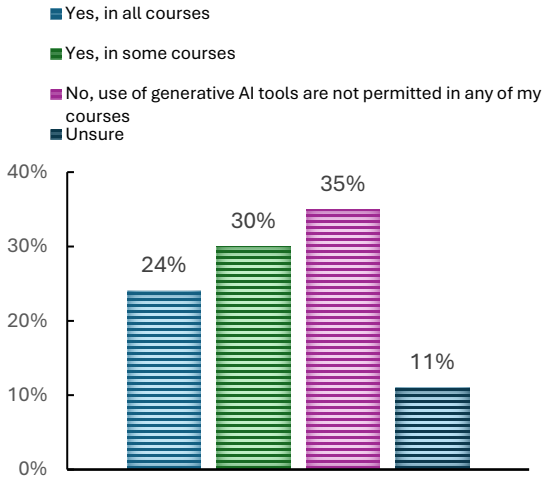


Figure 4. Academic Responses to Allowing GenAI Use in Their Courses

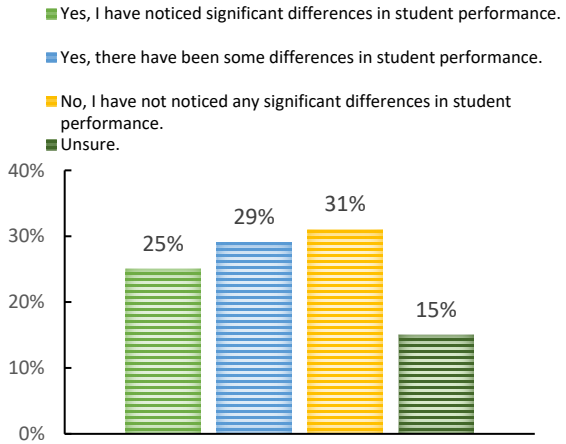
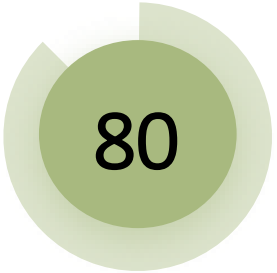
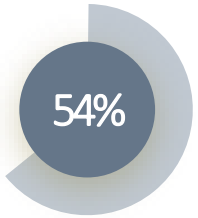


Figure 5. Noticed Differences in Student Performance Since the Introduction of GenAI

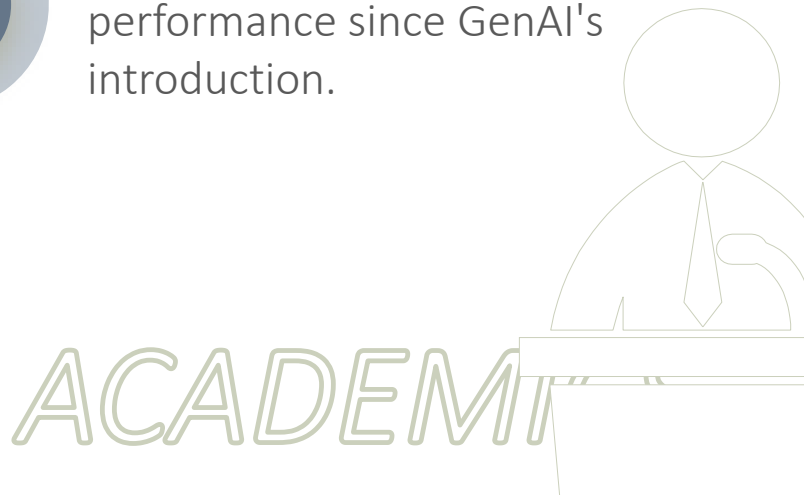


Academic Staff
Commenced the survey

Allowed students to use GenAI tools in their courses.



Noticed a change in student performance since GenAI's introduction.



