

Practical approaches to assessment in an AI copilot world

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Educational Innovation

DVC (Education) Portfolio

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Surely my authentic assessment is AI-proof

Imagine you are a pharmacy student who has just completed a week-long placement block at a community pharmacy. Write a 500 word reflection about your placement. Summarise a significant event that happened, then describe how this relates to your past experiences, then describe what you have learnt, and finally identify a question that remains unanswered.

- Reflective
- Personal
- Contextualised
- Situated
- Real world



r/ChatGPT

by jackredditlol • 18 days ago



I delivered a presentation completely generated by ChatGPT in a master's course program and got the full mark. I'm alarmingly concerned about the future of higher education

a presentation about a topic quite frankly we couldn't care less about.

framework of [subject's name] for a [master's class name]. Make sure to divide the presentation in 4 parts and make each part evenly split". We waited for it to generate a plan and holy moly does the plan look immaculate. After this we asked it to mention the studies where the plan come from and for each section to generate with references at least 4 academic statements, summarizing them in bullet points each. Lo and behold, we literally had our presentation slides served to us in under 20 minutes. We all sat at the café looking at each other in wonder as to wtf just happened.

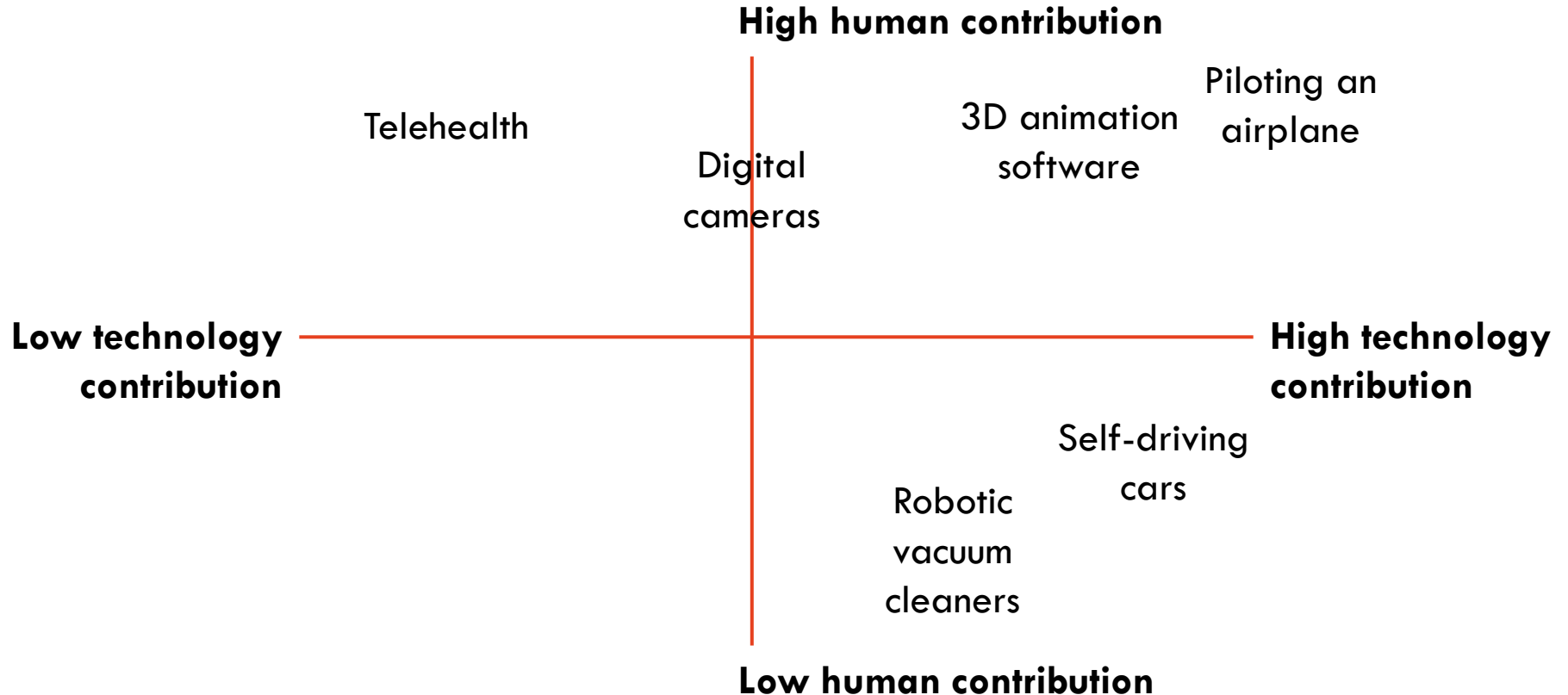
We were all creeped out and fairly amazed at how fast everything was. We used to read a couple articles, take notes, make a presentation slide and carefully jot down the notes and the bullet points for the presentation. Now we're fighting over which font to use and what wallpaper.

