Assessment Redesign Incorporating AI using 3 step approach.

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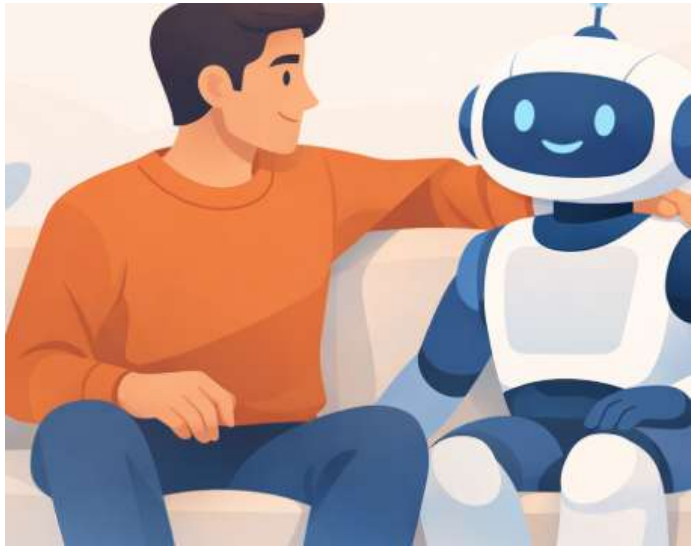
Modules involved in the development of this redesign: **=Production and Supervisory Management 5 credits, L7** **=Quality Systems &Framework, 5 credits L8** **=Regulatory Affairs, 5 credits, L8**	**Students:** **Approx 15 Adult learners, working full time, studying part time. Approx 25-35 years old.** **Motivated by interest, promotion opportunities**
Programme: Year 3, 4 **B Sc (hons) Quality for Industry**	**Delivery: Blended** **Assessment: Combination of online & on-campus**

Assessment Redesign- How did it all start?

Lecturer's Toolkit: **Assessment should be:...*valid, transparent, authentic, incremental, enable students to grow, motivate students to learn*(Race & Brown, 2025)**



It is **not possible to restrict AI** use in asynchronous assessments ...**not possible to reliably detect** that it has been used...need structural changes....to ensure that validity is built into assessment architecture. Bridgeman & Liu (2024), Corbin, Dawson & Liu (2025)

Marilla's redesign journey

*Assessment redesign adopts the principles of the **University of Sydney two-lane approach (2025)** which includes (1) and (2)*

-Step 1: An off campus asynchronous group task in collaboration with external sources/tools such as AI (Lane 2)

*-Step 2: On campus verification/defence (Lane 1) using the principles of **dialogue interactive oral** (O' Riordan et al, 2025).*

*-Step 3: Follow on individual reflection on the product/learning process to enable students to **understand their learning journey** (Mannion, 2022) and how it **contributes to their future self. (**Boud, 2025)*

This approach places an emphasis on:

- **Student Agency**: Develop and strengthen student agency/responsibility to work alongside external supports/tools, including developing skills associated with selection, use, verification and transparent referencing. Evans (2016) and Brown and Race (2025) and Boud (2025)
- **Assessment focus expands to…**
  - **Include Process,** not just Product (Francis & Smith, 2024) developing student skills to strategize, select, evaluate, conclude, defend, learn and update/build.
  - **Include verification** as part of assessment criteria (Alimardani, 2026)
  - Develop students' **evaluative judgement capabilities** (Mannion, 2022) regarding evaluation of self, peers, output and on their own learning process regarding future applications (Boud, 2025)

Where did I start?

- Engage L8 Students as partners (Boud, 2010)
  - Explanation of Approach
  - Clarification that marks/efforts are secure
  - Anonymous feedback at end (optional)
- Student Guidance:

1. Use your head first, then consider AI to elaborate, gaps, reword
2. Verify, verify, verify (accuracy, bias, relevance, logic)
3. Be confident in your output/conclusions
4. Be ready to defend-
   - You are responsible for your output
   - You are responsible for your learning

=And remember….you have signed up for this programme/module so you will be ready for *The Corridor Conversation*

‘The 3 step Approach’

Step 1: Take home asynchronous creation of Product (Lane 2, University of Sydney, 2025)

-Creation of Product (In groups, with optional use of external supports (including AI) as learning support.

