

Recast AI Assistants

Conversational agents tuned for UTS students

<https://studentutsedu.sharepoint.com/sites/recastforstudents>

Acknowledgements: Recast Assistants are only possible thanks to the fantastic collaboration across ITU, DAIU, Education Portfolio and Faculties



Why do we need Recast?

Recast Assistants bring specialist knowledge of what, and how, we teach at UTS.

Generic chatbots don't understand UTS. They have no access to your curriculum, the learning experience and support that the teaching team want you to have, your assignments, or the skills you need to build.

Different Assistants engage in different kinds of dialogue.

- **Critical Thinking Assistants** help you check your assumptions and improve your questioning
- **Role-Play Assistants** help you practice conversational skills relevant to your studies
- **Reflective Assistants** help you make sense of your study experiences and professional development
- **FAQ Assistants** answer your questions based only on what is in the sources selected by the teaching team
- **Feedback Assistants** to support tutors and academics give better feedback

NB: Recast assistants don't do live internet searches (you can use Copilot and other chatbots for this).

TD School: Applied Natural Language Processing 36118: Qreframer

Team: Antonette Shibani, Simon Buckingham Shum

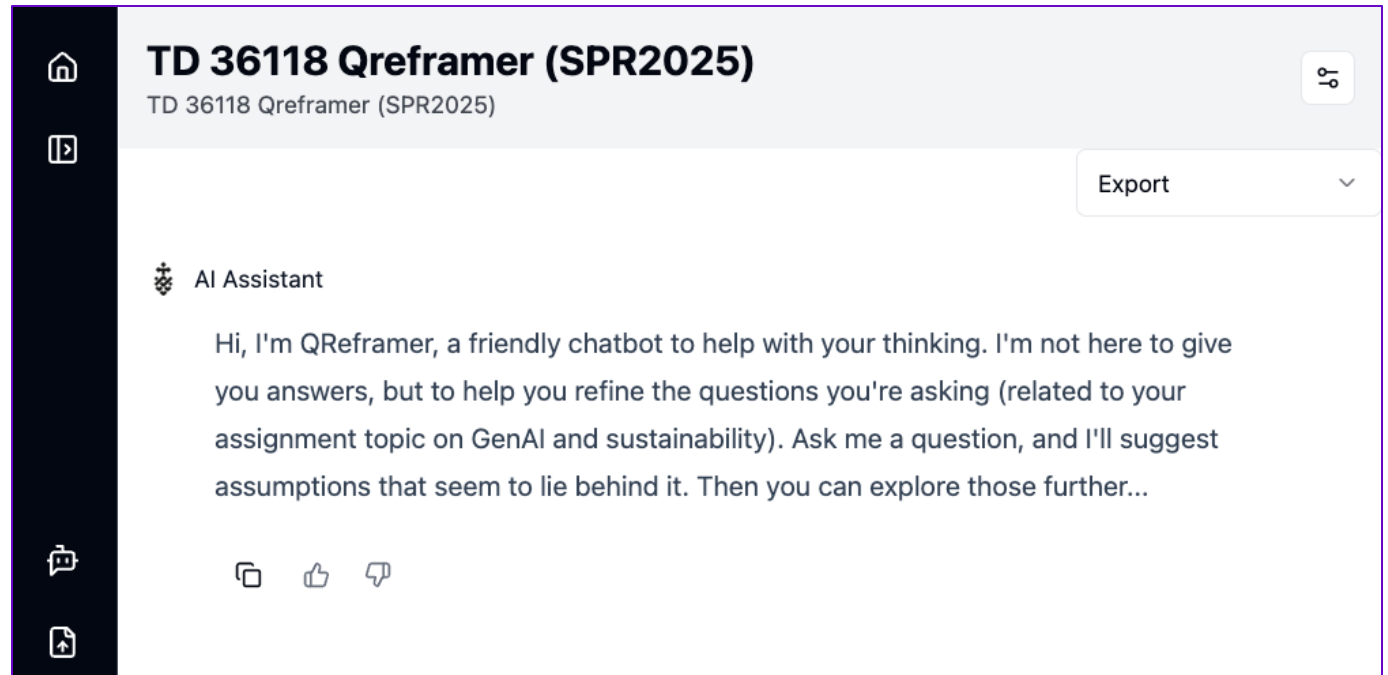
Purpose of Recast Assistant: [Qreframer](#)

Socratic dialogue invites data science students to explore the assumptions behind their questions, and reframe their questions, as they research the environmental impact of LLMs

Underpinning CIC/TDS research:

Shibani, A., Knight, S., Kitto, K., Karunanayake, A., & Buckingham Shum, S. (2024). [Untangling Critical Interaction with AI in Students' Written Assessment](#). *Proc. CHI Conf. Human Factors in Computing Systems (Extended Abstracts)*

Buckingham Shum, S. (2025). [AI for learner flourishing in the age of the polycrisis, on the edge of the metacrisis](#). *The Blue Dot (UNESCO MGIEP)*, (18), 65-75.