For everyone in higher education, I genuinely wish you the best of luck.

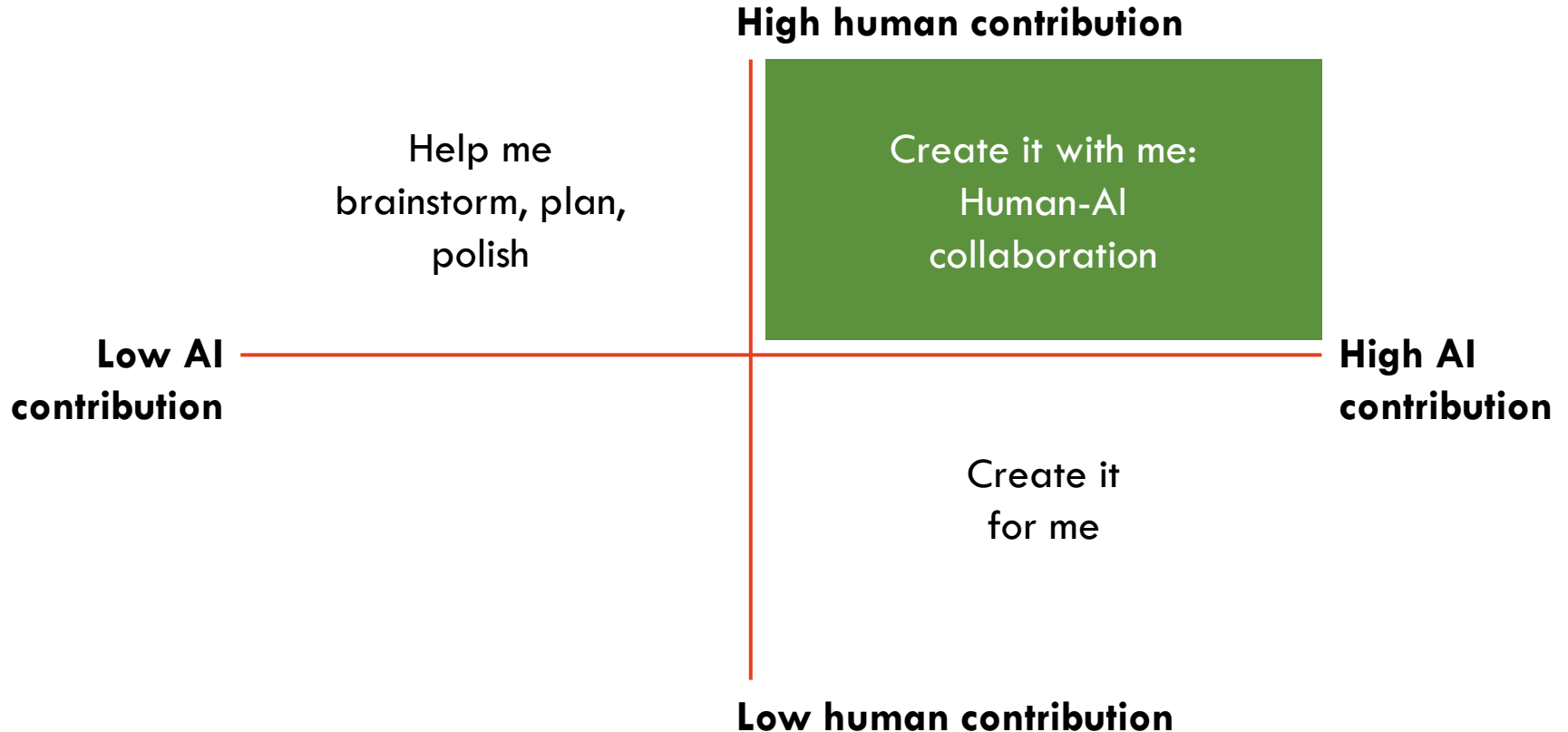
be deployed to contain this beast and I'm glad this is my final semester in higher education and kinda got there early to take full advantage of this. It's going to be a nightmare discerning real human work from AI-generated content, and I'm sure everyone is going to suffer equally this abrupt advance in technology.