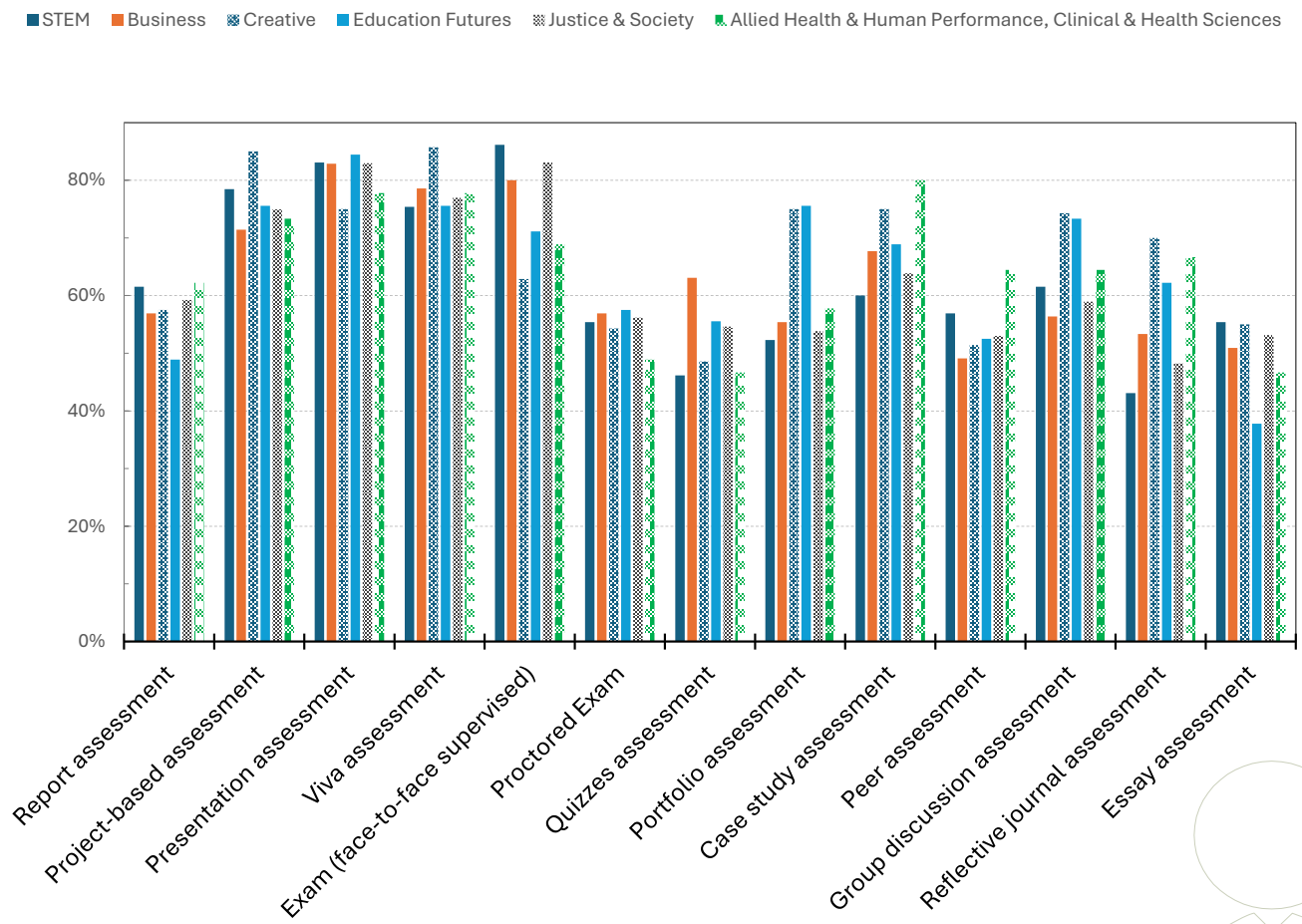
Moving forward: Academics' View

- **Assessment Overhaul:** Academic staff overwhelmingly believed that assessment types needed to change, requiring ***authentic, real-world, in-person assessments.***

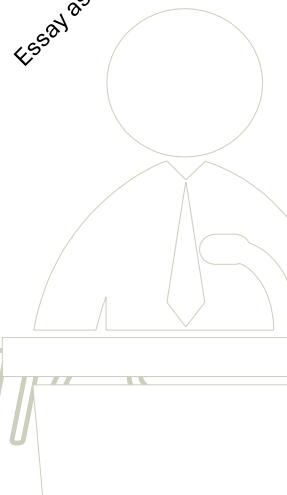
- **Scaffolded Learning:** An effective strategy is the use of scaffolded tasks linked to weekly coursework, helping students find information and demonstrate foundational knowledge.

- **Accountability and Guidance:** show students how to be accountable when using GenAI in academics, prompting adjustments in marking rubrics.

