New Forms of Assessment in an AI World

According to Stefan Bauschard in "Rebuilding 'Merit': University admissions, Education, and the Skills That Still Matter"...

"Instead of measuring students' ability to replicate what machines now do better, universities should identify those who excel at human-augmented intelligence: designing experiments to test hypotheses no one else thought to ask, facilitating genuine dialogue between opposing groups, creating original works that reveal new perspectives, and synthesizing insights across disciplines...The most meritorious students of the AI age will be those who can leverage artificial intelligence to amplify human wisdom, creativity, and insight."

Bauschard identifies the following skills in his defense of "The Fundamental Importance of Skills Beyond Content Knowledge"

Diversity of Thought

- **Diversity of thought**—including cultural, cognitive, and creative differences—is a uniquely human strength that complements AI.
- Students should see their **individual perspectives as assets**, not obstacles, in solving complex problems.
- While AI finds common solutions, humans offer **unconventional, empathetic, and ethically nuanced insights**.
- The future belongs to those who can **guide AI with original thinking**, not those who try to mimic its speed or logic.

Learning to Learn

- In a world of rapid change, the ability to **learn how to learn** is more valuable than static knowledge.
- Students must be able to **adapt quickly**, questioning outdated assumptions and integrating new ideas across disciplines.
- **Emerging fields and overturned beliefs** show that rigid expertise can become obsolete fast.
- Unlike AI, humans can **identify what needs to be learned next** and make creative, cross-disciplinary leaps.

Learning Through Iteration

- **True learning happens through trial, error, and refinement**, not from getting it right the first time.
- **Failure is a key teacher**, turning mistakes into opportunities for growth and insight.
- **Iterative learning, supported by AI feedback**, creates safe spaces for experimentation and rapid improvement.
- Expertise develops through **persistent, reflective practice**, not rote memorization.

Learning to Fail and Succeed

- **Resilience through failure and iteration** is crucial for real-world success but often discouraged by standardized education.
- **Breakthroughs come from repeated failures**, as seen in the stories of entrepreneurs, scientists, and artists.
- The current system teaches students to **avoid risk and fear mistakes**, leaving them unprepared for real innovation.
- Students who learn to "fail forward" - **extracting insight, adapting quickly, and staying motivated** - will thrive in a future shaped by uncertainty and AI.

Judgement

- The AI era requires **human judgment** to navigate complex, ethical, and value-based decisions where no clear answer exists.
- While AI excels at data analysis, it cannot replace **moral reasoning, cultural sensitivity, or long-term thinking**.
- Current education often rewards quick answers over **thoughtful deliberation and ethical reflection**.
- Future leaders will be those who can **make principled decisions under uncertainty**, where AI cannot substitute for human wisdom.

The 5Cs

- Success in an AI-augmented world depends on **human-centered skills** that AI cannot replicate, especially in social, ethical, and emotional contexts.
- The "5Cs" - **critical thinking, creativity, collaboration, communication, and character**—bridge AI's capabilities with real-world human needs.
- These skills help humans **interpret, apply, and guide AI responsibly**, especially in complex, high-stakes domains.
- Unlike standardized test skills, the 5Cs develop through **deep interpersonal interaction, ethical judgment, and lived experience**.

Discernment

- In a world flooded with human and AI-generated information, **discernment is essential** for evaluating accuracy, intent, and reliability.
- Students must learn to **identify bias, misinformation, and emotional manipulation** from both human and AI sources.
- Effective discernment involves **cross-referencing diverse perspectives**, recognizing the strengths and limits of both human intuition and algorithmic analysis.
- The ability to **judge information quality**—regardless of origin—will be key to making sound decisions in a complex, AI-driven world.

AI Augmentation

- Students must learn to **integrate AI seamlessly into their thinking and workflows**, as it becomes embedded in everyday life.
- The goal is not dependence, but **strategic use of AI** alongside strong human cognitive skills.
- Success requires knowing **when to rely on AI vs. human judgment**, and how to interpret and apply AI outputs critically.
- The future will favor those who can **collaborate with AI to solve complex problems**, combining machine power with human insight.

Fundamental Aspects of Assessment

- Assessments MUST be aligned to your course learning objectives. Learning objectives spell out what you want students to be able to do as a result of taking your course…your assessments are the evidence that students can do those things. It's important to start with clear, specific, measurable learning objectives for students.
- Identify for yourself the purpose of assessments in your course. Are they meant to provide feedback to students for areas of improvement and learning they have not yet mastered OR are they meant to be a final judgement on a student's learning (some assessments may be a mix of both purposes)? Your decision frames your approach: feedback to students for improvement implies a future opportunity to demonstrate that improvement and mastery; final judgments have a tendency to stifle learning as students see little point in reviewing / making improvements if they won't be allowed to demonstrate their eventual mastery.
- The shared (between course instructors and students) goal should be "validity" – that assessments are valid measures of student learning and achievement. It is important to distinguish between "assessment security" (that students followed every rule of the assessment and received no unauthorized assistance) and "assessment validity" (that the assessment is a valid measure of the learning goals). Assessment security is difficult to achieve. Assessment validity can be easier to achieve in an AI world.
- Assessments can fall anywhere on the AI assessment scale:

