prompt

a journal of academic writing assignments

Volume 9 | Issue 1 | 2025

prompt: a journal of academic writing assignments

Volume 9 | Issue 1 | 2025

Open access at http://thepromptjournal.com

ISSN: 2476-0943

This full journal issue is not an accessible PDF, and some links in it do not function (due to the manner of the compilation). For accessibility features and fully functioning links, please visit the journal's website and download the individual articles or read them in HTML on the site.

Editors' Note

Kelly Kinney[1] and Rick Fisher[2]

[1]University of Wyoming (kelly.kinney@uwyo.edu)
[2]University of Wyoming (fishr78@uwyo.edu)

We are excited to introduce readers to the articles featured in *Prompt* issue 9.1, which showcases writing assignments in diverse disciplinary contexts, including environmental communication, technical editing, health science, and three distinct first-year writing courses: one that focuses on online writing instruction, a second that incorporates Writing about Writing pedagogies, and a third that examines meme rhetorics.

In the essay, "Archival Research for Community- and Skill-Building in the Online Writing Classroom," Alex Evans develops a low-stakes assignment in his co-requisite course for developing writers that examines the archives of a local African American newspaper as an alternative to traditional researched writing. First engaging readings and media to introduce archival investigation, students then dive into this digitized newspaper archive to find a single article that captures their interest, share a summary of the article with their fellow classmates, and finally reflect on their learning in discussion board posts. Taught in the context of a predominately white Southern community college, we are impressed with the ways that Evans' prompt works to engage the historically underserved students that frequently enroll in the course, as well as how the author seeks to build community in what can often be an uncomfortable and isolating space—that is, an online first-year writing classroom.

Ryan Eichberger's piece, "Pixelated Life: Fostering Environmental Enchantment Through the Design of Children's Media," describes his effort to help students reconnect with a spirit of enchantment, especially with nature, in the face of a modern life that his students find increasingly overwhelming. From the perspective that "writing teachers are habitual guides toward attentiveness [by encouraging] process and recursion, rethinking and reimagining, noticing and listening," Eichberger developed an assignment asking students to create a play-based environmental game or activity for children. Spanning seven weeks, the assignment engages students in deliberately focusing their attention, analyzing audiences, developing relevant technoliteracies, applying document design, and, finally, trying out one another's activities. As Eichberger argues for the value of reconnecting students with nature, we appreciate that he coaches students through a more deliberate engagement with, rather than rejection of, technology. Through this approach, Eichberger invites students to engage strategically with technologies as a way to process and communicate their relationships with nature.

In "Editing AI-Generated Text for Accuracy and Completeness," Jen Talbot highlights how she asked students in her upper-division undergraduate editing course to engage in a comprehensive editing exercise of writing generated by ChatGPT. First taught on the heels of this evolving technology's release, her assignment asks students to gauge factual accuracy, rhetorical effectiveness, and attunement to user needs in AI-generated prose. We believe the prompt could serve as a smart introduction to generative AI in a range of courses across the disciplines and is particularly pertinent to technical fields where writing will increasingly be influenced by algorithm-driven technologies. We also appreciate Talbot's IRB study of student responses to the assignment, which contains valuable insights on how faculty might develop related prompts. As

prompt
a journal of academic writing assignments

Volume 9, Issue 1 (2025), pages 1–2.

DOI: 10.31719/pjaw.v9i1.236
Submitted January 18, 2025; accepted January 18, 2025; published February 25, 2025.

the author argues, although larger philosophical questions regarding AI will no doubt continue to evolve, it is crucial that faculty across the disciplines help students navigate the ethical dimensions of creating technology-generated writing.

Olivia Imirie's "Defining Writing Lingo: Using Interviews to Investigate Language about Writing and the Writing Process" describes her Writing about Writing-based assignment, which asks students to interview three people they consider to be good writers in order to develop and argue for a more nuanced understanding of key terminology for writing. Through this assignment, which also engages students in qualitative coding, students come to understand the complex ways that concepts like "revision" or "research" are embodied and enacted differently by writers across a variety of contexts. We are compelled by Imirie's description of this assignment as an opportunity for students to move beyond confident initial definitions of terminology towards more contextually nuanced understandings of writing as activity and artifact. Although Imirie situates the prompt in a first-year writing course, we find the assignment valuable to upper-division courses in writing studies and perhaps particularly courses that prepare graduate assistants to teach undergraduate writing.

Travis Maynard's contribution to this issue, "*Feels Good Man*: Memes as a Framework for Teaching Circulation, Remix, and Writing Transfer," explains a prompt that asks students to trace the evolution of a cultural meme. Drawing on evolutionary biologist Richard Dawkins' notion of meme and on other forms of circulation analysis, Maynard's Meme Research Infographic assignment invites students to rhetorically analyze multiple generations of a meme, develop an infographic to present their learning to peers, and reflect on their rhetorical and technological engagement with the assignment, including their use of AI at various stages of the project. Along the way, the documentary *Feels Good Man* (Jones, 2020), which explores ten generations of Pepe the Frog, serves as an illustration of cultural circulation and remix. We appreciate Maynard's effort to locate this assignment within disciplinary conversations about writing transfer, and we are excited about the ways this kind of exploration of meaning-making might be applied beyond the first-year composition classroom.

"Does Metacognition Matter?: Prompting Students to Think about How They Think," by Morgan Luck, Erika R. Francis, Stephanie Bernard, and Anne Schempp, describes the authors' efforts, across five cohorts of students in a masters-level physician assistant program, to develop students' metacognitive awareness of patient-oriented decision making. In the brief Metacognitive Analysis assignment, students investigate patient teaching cases in small group learning sessions and are asked to identify examples of *analytic* and *intuitive* decision-making during a case study. As part of scaffolded writing experiences throughout the program, the authors see this writing-to-learn activity contributing to practitioner self-awareness and evidence-based practice within a broader problem-based learning environment. We appreciate the authors' acknowledgement of the way this assignment engages some students in the complexity of intuitive interpretation within the context of health science, and we could see this kind of task applying across a range of other scientific fields as well as the social and behavioral sciences.

We hope you find value in these contributions and thank the authors for sharing their innovative writing prompts. As we move toward special issue 9.2, guest edited by Ethan Youngerman, we look forward to showcasing innovative assignments from a single writing program, the Expository Writing Program at New York University, which prides itself on developing courses inflected with content from across the disciplines. Stay tuned!

References

Jones, A. (Director). (2020). *Feels good man* [Film]. Ready Fictions & Wavelength. https://www.feelsgoodmanfilm.com/

Archival Research for Community- and Skill-Building in the Online Writing Classroom

Alex Evans[1]

[1]University of Cincinnati (evans2ax@mail.uc.edu)

Abstract

This low-stakes assignment invites students in an online corequisite first-year writing course to explore the archives of a local historic African American newspaper as an alternative to more conventional research-based writing tasks. This course is taught at a large public community college with a predominantly white student population in Louisville, Kentucky. For this activity, students first are introduced to the concept of archives through a reading and a video. Next, they are invited to freely explore the digitized newspaper archive, choose one article that captures their interest to read in full and sharing a short summary of it along with a reflection on their experience of navigating the digital archive on a discussion board. Finally, each student is asked to respond to at least two classmates, looking for harmonies and tensions between their and their classmates' summarized articles and experiences in the archive. The local focus of this assignment encourages students to see research as personal and quite literally close to home, while the focus on reflection and response encourages students to work collaboratively to overcome challenges when navigating difficult digital sources. In an online writing classroom, which can often be an isolating and unfamiliar space, particularly for the historically underserved populations most likely to be in a developmental writing course, this assignment encourages students to embrace their roles as researchers in community with other researchers.

Placing the Online Writing Classroom

"Archival Exploration: The *Louisville Leader* Archive" is a low-stakes assignment that invites students to thoroughly explore the digitized archive of a local historic African American newspaper, choose an article of interest to read and summarize on a discussion board, and reflect in conversation with other students on the different versions of the city described in their articles as well as their shared experiences of navigating the unfamiliar space of the digital archive. This assignment allows me as a teacher-scholar-activist (Toth et al., 2019) to bridge the gap between my own daily experience of research, which is primarily archival and historical, and my students' prior experience of research, which is all too often Google-searching for sources to support predetermined positions on preset topics. It allows students to gain experience as researchers and as digital communicators—both important outcomes for many first-year writing classes—but perhaps more importantly, it invites students to see research as being closely connected to their own lived experience and the experiences of people like them. Exploring the local archive allows students to critically consider the city they live in and their place within it, and by doing this in conversation and collaboration with other developing researchers, these students can forge community ties that are often difficult to create in online contexts.

I initially conceived of this assignment to solve a place-based problem of my own. In 2022, I was hired to teach ENG101/100, a corequisite first-year writing (FYW) course, online for Jefferson Community and Technical College, a public two-year college in Louisville, Kentucky. While I have briefly visited the city, I had never (and still have never) visited the campus or met any

prompt
a journal of academic writing assignments

Volume 9, Issue 1 (2025), pages 3–9.

DOI: 10.31719/pjaw.v9i1.205
Submitted January 2, 2024; accepted October 30, 2024; published February 25, 2025.

of my colleagues or students in the physical world. Like most other open-access two-year colleges, this school's mission is to serve a primarily local population. While not all of my students are originally from Louisville or currently live in Louisville, they all have some ties to the city or the surrounding region. My previous teaching experiences at other institutions had been exclusively in my hometown, and when teaching in person on other campuses, I had shared a local context with my students, walking the same campus sidewalks, eating in the same restaurants, experiencing the same weather, and so on. In this new remote position, I quickly realized that I had very little context for my students' lives, and they had little context for me or for the college itself, given that most of them are first-semester students taking courses partially or exclusively online.

To better serve my students, I felt sure that I needed to better understand where they were coming from, literally. Additionally, as was widely reported during the pivot to distance learning during the COVID-19 pandemic, online classes can lead students to feel more isolated and disconnected from their peers and their community (Birmingham et al., 2023). By encouraging students to make a familiar place the focus of their first foray into research, I aim to ground the class in their personal and communal experiences and create opportunities to bond with one another over shared places and discoveries about the city itself. Further, as Lisa Mastrangelo (2022) notes, "[s]low research in the archives...invites students to become voices within the local communities where they participate," and "the students are seen and come to see themselves as trusted authorities on their topics" (p. 41). This is particularly important for students placed into a corequisite developmental writing course at an open-access two-year college like Jefferson Community and Technical College, as these students often express anxiety about being in academic spaces and knowing what to write or say. Inviting these students to see themselves as important voices and capable researchers can have major impacts in their academic development both within the FYW course and beyond it.

Reimagining The Research Requirement

Like many first-year writing courses, ENG101/100 requires that students complete some sort of research-based writing (RBW) assignment during the term. In fact, of the 24 learning outcomes (that span state-, system-, and college-level competencies required of students) included in the course description, seven address on research skills in some way. In many cases, these outcomes are fulfilled by a traditional persuasive "research paper." The issue with the ubiquitous research paper assignment, as outlined by Elizabeth Wardle (2009), is that it is a genre unique to the FYW classroom. It does not introduce students to the kind of RBW they might do in their chosen discipline, nor does it acquaint students with the kind of methods and RBW that might be employed across multiple disciplines. While composition programs often claim that their courses prepare students to write in other academic and professional contexts, Wardle's study suggests that many standard FYW genres have little or no application beyond our classrooms.

The assignment presented here, which is a low-stakes, week-long activity, is not intended to be a one-to-one replacement for the kinds of research papers that Wardle critiques in "Mutt Genres"—for a start, students are not producing any formal academic essay at the end of it. Rather, this assignment is an invitation for students to see research as far more diverse and expansive than they often realize it can be. Ideally, this activity would be taught alongside other explorations into different kinds of research. While working in archives may initially seem like an odd choice for students' first experience of academic research, Pamela VanHaitsma (2015) argues that "this [archival research] process is most beneficial, though, not because students will become professional archival scholars (most will not), but because primary archival work involves students in inquiry-driven research and writing" (p. 36). Though few of my students are

likely to become archivists or researchers, they do stand to benefit from engaging in a research process that starts with a deep exploration of sources rather than one that encourages them to begin with an opinion and only later seek out limited evidence to support it.

While such immersive experiences of research are beneficial both to students and to teacher-scholar-activists working at two-year colleges, this institutional context often makes doing research difficult. Two-year colleges across the country are facing mounting budget cuts, resulting in fewer and fewer resources (Whitford, 2021). Often, libraries and other academic supports bear the brunt of these austerity measures. While the Research 1 university where I am a PhD student has multiple physical libraries, an enormous selection of online resources, dedicated subject area librarians, and multiple unique archival collections, two-year colleges often have smaller libraries, fewer digital resources, and no archives for students to explore. This lack of resources is especially noticeable for online students, who may struggle to navigate limited and/or outdated databases with inadequate remote support. For faculty, these meager resources make it difficult to maintain a research output, a situation exacerbated by heavy teaching loads and little institutional support or expectation for such work (Suh et al., 2021). These conditions create a situation in which teachers who have little research experience are expected to teach research skills to students who have little to no research experience, all without the necessary resources or institutional supports. Open-access digital archival collections present an opportunity to bypass these common institutional limitations and allow both students and faculty to engage with sources that might otherwise be inaccessible to them.

Students in the (Digital) Archive

The *Louisville Leader* was a weekly African American newspaper published from 1917 to 1954 by I. Willis Cole. Original editions were copied to microfilm in 1978, and in 2011, the University of Louisville digitized that microfilm to make the full collection publicly available online. In total, there are 900 issues preserved in the collection, a substantial but incomplete record of the paper's 37-year tenure. The *Louisville Leader* archive offers multiple features that make it ideal for this kind of low-stakes archival exploration. First, as noted, it is open access, avoiding paywalls or institutional logins. Second, the scans are high-quality and presented in an online viewer that allows users to zoom and scroll easily. Third, the entire collection is keyword-searchable, allowing students to find issues with articles relevant to their interests. Given the few locally focused and open-access options available in Louisville, the *Louisville Leader* archive was a logical choice for this activity, though as my students attest, it is not without its navigational challenges.

My students are assigned this activity in the seventh week of our 16-week course. By this point, they have already written one essay, a literacy narrative, and have even briefly explored another archive, the Digital Archive of Literacy Narratives (DALN), to identify possible models for that previous essay. Before diving into this collection, students are introduced to archives and archival research through two contextualizing sources: a chapter on archival research and place-based writing from *Writing Spaces 4* (Gaillet & Rose, 2021) and a video "Brief Introduction to Archives" from the university library that digitized the collection (University of Louisville Archives & Special Collections, 2020). While students may be able to capably explore a digital archive without these supporting texts, I have found that few first-year students have a clear sense of what archives are or how archival research differs from other research, and these sources help address those foundational questions. In a course with a synchronous component (on campus or online), these sources could potentially be replaced with an in-class lesson on archives, though I do think it is valuable for students to hear directly from working archivists and researchers.

Student responses to this assignment reflect the diversity of topics covered by the *Louisville*

Leader. While I initially imagined that students would gravitate towards the main focus of the paper (race relations in the city and nationwide), I have been consistently surprised by how many students alight on other interesting features of the newspaper to summarize on the discussion board. For example, multiple students in the two sections of ENG101/100 who have done this assignment have shared not articles but advertisements from the newspaper, describing how the products or services offered compare to those available today or how the needs or aspirations of the paper's readers compare to their own experiences today. Other students have highlighted articles about familiar places in the city—schools, churches, neighborhoods, and so on—and described how their experiences of these places compare to the narratives presented a century ago in the paper. Of course, this is not to say that students ignored the paper's focus on issues relevant to Louisville's Black community—many students have highlighted articles about civil rights movements, changing legislation, and particularly articles on local crime. In these responses, many students noted that they were not accustomed to reading history from this era written by Black authors, emphasizing a key value of this collection and of primary source research more generally.

Students' enthusiasm and interest in the content of the archive often has not extended to their reflections on the process of *navigating* the archive, however. In these, many students expressed frustration, noting the many ways in which the somewhat rudimentary navigability of the archive fails to meet the standards set by current search engines and other webpages. Here, students acted almost as User Experience professionals, identifying issues and making recommendations for how the archive's interface might be enhanced to more easily connect researchers to the sources they are seeking. In their responses to one another, students were notably supportive, offering suggestions to solve their peers' navigational problems and positing possible avenues for future research based both on the archive and their own experiences of the city. While discussion boards can often feel like a poor substitute for "conversation" in online asynchronous courses, I was impressed by the extent to which these students engaged with one another's ideas and worked to forge connections with their peers through shared experiences of the city and the archive.

Changing Contexts

As shown in the previous section, students engage with these tasks in part because of the clear connection between the content of the archive and their own lived experiences. For any instructor hoping to use this assignment in a different context, it will be essential to keep as much of this place-based approach as is possible. While few cities may have an archive exactly like the *Louisville Leader* collection, many research libraries have similar digitized collections of local or regional publications that might be suitable for engaging students in a similar research project, and many of these collections are open access. I am currently adapting this assignment to suit students at another institution in another city, and in that case, I have selected the college's digitized student newspaper archives, which span nearly 100 years of student writing. That collection has a different focus but still offers useful connections to students' lived experiences of the city and the institution. Finding a suitable collection may be time-consuming, but the payoff is significant when students can connect their archival explorations to their own lives.