- **Disciplinary Differences in Assessment:**
  - **STEM**: face-to-face exams to test problem-solving and technical skills.
  - **Health and Human Sciences:** case studies where theory was applied to real-world clinical situations.



Assessment preferences by unit specialisation



What was Unique about the Academics' View?

Challenging HE's Purpose

1

Redefining Authorship and Originality

Policies often narrowly define the "problem" as ***loss of originality***. There is a call to reconsider the "originality" of students' work.

2

Reframing Institutional Purpose

From surveillance to transformative learning, prompting the question: "What is higher education for?"

3

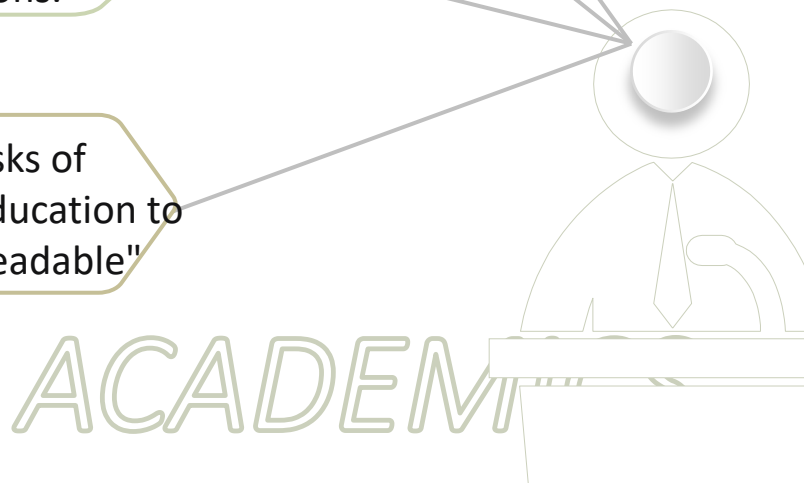
Rejecting Detection-First Approaches

Advocating improved assessment design and transparent AI declarations.

4

Interrogating External Influences

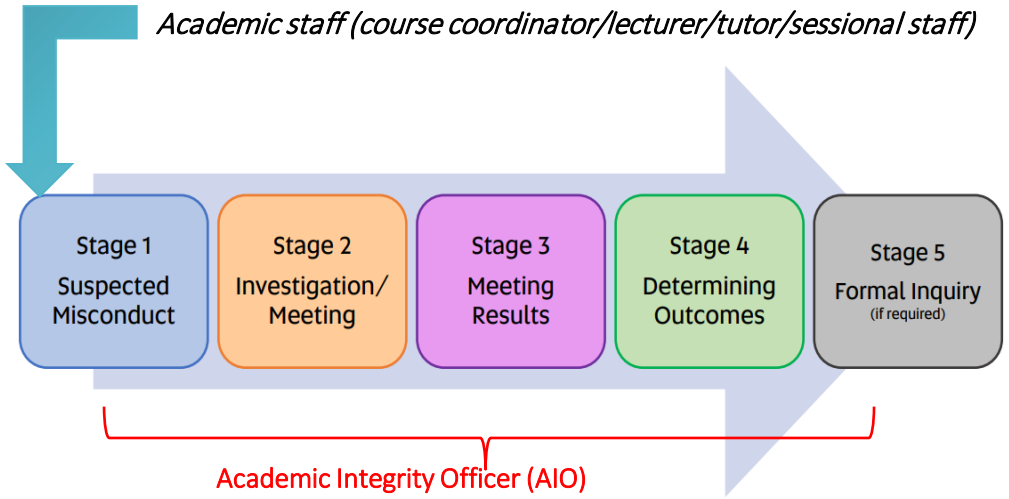
avoiding the risks of reorganising education to be "machine-readable"



Gen AI Integration and Adoption – Academic Integrity Officers' (AIOs) View

- **Detection Inadequacy:** AIOs' low confidence in detection, illustrating the inherent complexity of such investigations. Traditional plagiarism detection methods are generally inadequate for reliably distinguishing between genuine student work and GenAI-generated submissions. Only **24%** reported a high success rate in investigations,

- **Attribution of Misconduct:** AIOs attributed the rise in cases primarily to students not being adequately informed by universities about the ethical and permissible use of GenAI tools.