-Overview of Strategy: Transparent overview of creation process / including Reference Pack(new) (University of Newcastle, Verhoeven, 2026, Guiry 2026)

Student skills:
Collaboration, student agency/responsibility, critical thinking, negotiation skills, questioning skills, selection/use/evaluation of tools/sources (including AI), evaluative judgement- evaluation of outputs, justification to wider group, time management/project management.

Step 2: On campus synchronous oral/defence/verification- (Lane 1, University of Sydney, 2025) 10%

-Group Presentation to explain, defend product/strategy & assess the learning process via interactive oral. O’ Riordan et al (2025)

Student skills:
Presentation, explain output, explain strategy to get there, ability to defend both.

-Peer Assessment (Mannion (2022), Boud (2025)

Student skills: evaluative judgement of self/peers

=Feedback at step 2 so they can feed forward into step 3==

Step 3: Individual Self assessment Mannion (2022), Boud (2025) -20%

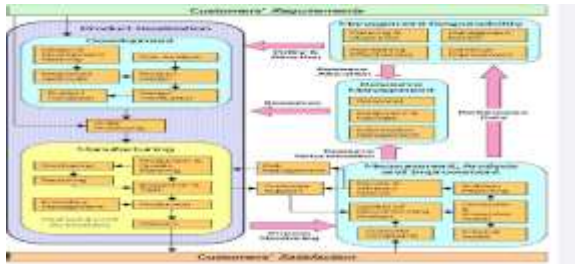
-Individual reflection on (a) Product and (2) Process

Student skills: Evaluative judgement, clarify regarding how learning contributes towards future self (covering future needs re professional/society)

Step 1: Take home asynchronous Task- GROUP (10%)

(a) Creation of Product/QMS

Each group had a different Standard/regulation- different marketplace, different Product



(b) Overview of Strategy/Reference Pack

Strategy

Slide 2-3	Asked Chat GPT to create a company with the name we provided and device we created. It generated a logo to meet our requirements & image of device.
Slide 4	Asked Chat GPT to create a list of stakeholders & Team reviewed.
Slide 5	Generated content ourselves – No AI.
Slide 6	Reviewed ISO standard and internal documents to verify this info
Slide 7	Researched various websites and ISO 13485.
Slide 8	Generated with help from AI and ISO 13485.
Slide 9	Designed with input from colleagues.
Slide 10	Wrote using ISO 13485.
Slide 11	Generated content ourselves – No AI.
Slide 12	Searched the ISO 13485 for references to Training requirements.

Table 10: AI Use – Prompts & Verification

Process / Task area	Who?	Where AI was used	AI Tool	Human Verification performed?
Task number 1 (a)	xxxxx	To format the Internal & External Factors	Co-Pilot	Review of ISO 17025 to ensure information was accurate.
Task number 1 (d)	yyyy	To visually summarizes the reasons why GMAAC is pursuing accreditation.	Co-Pilot	Review of ISO 17025 to ensure information was accurate.
Task number 2	zzzzz	Manual change of working hours in MS Project	Co-Pilot	Suggested method worked correctly
Task number 4 (d)	mmmmm	Rephrasing Content and asking an explanation on the clauses of ISO17025.	Co-Pilot	Review of ISO 17025 to ensure information was accurate.

Reference Pack

The Reference Pack (Guiry, 2026)

Student instruction:

‘All external sources including AI tools must be cited/referenced. For each external source that you use, **provide a screen shot of the specific section of the original credible sources that informed your output** (examples of credible sources include standards, guidance documents, regulations). It is expected to have 3-5 external sources referenced in your reference pack.’

Students have to drill down to ‘original source’ and share screen shot.

(ensures verification of output)

‘Transparency is the new Integrity’ Farrell, H & McCarthy, K (2025)
https://genain3.ie/manifesto/

Step 2: On campus synchronous oral/defence/verification-Group (10%)

(a) Presentation : Overview of Product & Overview of Process (Strategy)

(b) Defence:....(audit situation).....