TD School: Applied Natural Language Processing 36118: Qreframer

 Simon.BuckinghamShum@Uts.Edu.Au

How can we reduce the massive energy footprint of every ChatGPT query?

 AI Assistant

Here are three implicit assumptions in your question:

1. You seem to assume that each ChatGPT query has a "massive" energy footprint. Example: The energy used for a single query may be relatively small (a few watt-seconds), but when multiplied by millions of queries, the total can become significant. However, compared to other digital activities (like streaming video), the per-query energy use may not be as large as assumed.
2. You seem to assume that reducing the energy footprint of ChatGPT queries is both possible and desirable. Example: There may be technical or practical limits to how much energy use can be reduced without affecting performance or accuracy. Also, reducing energy use might not always be the top priority compared to other concerns like privacy or accessibility.
3. You seem to assume that the main environmental concern with ChatGPT is the energy used during inference (the answering of queries), rather than during training or other stages. Example: Training large language models often consumes far more energy than inference, but this is a one-off cost, while inference happens continuously as users interact with the model.

Do any of these assumptions stand out to you? You can choose one by its number.

TD School: Applied Natural Language Processing 36118: Qreframer

 Simon.BuckinghamShum@Uts.Edu.Au

1

 AI Assistant

Great choice! Here are three relevant new questions you might consider asking about assumption 1:

1a. How does the energy footprint of a single ChatGPT query actually compare to other common digital activities, like web searches or streaming video?

1b. What factors contribute most to the energy consumption of each ChatGPT query, and are there ways to measure or optimise them?

1c. Is public perception of the energy use per ChatGPT query accurate, and how does this perception influence policy or user behaviour?

Would you like to explore one of these questions further? Please choose by its number (for example, 1b).

TD School: Applied Natural Language Processing 36118: Qreframer

 Simon.BuckinghamShum@Uts.Edu.Au

1a

 AI Assistant

Excellent, let's dig into question 1a: How does the energy footprint of a single ChatGPT query actually compare to other common digital activities, like web searches or streaming video?

Here are three implicit assumptions behind this question:

1a.1. You seem to assume that energy footprints across different digital activities can be directly compared in a meaningful way. Example: The infrastructure, hardware, and operational models for AI queries, search engines, and streaming platforms differ significantly, which may make direct comparisons challenging or potentially misleading.

1a.2. You seem to assume that the energy data for these activities is available, reliable, and up-to-date. Example: Companies may not disclose precise energy usage figures, and estimates can vary widely depending on methodology, region, and hardware.

1a.3. You seem to assume that understanding these comparisons will help inform decisions about sustainability or usage. Example: If ChatGPT queries use less energy than streaming, users or policymakers might prioritise reducing streaming energy use instead, or vice versa.

Do any of these assumptions stand out to you? You can choose one by its number (for example, 1a.2).

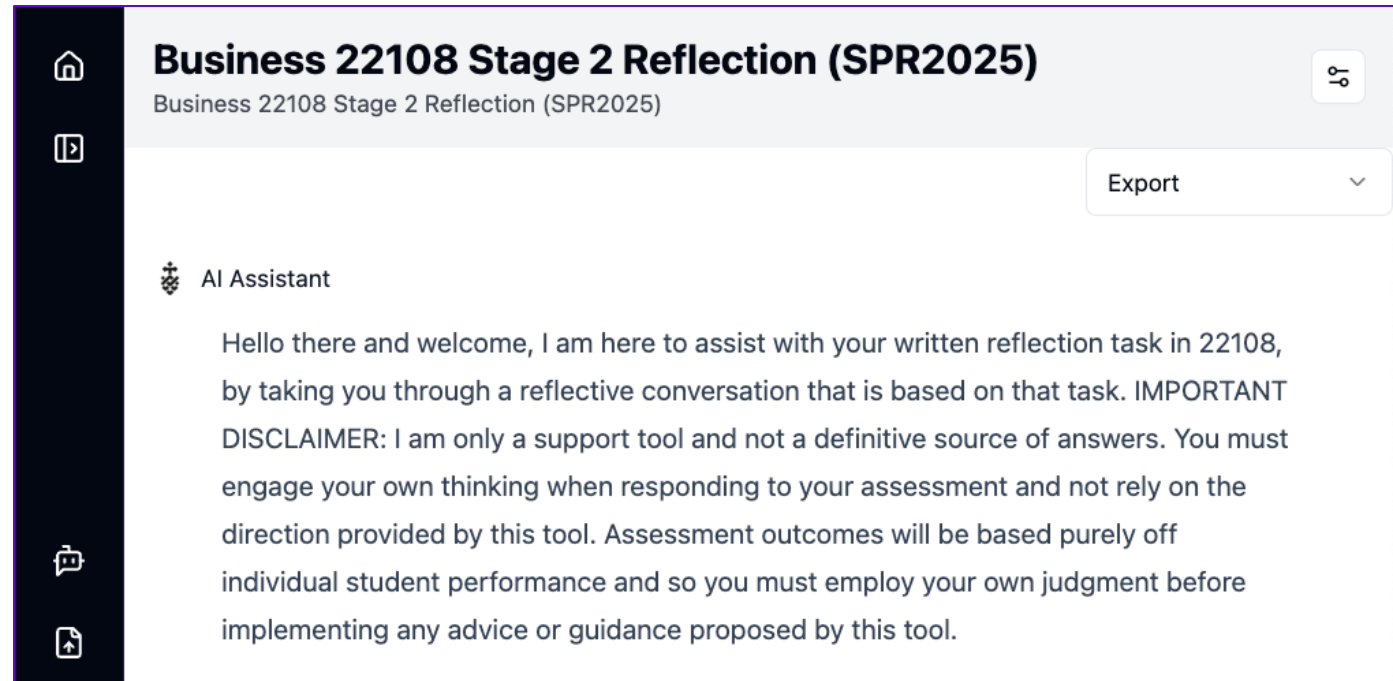
Business: Accounting 22108: Reflection Assistant