Academic integrity Process flowchart

18 Academic Integrity Officers Completed the survey

90% Reported investigating GenAI-related academic misconduct cases.

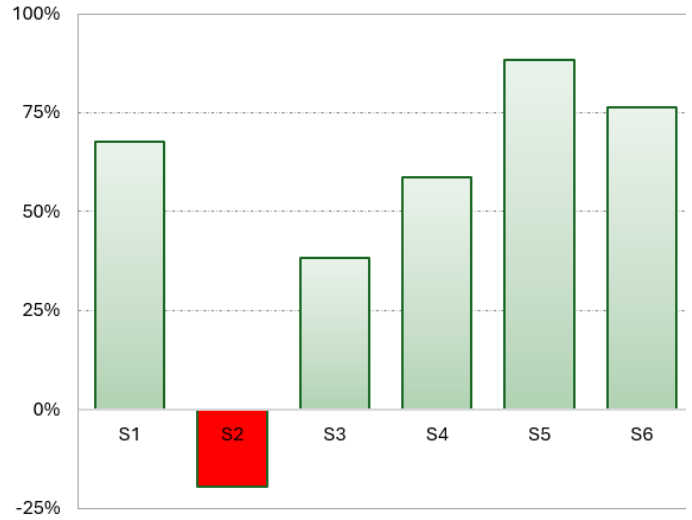
67% Reported that instances of misconduct had either doubled, tripled, or quadrupled since GenAI's emergence.

21% ONLY felt confident in their ability to detect GenAI-related misconduct.

Moving forward: AIOs' View

Prioritise educational and preventative measures over detection technologies:

- **Assessment Redesign:** 88.2% of AIOs support redesigning assessments.
- **Ethical Discussion:** 76.5% favor ethical discussions with students, compared to 39.5% for detection tools.
- **Mandatory Training:** Implement a compulsory first-year course on writing, researching, referencing, and ethical GenAI use.
- **Motivational Messaging:** Use motivational videos to highlight the value of authentic learning and job readiness over reliance on GenAI.
- **Clear Guidance:** Integrate GenAI literacy with clear usage guidelines.
- **Accountability and Guidance:** Teach students accountability in GenAI use and adjust marking rubrics accordingly.



Average agreement scores for survey questions (S1 – S7)

AIOs' views on assessment security and integrity

Category	Value
S1: GenAI challenges academic integrity	67.7
S2: Permit unrestricted GenAI use	-19.5
S3: Develop GenAI detection tools	38.5
S4: Provide specific assignment guidance for students	58.8
S5: Review assessments and teaching materials	88.2
S6: GenAI ethics discussion with students	76.5
S7: Mandatory GenAI training	61.8

What was Unique about the AIOs' View?

Unique Focus on Procedural Integrity and Ethics

1

Rejection of Surveillance

to reframe the purpose of Higher Education away from surveillance/policing toward **transformative learning**.

2

Focus on Procedural Fairness

Addressing practical and legal challenges in integrity practice, including due process and evidentiary standards.