How does this meet the standard, where did you address this requirement?

Explain your approach, what is this, where did you consider that, how did you verify this output?

Assessment

- Panel- Three lecturers- (co assessment with Technical Writing module for presentation skills, slides, ability to deliver and answer questions)
- Peers-Peer evaluation of other products/QMS

Output: Students were very capable in defending their output for step 2 (a simulated QMS certification audit)

FEEDBACK (step 2) TO FEED FORWARD (step 3)

Step 3: Self assessment-Individual(20%)

Reflection on (a) Product/QMS and (2) Process

(a)Reflection on Product/QMS (justification/reasoning)

Q1. Describe three aspects of your newly created QMS that you think works/will work.

Q2. ….requires updating/change.

(b)Reflection on Process

Q3. If you were to repeat this assessment, describe three changes would you make and why.

Q4. Describe three things that you have learned from this assessment and how does this learning connect to your future.

Q5. To what extent did this assessment's allowable use of AI influence your learning journey.

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Question 5:

It didn't influence me at all. I never copy and paste anything from AI anyway and I certainly wouldn't have from anything I searched for during this assignment. I did ask it to make up some slides for me and to be honest it was absolutely terrible. You could never use them! The only thing I find it good for is headings or certain words or a way of putting something that I may not have come up with myself. It also gives a certain language that I would never use so if I did heavily rely on it, I'd find it hard to understand the work I'm handing up. I need to learn for myself, not get a computer to do it. That's not going to do me any good when I'm asked a question in a meeting and I don't have AI to fall back on!

I did learn a lot from this assignment. I always find that the only way I can learn is by doing it and this assignment certainly checked that box.

Question 5: -

I believe that the use of AI is not bad at all. As our lecturer mentioned, we should never let AI start the work. We should always begin ourselves and then use AI only if we need to polish or improve something.

In our project, we followed that approach. We created all the content ourselves and only used AI for small support, like helping design the logo. I think this is the right way to use it. Instead of spending too much time on formatting or small details, we can use that time more productively for research, discussions, or understanding the actual process better.

The bottom line for me is that as long as we understand what we are doing and what we are learning, that's what really matters. AI can make things easier, but it cannot replace real understanding or effort.

The use of AI in this assessment didn't significantly affect our presentation. I was responsible for opening the presentation and creating slides for Question 1. I used AI to help format tables on Slide 4 (Internal & External Factors) and Slide 7 (Reasons for seeking accreditation), but I still cross-checked all content against ISO 17025 to ensure accuracy.

Personally, I relied more on Topic 3 from our lecture notes, classroom tasks, and live discussions from lectures. For example, when designing the organisational chart, I followed the class discussion by placing the "Quality Manager" first, then the "Regulatory Manager." as opposed to putting a technical manager first on the chart. Similarly, I used our classroom task to guide me when generating the list of "Interested Parties."

When I read the assessment brief, it was reassuring to know that using AI was allowed. Having access to AI tools gave our group some extra flexibility and support, especially in the early stages. But as we worked through the project, we realised that our lecture notes, classroom activities, and the ISO 17025 standard gave us all the guidance we needed. This was especially encouraging for group members who weren't as familiar or confident using AI. While AI can be useful, our teamwork and the knowledge we gained in class was strong enough to complete the task without

Anonymous student evaluation
1 month later

Q1- AI was permitted in many of the QSF assessments, to what extent did the permissible use of AI influence your learning?
I didn't learn anything from AI. I wouldn't trust it. I use it to get better wording for things
It helped me to put into words in a professional manner what I was trying to say
Not a lot really, i used it to re-write some of the inputs.
I used AI Copilot to answer explain questions that I was unsure of and to rewrite some of my assessments , Not the content but just to make it read better
It did not influence my learnings as I went back through my notes and used them as a strong baseline for my answers
I personally don't feel it took away from the learning of each lecture.
I found AI to be helpful when it came to the assignments as I found it gave me a good starting point for what I needed to write on. I also found when I wrote a paragraph myslef that AI was great at helping me re-word it to make it sound and read better.
AI was very helpful in assessments. What I usually do is to ask AI to give source for real life examples of topics. I will get a general idea regarding topic from that. This helps me saving a lot of time initially. From this I will generate my own findings and ideas.