Rethinking how we do stuff

Human-technology interactions



Human-AI interactions



ChatGPT (and generative AI) is like...

- A calculator
- Wikipedia
- Fire
- A well-read classmate
- An assistant

What works for assessments in the age of AI?

Microsoft Word

Copilot in Word



Microsoft

What works for assessment generally?

Villarroel et al. 2018

- Authentic assessment
 - Realism
 - Realistic context
 - Realistic task
 - Cognitive challenge
 - Evaluative judgement
 - Exemplars
 - Rubrics
- Feedback

Two-lane approach

Lane 1: Assurance of LOs

Short term

- In-person exams/tests
- Viva voces

Longer term

- In-class contemporaneous assessment
- Interactive oral assessments
- In-person exams/tests (sparingly)

Lane 2: Human-AI collaboration

Short term

- Students use AI to brainstorm, draft outlines, summarise resources, perform research
- Students critique AI responses

Longer term

- Students collaborate with AI and document this process; the process is graded more heavily than the product

Example of two-lane approach

LOs: apply marketing strategy concepts in real-world scenarios; demonstrate communication skills; evaluate effectiveness of different marketing strategies.

Lane 1: Assurance of LOs

- Live Q&A after in-class presentation (defend research/analysis, etc)
- Giving students unseen case study in a live supervised setting

Lane 2: Human-AI collaboration

- Bing Chat for market research and competitor analysis
- Adobe Firefly for campaign design
- Collaboration process is documented (fact-checking, improving, critiquing)
- In-class presentation
- Process heavily weighted

Important note about detection

- Many issues with AI detection by AI
 - False positives, including bias against NESB writers
 - False negatives, trivially easy to circumvent
- And issues with AI detection by humans
- It is not allowable to submit student work to any AI detection tool
 - Coordinators must submit a case to the Office of Educational Integrity
- Turnitin's AI detection tool is **not** switched on at USYD

Important steps for unit coordinators to take right now

- Try out their assessments in ChatGPT/other AI
- Evaluate how their assessments motivate students (SDT)
- Balance lane 1 and 2
- Reduce perceived workload and pressure
- Make decisions and communicate to students

Using AI to help us make assessment better

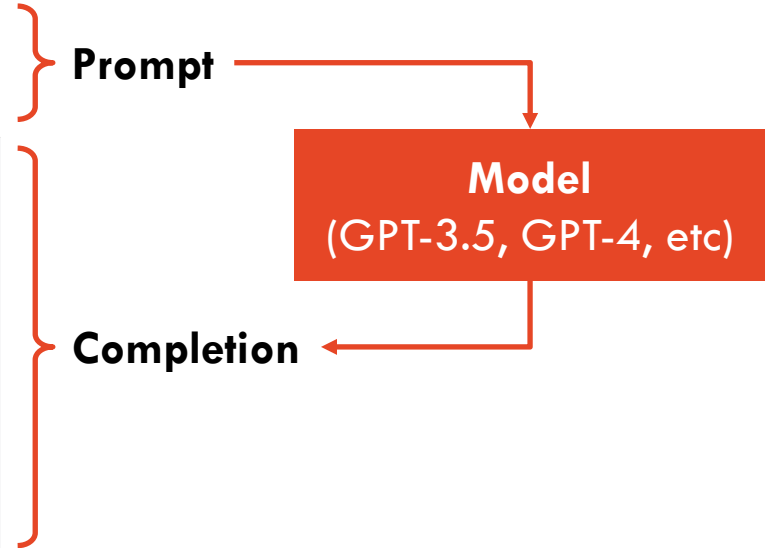
Some terminology



List 5 things a first year postgraduate student might say after their first week studying at university.



1. "I am overwhelmed by the amount of reading and assignments that we are expected to do each week. It's going to be a challenging year!"
2. "I am enjoying the lectures and discussions in class. The professors are really knowledgeable and passionate about their subjects."
3. "I have already made some great friends in my program. It's great to connect with people who share similar interests and goals."
4. "I am still trying to get used to the new routine and schedule. It's a lot different from undergrad and requires more self-discipline."
5. "I am excited about the opportunities that this program will offer me, both academically and professionally. I can't wait to see what the rest of the year holds!"