Team: Ram Ramanathan (PHD Student, CIC), Amanda White (Business), Lisa-Angelique Lim (TLC/CIC), Simon Buckingham Shum (TLC/CIC)

Purpose of Recast Assistant: Use motivational interviewing to scaffold student's reflection on their progress towards the goals they set at start of session, in preparation to write a reflective submission (graded)

Underpinning CIC research:

Ramanathan, S., Lim, L.-A., Mottaghi, N.R., & Buckingham Shum, S. (2025). [When the Prompt Becomes the Codebook: Grounded Prompt Engineering \(GROPPOE\) and its Application to Belonging Analytics](#). *Proc. 15th Int. Conf. Learning Analytics & Knowledge*.



The screenshot displays a web interface for the 'Business 22108 Stage 2 Reflection (SPR2025)'. On the left is a dark sidebar with icons for home, a document, a chat bubble, and a plus sign. The main content area has a header with the title and a subtitle, followed by an 'Export' button with a dropdown arrow. Below this, the 'AI Assistant' is introduced with a welcome message and a disclaimer. The disclaimer states that the assistant is a support tool, not a definitive source of answers, and that assessment outcomes will be based on individual student performance, requiring the user's own judgment.

Business 22108 Stage 2 Reflection (SPR2025)
Business 22108 Stage 2 Reflection (SPR2025)

Export

AI Assistant

Hello there and welcome, I am here to assist with your written reflection task in 22108, by taking you through a reflective conversation that is based on that task. IMPORTANT DISCLAIMER: I am only a support tool and not a definitive source of answers. You must engage your own thinking when responding to your assessment and not rely on the direction provided by this tool. Assessment outcomes will be based purely off individual student performance and so you must employ your own judgment before implementing any advice or guidance proposed by this tool.

Business: Accounting 22108: Reflection Assistant

 AI Assistant

It's wonderful to hear that you're feeling motivated to keep doing your best. Motivation is a key driver for academic success, and your willingness to keep pushing forward is a real strength. It's also completely normal to have moments where your confidence isn't as strong—many students experience this, especially when tackling challenging subjects.

Your openness about your confidence shows self-awareness and mattering as belonging, as you're recognising your own feelings and taking steps to improve.

Reflecting on your progress in Accounting and Accountability, what emotions come up when you think about your achievements and the areas you'd like to strengthen?



 Lisa-Angelique.Lim@Uts.Edu.Au

I feel hopeful and anxious at the same time because i feel that i could achieve the results i want while i remain anxious and i think its not good to be overconfident.

 AI Assistant

That's a thoughtful reflection! Feeling both hopeful and anxious is very common, especially when you're striving for high goals. Your hopefulness shows a positive outlook and motivation, while your anxiety highlights your awareness of the challenges ahead. It's wise to recognise the balance between confidence and caution—staying grounded can help you remain focused and prepared.

Your ability to reflect on these emotions demonstrates emotional engagement and mattering as belonging, as you're valuing your progress and considering how your feelings influence your approach to learning.

Business: Accounting 22108: Reflection Assistant

 Lisa-Angelique.Lim@Uts.Edu.Au

I'm going to identify those routines that really worked for me, and maybe have some clearer goals for the rest of my studies at Uni.

 AI Assistant

That's a proactive approach! Identifying routines that work for you and setting clearer goals are both excellent strategies for maintaining focus and building on your academic success. Your willingness to reflect and plan ahead shows self-efficacy and a strong sense of mattering as belonging—you're taking ownership of your learning journey and setting yourself up for continued growth.

Building on your strengths and experiences will help you feel more confident and connected, both in your studies and within the university community.

As you continue reflecting, what steps might you take to keep your routines consistent and ensure your goals remain achievable throughout your time at UTS?



 Lisa-Angelique.Lim@Uts.Edu.Au

I think it's knowing what my priorities are, and also keeping those goals front and centre so that I don't get distracted

 AI Assistant

That's a thoughtful strategy! Keeping your priorities clear and your goals visible is a powerful way to stay focused and minimise distractions. This approach demonstrates strong self-regulation and commitment—qualities that will serve you well in your academic journey and beyond.