3

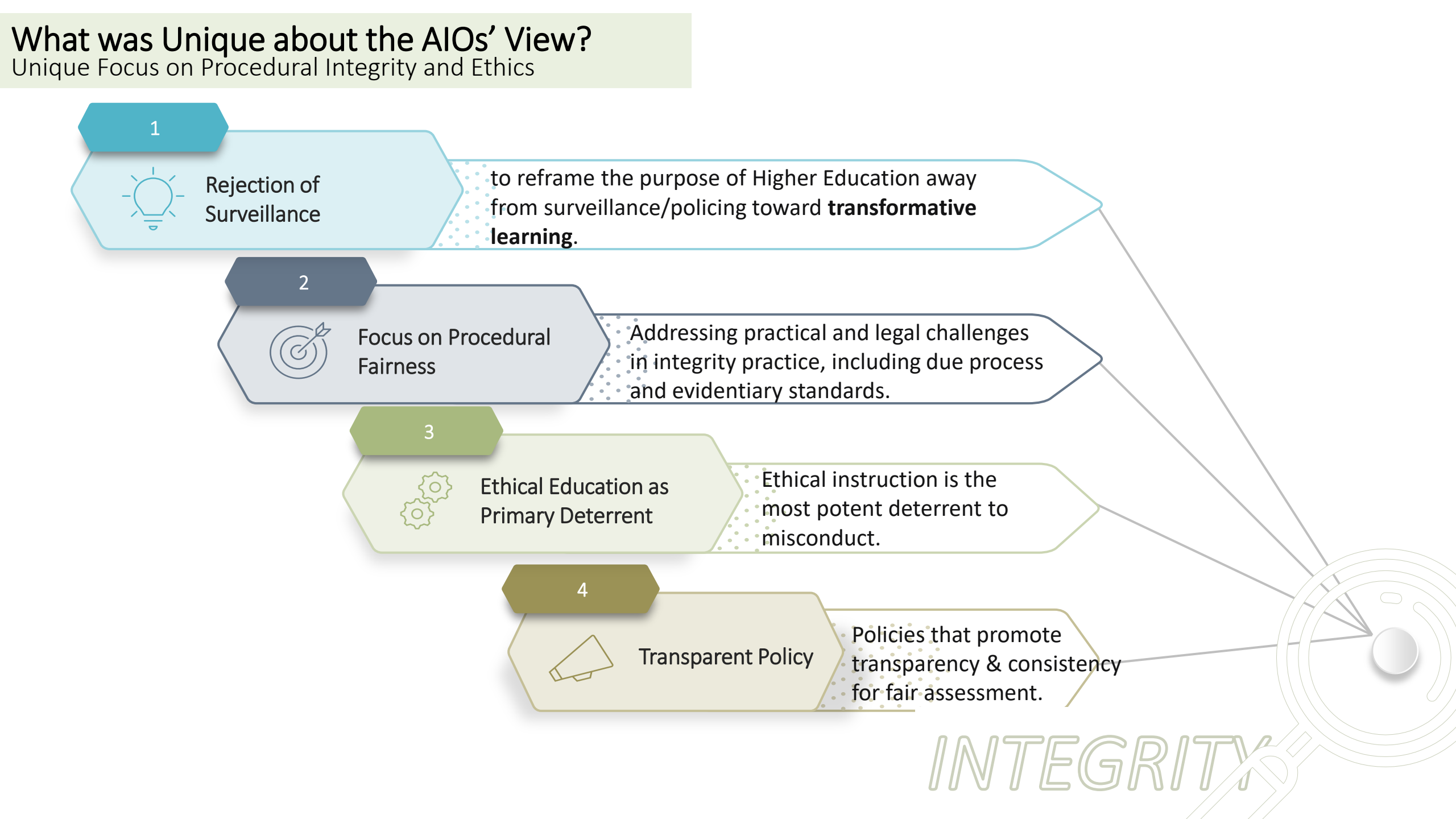
Ethical Education as Primary Deterrent

Ethical instruction is the most potent deterrent to misconduct.