For students in English classes outside of the first-year writing sequence or in other disciplines, this assignment still offers a valuable opportunity to engage in situated forms of research that mirror the work being done by scholars in various fields. As described, this assignment could be valuable to students in courses covering topics including journalism, history, or research methods. Modified versions of this assignment focusing on other archives might be employed in an even broader range of contexts, and I myself have taught a similar assignment

in an upper-level grammar course that guided students through various texts in the Lucille M. Schultz 19th Century Composition Archive, a digitized collection of 19th century grammar manuals and writing textbooks. In that case, students used the archival sources alongside their course textbook as a catalyst for conversation about changing methods of writing instruction as well as social norms around formality in speech and writing.

For on-campus classes, it may be valuable to have students explore a physical collection, though this could be logistically challenging depending on institutional context, class size, and other factors. Additionally, students in courses with synchronous meetings might complete this activity during class, with small group discussions taking the place of the online discussion board.

Future Plans

As I prepare to teach ENG101/100 again the next semester, I am considering multiple revisions to this assignment, including expanding this assignment from its current low stakes format into a unit of its own that invites students to produce an analysis essay focused on an article (or another artifact) from the *Louisville Leader* archive. I believe that such an expansion could provide a place-based alternative to common rhetorical analysis or researched argument assignments that would allow students to build skills as archival researchers while also using their local knowledge to provide context, support, and insight for one another's' projects.

While these plans for expansion are still preliminary, I could see students using this additional time to develop substantial projects that combine personal narrative and archival research in interesting and innovative ways. Students might draw on journalism or narrative nonfiction for inspiration, using their present experiences to reflect on the opinions shared in the newspaper's pages or using the events described in the archives to give context to the culture and geography of the city they live in. Such a project could fulfill many of the traditional learning outcomes of a first-year writing class while giving students an opportunity to compose in a form that has more public utility than the "mutt genre" (Wardle, 2009) of the conventional research or analysis paper.

Whatever form future versions of this assignment take, I plan to provide more direction to students in their first forays in the archive. While my intent in framing the discussion prompt around "harmonies and tensions" was to invite a range of responses and not limit students' contributions, some students struggled to find an access point to the discussion with so broad a prompt. Future students will be given examples of what such harmonies and tensions might look like and will be given more guidance to prompt deeper engagement with the archive. Similarly, I have found that some students need more support on reading historic texts. The provided chapter and video help with this, but I would be eager to develop a video in which I walk students through the process of navigating the archive and reading a text or two on screen in real time.

Conclusion

Too often, the research done in the FYW classroom, whether physical or digital, feels very distant from the research done by professionals in the field, whether in writing studies or other disciplines. This gulf is further expanded by labor and institutional inequities—most research-based writing published in the field comes from tenure-track faculty at four-year colleges and universities who rarely teach FYW, and the non-tenure track, contingent, and graduate student instructors who primarily teach these courses, particularly at two-year and teaching-focused schools, have few resources to pursue research (Hassel & Phillips, 2022). While first-year students are not and should not be expected to be professional researchers, they

stand to benefit from exposure to archival and other research methods employed by researchers in a variety of fields. Though this assignment is ultimately a small curricular intervention, it demonstrates how valuable and impactful it can be for students to engage in a research process that is localized and contextualized, allowing them to see themselves in their work and use the tools of the writing classroom to make sense of the world around them.

ASSIGNMENT
Archival Exploration: The *Louisville Leader* Archive

As you learned from the "At Work in the Archives" reading, archives can tell us a lot about a place and the people who live there. To get you some practice doing archival research yourselves, this assignment asks that you explore an online archive that can give visitors an insight into the peoples and places of Louisville, Kentucky.

The *Louisville Leader* is an African American newspaper that was published from 1917 to 1950 in Louisville, Kentucky, by I. Willis Cole. The newspaper has not been published in more than seventy years, but the paper's archives were preserved and made available online by the University of Louisville. You can learn more about the newspaper, I. Willis Cole, and the process of making it available online through the UofL Libraries blog, and you can access the full digital archive through UofL special collections.

Before posting to this discussion board, please complete the following tasks:

1. **Access the Louisville Leader online archives through UofL Libraries.** Take some time to explore the archive by clicking to view different issues, searching for various terms, and exploring the other features of the website.
2. Using the search function, see if you can find any issues of the newspaper with articles that correspond to familiar places in the city or issues/topics that are still relevant to your life in and around Louisville today.
3. Choose one article that you find interesting and relevant to read in full and share on the discussion board.

Before Day 4, please share an initial post of at least 250 words addressing the following prompts:

- Share a link to one article from the *Louisville Leader* that you found interesting or relevant to your life/experience of Louisville. Briefly summarize the article for your classmates.
- Next, describe why you chose this source. How might this article (or others like it) help the people of Louisville to better understand the history and culture of the city?
- Lastly, reflect briefly on your process of exploring the digital archive. How did it compare to using other sites online to get information? Did you find navigating the archive intuitive? Confusing? Frustrating?

Before Day 7, please share responses of at least 100 words to at least two classmates addressing the following prompt:

- How does your classmates' experience of navigating the archive compare to yours?

- Do your articles tell similar stories of Louisville, or is there some tension between the versions of the city they present?
- What else do you find interesting or relevant about your classmate's post?

Supplementary Material

For supplementary material accompanying this paper, including a PDF facsimile of the assignment description formatted as the author(s) presented it to students, please visit https://doi.org/10.31719/pjaw.v9i1.205.

References

Birmingham, W. C., Wadsworth, L. L., Lassetter, J. H., Graff, T. C., Lauren, E., & Hung, M. (2023). COVID-19 lockdown: Impact on college students' lives. *Journal of American College Health*, *71*(3), 879–893. https://doi.org/10.1080/07448481.2021.1909041

Gaillet, L. L., & Rose, J. (2021). At work in the archives: Place-based research and writing. In D. L. Driscoll, M. Heise, M. K. Stewart, & M. Vetter (Eds.), *Writing Spaces: Readings on Writing 4*. Parlor Press & WAC Clearinghouse.

Hassel, H., & Phillips, C. (2022). *Materiality and Writing Studies: Aligning labor, scholarship, and teaching*. National Council of Teachers of English.

Mastrangelo, L. (2022). Using archives to teach slow research and create local connections. In T. S. Graban & W. Hayden (Eds.), *Teaching through the archives: Text, collaboration, and activism* (pp. 31–45). Southern Illinois University Press.

Suh, E., Baird Giordano, J., Griffiths, B., Hassel, H., Klausman, J., Higgins, K., Roberts, L., Snyder, S., Sullivan, P., Tinoco, L., Toth, C., & Wegner, M. (2021). The profession of teaching English in the two-year college: Findings from the 2019 TYCA workload survey. *Teaching English in the Two-Year College*, *48*(3), 332–349. https://doi.org/10.58680/tetyc202131202

Toth, C., Sullivan, P., & Calhoon-Dillahunt, C. (2019). Two-year college teacher-scholar-activism: Reconstructing the disciplinary matrix of writing studies. *College Composition and Communication*, *71*(1), 86–116. https://doi.org/10.58680/ccc201930295

University of Louisville Archives & Special Collections. (2020, August 26). *A brief introduction to archives* [Video]. YouTube. https://www.youtube.com/watch?v=dPINe9vugNw

VanHaitsma, P. (2015). New pedagogical engagements with archives: Student inquiry and composing in digital spaces. *College English*, *78*(1), 34–55. https://doi.org/10.58680/ce201527436

Wardle, E. (2009). "Mutt genres" and the goal of FYC: Can we help students write the genres of the university? *College Composition and Communication*, *60*(4), 765–789. https://doi.org/10.58680/ccc20097196

Whitford, E. (2021, March 22). State funding hit lands on 2-year colleges. *Inside Higher Ed*. https://www.insidehighered.com/news/2021/03/23/state-funding-two-year-colleges-declined-year-while-four-year-colleges-saw-small-dip

Pixelated life

Fostering Environmental Enchantment through the Design of Children's Media

Ryan Eichberger[1]

[1]St. Olaf College (eichbe1@stolaf.edu)

Abstract

This article describes a seven-week project in which writing students design digitally mediated, play-based activities (card games, board games, pop-up books, or similar) to encourage children to experience a sense of environmental enchantment: an attentive, empathetic connection with the more-than-human world. The project emerged after students in several writing courses lamented modern life's quickening pace and a corresponding loss of pleasurable nature experience. The project gives students space to practice—and to practice encouraging in others—slower, more attentive ecological relations while strengthening media production skills aimed at non-academic audiences. In doing so, students produce projects that, in the words of virologist Jonas Salk, practice being "good ancestors" to future generations.

Introduction: Herons Lost and Found

In 2007, a new edition of the *Oxford Junior Dictionary* was published. Because the dictionary was limited to 10,000 entries, words like "blog," "MP3 player," and "broadband" were added while words like "acorn," "dandelion," and "heron" were removed, having been judged irrelevant to contemporary childhood experience (Flood, 2015). Public outcry followed. Nature writer Robert MacFarlane (2015) suggested that what had been lost was "the power that certain terms possess to enchant our relations with nature" (p. 4). MacFarlane and artist Jackie Morris (2017) later produced *The Lost Words,* an illustrated children's book that celebrated the deleted entries.

In 2020, I brought *The Lost Words* into a writing classroom at an urban community college in Minnesota. Many students responded to its watercolor images and gold-leaf text reverentially, recalling treasured childhood nature experiences. Clearly, the book appealed not only to young children or thirty-something professors. One student remarked, "I wish I could make something like this for my cousins. Oh well, I guess." A year later, she emailed me a photo showing her sitting with two grinning children, *The Lost Words* open to the page for "heron."

Subsequently, at both that college and the rural, private Minnesotan college where I currently teach, I met other students who lamented a lost connection with nature. Even environmental studies students in my classes described feeling unprepared to identify or appreciate species just outside the window. Various seniors over multiple semesters told me they felt uncomfortable explaining environmental ideas without using a five-paragraph formula or infographic template. The consensus? Life was overwhelming, with little time for pleasurable nature experience, and less still for honing media production skills needed to communicate such experience to non-academic audiences.

What had gone missing was *enchantment,* which May (2023) describes as an awareness of connection with the more-than-human world formed when people use "deliberate attention" (p. 7) to identify "quiet traces of fascination" around them (p. 202). Enchantment was what my students described knowing as children—and what they feared children today might not know. It was the thing that stirred when I held classes outdoors and students bent suddenly to inspect

prompt
a journal of academic writing assignments

Volume 9, Issue 1 (2025), pages 10–20.

DOI: 10.31719/pjaw.v9i1.210
Submitted May 4, 2024; accepted October 9, 2024; published February 25, 2025.

a leaf or turned to watch geese pass honking overhead. Maybe, I thought, a project that invited students to recover a shred of enchantment might be worthwhile, particularly if it enabled them to deepen their media skills to better encourage such experience in others—especially the young audiences they worried might grow up without such encounters.

My goal was that students might help themselves and others strengthen what Lopez (2010) describes as "a sense of allegiance with our chosen places, and along with that a sense of affirmation with our neighbors that the place we've chosen is beautiful, subtle, profound, and worthy of our lives" (p. xvi). Resilient earthly relations begin with a love of place, and a love of place begins with the art of noticing what can be loved. I have taught the resultant project in two courses: once in an abridged format for a first-year writing course, and twice in its full iteration in a Topics in Writing course about science communication, which follows a hybrid discussion/workshop model. The project invites students to develop the media literacies needed to craft a play-based activity, such as a card game, board game, nature walk, or pop-up book that teaches children to be curious about local nature—and maybe helps students develop their own more-than-human relations.

Project Motivations: The Pixelation of Life

Around the time my students were describing their lost connections with nature and the pressures of modern life, I was grappling with my own pressures, having just found out that I was autistic—not a small thing to uncover after three decades of living. My understanding of autism had previously been shaped by "a brutal minefield of stereotypes: the savant, the obsessive, the socially distant autodidact" (Hendren, 2020, p. 137). Now I was learning about autism from the inside, gathering a lifetime of inexplicable struggles into a narrative about myself that finally made sense. I began to understand that my neurology was such that light, sound, and touch created what May (2021), who is autistic, describes as "a current that surges around my body until I'm exhausted" (p. 9). A simple hallway chat with a colleague would unfold within a sensory deluge: buzzing fluorescent lights, scented carpet cleaner, nearby voices, my squeaky shoes. Moment to moment, I had to consciously pluck my coworker's words from the chaos, aware that this process left gaps in the conversation. The bustling world was out of scale with how I was made. This self-understanding led me to think closely about what my students had described. Maybe my experience of overwhelm was more intense than theirs, but the sense that modern life was too much—well, we shared that.

Modern life is full of phenomena that stretch life to breaking; they can be personal or systemic, analog or digital. A full slate of courses and co-curriculars leaves a student so exhausted that they do not read a book for pleasure for years. Old-growth forests in the Pacific Northwest are logged so heavily that Northern Spotted Owl populations plummet precipitously toward extinction. Meta, parent company of Instagram, starts training its large language models (LLMs) using users' photos and posts, turning an archive of human joys and sorrows into a coolly utilitarian repository of data. In short, borrowing a term from anthropologist Anna Tsing (2012), the scaling up of the world tends to reduce living things—to pixelate them.

Pixels, writes Tsing (2012), are "uniform, separate, autonomous" (p. 508), allowing them to scale up endlessly "without rethinking basic elements" (p. 505). But Tsing warns that living things are not pixels and do not expand without distortion: projects dedicated to speed, scale, and expansion—from digital networks to colonialism, oil extraction to 60-hour work weeks—tend to leave a "mounting pile of ruin" behind (p. 506). As Le Guin (1989) writes in "A Non-Euclidean View of California as a Cold Place to Be," technology is "an endless creative source," but it cannot itself bring us closer to being "a society that has made a successful adaptation to its environment and has learned to live without destroying itself or the people next door" (p. 98). Technology is

not ethics. Creating better societies, writes Le Guin, requires that we live "here, now, in this present"; if we do, we might "have some sense of our future as a people" (p. 85). As our inventive new technologies ask more of us, we will need alternatives to expansionist mindsets, ways to remind us to be attentive and present here, now, in our senses.

Such possibilities are written across the history of Writing Studies. Over forty years ago, Sommers (1980) concluded that effective writers made time to "exploit the lack of clarity, the differences of meaning, the dissonance" of writing (p. 386). Around that time, Flower and Hayes (1981) described writing as an opportunity for writers to "recreate their own goals in the light of what they learn," a process that involves rumination rather than brutal efficiency (p. 381). Thirty years ago, drawing lessons from Nazi Germany, Katz (1992) issued a landmark warning to technical communicators that "when expediency becomes an end in itself…ethical problems arise" (p. 272). Much more recently, Cooper (2019) argued for an "enchantment ontology" that demands attention to "our intimate entanglement with other beings, things, and forces" through which we as writers emerge (p. 68).

And although there is presently understandable excitement that emergent technologies like LLMs might ease writing's labor by "automating tasks such as brainstorming, drafting, and editing" (Ranade & Eyman, 2024, p. 2), Vee (2023) reminds us that while LLMs will produce "good writing," they will not necessarily produce "challenging, thoughtful, innovative humans, such as good writing instruction helps to nurture now" (p. 180). What good writing instruction offers is, to borrow Tsing's (2012) words, "collaborative survival—the transformative social relations—that make life possible" (p. 523). When I revise, I practice the art of not doing anything too quickly, of thinking with others, of noticing the shape of my thoughts. Attentiveness, curiosity, reflection—these skills taught by writing instruction also underwrite collaborative survival. They are as applicable to the geography of our minds as to how we engage with our places.

Situating the Prompt: A Web of Relations

For many people in Eurowestern societies, collaborative survival requires a healing of nature's division from culture, two realms that have become isolated pixels. Nature's media, like soil, water, or light, are not separate from technological media, but are in fact "the taken-for-granted base of our habits and habitat" (Peters, 2015, p. 1). As McLuhan (1994) famously writes, "it is not till the electric light is used to spell out some brand name that it is noticed as a medium" (p. 21).

An example: while doing research at my computer in Minnesota, I access a digitized nineteenth-century book about gannet colonies in northeastern Scotland. I click past the cloth cover, the endpapers, the first pages. I think first of my relations as being primarily with the book. Yet my relations are also with the particulate haze of Canadian forest fires outside my window; the way my autistic brain obsessively notices my pulse in my field of view; my screen, the wi-fi, a mess of hidden cables; a history of colonial displacement in Minnesota; Scottish archivists, scanners, servers, and libraries; book binders, printing presses (oh, yes—and writers!); gannets, nesting grounds, ancient migration routes; the deep-time upheavals of the earth itself. How far to cast the net of my relations is a choice. This project aims to help students begin to weave the net.