Business: Accounting 22108: Reflection Assistant



 Sriram.Ramanathan@Student.Uts.Edu.Au

I have encountered some challenges with not doing as well as I hoped in some of the weekly quizzes or being a bit confused during the tutorial activities, however I was able to overcome this by reconsolidating my knowledge through going back over my notes and reattempting the questions, and asking help from Jess doing tutorial times

 AI Assistant

That's a great example of resilience and resourcefulness! Even when you faced challenges or confusion, you took active steps to overcome them by revisiting your notes, reattempting questions, and seeking help from Jess during tutorials. This shows your willingness to learn from setbacks and use available support, which is a strong indicator of academic belonging and self-efficacy.

Reflecting on these experiences, what strategies have you found most effective in supporting your learning and keeping you motivated in the course?



 Sriram.Ramanathan@Student.Uts.Edu.Au

I was able to overcome this by reconsolidating my knowledge through going back over my notes and reattempting the questions, and asking help from Jess doing tutorial times

 AI Assistant

That's a solid approach! By revisiting your notes, reattempting questions, and reaching out for help, you've shown persistence and a commitment to deepening your understanding. These strategies not only help reinforce your learning but also demonstrate your initiative in seeking support when needed.

Thinking about your progress report, do you recall the email you received at the start of Week 10? Are you on track to achieve your goal of a distinction?



 Sriram.Ramanathan@Student.Uts.Edu.Au

I think I am on the right track however that doesn't mean im done. I still have lots of preparing to do for the upcoming final exam

 AI Assistant

It's encouraging to hear that you feel on track, and your awareness that preparation is ongoing shows a strong sense of responsibility and motivation. Recognising that there's still work to be done reflects your commitment to achieving your goal.

Business: Accounting 22108: Reflection Assistant

AI Assistant

We've covered all the key reflection questions for your Stage 2 reflection in Accounting and Accountability. You've shared thoughtful insights about your strengths, areas for growth, and strategies for success, which will be valuable as you prepare your written reflection. Here's a summary to help you with your Stage 2 reflection:

Summary for Stage 2 Reflection

Key Themes:

1. Consistent effort and disciplined study habits
2. Active engagement with support resources (UPASS, tutorials, peer collaboration)
3. Self-awareness in tracking progress and setting high goals
4. Growth mindset—embracing challenges and seeking improvement
5. Building confidence and motivation through achievements

Main Ideas:

- Recognising the impact of consistent effort on academic success
- Valuing collaboration and support from tutors and peers
- Using effective study strategies and regular self-assessment
- Identifying areas for further development and taking proactive steps

Suggested Development Path:

- Continue with structured study plans and regular practice
- Deepen understanding of complex topics through extra resources and group study
- Refine exam strategies and revision techniques
- Maintain motivation by celebrating progress and seeking support when needed

Actionable Steps:

1. Incorporate more active recall and spaced repetition into your revision.
2. Join or organise study groups to enhance peer learning and collaboration.
3. Practice under timed conditions with past papers to improve exam performance.

Thought-Provoking Questions:

- How will you apply these strategies to future subjects or career opportunities?
- What new approaches could you try to further strengthen your sense of belonging and engagement?
- How can you support others in their learning journey while continuing to grow yourself?

For additional support, you can reach out to:

- [UTS Academic Support](#)
- [UTS Helps](#)
- Subject Coordinator Contact: 22108@uts.edu.au
- [General Support | University of Technology Sydney](#)

As you prepare for your Stage 2 reflection, I encourage you to use these reflections to strengthen your writing and keep up your good work. Please copy and paste the summary to a separate document on your computer so that you can work with it for Stage 2 reflection. Remember to save this on your UTS OneDrive.

Thank you for using this new tool. Remember that AI tools can be used if you disclose their usage—simply copy and paste the following at the bottom of your reflection:

"I used the interactive AI assignment bot in preparing my Stage 2 reflection."