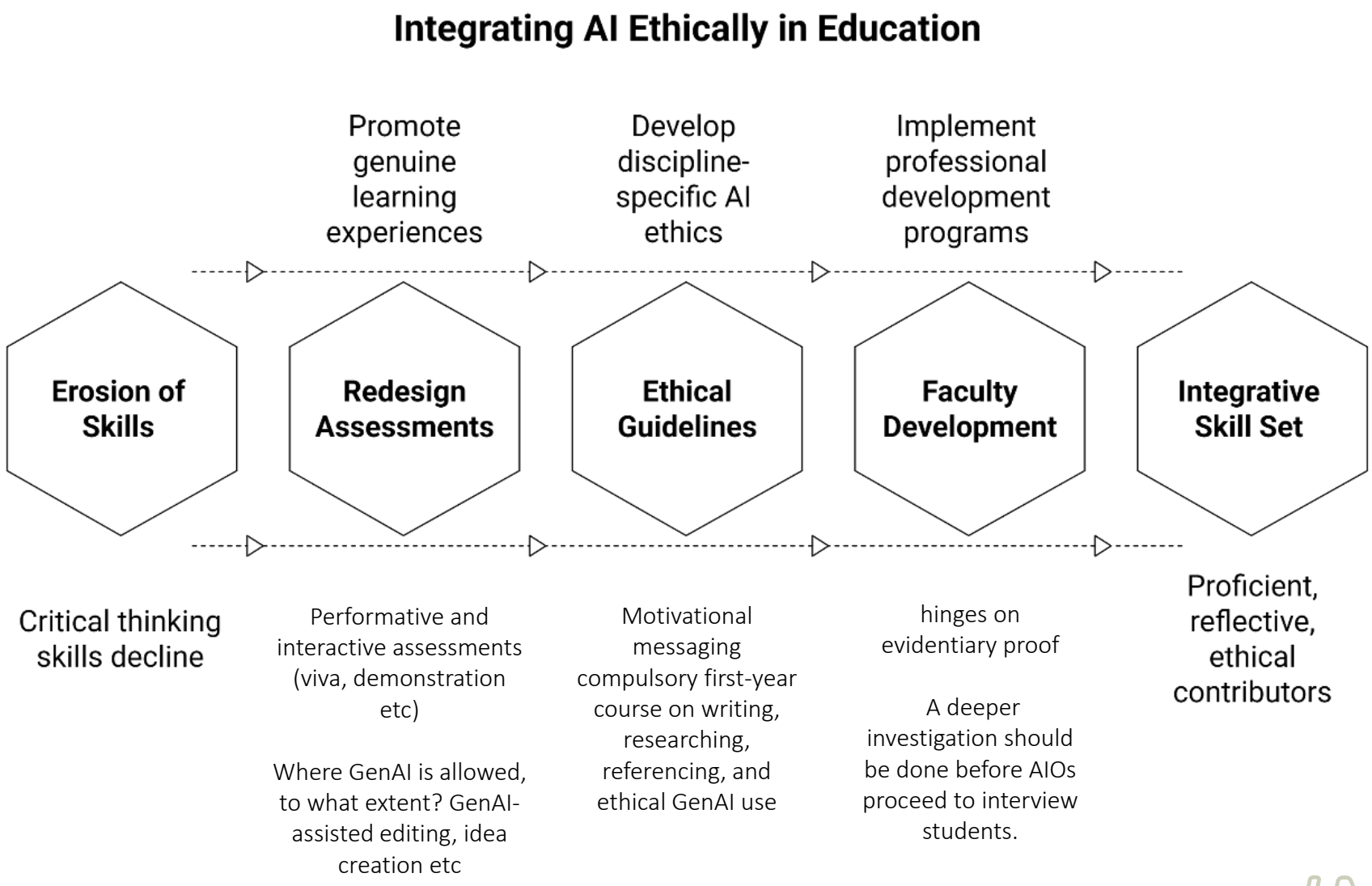
4

Transparent Policy

Policies that promote transparency & consistency for fair assessment.



Program/Course Development– AIOs View



- 88.2% & 58.8%: support assessment design changes & clear guidelines

76.5% & 61.8 %: advocate ethical discussions with students & GenAI training

Only 39.5% support using detection tools

INTEGRITY

Integrating Gen-AI Ethically and Effectively in HE

1 Redesign Assessment

Shift to authentic tasks and adjust the rubric

2 Establish Ethical Guidelines

Develop discipline-specific rules

3 Build Foundational Knowledge

Ensure core disciplinary knowledge is built

4 Promote Critical Thinking

Teach students to evaluate GenAI outputs.

5 Collaborate with industry

Seek a partnership for curriculum Development.

6 Encourage lifelong Learning

Foster adaptability & continuous upskilling

Prioritised Recommendations

PRIORITY LEVEL	RECOMMENDATION AREA	RATIONALE (LINKING TO SPECIFIC STAKEHOLDER NEEDS)
Immediate/Critical (Integrity Focus)	Clear, Discipline-Specific Guidelines & Ethical Education	Directly addresses *student* confusion and *AIO* concerns that ethical education is the strongest deterrent over detection. Necessary for ensuring consistent integrity processes.
High/Pedagogical (Staff/Student Focus)	Assessment Redesign (Authentic & Iterative) Learning assurance	Responds to *academic staff* demand for in-person, authentic assessments and addresses the *staff* and *student* concern about GenAI over-reliance and surface learning. This includes rewarding the responsible use of GenAI.
Medium/Strategic (Institutional & Program Focus)	Program-Level GenAI Mapping (Vertical Scaffolding)	Addresses the *industry's* fear of loss of critical thinking. Foundational courses build knowledge, mid-level courses evaluate output, and capstone courses apply GenAI in complex tasks.
Ongoing/Structural (Equity & Industry Focus)	Equity Measures and Embedding Professional Practice	Addresses the critical voice regarding paid tools and digital access. Embedding skills like communication and adaptability meet *industry expectations* for *job readiness*.

THANK YOU