The AI Assessment Scale

1	**NO AI**	The assessment is completed entirely without AI assistance in a controlled environment, ensuring that students rely solely on their existing knowledge, understanding, and skills **You must not use AI at any point during the assessment. You must demonstrate your core skills and knowledge.**
2	**AI PLANNING**	AI may be used for pre-task activities such as brainstorming, outlining and initial research. This level focuses on the effective use of AI for planning, synthesis, and ideation, but assessments should emphasise the ability to develop and refine these ideas independently. **You may use AI for planning, idea development, and research. Your final submission should show how you have developed and refined these ideas.**
3	**AI COLLABORATION**	AI may be used to help complete the task, including idea generation, drafting, feedback, and refinement. Students should critically evaluate and modify the AI suggested outputs, demonstrating their understanding. **You may use AI to assist with specific tasks such as drafting text, refining and evaluating your work. You must critically evaluate and modify any AI-generated content you use.**
4	**FULL AI**	AI may be used to complete any elements of the task, with students directing AI to achieve the assessment goals. Assessments at this level may also require engagement with AI to achieve goals and solve problems. **You may use AI extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.**
5	**AI EXPLORATION**	AI is used creatively to enhance problem-solving, generate novel insights, or develop innovative solutions to solve problems. Students and educators co-design assessments to explore unique AI applications within the field of study. **You should use AI creatively to solve the task, potentially co-designing new approaches with your instructor.**

 Perkins, Furze, Roe & MacVaugh (2024). The AI Assessment Scale

Creative Assessment Ideas for an AI-Era Curriculum

1. **Iterative Reflective Journals** - Students document their learning process on a project or complex problem over multiple stages, explicitly reflecting on failures, revisions, and insights gained. This encourages **learning through iteration**, resilience, and metacognition.
2. **Cross-Disciplinary Problem Framing** - Students select a current issue (e.g., climate change, digital misinformation) and create a project framing the problem through at least two different disciplinary lenses (e.g., science + philosophy). This builds **critical thinking, creativity, and diversity of thought**.
3. **Peer Review with Constructive Feedback** - Students exchange drafts or project ideas and provide structured, thoughtful peer feedback emphasizing diverse perspectives, creative alternatives, and ethical considerations, reinforcing **collaboration, communication, and critical thinking**.
4. **Ethical Dilemma Case Studies** - Present ambiguous, real-world ethical dilemmas (e.g., AI bias in hiring, privacy in health tech). Students write detailed essays analyzing stakeholders, competing values, and propose principled decisions demonstrating **judgment, moral reasoning, and character**.
5. **Alternative Worlds** – Learners apply basic concepts to problems that don't occur in real life (and won't be a part of the AI training set). This builds **critical thinking** and **application** skills.
6. **Ill-Posed Questions** – Students are given an ill-posed question and must identify what data is missing or conflicting, make the question well-posed (and justify their decision), and then solve it. In this manner they **judge information quality** and **apply critical thinking to discern what comes next in problem-solving**.
7. **Hyper-Local and New** – Using your own current research, thoughts, and experiences for the content of assessments, making it unlikely that AI is trained on that information, but also offering new, authentic, and realistic content for students as they **learn how to learn**.
8. **Collaborative Written Dialogue** - In small groups, students compose a multi-perspective written dialogue debating a complex topic, alternating viewpoints and integrating different cultural or cognitive approaches. This fosters **collaboration, communication, and diversity of thought** in writing.
9. **Discernment Portfolio** - Students curate a portfolio analyzing various information sources on a controversial topic, assessing credibility, bias, and reliability, including human and AI-generated content. They submit a synthesis report showcasing **discernment and critical evaluation skills**.
10. **Creative Synthesis Project** - Students combine ideas from unrelated fields (e.g., art + engineering) to propose innovative solutions or new concepts. The project includes a process log explaining how they integrated diverse knowledge and perspectives, highlighting **creativity and interdisciplinary thinking**.
11. **Character and Decision-Making Diaries** - Over a term, students keep a diary recording decisions they face that require ethical or value-based judgment (academic, social, environmental), reflecting on how they made choices and what influenced them. This cultivates **character, judgment, and self-awareness**.
12. **AI Workflow Simulation Report** - Students simulate working alongside AI by choosing tasks (e.g., data analysis, research) where they identify when to rely on AI-like tools (manually) and when to apply their own reasoning or creativity, documenting their decision-making process to demonstrate **AI augmentation and metacognitive skills**.
13. **Failure Analysis Essay** - Students write about a historical or personal example of failure that led to success, dissecting the iterative learning process and emotional resilience involved. This supports **learning to fail and succeed** as a growth mindset.