To support this rethinking, I invite students to read Cronon's (1996) "The Trouble with Wilderness," which punctures the wilderness myth, lays bare its colonial violence, and argues for a "full continuum" of nature that includes human life (p. 24). We also rewind to the early twentieth century by examining naturalist Anna Botsford Comstock's (1911/1947) 900-page *Handbook of Nature-Study*, which the author assures her readers "does not contain more than any intelligent country child of twelve should know of his environment" (p. xi). From there, we trace how nature study dropped out of American curricula due to the pressure of wars, the

depopulation of the countryside, and the rise of the hard sciences (Pyle, 2016, p. 148-149).

Of course, some readers of this essay do have developed relations with nature. Outside Eurowestern philosophy, indigenous traditions of *all our relations* have long offered a "complete ethical system" for being with one's environment (Cordova, 2004, p. 177). As Deloria, Jr. (1992) writes:

> "We are all relatives" when taken as a methodological tool for obtaining knowledge means that we observe the natural by looking for relationships between various things in it. That is to say, everything in the natural world has relationships with every other thing and the total set of relationships makes up the natural world as we experience it. (p. 37)

Students encounter these ideas through Kimmerer's (2015) *Braiding Sweetgrass,* which calls for descendants of settlers—like me—to work toward better relations, to "strive to become naturalized to place" (p. 214). Kimmerer positions the work of naturalization against the expansion-oriented habits of kudzu—that is, "taking over other people's homes and growing without regard to limits" (pp. 214–215). Students also read from writers like adrienne maree brown (2017), whose idea of emergent strategy draws on Octavia Butler to suggest "ways for humans to practice being in right relationship to our home and each other" (p. 25). brown and others associated with the Feminist Climate Renaissance emphasize joyful climate care in which healing systemic injustices and forming community "is a requisite foundation for building a better world" (Johnson & Wilkinson, 2020, p. xix–xx). Such texts help students work toward what Barnett (2022) calls "a rhetoric for earthly coexistence" in which human and nonhumans make worlds together and rhetoric strives to "unearth" ecological consequences surrounding discourse and technologies (p. 367). With these contexts in mind, students begin shaping their projects.

A Media Production Workflow

In Week 1, students practice deliberate attention. After reading about nature journaling, they walk around campus together, using an app to identify and log species encountered, providing data for local conservation. Afterwards, students practice independent nature observation, spending 30 minutes in one place recording every detail they notice, with the starter prompt, "I wonder why…", drawing on John Muir Laws' (2016) *The Laws Guide to Nature Drawing and Journaling.* Many describe the session as therapeutic: "When time was up I didn't want to leave," one student said. During this stage, students identify an environmental question or fascination to propel their projects.

In Week 2, students define their audiences. Because this project arose out of student concern that, in a hurried world, children might lack pleasurable nature experience, I ask them to choose a child or children they know as the audience for their projects. I want them to practice, following Sobel (2007), helping children "love the earth before we ask them to save it" (p. 192). Students use the technical communication practice of audience profiling to define their audience's needs, contexts, and experiences, and decide what medium might serve that audience best. Small groups work together to help each other hone these profiles into fully realized portraits. We also play a card game, *Ecologies*, in which players create food webs, sparking discussion about what makes a play activity enjoyable or unenjoyable, which shapes their subsequent rhetorical choices.

Week 3 invites students to develop those rhetorical choices by deciding what technoliteracies they need to accomplish their vision. Together, students analyze children's nature illustrations from the seventeenth century to the present. This historical view helps students situate their

work in media traditions, following Hayles's (2012) call for "approaches that can locate digital work within print traditions, and print traditions within digital media, without obscuring or failing to account for the differences between them" (p. 7). Students also use McCloud's (1993) *Understanding Comics* to break daunting project concepts into manageable components: purpose, form, aesthetics, structure, skills/materials, and polish (pp. 170-171). Students end the week by producing prototype sketches of their projects, which they informally peer review. All these activities are situated in a justice framework, which I build out with workflow principles from the Design Justice Network (2018).

In Weeks 4 and 5, students consider document design. Rather than design with templates, they design from scratch—testing page layouts, colors, and typefaces with help from Williams' (2015) *The Non-Designer's Design Handbook,* St. Clair's (2017) *The Secret Lives of Color,* and Brumberger's (2003) "The Rhetoric of Typography: The Persona of Typeface and Text," respectively. In one activity, students reflect on the way typefaces suggest personalities, renaming fonts according to perceived character. Thus, during one iteration of the project, the bold and blocky Alfa Slab One typeface became Friendly Convenience Store, reflecting what students saw as its plain and honest character; meanwhile, the rough, hand-drawn Cabin Sketch font became 2000s Indie Film, evoking the made-from-scratch aesthetics of the era. Pedagogically, the activity helps students deepen technoliteracies and make informed rhetorical choices.

In Weeks 6 and 7, students peer review full project drafts using principles of human-centered design from Donald Norman's (2013) *The Design of Everyday Things.* Subsequently, they revise as needed to bring their projects to completion. Then, the pay-off: students try out their activities together.

Challenges: Technoliteracies and Campus Ecologies

This project presents two challenges. Often, students must develop new technoliteracies to achieve their visions, so I must bring digital knowledge to the class—and be ready to learn alongside them. This is a chance for students to practice finding resources. YouTube tutorials are among the best means to help students engage with software like Adobe Illustrator or InDesign. However, this project could be conducted with different digital tools or could be entirely analog. While I discourage artificial intelligence for this project, with precise pedagogical framing AI may offer creative (as opposed to expediency-driven) possibilities.

Location also shapes this project. My college has woods, ponds, and savannah. Many students here grew up with expansive yards or had access to remote cabins. For them—and for me—wilderness's romance is strong: it's easy to attend to the squirrel in the woods but ignore the squirrel in the quad. At the urban campus where I also taught this project, however, students often described growing up with limited greenspace in which they did not perceive nature. Nature was always elsewhere. Both situations pose challenges, but the pedagogical pathway is the same: I invite students to become fascinated by hyperlocal environmental details. Together, we view the work of artists like landscape architect Matthew Tucker, whose photographs reveal plants erupting from concrete parking lots and suggest what is possible to notice and love about such places. Even the cracks of sidewalks are lifeworlds.

Assessment and Impact: Collaborative Survival

To help students reflect on their work (and help me assess it), I ask them to draft artist statements explaining their intended audiences, the ways the project encourages those audiences to connect with everyday nature, the challenges of production, and the technoliteracies they developed. These reflections are an invaluable means for me to understand three factors I weigh heavily in

the grading: audience, purpose, and usability relative to a child audience—all factors I might not know without student explanation. (See grading checklist in Step 5 of the assignment for more detail.)

To me, student projects often embody what Jonas Salk (1992) calls being "good ancestors"—making a difference for another generation (p. 16). For example, two students collaborated to create a drawing book that helps children map a greenspace and name its landmarks; one sketched the concept by hand, and one translated those sketches into digital designs in Illustrator, which were then printed and bound. The students gave copies to one student's young brother and to a child the other babysits, who used the book to name the neighborhood trees—and still refers to those trees by name when describing the goings-on of squirrels and robins. Both students agreed that this outcome made the project worthwhile.

Another student used InDesign to create a children's alphabet book about marine ecology. The vibrant blue book had little flaps that lifted to reveal, say, a parrotfish behind a coral. She gave the book to her young cousin, who enjoyed it so much that she took it with her into the ocean, where the book perished.

One student illustrated flashcards about the bayou ecosystem, which she digitized and edited using InDesign. She gave the cards to her younger sister in Louisiana, who subsequently coerced her parents into buying an armful of nature books. She also found herself unexpectedly taking a summer job as a nature center guide, and ranked her project among her proudest college work.

What these outcomes suggest to me is that Writing Studies is a good vessel for rekindling the loving awareness of place upon which collaborative survival is based. Writing teachers are habitual guides toward attentiveness: we encourage process and recursion, rethinking and reimagining, noticing and listening. These are wonderfully transferable skills. Against the swift impulses of our expansionist age, writing pedagogy may offer some small restorative. Writing teachers are well-positioned to be guides toward a broader kind of attentiveness.

Collaborative survival is work available to everyone, and it begins everywhere. All kinds of people must bring their skills to the tasks that need doing. I view this project as a chance for students to deepen those skills, shoring up technoliteracies that invite others into the intergenerational project of climate care—and maybe even rekindling, in a small way, their own environmental enchantment.

ASSIGNMENT
Play-Based Environmental Game/Activity

> As the distance grows between a tiny priesthood who know small parts of nature very well and a massive population who know next to nothing about the whole and not even the names of their neighbors, a right relationship with the world seems more and more elusive. Today, when children have all too many stimuli and all too few opportunities to experience bald wonder, many seem to lack any real interest in nature. Yet I believe, along with Carson and Wilson, that wonder is innate in the very young, waiting only to be ignited before the cheap tricks of modern life damp the fuse. Nothing can light the flame of fascination in a child like another living thing. It may be the naturalists who save us in the end, by bringing us all back down to earth.
>
> —Robert Michael Pyle, "The Rise and Fall of Natural History"

Objective

For this project, please create a piece of interactive, play-oriented media that communicates an environmental or scientific idea of your choice to a child or children. The concept you choose should be something that interests you—the goal of the project is to not simply explain an idea, but impart to your audience a sense of enchantment, or a sense of affinity or connection with the more-than-human world.

Your creation can take any form you want, but should (1) have a strong visual or tactile component, (2) include some amount of text, which is tailored to suit a child audience, and (3) invite interactive play of some kind.

Rationale

As we have discussed this semester, the work of our lifetimes will be to rethink the environment in ways that reassert our connectedness with the more-than-human world and recommit us to responsible place-making. We're going to need to know how to talk to people about the world so as to reawaken enchantment and the desire to care. This project offers a chance to practice those life skills.

Step 1: Practice Noticing Nature [due at the end of Week 1].

In brief: Compile a set of nature notes (raw and unedited).

In order to help others appreciate and care for the environment, it's important to understand what kinds of things might be appreciated. The best way to do this is to practice noticing the environment ourselves. We will do this through focused nature study.

In the United States, nature study used to be a standard element of education from childhood onward. Adults were expected to be able to identify local animals and plants with ease. We've lost that ability, and we need to get it back. Finding interest in local nature can sustain us as we do difficult climate action in years to come.

For this practice activity, find a spot to sit, stand, or rest for about twenty minutes. This spot can be on campus or at a location of your choosing. Depending on the spot you choose, you may want to try to be as still as possible, which will invite birds and other animals to accept you as part of the landscape. This stillness may seem tedious, but think of it as an exercise in attention:

- Start by noticing big things—weather, major landmarks, obvious sounds.
- Once you have noticed these defining features, notice more specific phenomena—the way wind moves leaves, or very distant sounds. Take time to notice variations in color, texture, light, smell, etc.
- Eventually, turn your attention to the ground and other highly specific surfaces. Notice specific blades or grass, insects, bits of soil.

As you observe, record notes, either in words or in sketches. Do not edit these things; keep your attention on what you see. When you feel you have exhausted your attention, return to the big things, and start again. At each stage, ask the question: "I wonder why…"

Step 2: Explore Ecological Connections and Project Possibilities [due at the end of Week 2].

In brief: Write a short, informal reflection (less than a page; casual, email-type voice) to begin clarifying your environmental attention and project interests.

From your notes, pick at least one thing that caught your focus. Reflect briefly on the following questions to begin shaping a vision for what interests you and for your project.

- What substances and beings does your subject interact with? List as many as possible.

- What do you not know about your subject? What parts of its environmental connectedness are mysteries to you?
- What does it feel like to think about the more-than-human world as a series of dense connections? Is this any different from how you think about the world on a daily basis?
- Is there anything here that interests you enough to become a topic for your project? Has the experience led you to think of some part of some other environment that interests you? For whom might you make a project? What form could it take?

Step 3: Define the project's technologies and form [due at the end of Week 3].

In brief: In an extended, informal reflection, sketch out the audience in more detail, the form the project will take, and what communication choices would help foster a sense of enchantment.

First, consider audience in more detail:

- What subjects do they enjoy?
- What activities or experiences excite them?
- What motivates them to take part in an activity?
- What bores them? What do they not like?
- What environments are around them? What ecological relationships shape their life?

Then, consider the project's form.

Scott McCloud's (1993) *Understanding Comics* is a common resource used by artists to think through their design process. McCloud describes art as having six stages. What would each stage look like for your project? What would each contribute to effective communication and enchantment look like for each?

1. **Idea/Purpose:** The work's content—the emotions, philosophies, and purposes of the work, for a given audience.

   What do you want your game to teach? What kind of environmental experience would you like your audience to have? Remember that your goal should be to both educate and cultivate emotional connection, so consider what you want your audience to both learn and to feel.

2. **Form:** The work's material nature—the general category of thing.

   Here are some possibilities:

   - a board game
   - a card game
   - a printable activity (a science experiment, treasure hunt, etc.)
   - a read-along atlas, field guide, a fairy tale, or book with interactive elements (flaps that can be raised to reveal something, etc.)
   - some other kind of media that I haven't named but you find interesting

   Your creation should have a realistic context. For example, if you create an outdoor activity for family use, ensure that it is easily printable by a parent. Basically, what you design should be functional and fit for real life use.

3. **Idiom:** The school of art—the toolkit of styles and choices for expression.

   To answer this, consider what kind of atmosphere you want to generate. Will you create media that is mysterious, light-hearted, comical, serious, or something else?

Do you like a particular art style—collage, watercolor, etc.? Are there particular artists whose work inspires you?

Also consider writing style. Particularly if you are most used to academic writing, how will your writing need to read differently to distill complicated ideas for a child audience?

4. **Structure:** What to include in what order.

Consider the material parts of the project and the way content within them is ordered. How do you want to arrange elements? What colors will you use? How will text be organized, and how will text be integrated with visuals?

5. **Craft:** Methods of constructing the work—needed literacies, skills, problem-solving strategies, tools, etc.

Take a minute to inventory your skills. How will you be able to apply your skills to achieve a project that matches your imagination of it? What skills do you need to enhance? Are there things you want to achieve that you don't currently have the tools for? (Let me know what learning resources or tools you need.)

6. **Surface:** Finishing touches and superficial details.

Consider what artful touches you wish to include. What little things would excite the child you are designing for?

Step 4: Rough, complete version of project for peer review [due at the end of Week 6].
At the end of Week 6, we will peer-review our work. Plan to bring your project with you in a complete, if rough, form. Together, plan to:

- Briefly explain to a small group of classmates why you have chosen your subject, what you have created, and what questions you have about your work
- Assess each other's work according to a modified version of Norman's design heuristics:
  - Visibility: Is it easy to see what the design does and how it works?
  - Feedback: Does the design let audiences know when they have completed an action?
  - Constraints: Does the design prevent errors and mistakes?
  - Affordances: Does the design help audiences use it correctly?
  - Mapping: Does the design offer satisfying responses to audiences actions?
  - Consistency: Does the design function so that the parts work predictably and are consistently designed?
- Reflect together on what the overall audience experience was like. Identify next steps, and needed resources.

Step 5: Submit and present a complete project [due at the end of Week 7].
Please use this grading checklist to gauge the completeness of your project:

Genre:

- Deliverable has a form and idiom suited to children's use and interest.
- Deliverable is complete (full and thoughtfully produced).

Audience & Purpose:

- Deliverable has structure, craft, and surface that is *appropriate* for the audience.

- Deliverable has structure, craft, and surface that is *enchanting* for a young audience—that cultivates a sense of affinity with the world.
- Deliverable finds a balance between clear, accurate information and strategic simplifications suited to the audience.
- Font—typeface is handled so that it is appropriate in personality and not overly complicated (restricted to a small number of fonts, etc.)

Usability:

- The deliverable is visually easy for the target audience to understand.
- The deliverable is textually easy for the target audience to understand.
- Deliverable is usable in a real-life context.
- Aesthetic unity—visual elements of the deliverable have overall continuity: they feel like they fit with each other aesthetically.

Integrity:

- Honesty & attribution—if Creative Commons materials are used, this is appropriately noted as an addendum to the artist's statement.
- For all research sources used, please also include references. References do not need to be integrated into the project itself, which might feel unnatural.

Artist's Statement:

In a short, conversational cover letter, describe your process of designing for a particular audience and what experience you wanted them to have.

Take me through the steps you took to reach the final product so I can appreciate what you did, including challenges and adjustments in your vision.

Supplementary Material

For supplementary material accompanying this paper, including a PDF facsimile of the assignment description formatted as the author(s) presented it to students, please visit https://doi.org/10.31719/pjaw.v9i1.210.

References

Barnett, J. T. (2022). *Mourning in the anthropocene: Ecological grief and earthly coexistence*. Michigan State University Press. https://doi.org/10.14321/j.ctv2npq91p

brown, a. maree. (2017). *Emergent strategy: Shaping change, changing worlds*. AK Press.

Brumberger, E. R. (2003). The rhetoric of typography: The persona of typeface and text. *Technical Communication*, *50*(2), 206–223.

Comstock, A. B. (1911/1947). *Handbook of nature-study* (24th ed). Comstock Publishing Associates. (Original work published in 1911).