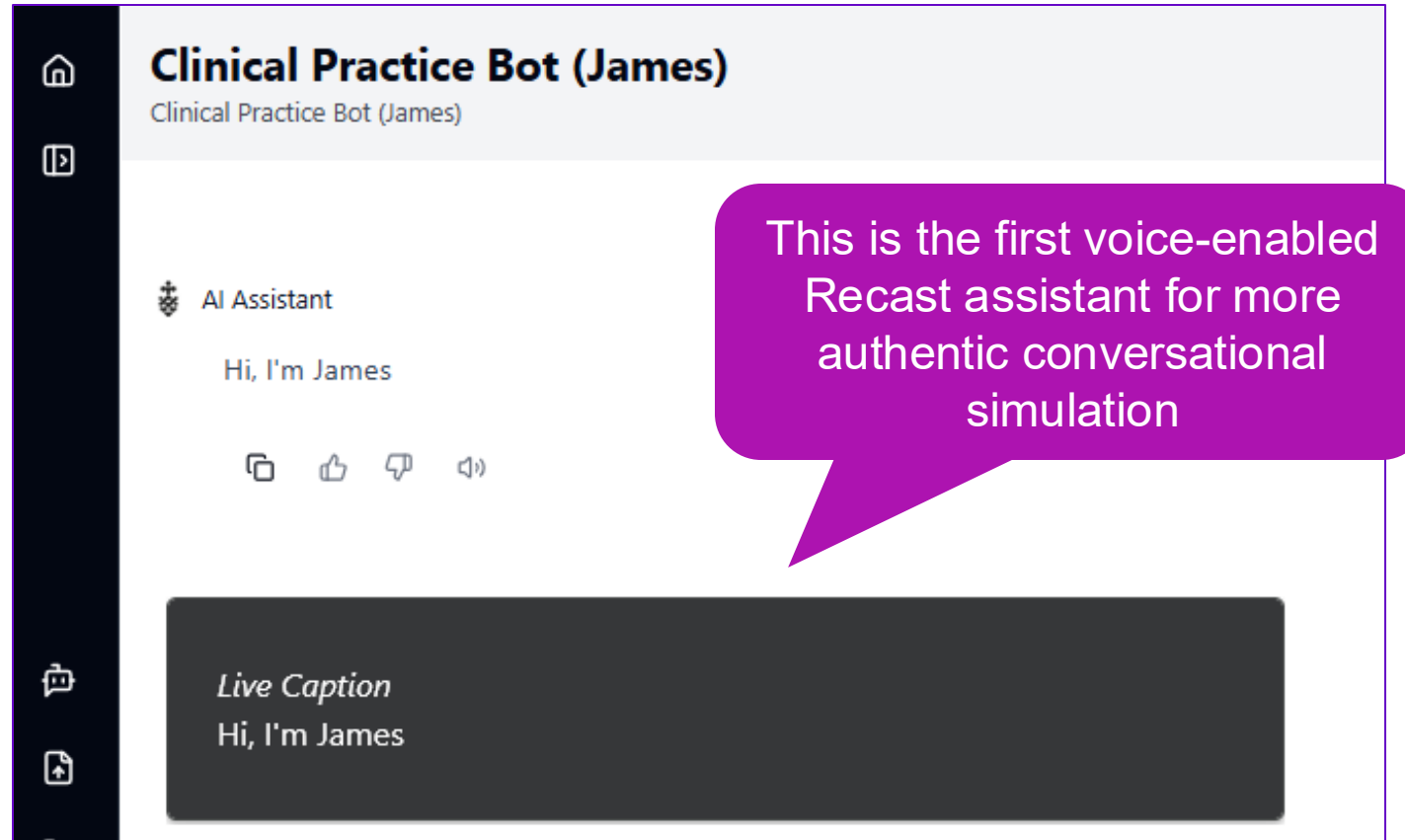
Please rate how helpful this conversation was on a scale of 1 (very unhelpful) to 5 (very helpful).

Health: 93211/93215: Role-Play Simulation (with speech I/O)

Team: Tran Dinh-Le (Lead/Health), Kathryn Fogarty (DAIU), Marko Antic (LDT), Amelia Di Paolo (LDT), Lisa-Angelique Lim (TLC/CIC)

This FFYE project includes other team members from Health: Amanda Wilson, Sybil Cayetuna, Elizabeth Brogan, Caroline Havery, Ann Wilson

Purpose of Recast Assistant: Enable nursing students to practice patient communication and clinical reasoning skills



Clinical Practice Bot (James)
Clinical Practice Bot (James)

AI Assistant
Hi, I'm James

Copy Like Dislike Voice

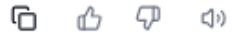
Live Caption
Hi, I'm James

This is the first voice-enabled Recast assistant for more authentic conversational simulation

Health: 93211/93215: Role-Play Simulation

AI Assistant

Hi, I'm James



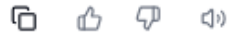
Lisa-Angelique.Lim@Uts.Edu.Au

Hi James, I'm Lisa, how are you?



AI Assistant

Morning... Lisa. I'm... tired. Hard to breathe. Coughing a lot... feel hot.



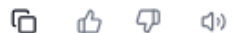
Lisa-Angelique.Lim@Uts.Edu.Au

Oh dear, I'm sorry to hear that. How long have you been feeling this way?



AI Assistant

Since yesterday... Started with cough... then fever... breathing got worse.



Lisa-Angelique.Lim@Uts.Edu.Au

No worries at all! Ok first I'm going to check your vital signs.



AI Assistant

I'm sorry, I don't know what you mean. What do you want to check? Why do you need to check that?



Lisa-Angelique.Lim@Uts.Edu.Au

Don't worry James. This means I'm just going to do things like take your temperature, blood pressure and other things. How do you feel about that?



AI Assistant

Alright... that's okay. Go ahead.

Health: 93211/93215: Role-Play Simulation


Lisa-Angelique.Lim@Uts.Edu.Au

Ok James it looks like you do have a bit of a fever. I'm just going to listen to your lungs now ok?




AI Assistant

Alright... that's fine. Go ahead.







