Approaches and Rationales for Teaching 102 in GenAI Age

In a world with GenAI, FYC courses with a on research-writing should:

1. Create assignments and learning environments that **motivate** students to take on the cognitive burden of conducting research
2. Find ways to **hold students accountable** for putting effort into their learning
3. Help students **engage in constant critique** of GenAI's capabilities and limitations

My pedagogical approach uses four main strategies to reach these objectives.

1. Incorporate **GROUP WORK**
2. Assign projects that require **MULTIMODAL** deliverables
3. Require students to engage in **PRIMARY RESEARCH**
4. Engage students in activities that use GenAI to deepen **STUDENT ANALYSIS AND SYNTHESIS** of primary and secondary research data

The composition field already endorses the first three strategies, demonstrating through research how and why they are effective. What I will discuss here is, first, why the strategies help achieve the three objectives for an FYC course and, second, how I build the strategies into my 102 course. Finally, I explain the rationale and value of the research-related GenAI activities. Find specific details and step-by-step instructions for the activities on the Sample Activities document, linked on the FYC page.

GROUP WORK

After the advent of GenAI, I revised my course to build in additional low- and high-stakes group projects. Rather than having each student conduct their own fully independent research project, this new course lead groups of students to:

- pool their findings from independent secondary research and create a final, group annotated bibliography
- discuss secondary research findings to negotiate a shared final research question
- collaborate to create surveys or craft interview questions
- co-execute the primary research activity; work together to analyze the primary research data
- share their progress on synthesizing the primary and secondary data to answer the research question.

At the end of the research process, they can choose to write individual papers or collaborate with their groups to co-write.

While research shows myriad benefits for building group work into courses (Riebe et al., 2016; Loes & Pascarella, 2017), the important benefit for composing in an age of GenAI is that working with a group work may motivate first year students to engage more deeply than working

alone. A study by Kelly et al. (2020) found that when class periods were devoted to group work, students "felt more inclined to attend" and "to work harder….as they did not want to disappoint their group members." Furthermore, the study finds that students "claimed to work harder on group tasks." They conclude that "group work can be a powerful extrinsic motivator of first year undergraduate students" (p.1018).

While no intervention will keep students from offloading the cognitive burden of their work to GenAI, the results of my revamped 102 course align with Kelly et al.'s findings. Because students spend so much time in and out of class collaborating with their groups, they have no choice but to speak and think about the topics and research they worked with. They have to build their primary research survey together and therefore must negotiate their ideas in real-time instead of turning to AI to do it for them. I witness different groups take the same academic sources and spin off totally unique research questions and project directions. As a result of this engaged group work, many express that they feel ownership over the research process and investment in the outcome.

On the instructor side, it takes more time to set up the groups and invite the right kind of engaged participation. I make sure to spend time in class clarifying group member roles and expectations as well as prompting students to reflect on their personal investment and contributions to the group. They create plans for how to complete their projects, and while students have ample opportunity to complete group work in class, there are some projects that require outside meetings. As part of the front-end work of setting up groups, they communicate when and how they would like to meet outside of class should it be necessary. Throughout the semester, students have multiple opportunities to communicate conflicts with me, and I intervene if the situation required. However, while I spent more time on the front end of instruction, it takes far less time to grade the major group project deliverables.

MULTIMODAL OUTPUT

In this new, more GenAI-savvy version of the course, I revised the first assignment so that it requires students to work together to produce a video rather than to individually compose a written essay. Both assignments require students to read, annotate, answer questions, and engage in classroom discussions about a long, detailed, academic text. In the written version of the assignment, students write a brief two-page report summarizing and arguing for what they think is the most important takeaway of the article for students. In the multimodal version, groups of students compose a video summarizing the major points of the article and asserting what their group believes is the most important takeaway for students.

This revised, multimodal assignment helps meet my goal of holding students accountable for putting effort into their learning. Producing a video takes a great deal of effort above and beyond typing out an essay; in this way, it means that while GenAI might play a role in student learning,

it cannot complete the entire assignment. When students plan, record, and edit a video, their engagement extends outside the scope of writing words on a page to the work of considering space, images, sound, tone, and more. Not only must students *write* or *think* about the words they will say, but then they must actually *say* them aloud. In fact, they are likely to say these words many times to capture a usable recording take. Next, they must edit the clips into a single composition. Taken together, students may end interacting with and considering the content of their video more than if they had written an essay. Also, even if students use GenAI to develop the content of their scripts for the video or to create images for the video, they nevertheless are forced to spend time and thought crafting it into a coherent whole.

Scholars in composition and digital rhetoric have long argued for instructors to teach about and engage students in multimodal composition (Selfe, 2009; Alexander and Rhodes 2014). The advent of GenAI gives yet another reason to lean into research-based composition pedagogy.

PRIMARY RESEARCH

Like the first two interventions, scholars in the field of composition have long recognized the value in engaging FYC students in primary research (Sunstein et al., 1996; Weiser, 2022). In light of GenAI, students in my 102 course must develop primary research activities, engage in data analysis, and use some part of their findings in a final research paper. While GenAI can come into play in any other of these stages, the class is set up in such a way that students must be present with one another to negotiate in-real-time how they want their research to unfold. In class, students work in groups to develop effective survey or interview questions; I provide feedback and require revisions for this process. Then they publish and administer the surveys and/or conduct the interviews. Next, we spend time in class learning about and practicing basic methods of qualitative data analysis. They work in groups to conduct thematic analyses and to code data. Finally, they incorporate their findings into their final paper, using their *own* data as evidence for some claim. Having students conduct primary research necessitates time, thought, and attention that they cannot give entirely to GenAI.

Not only is assigning and facilitating primary research a way to have students resist offloading their cognitive burdens to GenAI, but it also provides several organic opportunities for critical thinking. Like multimodal assignments, primary research requires students to engage in multiple stages of thinking, planning, executing, and analyzing. This helps to hold them accountable for putting forth time and effort into their learning. Furthermore, when students take part in each of the steps of research, they may come to recognize the complexities, murkiness, and nuances of research; this helps them think more critically about secondary research that they read, potentially alerting them to the manifold limitations of research and helping them better contextualize published findings.

In-Class GenAI Activities

In 101, students should engage in GenAI activities mainly to learn about what the tool is, how it works, and what it is and is not capable of producing. In 102, instructors can develop activities that use GenAI to deepen student analysis and synthesis of primary and secondary research. What these activities highlight is that students must do a lot of deep thinking *before* they can reap any benefits from GenAI. First, they must engage in data analysis and think critically about their research to compose effective prompts. For example, when students take time to reflect on their research findings and then compose detailed summaries to use as the basis of a GenAI prompt, students jumpstart the difficult work of synthesizing research findings. Instructors guide students to engage critically with the output, but the value of these activities lie in the cognitive load students must take on in the prompt generation as well as *before* they get to prompting. To help transfer that awareness to future writing contexts, instructors can ask students to reflect on the experience of composing the GenAI prompt, helping students notice that the time and thought they spent to craft the prompt has a direct relationship to both the helpfulness of GenAI's output and to their choice about how to incorporate GenAI's output into their final drafts.

References

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