Cooper, M. M. (2019). *The animal who writes: A posthumanist composition*. University of Pittsburgh Press. 10.2307/j.ctvcb5dnf

Cordova, V. F. (2004). Ethics: The we and the I. In A. Waters (Ed.), *American Indian thought: Philosophical essays* (pp. 173–181). Blackwell Publishing Ltd.

Cronon, W. (1996). The trouble with wilderness: Or, getting back to the wrong nature. *Environmental History*, *1*(1), 7–28. https://doi.org/10.2307/3985059

Deloria, V., Jr. (1992). Relativity, relatedness and reality. *Winds of Change*, *7*(4), 34–40.

Flood, A. (2015, January 13). Oxford Junior Dictionary's replacement of 'natural' words with 21st-century terms sparks outcry. *The Guardian*. https://www.theguardian.com/books/2015/jan/13/oxford-junior-dictionary-replacement-natural-words

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, *32*(4), 365–387. https://doi.org/10.2307/356600

Hayles, N. K. (2012). *How we think: Digital media and contemporary technogenesis*. University of Chicago Press. 10.7208/chicago/9780226321370.001.0001

Hendren, S. (2020). *What can a body do? How we meet the built world*. Riverhead Books.

Johnson, A. E., & Wilkinson, K. K. (Eds.). (2020). *All we can save: Truth, courage, and solutions for the climate crisis*. One World.

Katz, S. B. (1992). The ethic of expediency: Classical rhetoric, technology, and the Holocaust. *College English*, *54*(3), 255–275. https://doi.org/10.58680/ce19929392

Kimmerer, R. W. (2015). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge, and the teachings of plants*. Milkweed Editions.

Laws, J. M. (2016). *The Laws guide to nature drawing and journaling*. Heyday.

Le Guin, U. K. (1989). *Dancing at the edge of the world: Thoughts on words, women, places*. Grove Atlantic.

Lopez, B. (2010). Introduction. In B. Lopez & D. Gwartney (Eds.), *Home ground: Language for an American landscape* (pp. xv–xxiv). Trinity University Press.

May, K. (2021). *The electricity of every living thing: A woman's walk in the wild to find her way home*. Melville House Publishing.

May, K. (2023). *Enchantment: Awakening wonder in an anxious age*. Riverhead Books.

McCloud, S. (1993). *Understanding comics: The invisible art*. Kitchen Sink.

McFarlane, R. (2015). *Landmarks*. Hamish Hamilton.

McFarlane, R., & Morris, J. (2017). *The lost words: A spell book*. Hamish Hamilton.

McLuhan, M. (1994). *Understanding media: The extensions of man*. The MIT Press.

Network, D. J. (2018). *Design Justice Network Principles*. Design Justice Network. https://designjustice.org/read-the-principles

Norman, D. (2013). *The design of everyday things, revised and expanded edition*. Basic Books.

Peters, J. D. (2015). *The marvelous clouds: Toward a philosophy of elemental media*. University of Chicago Press. https://doi.org/10.7208/chicago/9780226253978.001.0001

Pyle, R. M. (2016). *Through a green lens: Fifty years of writing for nature*. Oregon State University Press. https://doi.org/10.1353/book48977

Ranade, N., & Eyman, D. (2024). Introduction: Composing with generative AI. *Computers and Composition*, *71*, 1–5. https://doi.org/10.1016/j.compcom.2024.102834

Salk, J. (1992). Are we being good ancestors? *World Affairs*, *1*(2), 16–18. https://www.jstor.org/stable/45064193

Sobel, D. (2007). Beyond ecophobia. In B. Lopez (Ed.), *The future of nature: Writing on a human ecology from Orion Magazine* (pp. 181–192). Milkweed Editions.

Sommers, N. (1980). Revision strategies of student writers and experienced adult writers. *College Composition and Communication*, *31*(4), 378–388. https://doi.org/10.2307/356588

St. Clair, K. (2017). *The secret lives of color*. Penguin Books.

Tsing, A. L. (2012). On nonscalability: The living world is not amenable to precision-nested scales. *Common Knowledge*, *18*(3), 505–524. https://doi.org/10.1215/0961754X-1630424

Vee, A. (2023). Large language models write answers. *Composition Studies*, *51*(1), 176–181.

Williams, R. (2015). *The non-designer's design book: Design and typographic principles for the visual novice* (4th ed). Peachpit.

Editing AI-Generated Text for Accuracy and Completeness

Jen Talbot[1]

[1] University of Central Arkansas (jtalbot@uca.edu)

Abstract

This assignment, developed for a fall 2023 section of an upper-division undergraduate editing course, asks students to perform a comprehensive edit of a ChatGPT-generated text. The highest stated priorities for the assigned edit were factual accuracy, rhetorical appropriateness, and completeness in relation to user need. Overall, the project successfully developed and assessed the desired learning outcomes, and served as an introduction to generative AI for students whose experience with it was limited.

Introduction

In January 2023, about two months after the release of ChatGPT-3, the Executive Committee of the Association for Writing Across the Curriculum (AWAC) released a statement on the use of generative AI tools for writing across the curriculum. In this statement, AWAC expressed concern that the use of AI tools has the potential to limit student learning because of the unique cognitive and social development facilitated by the writing process. At the same time, AWAC advocated for the critical, strategic integration of AI tools into writing pedagogy. Because we do not know what the long-term effects on student learning will be, and because we have an obligation to expose students to the tools and processes of their future professions, many educators are similarly seeking to thread the needle of these (potentially) competing priorities by adopting what Stuart Selber (2023) describes as a post-critical stance toward generative AI tools, in which they are approached as "both an educational subject and a platform for work" (Selber, 2023).

The broadly transformational impacts of generative AI tools across disciplines suggests that unified and generalizable integrations are unlikely to be useful or effective; rather, the approach and degree of integration might be more effectively determined by learning objectives at the course and assignment levels. For example, a programming course might address potential privacy concerns; a studio art course might focus on intellectual property; a business course might focus on consumption of resources and environmental impact. While the full scope of concerns might certainly be acknowledged in any part of the curriculum, the most substantive integration will naturally occur at points that align with existing goals and learning outcomes. In a technical editing course like the one in which this project is assigned, engagement with generative AI tools aligns with goals and outcomes surrounding rhetorical ethics, which includes questions of authorship, agency, accountability, accuracy, and precision.

Technical writing is among the careers predicted to be most impacted by the generative AI turn (Kochhar, 2023). Many practitioners have embraced its utility in automating the production of rote and boilerplate documents (Verhulsdonck et al., 2024; Reeves & Sylvia, 2024). When used by experts who are able to assess the quality and effectiveness of documents as situated in contexts with material and ethical stakes, generative AI tools can save time and labor (Dobrin, 2023; Bowen & Watson, 2024). In response to this shift, many technical writing programs and teachers are leaning into the elements of content production that require human

prompt
a journal of academic writing assignments

Volume 9, Issue 1 (2025), pages 21–27.

DOI: 10.31719/pjaw.v9i1.204
Submitted December 30, 2023; accepted January 8, 2025 ; published February 25, 2025.

judgment (Reeves & Sylvia, 2024; Cardon et al., 2023; Mallette, 2024; Laquintano et al., 2023). Laquintano, et. al. (2023) and Plugfelder & Reeves (2024) point out that generative AI tools draw productive attention to competing understandings of authorship and agency in academic writing contexts, which center the individual author, and technical writing contexts, which distribute rhetorical agency in production and messaging. Similarly, in an academic writing context, attribution is primarily about giving credit; in a technical writing context, it is also about accountability. Correct attribution is necessary to maintain credibility and trust among users. Unattributed information is more likely to be inaccurate, imprecise, or biased, which can in turn lead to problems with safety, legal compliance, operational efficiencies, equity, and professional reputation.

Hallucinations, in which AI tools fill in inaccurate information and invent citations that do not exist, are another threat to accuracy and precision. In text-based AI products, hallucinations tend to be either false information presented as true or citations attributed to fabricated sources. Humans and AI alike tend to believe a statement is true unless there is a specific reason to think otherwise, a phenomenon known as "truth bias." Both humans and AI detect deception at a rate of about 50%, but AI is significantly more truth-biased, evaluating nearly 100% of messages as true (Reeves & Sylvia, 2024). The practical problem of hallucination presents a pedagogical opportunity aligned to the existing goals of many professional and technical writing courses that engage with the ethics of accuracy, precision, and attribution in communication. In many cases, technical editors serve as quality control in ensuring that users are receiving information that takes every foreseeable precaution against these potential harms. For this reason, engaging with AI-generated texts in an editing class not only exposes students to the utilities and weaknesses of generative AI, it also creates an opportunity to deepen students' understanding of existing higher-order course goals.

Course Context

The course for which this assignment was designed is an upper-level undergraduate course in technical editing housed in the professional and technical writing program. It is populated primarily by majors and minors in this program, as well as students from the English and creative writing programs. Due to the small number of participants, in order to preserve anonymity, I did not collect demographic data. In general, white women made up the majority of participants. All spoke English as a first language. The institution as a whole is a Predominantly White Institution (PWI) that enrolls approximately 65% women to 35% men. Among first-time undergraduates, 33.9% are first-generation students, and 44.4% receive Pell grants (Institutional Research, 2023). In 2023, when I first assigned this project, 41% of students surveyed reported having never accessed ChatGPT, though by 2024 that number had dropped to 27.8% (Casey, 2024). While these numbers may seem low, and self-report may be a factor, they align with data that shows that men and students from households with higher incomes and higher educational attainment are more likely to use generative AI tools (National University, 2024). These populations are less represented on our campus and in our program.

The editing course is most often taken later in the program sequence. Though it does not have any explicit prerequisites, most students have taken one or more technical or multimodal writing courses before enrolling. Objectives for the course are the ability to demonstrate the following:

- An understanding of the editor's role in producing a text
- Knowledge of the fundamentals of style, grammar, and usage
- The ability to prioritize editing issues from global concerns through proofreading

- The ability to clearly and persuasively articulate the reasons behind editing decisions
- Familiarity with the tools and methods of editorial markup on both page and screen

Assignment Goals and Rationale

I chose to develop an AI-centered assignment in the editing course rather than in a more production-based course in the curriculum for two reasons. First, in this early stage of adapting to accessible generative AI tools, it appears that using AI for initial drafting and humans for fact-checking and editing will be an increasingly common scenario for writers and editors in the workplace. Practitioners report using generative AI for research and writing to a greater extent than for editing and revising (Reeves & Sylvia, 2024). Because AI is unable to reliably evaluate whether a statement is true or false, human judgment is necessary to creating "tailored, rhetorically aware, user-centered communication" (Mallette, 2024, p. 290). It follows, then, that as use of generative AI tools becomes more integrated into workflows, editors will spend more time on the tasks that require human judgment while automating those that do not (Mallette, 2024; Verhulsdonck et al., 2024).

Second, people outside the discipline of technical writing and editing may not be aware that the ability to address and provide feedback on higher-order content and ethics concerns is a core role of working editors. Students are no different, and as novice editors, often focus on sentence-level editing at the expense of structural and rhetorical concerns. Generative AI tools are highly effective at creating clean prose but are less so at tailoring text for a local context and concrete audience and purpose; therefore, working with AI-generated texts will help prevent students from getting caught up in the lower-order and mechanical concerns.

This assignment is the first of three major assignments in the class. The first focuses on content; the second, organization and structure; and the third, grammar, style, and mechanics. This is a common trajectory of focus that aligns with the structure of a number of technical editing textbooks, including the one used for the course, which is Cunningham, Malone, and Rothschild's *Technical editing: an introduction to editing in the workplace* (2019). The learning outcomes for project one are as follows:

- Recognizing the strengths and weaknesses of AI-generated text
- Assessing a rhetorical situation
- Evaluating a document for completeness in the context of a particular audience and purpose
- Creating content necessary for comprehension and use by the target audience
- Checking content for accuracy
- Checking content for internal consistency
- Using Word's Track Changes and Comment features

Each of these outcomes aligns with one or more of the course goals, and all goals (with the exception of "knowledge of grammar, style, and usage") are addressed by the assignment outcomes.

Students are provided with a Word document containing AI-generated text (included with the assignment sheet) and asked to edit it for accuracy, completeness, and consistency, tracking their changes. The text is a 750-word recommendation report for creating a pollinator garden in a local public park; the audience is the Mayor, the City Council, and the Director of the Parks and Recreation Department. Students are asked to perform a "substantive edit," a term that is articulated, defined, and applied as part of the scaffolding work for the assignment. To help

guide the process, the assignment sheet suggests they keep the following questions in mind:

- Is all of the information accurate?
- Is all of the information relevant to the stakeholders?
- Will the stakeholders be able to make a decision based on the information provided, or is more (or different) information needed?
- Is the information internally consistent?

These questions, taken together, serve to direct students' editorial attention to higher-order concerns in the document, especially accuracy and completeness based on audience, which are the focus of the course's first unit.

I provided students with the text instead of having them use AI to generate it themselves because the projects in this class have historically used provided texts, which allows the bulk of class time to focus on editing rather than drafting. Iterative prompt engineering is a valuable skill that is addressed in other courses in our program, but it is outside the scope of this course. The text was generated using ChatGPT 3.5, which was sufficient for the task at the time. The initial prompt was "The City of Conway is considering planting a pollinator garden in one of its parks. Please write a 750-word recommendation for where it should be located, what should be planted there, and how much it would cost initially and for maintenance."

I chose to generate a text related to the local environment because it is an area in which ChatGPT was likely to be inaccurate. The AI did an excellent job of creating a list of plants that are both good for pollinators and indigenous to the area, but included some inaccuracies related to execution in a specific local context. For example, it recommended two local parks on the basis of being centrally located; however, one of those parks is located outside of town. The rest of the content was widely available factual information, which is where generative AI excels. In order to introduce more inaccuracies, I reran the same prompt, but asked that it include some plants that would not serve the stated purpose and cite some quotations, an area in which ChatGPT is weak and prone to hallucination. Though the organizations and/or publications quoted throughout are real, the quotations themselves are fabricated. Not only do they not exist in the sources cited, they do not exist as direct quotations in any verifiable way. For example, the AI-generated text included the passage "according to a study published in *Environmental Entomology*, 'Native plants are more effective at attracting and supporting native pollinators compared to non-native species.'" *Environmental Entomology* is an existing journal published by Oxford University Press and the content of the statement is accurate; however, the exact quotation does not appear in any of their issues. This is a common form of AI hallucination.

In order to successfully complete the assignment, students need to do the following:

- Delete unnecessary information based on the needs of the audience (the plants that do not serve the stated purpose)
- Add information based on audience (this will likely vary, but I am looking primarily for more specific details in the Introduction and Location Selection sections that would help stakeholders make a decision)
- Address the inconsistency in the park's location
- Address the fabricated quotations
- Confirm the Latin names and definitions of the recommended plants and that they would thrive in the local climate
- Confirm that cost estimates are roughly correct OR generate more specific cost estimates

Because much of the information is correct and therefore does not show up in the changes tracked on the document, students accompany the edited document with a Letter of Transmittal,

in which they describe the changes they made, the reasoning for those changes, and the editing process.

Scaffolding and Process

Before the introduction of this project, the course had covered the editing process, assessing a document in terms of its rhetorical situation, and planning and executing an edit using Track Changes in Word. Over several weeks after this project was introduced, we built skills needed to achieve the outcomes by reading and discussing textbook material on editing for completeness and editing for accuracy. These discussions were interspersed exercises practicing those skills, which were completed both collaboratively and individually. Feedback on the collaborative exercises was provided in class; on the individual exercises, in writing. We spent one class period early in the process working with ChatGPT, which most of the students reported that they had never used, though they were aware of it. While we identified and discussed the problems with citing sources that are characteristic of ChatGPT, the scaffolding exercises did not use AI-generated text, depending instead upon exercises from the textbook.

Performance, Feedback, and Revisions

In general, I was pleased with the students' performance on the assignment, and I think it was successful in moving them toward course goals. The average grade on the assignment was a 77.83%, which is similar to average scores for previous assignments on completeness and accuracy that ask students to edit human-generated rather than AI-generated texts. The most successful projects identified and corrected all major and minor inaccuracies and made logical suggestions for adding and deleting information based on audience need. While I had a couple of things in mind for changes based on audience need (a more detailed introduction, more description of recommended locations, for example), students took different approaches. For example, several students recommended adding more detail to the budget section, as those material details would be the most important deciding factor for the relevant stakeholders. Others recommended more background information on the benefits of pollinator gardens. One student added language about community and social engagement in order to appeal to the target audiences' perceived values. Others focused more on the accessibility of language choices. I accepted edits for audience that were effective in terms of the document and were explained in the letter of transmittal in a way that demonstrated an understanding of audience. The more successful recommendations were those that considered stakeholders' specific needs and grounded the recommendation in course concepts.