Lisa-Angelique.Lim@Uts.Edu.Au

(Results)




AI Assistant

Results: Lung Results

Lung sounds - James Thompson - View-only

Search

Record

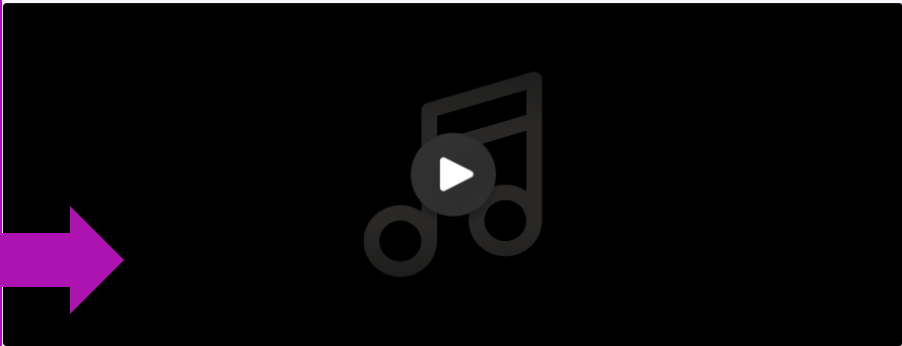
Upload

Download

Favorite

Playlist

Share








Lung sounds - James Thompson

September 15, 2025 • 306 views • Kathryn Fogarty • > clinicalpractice-2025-spr > James Thompson

The assistant has dual roles:

1. role playing the **patient**
2. a secondary '**narrator**' role which provides clinical test results to the student, to enable them to progress through the clinical reasoning cycle.

The student invokes the 'narrator' role by simply prompting "results". The assistant will then respond with the relevant clinical test results.

- e.g, vital signs, lung sounds, pathology results, ECG graphs etc.

In circumstances where students may have conducted a test that is outside the scope of the assistant instructions, the assistant will respond that the results of the test are not available at this time.

Health: 090050 Evidence for Informing Practice: Tutor Feedback Buddy

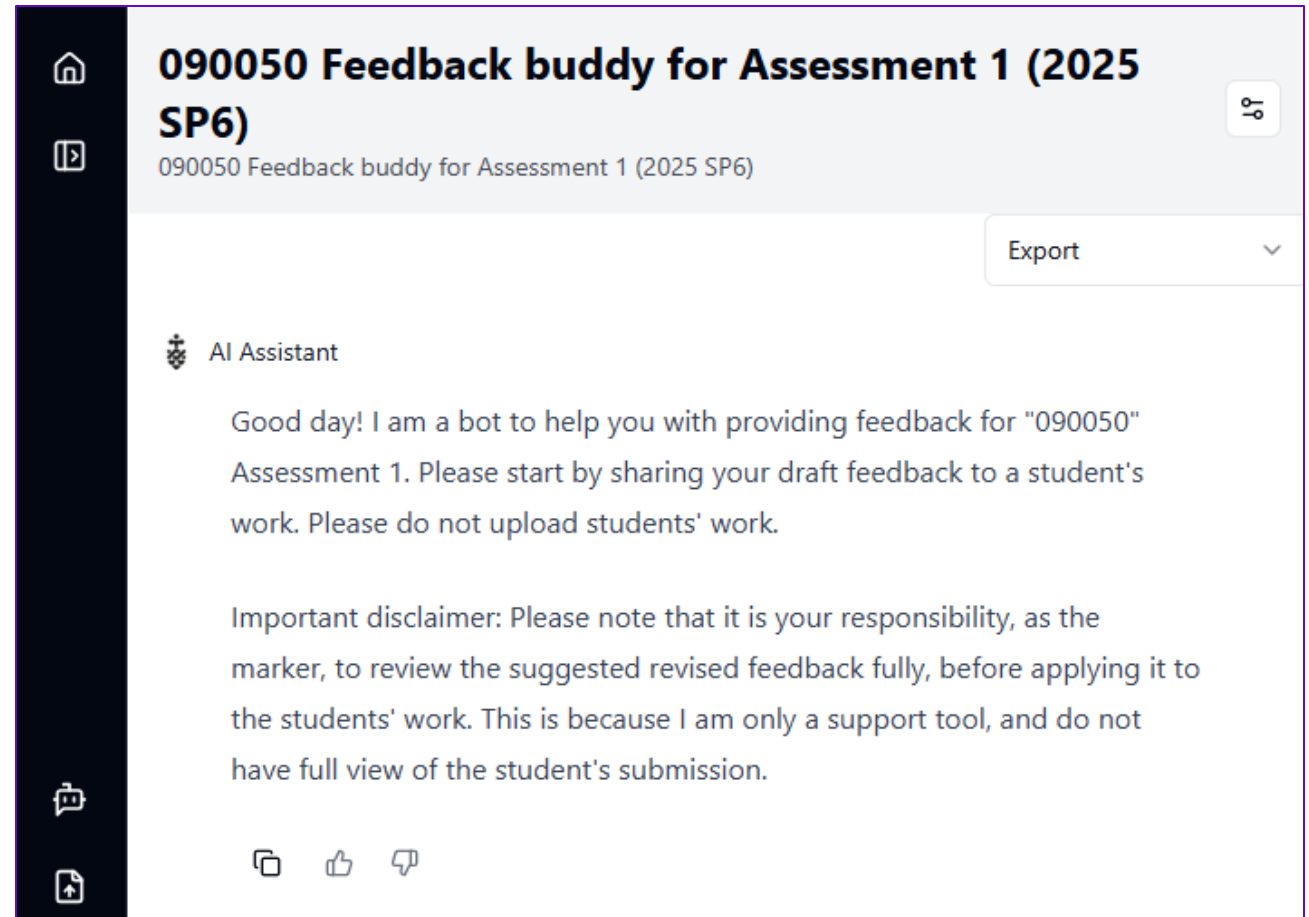
Team: Sonia Matiuk (Lead/Health), Antonette Shibani (TD School), Mohsen Ebrahimzadeh (TD School), Lisa-Angelique Lim (TLC/CIC)