Anonymous student evaluation
1 month later

Q2-Do you think that AI should be permitted in student assessments? Share your thought/opinions on this
I think it should. To be honest I think it'll be used whether or not it's permitted
Yes I think it should - it is helpful in supporting learning
yes
Yes, for rewritting to read better and for helping explain some questions or give examples
For written assessments, no I don't think it should- I find it tends to make people become lazy learners and knowing they can use AI during an assessments takes away from the time and effort lecturers have put in to their classes and they become reliant on AI even though they know its not 100% accurate all the time. For moodle quiz's, perhaps it could be used or quiz's that don't carry high marks.
Yes for individual assessments however for group assessments it was very difficult to manage where it appeared team members were using AI and not verifying the output. Once we all agreed what sections we would complete it felt confrontational to questions someone's submission as AI. So for group assessments I would say no.
Yes, because people are going to use regardless..... I personally use it as a starting point on somethings but would never rely on it for overall learning
Yes I do. I took heed of your advice and tried as much as I could to draw on my own knowledge & learning throughout the module. But when I found myself stumped or need of some guidance, asking AI for guidance helped me get back on track. I found it useful during on presentation task when coming up with a design for a company logo or the layout of a slide
Yes I think it should be permitted

Anonymous student evaluation
1 month later

Q3-For assessments that permit use of AI, what supports do students need?
None that I can think of
Maybe a training class or some information on how to use AI efficiently and understand the limits it can be used
maybe a tool that you can submit the document to and assess its use?
AI is useful but may not be accurate, so I would not rely on AI
examples of what is and is not expected. The types of AI that are permitted, how to not use AI as a crutch for assessments and ensure the student can keep their own opinion/voice.
I feel like there was continuously discussions in which it was made clear that the output must verified and understood. I think those conversions were valuable and it may be worth continuously driving that point home. Perhaps examples of why this is so important would also be a good tool to show students that this will not give you a perfect project.
The same support they received last semester - you asked all your students to be honest about their use of it and at the end of the day the responsibility of that lies with the student.
I find I struggle with the aspect of referencing for an assignment. This I find out with if it's from the library or website so when it came to AI I am unsure if I referenced correctly.
Please specify A guidance on ethical use of AI will be great. (short video or any guidelines)

Student Evaluation continued….

Q: Student input on how to develop the Reference Pack concept for this assessment

A1:You asked about the reference pack …I found it fine to do and I think too its a good way to show honesty and I felt each time I updated the references, the screenshots would separate from the reference due to alphabetical order, so I ahd to read the screen shots often to place them back with the reference.. so it was sticking in my head more

B/A2: Found the reference pack very useful and beneficial, and it was a nice change from the usual way we would do referencing

C: The reference pack was very easy to use. While researching for my assignment, I simply snipped or linked the sources and added them to the end of my document, which required no additional effort.

D: I really like the reference pack option. As someone returning to academics part-time as a professional, I always struggled with citing and using Harvard style referencing, having an alternative option available was really helpful.

Note: Above responses are not anonymous.

Summary of the Three steps once again

Step 1: Take home asynchronous creation of Product 10%

- **Creation of Product** (In groups, with optional use of external supports (including AI) as learning tool)
- **Overview of Strategy**: Transparent overview of creation process / including Reference Pack

Step 2: On campus synchronous oral/defence/verification- 10%

- Oral presentation/interactive oral (Group) **to explain, defend product/strategy/approach**

Step 3: Self assessment- 20%

- Individual Reflection on (a) Product and (2) Process

Step 4: Progress and Build (30%) – incorporating AI tools under development

-Merge/integrate/update QMS across companies/groups

-currently on campus under controlled conditions (LanSchool)