In order to get a fuller sense of students' experience with the project, I conducted an anonymous IRB-exempt survey soliciting basic feedback. The survey asked students to rate on a four-point Likert scale how useful the assignment was in preparing them to meet each of the assignment outcomes. Because of the relatively low response rate in an already small sample, I hesitate to draw firm conclusions from the results. That said, in general students indicated that they felt less prepared to meet the AI-related objectives than the more traditionally editing-related objectives. When I assign this project again, I will give it four weeks rather than three. Though it is likely that by fall 2024, when I next teach the class, students will be more familiar with ChatGPT and other generative AI tools, I will build in additional class time to engage with the tools in an open-ended way. Further, I will add one or two additional scaffolding exercises on editing for accuracy and fact-checking.

In conclusion, though I will make minor tweaks to the scaffolding and I will need to regenerate the provided text periodically as generative AI tools develop, at its core this project is an

effective way to introduce students to generative AI in the writing and media disciplines. It opens up discussions about rhetorical ethics and agency, grounding them in a specific context and connecting them firmly with existing course goals. Though the assignment was developed in an editing course, it could be revised for a technical writing and communication course, a digital rhetorics course, a writing-intensive course in another discipline, or any course that might benefit from automating some of the drafting process for public-facing documents. While the larger philosophical and ethical questions posed by generative AI continue to unfold, writing studies professionals and teachers must help students understand these tools as a means of engagement in an increasingly algorithm-driven rhetorical landscape.

ASSIGNMENT
Editing AI-Generated Text for Accuracy and Completeness

Objectives

In completing this assignment, you will practice:

- Recognizing the strengths and weaknesses of AI-generated text
- Assessing a rhetorical situation
- Evaluating a document for completeness in the context of a particular audience and purpose
- Creating content necessary for comprehension and use by target audience
- Checking content for accuracy
- Checking content for internal consistency
- Using Word's Track Changes and Comment features

Deliverables

1. **Edited Report**: Submit your edited report as a Word document with changes tracked.
2. **Letter of Transmittal**: Submit a Letter of Transmittal, addressed to me, that explains and provides a rationale for the changes you made. If you corrected inaccurate information, include the source(s) you used.

Scenario

The City of Conway is considering planting a pollinator garden in one of the local parks. You have been charged with creating a report for the Mayor, the City Council, and the Director of the Parks and & Recreation Department in which you make recommendations about establishing such a garden. You are on a tight deadline, so you have been given a first draft created by ChatGPT (attached on Classroom) to use as a starting point. Perform a substantive edit on the document, keeping the following questions in mind:

- Is all of the information accurate?
- Is all of the information relevant to the stakeholders?
- Will the stakeholders be able to make a decision based on the information provided, or is more (or different) information needed?
- Is the information internally consistent?

Assessment Criteria

Report

- Factual accuracy
- Rhetorical effectiveness
- Consistency of content, organization, and style
- Use of Track Changes

Letter of Transmittal

- Compelling rationale for changes, grounded in course concepts
- Organization and structure
- Clarity and usage

Supplementary Material

For supplementary material accompanying this paper, including a PDF facsimile of the assignment description formatted as the author(s) presented it to students, please visit https://doi.org/10.31719/pjaw.v9i1.204.

References

Bowen, J. A., & Watson, C. E. (2024). *Teaching with AI: A practical guide to a new era of human learning*. Johns Hopkins University Press. https://doi.org/10.56021/9781421449227

Cardon, P., Fleischmann, C., Aritz, J., Logemann, M., & Heidewald, J. (2023). The challenges and opportunities of AI-assisted writing: Developing AI literacy for the AI age. *Business and Professional Communication Quarterly*, *86*(3), 257–295. https://doi.org/10.1177/23294906231176517

Cunningham, D. H., Malone, E. A., & Rothschild, J. M. (2019). *Technical editing: An introduction to editing in the workplace*. Oxford University Press.

Dobrin, S. I. (2023). *Talking about generative AI: A guide for educators*. Broadview Press. https://sites.broadviewpress.com/ai/talking/

Institutional Research. (2023). *Diversity ledger*. University of Central Arkansas. https://uca.edu/ir/files/2024/11/diversity-ledger_fall-2023.pdf

Kochhar, R. (2023, July). *Which U.S. workers are more exposed to AI on their jobs?* (Tech. rep.). Pew Research Center. https://www.pewresearch.org/social-trends/2023/07/26/which-u-s-workers-are-more-exposed-to-ai-on-their-jobs/

Laquintano, T., Schnitzler, C., & Vee, A. (2023). Introduction to teaching with text generation technologies. In A. Vee, T. Laquintano, & C. Schnitzler (Eds.), *TextGenEd: Teaching with text generation technologies*. The WAC Clearinghouse. https://doi.org/10.37514/TWR-J.2023.1.1.02

Mallette, J. C. (2024). Preparing future technical editors for an artificial intelligence-enabled workplace. *Journal of Business and Technical Communication*, *38*(3), 289–302. https://doi.org/10.1177/10506519241239950

Reeves, C., & Sylvia, J. J., IV. (2024). Generative AI in technical communication: A review of research from 2023 to 2024. *Journal of Technical Writing and Communication*, *54*(4), 439–462. https://doi.org/10.1177/00472816241260043

Selber, S. A. (2023, July). PWR approach to artificial intelligence. https://www.pwr.psu.edu/pwr-ai-approach/

Verhulsdonck, G., Weible, J., Stambler, D. M., Howard, T., & Tham, J. (2024). Incorporating human judgment in AI-assisted content development: The HEAT heuristic. *Technical Communication*, *71*(3), 60–72. https://doi.org/10.55177/tc286621

Defining Writing Lingo

Using Interviews to Investigate Language about Writing and the Writing Process

Olivia Imirie[1]

[1]Wor-Wic Community College (oimirie@worwic.edu)

Abstract

In this project, students examine their previous definitions and associations with writing-related vocabulary and investigate the complexity of this terminology by interviewing other writers about their writing processes. The "Good Writing" Analysis is an argumentative paper that asks students to investigate a writing term and then argue for its significance to the writing process. As their evidence for this essay, students interview three people they consider to be good writers about how each writer uses or understands the chosen term as part of their writing process. This assignment is used in a first-year writing course which uses a Writing about Writing-based curriculum, but this assignment could easily be used in any unit that asks students to investigate the writing process. By completing this assignment, students broaden their definitions of writing vocabulary and its impact on good writing, they gain experience in conducting and coding interviews, and they develop metacognitive awareness of themselves as writers and researchers.

Introduction and Inspiration for the "Good Writing" Analysis

In first-year writing (FYW), many instructors are familiar with students' challenges to identify what counts as "good writing" and their preconceived notions of the terminology around writing. Students may have heard terms like brainstorming, revision, and audience, but they may have a one-dimensional understanding of those terms (e.g, that revision means sentence-level changes). These shallow definitions mean many FYW students lack the deep knowledge necessary for understanding the writing process and the ways that more experienced writers interpret and use this terminology themselves; as a result, students' understanding of what counts as "good writing" can often be equally shallow simply because of their limited grasp of what these terms mean and how writers apply them. As a composition instructor, I strive to instill greater writing confidence in students by having them investigate and expand on their knowledge of seemingly straightforward writing lingo. This project encourages students to analyze the writing processes of other writers through defining a specific writing term and examining its impact on their interviewees' writing processes.

The "Good Writing" Analysis (GWA) provides an excellent starting point for students entering the university, who often have varied past experiences with the writing process and writing terminology (Robertson et al., 2012). As students learn about a range of enacted brainstorming, drafting, revision, and research practices, they find that their initial understanding of their chosen term or concept is inaccurate or unable to capture the complexity of this term. Consequently, students develop a more nuanced definition of this term and of the complexity of the writing process. Further, through this introduction to primary research, students also learn that writing is "epistemic" (Perl, 1979/2020, p. 111) and creates new knowledge. Students engage in this meaning-making by reevaluating their term and arguing for its role in the writing process in their analysis of their interview evidence.

prompt
a journal of academic writing assignments

Volume 9, Issue 1 (2025), pages 28–35.

DOI: 10.31719/pjaw.v9i1.196
Submitted August 27, 2023; accepted October 5, 2024; published February 25, 2025.

The GWA was designed as part of a FYW Writing about Writing (WAW)-based curriculum at a regional comprehensive university of approximately 6,000 undergraduate students, at which students took FYW as one 4-credit course. This university is a predominantly white institution, and many undergraduate students are graduates of local high schools. In class, students share that their writing experiences vary: some students had AP classes, some had only ever written 5-paragraph essays, and some had not written a paper since their sophomore year of high school.

WAW introduces students to Writing Studies research to illustrate that writing is a discipline that can and should be studied (Wardle & Downs, 2020). When students read scholarship that is foundational to Writing Studies, these articles challenge students due to the complex language and unfamiliar organization of this genre; as a result, instructors must devote time to scaffolded reading and discussion strategies to help students understand and connect these readings to their own experiences (Charlton, 2009/2010). Notably, however, discussions of students' previous experiences as writers help the students begin to recognize the variety of definitions they bring to key terms about writing, as well as how these writing terms impact the writing process. Additionally, even though there are relatively few models for undergraduate research of writing, WAW invites instructors to take up the challenges of understanding the collaborative relationship that is necessary for this kind of empirical research (Bird et al., 2019, pp. 4-5). Within this context, the GWA is designed as an accessible approach to undergraduate research through an introduction to the language of Writing Studies and then an investigation of this language through primary interview research.

Teaching the "Good Writing" Analysis

Defining "Good Writing"

As part of the first week and a half of the project,[1] students have in-class conversations about personal writing experiences and read scholarship to deepen their understanding of the writing process and Writing Studies.[2] As part of this process, students discuss a working definition of good writing that they use to identify writers that they could interview for their project. Though students initially use parameters such as perfect grammar to define good writing, they begin to focus not just on what good writing looks like, but what good writing does. Their definitions expand to include features like clarity, fulfillment of purpose, and audience awareness as important aspects of good writing. These conversations prepare students to apply this definition of good writing to writers in multiple contexts, such as email, advertisements, and social media. Though students initially might not have considered a friend as a possible interviewee because that friend is not a perfect speller, they reconsider this when thinking about this friend's clarity in social media writing. Additionally, students further examine writing terminology by reading foundational scholarship in writing studies. For example, by reading scholarship on writer's block, students investigate their beliefs about what writers do to create good writing and discuss how adherence to writing rules may negatively impact a writer's process (Rose, 1980/2020). As a result, students synthesize their class conversations about good writing with scholarly research, preparing them for the synthesis of their interview data and sources that they will do for their GWAs.

Introducing the GWA

After first selecting a term that personally interests them, students investigate their preconceived notions about this term and writing terminology more broadly. Students may examine something that has previously been difficult in their writing process, such as writer's block, to understand how real writers respond to writer's block during their composing processes. Other students may pick a term that feels more abstract, such as genre, which can help them reflect

on how writers understand these abstract concepts and use this knowledge to create good writing. In either case, this investigation challenges students to reevaluate their basic definitions of language about writing; by interviewing multiple writers and synthesizing this data, they consequently deepen their knowledge about the writing process and writing terminology.

When I first introduce students to the GWA assignment, I tell students that the primary goal is to create an argument about the term rather than just a definition. This is important to explain to students because when first assigned this project, many students believe that this will be "easy" because of the definitional aspect. Though this belief is somewhat misguided, this interpretation of the ease of the project helps students approach the project with more confidence. However, I remind them that as they talk to their interviewees, their explanation of the writing term's significance becomes much more important to students' arguments and their role in contributing to Writing Studies knowledge. Through this explanation, students are required to justify the importance of this term to the writing process in all the term's complexities and practices, creating a more complex argument rather than a simple definition.

Ethical Interviewing Practices and Interviewee Selection

To prepare for their interviews, students learn ethical interview practices and complete in-class practice interviews with peers. These activities introduce students to interviews as a method of data collection and to their role as ethical researchers. For this project in FYW, ethical research means students respect their interviewees' time, expertise, and autonomy when conducting interviews, creating a sound foundation for learning more specific research practices later in their academic career. Using a handout,[3] students review ethical interviewing in multiple modalities, including steps for informed consent for recording.[4] After selecting interview questions, students practice interviewing a peer in class. Many students have minimal experience with interviewing someone and initially feel intimidated by this part of the project, but this in-class practice with the provided handout increases students' confidence with ethical interview research.

Students apply their emerging definitions of good writing to select three interviewees. As their definitions of good writing becomes more complex, students expand their pool of interviewees beyond obvious authorities like teachers and authors to include friends, family members, coworkers, teammates, bosses, etc. This expanded interview pool allows students to examine good writing practices outside of education and further deepen their knowledge of who counts as a good writer and how these good writers engage with writing terminology. Some students have still sought out former teachers and counselors to participate as interviewees. For example, one student intentionally interviewed three former teachers who wrote in different disciplines: English, history, and biology. He wanted to evaluate the use of evidence in writing across these different disciplines. Other students contacted family members and friends who wrote creatively or in professions like real estate and health care. By selecting and explaining their choice in interviewees, students consider the rhetorical impact of their choices and how to justify the choices they make as writers and researchers, skills which are essential to learning ethical research practices.

Coding Interview Data

After collecting data, students learn the process of coding to select evidence and develop their argument about their chosen writing term. For this project, students only need a basic understanding of how coding works: they learn that coding is identifying common themes and sorting these common themes into groups. Students first practice this with a class coding activity of something familiar.[5] I often use the topic of monsters and ask students to give me

a list of 15-16 monsters for their example data set (King, 2023). Students then work in groups to identify 4-5 themes that they see in this data set (e.g., scary, humanoid, etc.). Then, they share their chosen codes and how they created them to metacognitively reflect on their process and illuminate their coding strategies for their classmates (King, 2023). After this activity, students are ready to practice coding with example transcripts. Using transcripts from my own GWA example,[6] I model developing codes for a GWA project by showing them how I looked for common themes across interviewees (rather than coding each interviewee individually) and explaining that these common themes became my codes. I explain that creating codes across interviewees allowed me to see commonalities in how good writers are defining the writing term and what is most important to understand. Students then practice coding by color-coding or underlining different sections of these example transcripts using the codes that I had developed for my own project After these in-class activities, students workshop their own codes for their interview data as the next step in analyzing this data as evidence. Coding then provides a foundation for further analysis, and students look for specific themes that help them understand their writing term and its impact on their writing process.

Drafting the GWA

Students are given a few strategies for approaching the development of their argument. One strategy that many students use is to focus their argument on the code that was most prevalent in their data. For example, one student chose to focus on style as a form of self-expression because this was the code that appeared the most in his data set. Another strategy that students chose was to explore the relationship between two or three codes (e.g., positive effects of writer's block and negative effects of writer's block). Other students selected a code that appeared less frequently but offered a new way of defining their term that they had not considered before (e.g., revision is for the reader, not the writer). By giving students options, they have more autonomy as they develop an argument based on what they find personally interesting in their data.

Once students have identified the new knowledge about the term and how it works, students begin drafting an IMRAD-style paper (i.e., Introduction, Methods, Results, and Discussion), supporting their argument through interview quotes and secondary sources. Students engage in peer review and individual conferences with their instructor, supporting a learning goal of collaboration with writing. Students revise in between this feedback, which promotes effective revision strategies and encourages them to see writing as recursive (Perl, 1979/2020, p. 115). In peer review, students write comments about global concerns like the overall clarity of the argument and the effectiveness of the writer's analysis of their evidence. In conferencing and in-class workshops, students continue to revise using feedback from their instructor and peers. These collaborative practices encourage revision and deeper conversations about students' writing processes and projects.

Students' Experiences and Successful Outcomes

Students' experiences with this project seemed positive. As students conducted interviews, they deepened their understanding of terms that they were previously confident they understood. For example, students who chose to explore writer's block were surprised to learn that writer's block can have a positive impact on the writing process rather than a solely negative effect. Students used their arguments to explore the complexity of these dual effects of writer's block, directly contradicting previously held beliefs that writer's block has only negative effects and that good writers never experience writer's block. Another student chose voice as her writing term. She expressed that she wanted her own voice reflected in her argument, since her interviewees

talked about how vital voice was to them. By making specific rhetorical choices about her own use of voice in her writing, this student effectively transferred her knowledge about voice gained from the project, even as she was still engaged in it. Though this student initially considered voice as part of copyediting, she argued that instead voice should be a primary consideration at every stage of the writing process, leading her to push back against the way she was taught to write and value voice. Within the context of a WAW-based curriculum, these examples demonstrate the ways that students treated writing as a discipline to study rather than only a skill. After completing the GWA, students were more prepared to investigate their own writing process, challenging preconceived notions of themselves as writers and researchers.

Even as many students succeeded in learning more about writing terminology, there were limits and challenges to the GWA. For example, many students became frustrated when interviewees did not respond quickly or at all. This proved to be a valuable learning opportunity when students had to turn to back-up interviewees for their data, and they were empowered when they navigated these challenges successfully with support from their instructor and peers. Another limitation to this project was the challenge of new genre expectations. Many students were new to the IMRAD genre, since this genre was significantly different from the five-paragraph essay genre most students learn in high school. Though students successfully learned this new genre, the initial challenges this project presents can be overwhelming to students. Additional drafting and in-class workshops, as well as genre discussions, are necessary to help students feel more comfortable with writing their essay.