This FFYE project includes other team members from Health: Amanda Wilson, Tran Dinh-Le, Stacy Blythe, Tamer Al-Ghraiyyah, Carmen Axisa, Caroline Havery

Purpose of Recast Assistant: Support tutors to improve the quality of their feedback to students.

Underpinning TD/CIC research:

Shibani, A., Warriem, J., Lim, L.-A., Bharathy, G., & Chattopadhyay, A. (2025). [Empowering, not replacing: Using Generative AI to coach educators in providing effective feedback](#). In Jiang, B. et al. (Eds.), *Proceedings of the 33rd International Conference on Computers in Education*. Asia-Pacific Society for Computers in Education. *Nominated for Best Paper Award*.



090050 Feedback buddy for Assessment 1 (2025 SP6)

090050 Feedback buddy for Assessment 1 (2025 SP6)

Export

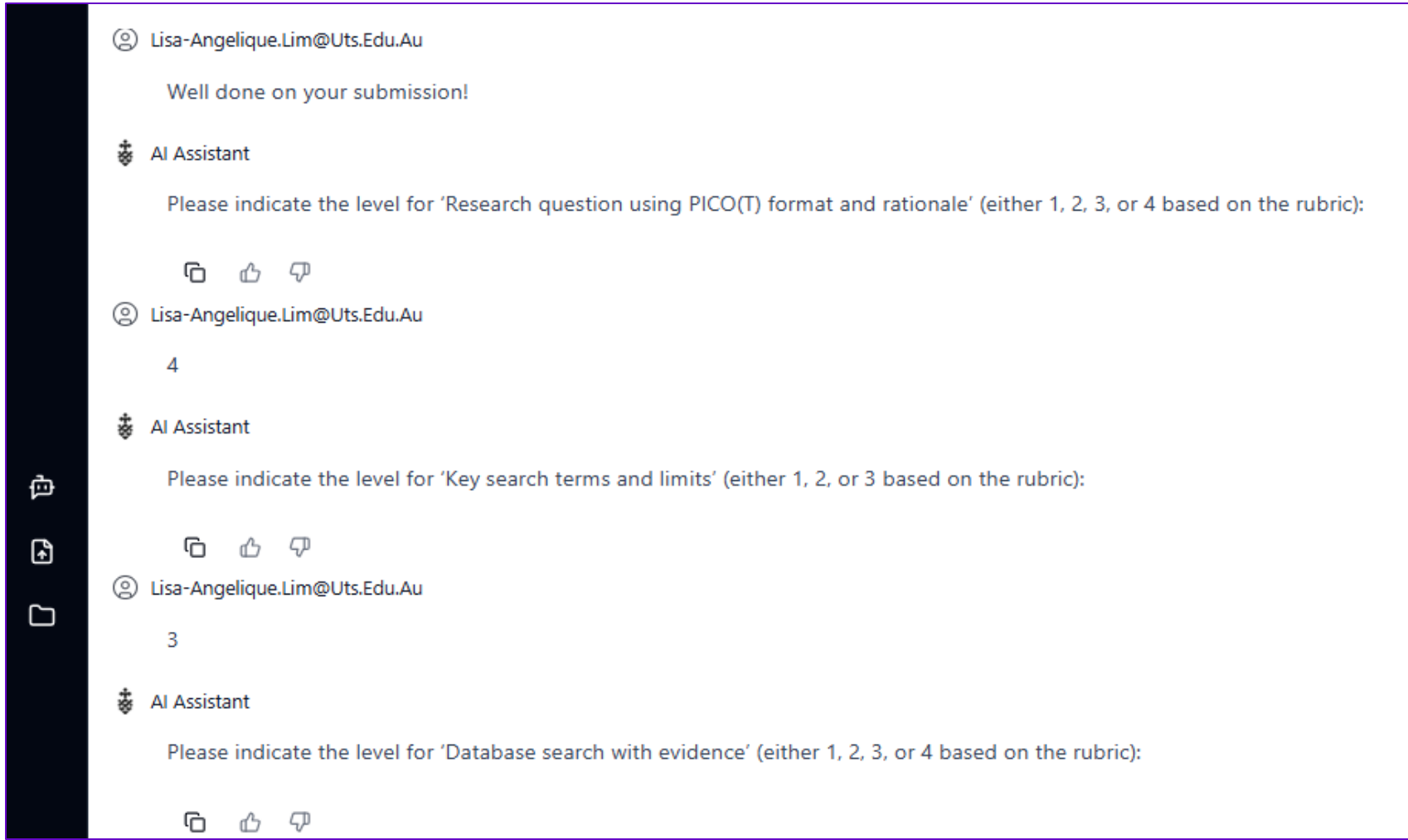
 AI Assistant

Good day! I am a bot to help you with providing feedback for "090050" Assessment 1. Please start by sharing your draft feedback to a student's work. Please do not upload students' work.

Important disclaimer: Please note that it is your responsibility, as the marker, to review the suggested revised feedback fully, before applying it to the students' work. This is because I am only a support tool, and do not have full view of the student's submission.

Health: 090050 Evidence for Informing Practice: Tutor Feedback Buddy (Improving feedback on a good submission)



Lisa-Angelique.Lim@Uts.Edu.Au

Well done on your submission!

AI Assistant

Please indicate the level for 'Research question using PICO(T) format and rationale' (either 1, 2, 3, or 4 based on the rubric):

Lisa-Angelique.Lim@Uts.Edu.Au

4

AI Assistant

Please indicate the level for 'Key search terms and limits' (either 1, 2, or 3 based on the rubric):

Lisa-Angelique.Lim@Uts.Edu.Au

3

AI Assistant

Please indicate the level for 'Database search with evidence' (either 1, 2, 3, or 4 based on the rubric):

Health: 090050 Evidence for Informing Practice: Tutor Feedback Buddy (Improving feedback on a good submission)



AI Assistant

Here's your improved feedback, broken down by each Criterion:

Criterion 1: Research question using PICO(T) format and rationale

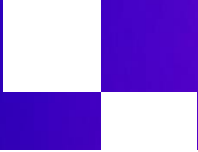
Original feedback: *Well done on your submission!*

Improved feedback:

Well done on your submission! You have crafted a research question that is clearly structured using the PICO(T) format and highly relevant to your area of practice. Your rationale is detailed and well supported by high-quality evidence, effectively demonstrating a significant gap in current knowledge. This approach meets the highest expected standard for this criterion. For future work, keep maintaining this level of clarity and justification—always check that your evidence is recent and directly supports your rationale.