My learnings to date

- AI contributions are **not detectable, rules are not enforceable.** (Liu & Bridgeman, 2024)
- **Re-design seeks to explore how AI can be engaged** and integrated in a guided and assessable format to ensure ethical, honest and transparent behaviour as we prepare students for their future.
- **Verification must be assessed**, **not just encouraged.(**Alimardani, 2026)
- **Student agency:** Build confidence in their abilities/creations and where AI has been engaged that they develop honest and evaluative capabilities to judge, verify and reference outputs with complete transparency. Evans (2016) and Brown & Race (2025) and Boud (2025)

Guidance for generative AI in education and research (UNESCO, 2023)

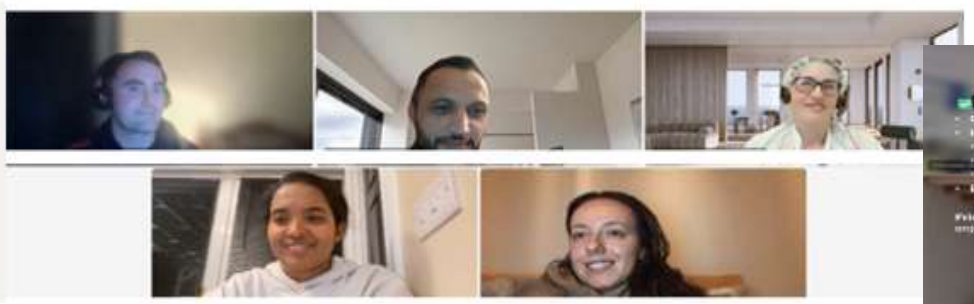
- Access and Equity- Leaner capabilities, preferences, access to AI tools
- The future quality/reliability of AI generated output:
  - The sources that AI selects from are from a specific and limited body of knowledge that may not be representative of wider knowledge/data/population base.
  - The accuracy and validity of future outputs will contain current AI outputs as inputs that may in themselves have bias or errors

For this assessment type

- ✓Work on how to meet student needs regarding scaffold supports that provide clarity regarding the role of AI as a team member, selection of AI tools, prompting as technical literacy, systematic verification strategy, evaluative judgement capabilities, reflective writing and correct referencing of external sources/tools.
- ✓Consider re-weighing markings –more focus on assessing verification (step 2)- consider a minimum mark. (Alimardani, 2026)
- ✓Ensure to provide for alternatives to student preferences/capabilities- For example, to consider preference/accessibility re external sources/tools, consider options re step 2 (defence) as not all students are able to conduct/participate in on-campus oral verification. (Ahead, 2026)

A few Thank You's

- Thank you to colleagues for feedback and support in development of this re design, in particular Judith (Technical Writing and Trish (Maths/Stats) for active participation in Step 2 (oral defence)
- Thank you Aoife Guiry, sharing how I could engage the concept of the reference pack in this assessment.
- Thank you Emma/Mary and class of Assessment and Feedback L9 module
- Big Thank you Level 8, B Sc (hons) Quality for Industry for support and feedback



Thank you for listening

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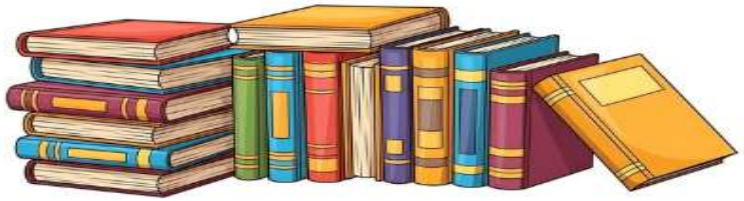

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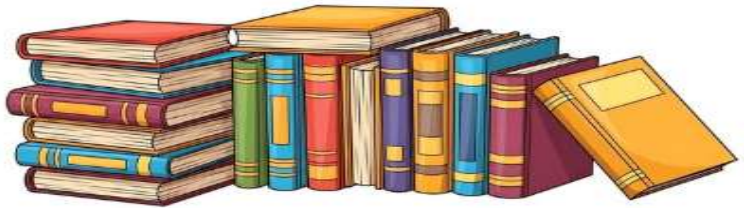

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