Future Plans and Strategies for Teaching

This project can be expanded upon in future FYW classes. If this project is the first assignment students complete, it could serve as a foundation for subsequent interview-based projects. Students could also be given more guidance for choosing interviewees by selecting one teacher, one classmate, and one friend or family member. These more specific guidelines would allow students to explore a broad range of writing experiences within their projects. Instructors could collaborate with fellow faculty, staff, and administrators willing to volunteer as interviewees to fulfill the learning outcomes of the project and increase community engagement. Additionally, the GWA has positive implications for transfer of professional skills, since students can transfer what they learned about effective interviewing to hiring processes.

There are also several opportunities for revisions to this project, specifically around coding knowledge, adapting the GWA to upper-level Writing Studies courses, and focusing more on cultural myths of good writing and good writers. First, students may benefit from a more detailed discussion about coding and different methods of coding for their analysis. For example, utilizing excerpts from texts such as *The Coding Manual for Qualitative Researchers* (Saldaña, 2015) to discuss the broad range of coding options may be particularly useful when using the GWA as an introduction to a more detailed overview of coding and primary research. In addition, while this project is intended for a FYW course, the GWA could be adapted to upper-level writing courses by focusing on a particular kind of writing, such as workplace writing or social media writing. Students could write meaningful arguments about the role of audience or organization in these contexts, selecting interviewees based on their definitions of good writing in these contexts. Furthermore, since "good writing" is often a charged term for students, a strong revision to this project could focus on interrogating cultural myths around good writing and who counts as a good writer.

Both in its current form and in these potential adaptations, this assignment offers students an opportunity to complicate their understanding of the writing process and to confidently engage with primary research. As a result, the GWA teaches students to create complex argumentative

writing and practice skills such as interviewing that can be transferred to future academic and professional contexts.

ASSIGNMENT
"Good Writing" Analysis

For this assignment, you will be doing an analysis of a specific writing term (one that is important to your own writing process) and its significance to writing. To do this, you will interview (three) 3 people you would describe as "good writers." You will ask them questions about this writing term, how they understand it, and how these use this term in practice in their writing process. You will then analyze that interview data. The findings of these interviews will be the focus of the argumentative essay that you will create.

Learning Goals

- Develop a more complex understanding of the writing process and the terminology that we use to describe writing
- Learn to build an argument by selecting and analyzing primary data (from your interviews)
- Select relevant sources and integrate them to expand and contextualize your primary data findings
- Gain appropriate peer review practices for participating in a community of writers

Week-by-Week Schedule

Week 1 Introducing the Study of Writing and Readings on the Writing Process

Week 2 Understanding the "Good Writing" Analysis & Ethical Interviewing Practices

Week 3 Coding Interview Data and Developing Argument about Writing Term

Week 4 Rhetorical Source Use, Selecting Evidence from Interviews, & Drafting GWA

Week 5 Effective Peer Review Practices and Revision Strategies

Week 6 Individual Conferences, Revision Workshop, and Final Copyediting

What your Project is

Guiding this project is the question: "What is [writing term], and how is it important to the writing process"? In particular, this research question requires that you make two moves:

1. to identify and define the term, and
2. to explain how it impacts the writing process. Your purpose in this assignment is to make an evidence-based argument about a term related to writing and how it shapes the writing process.

What this Paper Should Look Like

Your paper should have an **introduction**, where you introduce the reader to your chosen writing term, and where you lay out your aim for the paper and how you will accomplish it. In particular, we are going to look at introductions borrowing from Swales' description of the "moves" of writing an academic paper's introduction, called the CARS moves:

1. Establishing territory (or background)
2. Establishing a niche or gap (a problem or "missing piece" to which you respond)
3. Occupying the niche or gap (or how your argument/paper fills this niche or gap).

Your paper should describe your process of data collection and analysis (e.g. the **methods** you used in order to answer your research question). Your paper should describe what you found as a consequence of following these methods in your **results and discussion** sections. You'll pull together two sources of information here: your interview data via transcriptions/notes and secondary sources describing the writing process.

Finally, your paper will have a **conclusion**, where you identify how this writing term applies to *your* writing process and why this term is important to understanding writing. You will also use your conclusion to further double-down on your definition of your writing term and its significance to the writing process.

Other Guidelines for Writing

- Paper length: this will become a paper of 1250-2000 words double-spaced in 12 pt. Times New Roman, Arial, or Calibri font.
- You'll use at least 2 sources (no more than 3).
- You should document your source use in MLA or APA
- We'll take this through at least 2 drafts before submission: all submitted drafts should be complete drafts (e.g. 1250-2000 words, 2 sources, using some system of citations & including a work reference/citation page).

Based on our readings and conversations in class, we have several different writing terms that you can analyze and ask your interviewees about. I've provided a list below of options. If you want to analyze a term that is not listed below, you should first ask me about the term you want to use. This is so I am aware of what you want to do in your project and can make sure you still fulfill the goals of the assignment. Either way, you should select **ONE** term to analyze for this project.

You should choose a term that is significant to your own writing process. Think about what you do when you write, what you believe is important to good writing, and/or what you enjoy most about writing. After you've decided on **ONE** of these features of your own writing process, focus on this as your term.

Writing terms

Genre	Argument	Flow
Drafting	Revision	Planning
Credibility	Thesis	Evidence
Research	Audience	Voice
Peer review	Organization	Writer's block
Brainstorming	Outlining	Significance to the reader
Sources	Style	

Notes

[1]See the "Good Writing" Analysis Assignment that follows the essay for a Week-by-Week suggested schedule for a 6-week version of this project.

[2]Because I used the *Writing about Writing* textbook (Wardle & Downs, 2020), students read articles by Mike Rose ("Rigid Rules, Inflexible Plans, and the Stifling of Language"), Nancy Sommers ("Revision Strategies of Student Writers and Experienced Adult Writers"), Anne Lamott ("Shitty First Drafts"), etc. However, a variety of texts about writing could be consulted, including open access resources like *Writing Spaces*, Volumes 1-5.

[3]See the "Good Writing" Analysis Interview Questions supplemental file.

[4]IRB approval is not required for these interviews, as it is considered a class project and as such is designed for pedagogical purpose rather than for research dissemination. Instructors should consult with their Institutional Review Boards for best practices at their universities.

[5]See Coding Guidance/Activity supplemental file.

[6]My "Good Writing" Analysis Example: Partial Draft of Introduction and Methods is included as a supplemental file. Having my own example was extremely helpful for multiple reasons. Since I had done the assignment myself, I could anticipate and prepare for students' challenges. I also had example transcripts for coding and multiple drafts of my project to show meaningful revision in action.

Supplementary Material

For supplementary material accompanying this paper, including a PDF facsimile of the assignment description formatted as the author(s) presented it to students, please visit https://doi.org/10.31719/pjaw.v9i1.196.

References

Bird, B., Downs, D., McCracken, I. M., & Rieman, J. (Eds.). (2019). *Next steps: New directions for/in writing about writing*. Utah State University Press. http://www.jstor.org/stable/j.ctvfwwrs9

Charlton, J. (2009/2010). Seeing is believing: Writing Studies with "basic writing" students. *Basic Writing e-Journal*, *8/9*, 1–9. https://doi.org/https://bwe.ccny.cuny.edu/Seeing%20is%20Believing-%20%20Writing%20Studies%20with%20%E2%80%9CBasic%20Writing%E2%80%9D%20Students.pdf

King, C. M. (2023). Activity 41: Teaching synthesis by sorting monsters. In M. Reznizki & D. T. Coad (Eds.), *Dynamic activities for first-year composition: 96 Ways to immerse, inspire, and captivate students* (pp. 139–142). National Council of Teachers of English.

Perl, S. (1979/2020). The composing processes of unskilled college writers. In E. Wardle & D. Downs (Eds.), *Writing about writing* (4th ed., pp. 94–118). Bedford/St. Martin's. (Reprinted from *Research in the Teaching of English*, 13(4), 317-336, 1979, http://www.jstor.org/stable/40170774).

Robertson, L., Taczak, K., & Yancey, K. B. (2012). Notes toward a theory of prior knowledge and its role in college composers' transfer of knowledge and practice. *Composition Forum*, *26*, 1–21. https://files.eric.ed.gov/fulltext/EJ985812.pdf

Rose, M. (1980/2020). Rigid rules, inflexible plans, and the stifling of language: A cognitivist analysis of writer's block. In E. Wardle & D. Downs (Eds.), *Writing about writing* (4th ed., pp. 160–172). Bedford/St. Martin's. (Reprinted from *College Composition and Communication*, 31(4), 389-401, 1980, https://doi.org/10.2307/356589).

Saldaña, J. (2015). *The coding manual for qualitative researchers* (3rd ed). Sage Publications.

Wardle, E., & Downs, D. (2020). *Writing about writing* (4th ed). Bedford/St. Martin's.

Feels Good Man:
Memes as a Framework for Teaching Circulation, Remix, and Writing Transfer

Travis Maynard[1]

[1]Elon University (tmaynard3@elon.edu)

Abstract

This essay introduces a circulation analysis assignment, blending together insights from multimodal composition, remix/assemblage pedagogy, and circulation studies to encourage writing transfer. The assignment asks students to document the origins and evolution of a cultural meme (as coined by evolutionary biologist Richard Dawkins) as it is adapted for different rhetorical situations, modeled for students in the titular documentary film *Feels Good Man*. By completing this analysis, presenting it in multimodal contexts, and reflecting upon how they adapted that presentation for their audience, students begin to develop the metacognitive, cross-contextual thinking necessary for successful writing transfer.

Introduction

For nearly twenty years, writing studies has undertaken an agenda to identify the ways students adapt and apply prior writing knowledge to new contexts during and after their writing education—a phenomenon the discipline calls "writing transfer" (Anson, 2016; Bleakney et al., 2022; Yancey et al., 2019). In addition to documenting writing transfer, researchers are identifying mental processes that lead to it, including metacognition—a term writing studies has borrowed from psychology to denote a writer's awareness of *how and why* they are adapting their knowledge (Center for Engaged Learning, 2015; Driscoll et al., 2020; Lindenman, 2015; Nowacek, 2011; Yancey et al., 2014). These scholars argue metacognition is imperative for transfer because it allows students to recognize if, when, and how to adapt their writing knowledge to new contexts; in other words, metacognition develops students' cross-contextual awareness of rhetorical situations, helping them identify opportunities to recontextualize their writing knowledge to complete unfamiliar writing tasks.

Alongside these transfer researchers, a second contingent of writing studies scholars have been focused on the ways in which texts, language, and ideas move through culture and evolve over time, gathering under the umbrella of "circulation studies" (Edwards, 2017; Gries & Brooke, 2018; Porter, 2009; Edbauer, 2005; Ridolfo & DeVoss, 2009). These scholars seek to understand how discourse evolves as it is adapted for new rhetorical contexts, such as the many mutations of the Obama *Hope* poster (Gries, 2013), paradigm shifts of the natural sciences (Kuhn, 1962), or the co-opting of Black Lives Matter rhetoric into texts supporting law enforcement ("Blue Lives") and firefighters ("Red Lives"). Given the cross-contextual focus of these areas of scholarship, blending pedagogical approaches of transfer and circulation presents an opportunity for students to simultaneously a) examine how writing shifts across contexts, b) adapt their writing across contexts themselves, and c) practice metacognitive reflection to facilitate cross-contextual thinking. While some have designed pedagogies emphasizing circulation through the lens of remix, and many transfer pedagogies engage in cross-contextual writing, there have been few efforts to explicitly blend the two.

The first-year writing assignment presented here represents such an effort, using students' familiar cultural register of memes to frame a rhetorical analysis asking them to trace the

prompt
a journal of academic writing assignments

Volume 9, Issue 1 (2025), pages 36–45.

DOI: 10.31719/pjaw.10.31719/pjaw.v9i1.208
Submitted March 7, 2024; accepted October 9, 2024; published February 25, 2025.

circulation of a cultural meme. The assignment expands students' prior knowledge of memes as online communication by (re)introducing the concept as evolutionary biologist Richard Dawkins (1976) defined it in *The Selfish Gene*: any unit of culture transmitted between individuals by imitation and evolving through mutation—such as words, narrative tropes, genres, melodies, trends in art and fashion, and online meme templates. By mapping the circulation of a meme, composing an infographic to deliver their analysis, and reflecting on the rhetorical decisions guiding their delivery, students develop their abilities to read across rhetorical contexts, adapt to rhetorical situations, and engage in the cross-contextual thinking necessary for transfer.

Inspiration and Influence

The current assignment is one of many similar tasks in writing studies known as a circulation analysis. At its core, a circulation analysis asks students to choose a unit of culture, document its rhetorical evolution, and rhetorically deliver those findings. Several scholars have previously presented such an assignment: from multimodal composition, Shipka's (2005, 2011) *Oxford English Dictionary* assignment tracing the etymology of a single word; from circulation studies, Ridolfo and Devoss's (2009) rhetorical velocity activity tracing the circulation of press releases; from visual rhetoric, Gries's (2013) method of iconographic tracking; and from remix/assemblage pedagogy, McElroy and Maynard's (2017) "genealogy" essay examining a "semantic unit" across individual texts (p. 107). While my version shares the core analytical task with its predecessors, it broadens the scope of analysis to include other units of culture and modalities of meaning making. While Dawkins' (1976) idea of the meme as a cultural unit has been criticized for its lack of discrete boundaries, in the writing classroom, the malleability of Dawkins' articulation allows for students to bring their own interests and literacies into the assignment, yielding a range of unique analyses.

Course Context and Assignment Overview

I teach this assignment at Elon University, a medium-sized private liberal arts university in the Southeast that is 60% female and a predominantly white institution on a residential campus. Like so many American students public or private, ours are conditioned to the standards of "good writing" upheld by decades of standardized tests: bibliographic research and formal prose presented in analytic essays, no matter the context or audience—hence my desire to expand students' rhetorical awareness to new contexts, research tasks, and genres.

At my institution, first-year writing is a one-semester course designed to meet five outcomes: engage with writing as a process, develop the ability to write across genres, understand how writing is socially situated, conduct research to develop arguments, and appreciate the capacity of writing to shape the world. My students complete three interconnected projects, the first of which is presented here and which allows them to begin refining their writing processes, develop their abilities in a new genre, and train their sense of the contextual nature of writing. When presenting this assignment to students, I break it down into three phases: research, delivery, and reflection.

Research

The research phase begins with students selecting a cultural meme. Given their digital literacies, many students research an online meme, with Doge, Crying Jordan, Distracted Boyfriend, and Spongebob being favorites. Each semester, some students will choose an analog cultural meme; over the years, these have included dance styles like clogging, fashion items like sunglasses, political iconography like Rosie the Riveter, the board game Clue, the "Yo Mama" joke format,

and historical retellings of fairytales like Cinderella. No matter the meme students select, I ask them to use Google, Wikipedia, and/or Knowyourmeme.com to research its history, identifying the following:

- Its origins and/or source materials, including literal or figurative predecessors
- The very first instance, including who created/first posted it, when it was created, and where it was first circulated
- At least three of its subsequent "generations," in which the meme has been transformed to function in a new context

Students then analyze each generation to discern its intended purpose and audience, how it transforms the original meme and/or previous generations, and how those transformations facilitate meeting the intended purpose and audience.

By conducting this research and analysis, students will ideally have a thorough understanding of their meme, its initial rhetorical function, and how the processes of imitation, mutation, and circulation have caused the meme to serve different purposes and connect with different audiences.

Delivery

Since this is students' first assignment in the class, I am directive in defining their rhetorical situation with three stipulations:

- Their audience is their peers, broadly conceived—first-year students, 18- and 19-year-olds, Gen Z, i.e., whatever framing helps them make sense of their audience;
- They design a visualization in Canva, whether that be a one-page infographic circulated online or a multi-page post/story for social media;
- The visualization should employ a custom, consistent visual theme that pertains to their subject matter.

These three stipulations are deliberate: since they are a member of the target audience, I encourage them to think about whether they would engage with the content they are creating as a heuristic for rhetorical effectiveness; given the prominence of social media content in their own lives, I ask them to transfer their previous experiences in consuming or designing visual texts; and the visual theme discourages the sometimes lazy use of templates and encourages them to think about the rhetorical relationship between form and content. However, the possibilities for delivery on this assignment are multitude, and instructors can customize the genres and audiences according to their own course outcomes.

Reflection

Finally, reflective essays accompany students' visualizations, asking them to articulate their rhetorical decision-making in six areas, citing specific examples from their artifacts as evidence of their thinking:

- Pertinence of their selected generations to an audience of their peers
- Organization and layout of the visualization
- Visual conventions of visualizations they employed
- Elements they used to build their visual theme, and how they relate to the subject matter
- Previous writing/design experience they drew upon
- Challenges or struggles they faced in completing the project

These areas of the reflection provide space for students to articulate their rhetorical thinking, verbalize their pathways of writing transfer into the course, and narrate their affective experience during the assignment.

Implementation in Context: Scaffolding and Supporting Materials

I typically allocate five to six weeks to this assignment; below, I document how I support three key phases of this project: research, delivery, and reflection.