One suggested structure for prompts

- RTRI:
 - Role (act as...)
 - Task
 - Requirements (include... contain... be...)
 - Instructions

Text-based generative AI tools

Tool	URL	Cost/access
ChatGPT	https://chat.openai.com/	Free (GPT-3.5)
ChatGPT Plus	https://chat.openai.com/	US\$22/month (GPT-4)
Bing Chat	https://www.bing.com/chat	Free access to GPT-4
Chatbot UI	https://www.chatbotui.com/	Needs OpenAI API key (\$) but can be cheaper than ChatGPT Plus)

Hands-on with some AI and prompts around assessment

Access to GPT-4

In a browser, navigate to:

bit.ly/sydteach23-ai

Example: Try your assessment in AI

- Copy and paste an assignment brief or an assessment question into a generative AI tool
- Try:
 - Include the rubric descriptors for HD if you have them
 - Using follow-up prompts to improve the AI's response (e.g. suggest specific improvements)

Example: Generate practice Q&A

You are a world-leading, award-winning geosciences instructor.

Make 3 multiple choice questions that test second-year university students' understanding of a combination of the following topics:

- Geomorphology
- Geochemistry
- Mineralogy

For each question, provide the correct answer. Then write feedback to students about the correct and incorrect options. Link the topics together in your feedback to help students connect ideas together. In your feedback, provide questions that encourage students to explore these ideas more themselves, instead of giving them the answer directly.

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What is Bloom's taxonomy?

Example: Assessment ideas generator

Suggest 5 creative assessment ideas that can assess the following learning outcomes in a university-level planetary sciences course. Make the assessment meaningful for students, encourage gradual work towards the final product, and use non-essay formats.

LO1. Analyse and interpret data from spacecraft missions, telescopic observations, and laboratory experiments to gain insight into the properties and characteristics of planetary bodies.

LO2. Evaluate the evidence for the formation and evolution of the solar system and the diversity of planetary systems around other stars.

LO3. Critically assess the potential for life beyond Earth and the constraints that govern habitability on other planets and moons.

LO4. Demonstrate proficiency in the use of mathematical and computational tools to model planetary systems, simulate planetary processes, and analyse data.

LO5. Communicate scientific ideas effectively through oral and written presentations, as well as through collaborative projects and group discussions.

Example: Two-lane assessment ideas generator

Act as an expert higher education faculty member, skilled in designing authentic assessments.

The two-lane approach below describes how assessments need to be designed to ensure students attain learning outcomes as well as ensure students have a chance to develop positive approaches to collaborating with AI.

Lane 1: Assurance of learning outcomes through in-person supervised or invigilated assessments, options are:

- In-person exams/tests (used sparingly)
- In-class activities that are graded
- Interactive oral assessments and viva voces

Lane 2: Encouraging and enabling human-AI collaboration

- Students use AI to brainstorm, draft outlines, summarise resources, perform research
- Students critique AI responses
- Students collaborate with AI and document this process; the process is graded more heavily than the product

Using these two lanes, design a set of assessment tasks where students need to ...

The two assessment tasks must complement each other. Start by designing the lane 2 assessment. Students will use the lane 2 assessment to develop disciplinary expertise and competence with AI. They will then have their learning outcomes confirmed by the lane 1 assessment in a supervised/invigilated setting.

Example: Rubric drafting assistant

Act as an expert higher education academic and writer of assessment rubrics.

I need to write a marking rubric for a second-year university-level assessment where students (pre-service teachers) need to critique the use of technology in high schools. You need to help me generate the rubric rows (which are the criteria), and the columns are the various standards (from high distinction, to distinction, to credit, to pass, to fail).

Ask me questions to help me write a strong rubric. Ask one question at a time, wait for my response, and ask me the next question. After I have answered your questions, produce a draft rubric for me.

Example: Exemplar generator

Write a 300 word reflection based on the following ****assignment parameters****. Ensure your reflection addresses achievement at the level described in the ****performance criteria****.

Assignment parameters

Performance criteria

Example: Evaluating assessment criteria

The below are two sets of criteria for an assignment - **pass criteria** and **distinction criteria**. The assignment is described in the **assignment parameters**. In a table, provide examples of student writing for each of the criteria at the two standards, pass and distinction.

