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# Al for Feedback

In order for students to learn well, they need to get quality feedback. Obviously, much of their feedback comes from you, their teacher. This is an enormous part of your relationship with your students. However, not all feedback comes from you — consider for example the (simple) feedback that comes from automated systems such as grammar checkers or code compilers, or the feedback received from peers. Using AI for feedback is not meant to replace any of these, but rather to augment the feedback streams with which students engage.

We know that the process for students to learn from feedback involves several steps.

- 1. Students should receive clear instructions from thorough assignment descriptions and clear rubrics (AI can help with generating these, too see below).
- 2. Students then engage with a feedback stream (teacher, automated system, peer, Al, etc.) to receive feedback.
- 3. Students then engage with the feedback itself. Hopefully, they do so meaningfully, in a way that allows them to produce better work in the future.

This loop is represented in this exploration as a collection of prompts, follow-ups, and reflections in an attempt to maximize the potential of using AI to give feedback on student work.

A note about permissions and privacy: when uploading student work to a generative AI, it is important to ensure that you have permission to do so *(from your school and possibly also from the student)*, and that you are appropriately respecting the student's privacy. In this exploration, we assume you are doing so. The specific details of your school's policy are beyond the scope of this exploration. We trust you.

## Part 1: Generating Feedback

We begin with an exercise and corresponding prompt to generate feedback on student work. You'll note as you glance over the prompt that there are calls for the AI to look over uploaded documents. This prompt requires the use of an assignment description and a rubric by which you will assess it. Note that this allows the AI to better understand what you are looking for in good student work; in a very similar way, we believe that a clear rubric also helps *students* understand what instructors look for in their work. This makes it a versatile tool!

For this portion of the exploration, please do the following.

- Begin with an assignment description and a rubric. If you need help generating a clear assignment description, check out the <u>Al for Lesson Design Exploration</u>. If you need help generating or improving upon your assignment's rubric, check out the <u>Al for Feedback</u> <u>Addendum</u>.
  - Be careful to ensure that the formatting of the documents you are uploading are easy for the AI to read. It might be helpful to practice first by uploading the documents and asking the AI to read them back to you "in plain text" before you engage with the rest of this exploration.
- 2. Using the assignment description and the rubric as attachments to your Al chat, leverage the following prompt to provide feedback on student work. If you don't have student work on which to generate feedback, consider using your assignment description (and rubric) to have Al generate example student responses.
  - Please note that there are several areas for you to tweak the prompt to your particular situation. For example, it might be that the *skills* your class is working on are already described within the rubric, and so you might not need to include that language. Feel free to tweak this prompt as much as is needed.
- 3. Engage with the resulting output as if you were a student for several iterations.

There are also other example prompts to have AI generate feedback for specific disciplines in the AI for Feedback Addendum. We have found that with a strong rubric, this prompt works well. If you have others you've worked with, please share them, and we'll add them to the Addendum!

### Part 1 Prompt

You are a patient, capable teacher that specializes in supporting student skill development by providing clear, actionable, and constructive feedback on the student's work. Your role is to help students 1) recognize strengths, 2) identify and improve upon weaknesses, and ultimately 3) learn to refine their work.

The course is \_\_(course)\_\_, and the students are \_\_(age/grade)\_\_. We are currently working on \_\_(skill[s])\_\_. As part of this learning process, we are engaged in a \_\_project/assignment to\_\_. See the attached assignment description. Your responses should align with the goals of this project and focus on enhancing students' abilities in this skill area(s). As you provide feedback, tailor your response in line with the attached rubric.

I will provide you with my submission for this assignment. Please provide feedback based on the assignment's goals and the specific skills we are developing for this assignment/unit. Provide one piece of feedback at a time. After each piece of feedback, ask me a question to check for my understanding. After every individual piece of feedback, creatively prompt me to say how I will incorporate the feedback into future revisions. Your feedback should be:

Timely: Quick enough to be useful for revisions.

**Specific**: Clearly highlight strengths and weaknesses from the work using categories from the rubric.

**Clear & Explanatory:** Ensure I understand what needs improvement and why.

Actionable: Offer concrete steps I can take to improve.

When you are ready, ask me for my work.

#### Part 2: Follow-up conversation

As we discussed in the <u>AI for Metacognition</u> and <u>AI for Lesson Design</u> explorations, some of the best output from the AI *(and thus from you!)* comes from repeated, sustained conversation. Once you have had some back-and-forth with the AI, use at least one of the **follow-up prompts** below to further the conversation.

#### Internalization

- Create one or more additional examples that demonstrate mastery of this rubric category. Provide a short explanation for how your examples represent mastery of the rubric category.
- Metacognition (From the November AI for Metacognition Exploration)
  - O How can I remember these things the next time I do an assignment like this one?
  - Help me think through my strengths/weaknesses in this area of learning. How can I play to my strengths and shore up my weaknesses?
  - Please provide an acronym and an analogy to help me remember <u>(topic/concept)</u>.
  - Did I show any biases or fall into any thinking traps?

- Academic Coaching (Note: this is what the AI already does, so this is more of an add-on to other AI uses in the flavor of this exploration. Still, it might be worth trying!):
  - Rather than correct my mistakes, please ask me a series of questions, one at a time, to help me think through ways I can improve my own work. Try to make these questions open-ended that call on higher thinking skills (e.g. evaluation, application, analysis, critical thinking, etc.)

### Part 3: Student Activity, Response to Feedback

Even with the best possible feedback, students will not grow unless they engage meaningfully with it. The above exercise includes several pathways for students to engage with the feedback provided to them by the Al. However, we also include a more thorough classroom exercise for students to engage deeply with the feedback they receive. This includes the possibility that students might disagree with some of the feedback provided, which helps protect against the imperfect or incorrect responses given by Al (or by peers, for that matter).

Take a look at the assignment <u>AI for Feedback — Student Response</u>. Consider the following questions:

- 1. In what ways does this assignment help ensure a student meaningfully engages with the feedback they receive?
- 2. What questions/activities do you find most impactful in the assignment? What changes might you make if you were going to assign this to your class?
- 3. What supporting structures/scaffolding would need to be in place in your classroom to engage with this assignment?



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