Research: Weeks 1, 2, and 3

During our first meeting, we watch two videos from evolutionary biologist Richard Dawkins (Oxford Union, 2014) and philosopher Daniel Dennett (Big Think, 2017) introducing memes. In the former, Dawkins uses the game of Telephone to explain the processes of replication and mutation; to illustrate these processes, students play the game Telestrations, a blend of Telephone and Pictionary. Although memes are students' entry point to the course and frame this assignment, they are a stepping stone to introduce complementary concepts of remix and rhetorical situation; it is the triangulation of memes, remix, and rhetoric that allows students to conduct their analysis. The following class, we view Kirby Ferguson's (2010) webseries *Everything is a Remix*; like "meme," the term "remix" uses familiar vocabulary to describe the processes by which memes evolve in the realm of artistic creation. To complement Ferguson, we complete an intertextual mapping activity, where students choose a single text, identify three texts it took inspiration from, and one text each of those were inspired by, mapping out two generations of influence in a single text.

The second week layers in the vocabulary of rhetorical situations (Bitzer, 1968) via Laura Bolin Carroll's "Backpacks vs. Briefcases (2010) an accessible primer for rhetorical analysis. With the concepts of memes, remix, and rhetoric in place, students screen *Feels Good Man* (2020), a documentary chronicling the journey of Pepe the Frog from comic book character to alt-right icon. The film highlights ten generations of Pepe and addresses the rhetorical dimensions of each, making it an ideal model of circulation analysis. Students complete an analysis of Pepe in small groups, selecting a generation of the meme and identifying its purpose and audience, how it mutates previous generations, and how those mutations contribute to its rhetorical effectiveness. Having facilitated this group circulation analysis of Pepe, I finally introduce the assignment sheet, explaining that the project asks students to do the same work as *Feels Good Man*.

Before conferences in week three, students complete a writing journal identifying memes they would like to explore, vocalizing questions they have about the assignment, and reflecting on their previous visual composing—a set of tasks which prompts them to think about how they might transfer those experiences into the classroom. During 15- to 20-minute conferences, conducted one-on-one or in small groups, I address students' questions, give them feedback and direction on their ideas, get them thinking about visual theme(s), and have them talk further about their previous composing to better determine their comfort with the task.

Delivery: Weeks 4 and 5

Week four supports students' visual design with an infographic workshop and peer review. For the infographic workshop, students gather five samples they would like to imitate in some way, such as layout features or visual style. The workshop begins with an overview of the features of infographics and components of a coherent visual theme. Then, after introducing the interface of Canva, I work from my own samples to model how I would replicate them in the platform and make decisions about color schemes, font styles, and other elements to build my visual theme. Students take the rest of the class to start imitating their own models, building their visual themes, and troubleshooting Canva. For the first draft, students must make progress on their visual theme and structure, and write the title, introduction, and one other chunk of text.

The peer review is guided by the chapter "13 Layout Sins" from *White Space is Not Your Enemy* (Golombisky & Hagen, 2010), which articulates common errors that first-time designers make; students then review partners' drafts for these errors and offer suggestions to improve.

In week five, students focus on the written content, making rhetorical decisions about how to adapt to their audience. This process begins with a guided rhetorical analysis activity. Students bring into class five to seven generations of their meme they might include in their final infographic. After reminding them of the analysis we did after *Feels Good Man*, we analyze a curated series of six sample remixes of Magritte's painting *The Treachery of Images* to identify their purposes, audiences, and transformations. I then model two ways of writing those findings—complete sentences or bullet points—and discuss the rhetorical benefits and drawbacks of both. Next, they write up an analysis of one of their examples—first as a paragraph, then as a set of bullets. To begin making rhetorical decisions about which generations to include on their infographics, we revisit my six samples to discuss which three would be most appropriate for different audiences: Millennials or Gen Z, men or women, etc. Finally, students return to their set of samples and make rhetorical decisions about the three they want to include in their next draft.

Reflection: Weeks 5 and/or 6

With full drafts of their infographics, students finally turn to the reflection essay. I introduce students to a what/how/why framework for reflection, explaining that for each reflection prompt, I want them to identify a rhetorical decision they made, i.e., *what* they did, *how* they accomplished that decision via specific examples from their artifacts, and *why* they felt this move was rhetorically effective. We then read a sample reflection together as a class, with students identifying when it employs the what/how/why framework.

Before students submit their final drafts, we have a second peer review focused on the infographic's written content and on the students' reflections, which helps ensure that infographics accurately describe the purposes, audiences, and transformations of their memes, and that the reflections address all prompts and invoke specific examples.

Successes and Shortcomings

Having taught this assignment for six semesters, I have noticed patterns in student approaches and responses to the project, offering evidence of short-term writing transfer and providing insight into how it might be tweaked in the future. Without having completed a longitudinal study of my students, it is nigh-impossible to discern whether they engage in long-term writing transfer after one semester with them. However, subsequent assignments in the course indicate that they engage in short-term transfer and begin developing the rhetorical awareness I hope to foster. Their second project is an annotated bibliography gathering scholarly sources connected to some aspect of their meme[1], and the final project is what Bearden (2022) calls a "remediation assignment," which asks students to re-contextualize their academic research for an audience of their choosing, in a genre appropriate for that audience. In completing that project, I encourage students to transfer their previous composing experience to guide their selection of genre and audience, as well as draw upon the research they gathered in the previous two assignments to help flesh out their rhetorical artifacts. Furthermore, in final reflection essays, students mention that their biggest takeaways from the course are an acute need for adapting to one's audience and the nature of writing as remix or re-use. In addition to these glimmers of transfer, there are other trends to mention.

Successes

- **Perspective**. Students express pleasant surprise at how Dawkins and Dennett expand their understanding of memes.
- **Agency**. Students appreciate the agency to bring their own interests into the classroom and choose their topics.
- **Engagement**. Students who really invest in the assignment seem to develop cross-contextual thinking, setting themselves up for future writing transfer.

Shortcomings

- **Incomplete Analysis**. Students often excel at identifying the purpose and audience of each generation or describing how each generation is remixed, but sometimes struggle to do both.
- **Path of Least Resistance**. Some students simply choose an online meme they believe will make the assignment easy.
- **The Utility of Infographics**. Some students express unfamiliarity with infographics because the genre doesn't circulate as frequently in the online forums they frequent; others default to using a design template despite my requiring a custom visual theme.
- **Misunderstood Reflection**. Rather than engaging with the metacognitive prompts, students default to summarizing the content of their infographics.

Possible Correctives

- **Analog Memes Only**. To discourage students' paths of least resistance, an instructor could require them to choose "analog" or "real life" cultural memes, in the Dawkins sense of the word.
- **Analysis Practice**. An instructor might conduct more in-class activities with students articulating the rhetorical and remix components of memes.
- **New Digital Deliverables**. The assignment could invite students to compose texts that circulate in the online spaces they frequently use, e.g., a series of TikTok videos.

The Meme-Cycle Continues: Possibilities for Future Mutation

Given the malleability of memes as a unit of analysis, many possibilities for this assignment could be adapted to other writing pedagogies. As mentioned above, the easiest adaptation would be shifting the genre of the deliverable; it could be retooled to a primarily textual genre or another multimodal manifestation. No matter the deliverable, the reflective element of the assignment must remain, as the reflection catalyzes students' rhetorical thinking. Further, depending on one's pedagogical approach, one might specify the type of meme students research. For public/civic writing, instructors could require students examine a meme shaping public discourse; WAC/WID students could map knowledge paradigms of their target fields, like the "turns" of rhetoric and writing studies, paradigm shifts of the sciences, or the evolution of research methodologies; and those working in Rhetorical Genre Studies can have students trace a genre, a single genre over several ecologies, or a single convention across genres.

Beyond adapting this assignment, there are also technological considerations in the wake of generative AI (GenAI). An earlier draft of this essay naively described the assignment as "AI-resistant"; given the technology's exponential growth in generating prose and interpreting images, students can now use the technology to complete and excel at the project. Recognizing "banning" GenAI as an exercise in futility, I have elected to integrate the technology into all stages of the composing process; I would rather teach students to use the technology ethically and transparently instead of incentivizing dishonesty with punitive measures.

AI can provide ideas for cultural memes to research, summaries of how memes have evolved, analysis of images, or initial drafts of text for students' visualizations. From there, it would be students' task to adapt that information to resonate with an audience of their peers. On the design side of things, York (2023) has employed GenAI as a design consultant, outlining genre conventions and brainstorming elements of their visual themes. It is also possible that AI could interpret students' infographic images to address the reflection essay prompts—a feature I will experiment with and adapt reflection prompts accordingly. Deploying AI in these ways will automate some of the text generation process but will ultimately allow the assignment to meet the outcomes of cross-contextual analysis, adaptation, and transfer.

These are just a few possibilities for the growth and evolution of this assignment. Given the continued need for students' metacognitive, cross-contextual thinking for writing transfer and the growing importance of understanding circulation as a driving force of rhetorical discourse, I hope that other instructors will take up this version of circulation analysis and make it their own.

ASSIGNMENT

Meme Research Infographic

As we have seen in our initial class discussions, human cultures emerge and develop through the repetition, transmission, and mutation of "memes." Furthermore, these memes grow and evolve through the processes of remix—copying, transforming, and combining memes in order to better fit within new rhetorical situations. This project will develop your understanding of these processes by conducting research into a meme of your choosing, learning about its rhetorical history, and presenting your findings to an audience of your peers.

Phase 1 - Research

You will select and research a cultural "meme" that interests you. You may select an online meme format/template (like Pepe the Frog), a single image/visual (Like the Obama Hope Poster), or you may choose a broader cultural meme that exists within and beyond digital spaces (Like "Keep Calm and…" posters). We will meet to discuss potential memes and finalize your topic during our first individual conference.

Once you have selected your topic, you will research the meme in order to identify:

- The meme's predecessors, origins, and/or first instance
- Three separate examples, or "generations," that adapt the meme to function within different rhetorical situations.

For each "generation" of your meme, you will conduct rhetorical analysis to identify:

- The examples' intended rhetorical purposes;
- Their intended audiences;
- How they transform, adapt, or change the "original" meme to meet that new rhetorical situation.

Phase 2 - Delivery

Next, you will present your research and analysis to an audience of your peers (late teens, first-year college students, Gen Z, etc.), creating an infographic or visualization in a free online platform called Canva. How you visualize and organize your research is up to you, but the visualization must have a consistent visual theme/aesthetic that relates to your meme or with your audience in some capacity.

Phase 3 - Reflection

Accompanying your infographic will be a 900-word reflection describing the rhetorical choices you made in designing your project. Use the questions below to compose your reflection, using specific examples from the project to illustrate your answers:

- How did you decide which generations of your meme to include? Why would those examples be relevant to your audience?
- Why did you organize the project the way you did? How does that organization help guide your reader through the project?
- What common features of infographics did you incorporate into your project? How do those features help engage your audience and/or help them understand your project?
- What specific elements (shapes, colors, images, fonts, etc.) did you incorporate into your project to build your visual theme? How do those elements contribute to the overall visual theme, and how do they connect to your topic and/or audience? What rhetorical effect does this visual theme have on your reader?
- How did our use of AI tools help you in brainstorming, writing, and designing this project? How did you have to adapt or revise the AI-generated outputs to better meet your rhetorical goals?
- What did the AI tools do well? What did they struggle with? Did you learn anything new about writing from using them?
- What other types of support did you seek out in completing this project? Feedback from friends or family? The Writing Center? How did you use those supports, and how did they help or hinder your success?
- Did you draw upon any previous writing/design experiences to help you complete this project? How did those previous experiences help you?
- Based on your experience completing this project, did you learn anything new about writing?

How We Will Use Generative AI

We will work with generative AI platforms at multiple stages of the writing process for this project. The functions we will experiment with include:

- *Brainstorming* – Getting ideas for topics and creating outlines;
- *Audience Analysis* – Developing strategies for communicating with the audience of your peers;
- *Design Consultant* – Seeking guidance for creating infographics, including organization, features, visuals, color schemes, and fonts;
- *Drafting* – Generating drafts of the infographic's written materials.

Unacceptable use of generative AI for this project includes:

- Submitting unedited or unrevised generative-AI outputs;
- Submitting an AI-generated infographic;
- Submitting an AI-generated reflection.

Using generative AI in these ways will be considered a violation of the university honor code.

Project Submission

You will submit two separate files in Moodle:

- Your Reflection in a Microsoft Word doc, Google doc, or PDF
- An image file, PDF, or URL of your infographic or visualization.

Assessment

In assessing your projects, I will be focusing on three areas: content, design, and the reflection. In terms of content, I will be looking to see that you have fully completed the research tasks outlined above. In terms of design, I will look to the overall theme and aesthetic of your artifact. Finally, I will assess the level of rhetorical awareness that your reflection indicates.

	Needs Improvement	**Good**	**Excellent**
Identifies origins/first instances of the meme			
Identifies three separate generations of the meme			
Unpacks rhetorical dimensions (purpose and audience) of each generation			
Addresses how each generation adapts/changes the original meme			
Adheres to a consistent aesthetic/visual theme related to the meme or audiences			
Employs logical and coherent organization			
Employs strong visual design			
Incorporates features common to infographics/visualizations			
Reflection addresses prompts and points to specific examples from infographic			

Project Timeline

- Introduce Project – Week 2
- Project Conference – Week 3
- Rough Draft – Week 4
- Complete Second Draft – Week 5
- Final Draft – Week 6

Notes

[1]For example, students researching the online meme Doge have done academic research on cryptocurrency, given the existence of Dogecoin.

Supplementary Material

For supplementary material accompanying this paper, including a PDF facsimile of the assignment description formatted as the author(s) presented it to students, please visit https://doi.org/10.31719/pjaw.10.31719/pjaw.v9i1.208.

References

Anson, C. (2016). The Pop Warner chronicles: A case study in contextual adaptation and the transfer of writing ability. *College Composition and Communication*, *67*(4), 518–549. https://doi.org/https://doi.org/10.58680/ccc201629612

Bearden, L. (2022). *Making progress: Programmatic and administrative approaches for multimodal curricular transformation*. Utah State University Press.

Big Think. (2017, February). Daniel Dennett: Memes 101: How cultural evolution works [Video]. https://www.youtube.com/watch?v=5fG-3f4f0hA

Bitzer, L. (1968). The rhetorical situation. *Philosophy & Rhetoric*, *1*(1), 1–14. https://www.jstor.org/stable/40236733

Bleakney, J., Moore, J., & Rosinski, P. (Eds.). (2022). *Writing beyond the university: Preparing lifelong learners for lifewide writing*. Elon University Center for Engaged Learning. https://doi.org/10.36284/celelon.oa5

Carroll, L. (2010). Backpacks vs. briefcases: Steps toward rhetorical analysis. In C. Lowe & P. Zemliansky (Eds.), *Writing spaces: Readings on writing* (pp. 45–58, Vol. 1). Parlor Press & The WAC Clearinghouse. https://writingspaces.org/past-volumes/backpacks-vs-briefcases-steps-toward-rhetorical-analysis/

Center for Engaged Learning. (2015). Elon statement on writing transfer. http://www.centerforengagedlearning.org/elon-statement-on-writing-transfer/

Dawkins, R. (1976). *The selfish gene*. Oxford University Press.

Driscoll, D., Paszek, J., Gorzelsky, G., Hayes, C., & Jones, E. (2020). Genre knowledge and writing development: Results from the writing transfer project. *Written Communication*, *37*(1), 69–103. https://doi.org/10.1177/0741088319882313

Edbauer, J. (2005). Unframing models of public distribution: From rhetorical situation to rhetorical ecologies. *Rhetoric Society Quarterly*, *35*(4), 5–24. https://doi.org/https://doi.org/10.1080/02773940509391132

Edwards, D. (2017). On circulatory encounters: The case for tactical rhetorics. *Enculturation*, *25*. https://enculturation.net/circulatory_encounters/

Ferguson, K. (Writer, Director, Producer). (2010). Everything is a remix [Web series, produced from 2010 to 2012]. https://www.everythingisaremix.info/watch-the-series

Golombisky, K., & Hagen, R. (2010). *White space is not your enemy: A beginner's guide to communicating visually through graphic, web & multimedia design*. Focal Press/Elsevier.

Gries, L. (2013). Iconographic tracking: A digital research method for visual rhetoric and circulation studies. *Computers and Composition*, *30*(4), 332–348. https://doi.org/10.1016/j.compcom.2013.10.006

Gries, L., & Brooke, C. G. (Eds.). (2018). *Circulation, writing, and rhetoric*. Utah State University Press.

Jones, Arthur (Director). (2020). *Feels good man* [Film.]. https://www.feelsgoodmanfilm.com/

Kuhn, T. (1962). *The structure of scientific revolutions*. University of Chicago Press.

Lindenman, H. (2015). Inventing metagenres: How four college seniors connect writing across domains. *Composition Forum*, *31*. https://compositionforum.com/issue/31/inventing-metagenres.php

McElroy, S., & Maynard, T. (2017). Copy, combine, transform: Assemblage in first year composition. In K. Yancey & S. McElroy (Eds.), *Assembling composition* (pp. 101–119). NCTE.