Assignment parameters

Pass criteria

Distinction criteria

Example: Cleaning up feedback*

Act as an expert educator in higher education.

I will give you a summary of notes for feedback to students about an assignment. I want you to expand these into a paragraph or two of feedback to students. The feedback needs to be encouraging and help students understand how they can move forward.

Base your feedback on the ****assignment brief**** as well as the ****marking rubric****.

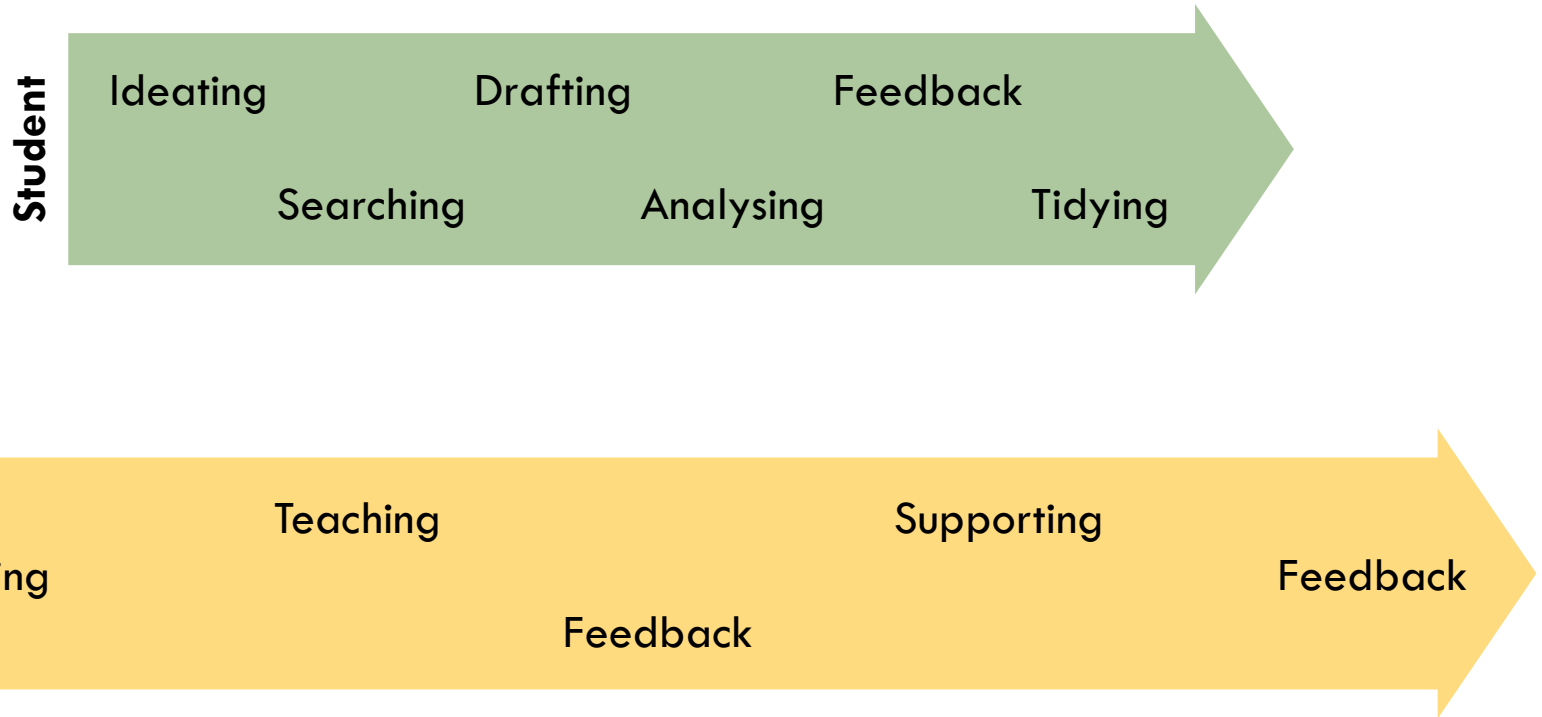
Acknowledge that you understand this and have received the assignment brief and rubric. Wait for me to provide the summary of notes. When I provide the summary, you should reply with the expanded feedback. Keep your feedback a maximum of 2 paragraphs.

Assignment brief:

Marking rubric:

Where to now?

Where, when, and how can AI assist?



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