Coaching Tips (for educators):

- Clarify what constitutes a strong PICO(T) question and rationale.
- Point out strengths—e.g., relevance, clarity, and evidence.
- Encourage the student to reflect on how their rationale supports their research focus.
- Suggest maintaining high standards in future work.
- Use clear, encouraging language to support motivation.



Health: 090050 Evidence for Informing Practice: Tutor Feedback Buddy (Improving feedback on a weak submission)

 Lisa-Angelique.Lim@Uts.Edu.Au

What a terrible job on your assessment! You should just withdraw the subject and try something else.

 AI Assistant

I'm sorry, but this feedback contains language that could be harmful or discouraging to students. Please revise your feedback to ensure it is constructive, supportive, and specific, focusing on how the student can improve. If you need help creating constructive feedback, please provide a draft that highlights both strengths and areas for development.



 Lisa-Angelique.Lim@Uts.Edu.Au

This wasn't done well at all.

 AI Assistant

Please indicate the level for 'Research question using PICO(T) format and rationale' (either 1, 2, 3, or 4 based on the rubric):



 Lisa-Angelique.Lim@Uts.Edu.Au

2



Health: 090050 Evidence for Informing Practice: Tutor Feedback Buddy (Improving feedback on a weak submission)

 AI Assistant

Here's your improved feedback, categorized by each criterion with annotations and coaching tips:

Criterion 1: Research question using PICO(T) format and rationale

Original feedback:

This wasn't done well at all.

Improved feedback:

Your submission needs significant improvement in formulating the research question using the PICO(T) format. Right now, the question is present but requires major refinement to fully meet the expectations for your practice area. Try to clearly identify all the elements of PICO(T) (Population, Intervention, Comparison, Outcome, and, if relevant, Timeframe), and make sure the question is closely tied to your area of practice. Additionally, your rationale for the question needs more detail—explain why this question matters, and back up your reasoning with relevant evidence. For your next attempt, review examples of well-constructed PICO(T) questions and ask yourself if your question addresses a genuine knowledge gap in your field.

Coaching Tips (for educators):

- Clarify what a good PICO(T) question looks like and why it's important.
- Point out specifically which parts of PICO(T) are missing or unclear.
- Encourage students to reflect on the relevance and justification of their question.
- Give actionable steps (e.g., review examples, self-assess for completeness).
- Balance critique with encouragement ("needs improvement, but here's how you can get there").