Nowacek, R. (2011). *Agents of integration: Understanding transfer as a rhetorical act*. Southern Illinois University Press.

Oxford Union. (2014, February). Richard Dawkins: Memes [Video]. https://www.youtube.com/watch?v=4BVpEoQ4T2M

Porter, J. (2009). Recovering delivery for digital rhetoric. *Computers and Composition*, *26*, 207–224. https://doi.org/10.1016/j.compcom.2009.09.004

Ridolfo, J., & DeVoss, D. (2009). Composing for recomposition: Rhetorical velocity and delivery. *Kairos*, *13*(2). https://kairos.technorhetoric.net/13.2/topoi/ridolfo_devoss/intro.html

Shipka, J. (2005). A multimodal task-based framework for composing. *College Composition and Communication*, *57*(2), 277–306. https://doi.org/10.58680/ccc20054030

Shipka, J. (2011). *Toward a composition made whole*. University of Pittsburgh Press. https://doi.org/10.2307/j.ctt5hjqkk

Yancey, K., Davis, M., Robertson, L., Taczak, K., & Workman, E. (2019). The teaching for transfer curriculum: The role of concurrent transfer and inside- and outside-school contexts in supporting students' writing development. *College Composition and Communication*, *71*(2). https://doi.org/10.58680/ccc201930423

Yancey, K., Robertson, L., & Taczak, K. (2014). *Writing across contexts: Transfer, composition, and sites of writing*. Utah State University Press. https://doi.org/10.2307/j.ctt6wrr95

York, E. (2023). Virtual power tools: Integrating AI in UX design pedagogy [Conference Presentation]. *American Association of Teachers of Technical Writing Convention, Online*.

Does Metacognition Matter?
Prompting Students to Think about How They Think

Morgan Luck[1], Erika R. Francis[2], Stephanie Bernard[3], and Anne Schempp[4]

[1]Shenandoah University (mnowak2@su.edu)
[2]Shenandoah University (efrancis11@su.edu)
[3]Shenandoah University (sbernard2@su.edu)
[4]Shenandoah University (aschempp@su.edu)

Abstract

This writing assignment, titled Metacognitive Analysis, prompts awareness of metacognition in learners early in their medical disciplines as they critically evaluate their process for making medical decisions. The Metacognitive Analysis assignment is completed by first-year graduate health profession students in a master's level physician assistant (PA) course focused on the development of critical thinking and clinical decision-making. Throughout the semester, patient teaching cases are discussed and dissected by the students in small-group, problem-based learning sessions. In the Metacognitive Analysis assignment, students extend this learning by evaluating their own individual decision-making process in relation to concepts of intuitive and analytic reasoning.

Background and Introduction

The Metacognitive Analysis assignment is a one- to two-page reflective essay focusing on concepts of intuitive and analytic reasoning in the context of a clinical diagnostic decision-making process. The Metacognitive Analysis assignment elicits reflections on evidence that supports or refutes a clinical decision and incorporates implications for future clinical practice.

As educators in a master's level health profession program, we are responsible for imparting an extensive amount of medical, ethical, and practical information to physician assistant (PA) students during the 18-month didactic phase before their clinical rotations. Although these students arrive to the didactic phase with a shared background of prerequisite science coursework, their undergraduate disciplines, as well as their maturity and professional and life experiences, can vary widely. With our support, each student learns how to transform themselves into highly efficient diagnosticians responsible for the health and well-being of future patients.

Beyond their ability to memorize medical content for examinations, these students must hone their skills in critical thinking and application of foundational knowledge. The concept of metacognition is important to introduce to medical learners as it informs their ability to critically think and make patient-related decisions (Colombo et al., 2010). They must synthesize information gathered from an initial patient history into the development of an appropriate physical exam, endorse an approach to diagnostic testing, diagnose the patient, and negotiate an optimal patient treatment and management plan, with numerous decision-making points along the way. In our program, students are prompted to metacognitively analyze their thinking as they work through their decisions. The importance of their decision-making abilities cannot be understated, as a wrong decision could result in an unnecessary financial burden or medical error, such as a patient's delayed diagnosis, or worse, patient harm (Croskerry, 2013).

To prepare the next generation of healthcare providers for this immense responsibility, many graduate education programs have incorporated problem-based learning (PBL) into curricula

prompt
a journal of academic writing assignments

Volume 9, Issue 1 (2025), pages 46–51.

DOI: 10.31719/pjaw.v9i1.201
Submitted November 1, 2023; accepted October 5, 2024; published February 25, 2025.

and decreased reliance on traditional lectures for content delivery. Characteristics of PBL include problems as a trigger for learning, small-group collaboration, and the guidance of a tutor (Schmidt et al., 2011, p. 793). In our classes the role of "tutor" is filled by faculty facilitators.

Our cohort-based PA program includes a three-semester PBL course sequence entitled Clinical Integration Seminar I, II, and III. Faculty facilitators work through a different patient case every one to two weeks with small groups of eight to ten PA students. As they do so, the facilitators break the process of clinical decision-making down into digestible chunks of information and application within our medical systems-based curriculum design model. Knowledge gaps are identified by the students themselves, small-group peer members, and faculty facilitators.

Evidence-based practice is reinforced during group sessions by pushing students to locate recommendations from national professional organizations and current medical literature (for example, guidelines for the treatment of ear infections published by the American Academy of Pediatrics). Evidence-based practice is the gold standard for clinical diagnosis and treatment today. This approach to medicine entered its modern era in the 1970s, along with advances in technology that facilitated practitioners' access to research (Claridge & Fabian, 2005). Our students learn to identify and vet evidence through this PBL course sequence as they critically consider and integrate knowledge in a setting of patient case studies. This approach is supported by academic literature which has shown the effectiveness of PBL in facilitating student application of evidence-based practice prior to clinical exposure (Lusardi et al., 2002).

In general, students in this three-course sequence can reliably navigate a patient case and its complexities by the conclusion of the second course. By this time, the process of working through a simulated medical appointment from patient intake to disposition has become more natural to these developing clinicians, as has the application of clinical guidelines and medical literature. The students are primed to understand and incorporate concepts of intuitive (automatic, reflexive) and analytic (deliberate, controlled) reasoning as applied to their own decision-making (Croskerry, 2013; Senelick, 2013). The Metacognitive Analysis assignment actively engages students in the concept of clinician self-awareness (metacognition) at this optimal point in the curriculum. The maturing diagnostician is mindful of the balance between reflexive and deliberate reasoning and prevents one or the other from coloring their choices (Croskerry, 2013). For this reason, the Metacognitive Analysis assignment has been situated in the students' second semester for five successive cohorts (approximately 60 students per cohort).

Assignment Overview

Our program's curriculum scaffolds assignments in academic writing throughout the student experience. In the first semester of the curriculum, students are guided through interpretation of evidence-based medical literature and familiarized with applicable search engines. They confirm peer review status and timeliness of articles and guidelines, and they practice citing these resources according to academic style guidelines. Students submit four introspective reflective essays in fulfillment of professional seminar requirements prior to the Metacognitive Analysis assignment. In these essays, students reflect on personal and interpersonal growth as well as significant moments they have encountered while engaged in their PBL course learning. Students are provided faculty feedback on each of these reflections.

The prompt for the Metacognitive Analysis assignment brings these skills together toward a next step in academic writing. This assignment is introduced at the conclusion of the students' final collaborative session of the second-semester PBL course. The students are instructed to complete the assignment independently and outside of class time. As an introduction to the concept of metacognition in medicine, students are required to read the article "Teaching

Doctors how to Think" by Richard Senelick (2013). They are then encouraged to use principles of metacognition to reflect on their own balance of intuitive and analytical reasoning in the context of a clinical case by completing a single reflective writing assignment in essay form. By encouraging students to analyze evidence from the course and to interpret their own critical thinking behavior, the Metacognitive Analysis serves as a writing to learn activity (Bazerman et al., 2005).

After we assign the Metacognitive Analysis and related reading, we take 15 minutes of class time to help students understand how to identify examples of intuitive and analytic thought processes. During this class time, we coach students on how to identify their analytical thought process by asking them to think of a peer-reviewed resource they consulted in making a diagnostic decision they made while working through a case. For example, clinical guidelines may recommend that a certain diagnostic test is appropriate when specific findings are present on the physical examination portion of the encounter. Considering the clinical guidelines as evidence, did the students make correct decisions given their physical exam findings? The students are asked to demonstrate how their newfound knowledge of this evidence may affect their future decision-making. Then, we help them understand that intuitive decision-making would be a reflexive, immediate decision to pursue a particular diagnostic plan without purposefully considering the clinical guidelines. We believe this in-class explanation helps students identify specific details and processes to focus on in their Metacognitive Analysis.

By engaging students in these reflections, the Metacognitive Analysis assignment allows us to assess two instructional objectives: (a) During the problem-solving process, recognize when additional knowledge is needed to better define and understand the patient's problem(s), needs, and diagnostic/treatment management, and (b) Incorporate principles of evidence-based practice. As an example, one student chose to reflect on a case study involving a patient with abdominal pain. In the essay, the student wrote that they recognized using intuitive thinking, which they referred to as "pattern recognition," when they initially jumped to ulcer disease as the most likely diagnosis. They recognized the use of analytic thinking when they expanded their list of possible diagnoses to include more rare conditions. The student indicated that this awareness would help them brainstorm less likely but important alternate diagnoses in future clinical settings.

After students complete and submit the Metacognitive Analysis, we return the assessed work to students, providing individual feedback through a detailed rubric along with specific responses to their submission. Feedback includes a determination of the student's ability to apply evidence-based medicine to support or refute their clinical decision-making. A strength of the Metacognitive Analysis assignment is early identification of students' incorrect interpretation of intuitive and analytic thinking. Feedback provides an opportunity for remediation and encourages development of the skill of critical thinking. For example, feedback to one student included this clarification: "You seem to be associating analytical reasoning with interpreting test results. An example of analytical reasoning would be when the group debates which test is best for a given situation. It is a slow and deliberate way of thinking." Faculty responses also address the student's skill in following the rules of professional academic style writing, in this case American Medical Association style.

Experiences and Outcomes

Faculty Experiences and Approach

As faculty, our experiences with this Metacognitive Analysis assignment have been positive. Faculty facilitators are responsible for answering clarification questions pertaining to the Metacognitive Analysis assignment when it is introduced during a small group session. Prior to this

assignment, students are provided many opportunities to collaborate with their small group members for clinical decision making. This assignment builds on those experiences through an individual submission, as each student now must rely on their own skill set. From a faculty load perspective, the course coordinator is responsible for grading the essays (approximately 60 total). The grading rubric and relatively short length of the essay (one to two pages) are helpful to keep grading efficient and consistent.

As previously mentioned, this Metacognitive Analysis assignment provides one of many touchpoints used to emphasize the use of primary literature and research when practicing evidence-based medicine. We can measure growth and development in our students in a concrete way through this assignment, demonstrating how far the students have come since matriculating into the PA program.

Students' Experiences

Students historically perform well on this Metacognitive Analysis assignment. However, a few students from each cohort voice concerns with interpretation and reach out for clarification prior to submission. The common challenge has not been with the assignment itself, but with the greater concept of critical decision-making within the practice of medicine. This realization has led to discussions with faculty about the "art of medicine" or the "practice of medicine" concepts, which reflect the nuanced opinions and interpretations of practitioners within the context of science.

The Metacognitive Analysis has been effective for our needs, with over 300 students in a six-year period demonstrating proficiency by meeting or exceeding the 80% benchmark grade. This grade is earned through evaluation against a standardized rubric that requires graduate-level analysis and writing. Students in the cohorts that have completed this assignment have ranged in age from 21 to 56 years old and identified as approximately 70% female and 30% male. Average cumulative undergraduate GPA of the students is 3.6 on a 4-point scale.

Because students have overwhelmingly achieved benchmark on this assignment, the faculty have not explored trends in terms of weaknesses. However, the use of this assignment has been helpful as a formative instrument and also serves to identify learners in need of additional support and remediation prior to their exploration of research methods in following semesters. The students are evaluated in a summative fashion on their critical-thinking skills in a subsequent research course and through their summative capstone projects.

Student experiences are gathered from a combination of formal channels including course evaluations and informally through small-group faculty facilitator interactions with their student group members. Additionally unsolicited positive feedback from student leadership has been shared with the faculty course coordinator.

Limitations

The Metacognitive Analysis assignment is difficult conceptually for some students because they are being asked to switch from scientific thinking to an introspective exploration of their own decision-making process. The assignment requires the students to engage with only one supplementary reading on the background of intuitive and analytic thought processes when they might benefit from more exposure to these concepts. Similarly, there is no supplementary reading on metacognition. We do not provide a focused lecture or reference on metacognition but instead incorporate it into practice.

Future Applications

In the future, elements of the Metacognitive Analysis assignment could be introduced in a longitudinal fashion applying the concepts of metacognitive thinking and decision-making processes throughout the course sequence. An initial video or reading introducing the concept of metacognition could be placed in the first semester. Subsequently, faculty facilitators could integrate further discussion regarding metacognition into PBL class time to supplement the introductory material. As a result, students would engage in this particular type of thinking more than once. This approach may address the difficulty students have occasionally reported with interpretation of this assignment. Reinforcement of the concepts of a balanced intuitive and analytical approach to clinical decision-making would be helpful to maintain the students' self-awareness throughout their learning.

Although the Metacognitive Analysis assignment was created specifically for the developing medical diagnostician, the concepts of intuitive and analytic reasoning are applicable to other student populations and professions that must blend evidence-based practice research with intuitions based on contextual experience. Faculty in other disciplines could build on this work by modifying this prompt to fit those populations. This assignment could also be integrated into a single course in any context in which differentiating analytic from intuitive thinking is applicable. Aligning the Metacognitive Analysis assignment with a case study or small-group discussion that requires decision-making could provide a similar opportunity within one semester.

ASSIGNMENT

Metacognitive Analysis Assignment

The Metacognitive Analysis assignment is designed to examine the process of clinical decision making and reasoning. The purpose of this assignment is to guide you in examining your own behaviors when making clinical decisions and to introduce the concept of using evidence-based data to justify or refute diagnostic decisions.

Students are to complete this assignment individually.

1. Read the following article regarding clinical decision making and reasoning: Teaching doctors how to think by Richard Senelick
2. Recall a clinical patient case that we have worked through in CI seminar. Reflect on your personal use of intuitive and analytic processes throughout the case.
3. Investigate one diagnostic decision made in the case. Search for and choose one peer-reviewed journal article that provides evidence to support or refute that decision. Articles must be recent and published within the past 5 years.
4. Write a one-to-two-page paper addressing the following components:
    a. Identify two instances in the case that you used analytic reasoning to make a decision.
    b. Identify two instances in the case that you used intuitive reasoning to make a decision.
    c. Summarize the data from the evidence (#3 above) and describe how it is pertinent to the initial diagnostic decision you identified (#3 above).
    d. Discuss how having this evidence (#3 above) might influence the way you approach similar patients in the future.

5. Submit paper and supporting article.

The Metacognitive Analysis assignment will be graded using the rubric attached to this assignment in the PA 636 course.

Guidelines for paper:

- One to two pages
- Double-spaced
- Arial or Times New Roman 12-point font
- One-inch margins
- Cite source using AMA style (within the text of paper and in references)

Supplementary Material

For supplementary material accompanying this paper, including a PDF facsimile of the assignment description formatted as the author(s) presented it to students, please visit https://doi.org/10.31719/pjaw.v9i1.201.

References

Bazerman, C., Little, J., Bethel, L., Chavkin, T., Fouquette, D., & Garufis, J. (2005). *Reference guide to writing across the curriculum*. Parlor Press & The WAC Clearinghouse.

Claridge, J. A., & Fabian, T. C. (2005). History and development of evidence-based medicine. *World Journal of Surgery*, *29*(5), 547–553. https://doi.org/10.1007/s00268-005-7910-1

Colombo, B., Iannello, P., & Antonietti, A. (2010). Metacognitive knowledge of decision-making: An explorative study. In A. Efklides & P. Misailidi (Eds.), *Trends and prospects in metacognition research* (pp. 445–472). Springer. https://doi.org/10.1007/978-1-4419-6546-2_20

Croskerry, P. (2013). From mindless to mindful practice: Cognitive bias and clinical decision making. *The New England Journal of Medicine*, *368*, 2445–2448. https://doi.org/10.1056/NEJMp1303712

Lusardi, M. M., Levangie, P. K., & Fein, B. D. (2002). A problem-based learning approach to facilitate evidence-based practice in entry-level health professional education. *Journal of Prosthetics and Orthotics*, *14*(2), 40–50. https://doi.org/10.1097/00008526-200206000-00005

Schmidt, H. G., Rotgans, J. I., & Yew, E. H. J. (2011). The process of problem-based learning: What works and why. *Medical Education*, *45*(8), 792–806. https://doi.org/10.1111/j.1365-2923.2011.04035.x

Senelick, R. (2013, July 8). Teaching doctors how to think. *The Atlantic*. https://www.theatlantic.com/health/archive/2013/07/teaching-doctors-how-to-think/277555/