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A Tale of Five Case Studies: Reflections on Piloting a Case-Based, Problem-Based Learning Curriculum in English Composition

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A Tale of Five Case Studies:

Reflections on Piloting a Case-Based, Problem-Based Learning Curriculum in English Composition

Katie Strand, Rachel Wishkoski, Alex Sundt, and Deanna Allred

Lively discussions break out in noticeable contrast to the dull, white walls of the windowless library classroom. Four college students immediately dismiss a news article as biased, emotional, and useless. "Remember context and purpose matter," echoes a pointed reminder from the librarian. A case study handout, forgotten and pushed aside since the start of the activity, gets picked up and reread with renewed focus. It explains that Taylor, the subject of the case study, is terrified by a recent article and wants to make their senator aware of their concerns. "Wait…" a member of the group says. "This might actually be useful for Taylor. Let's look at it again."

The source in question for Taylor's group is an editorial in the *Washington Post* arguing for stronger regulation of 3D-printed guns. Taylor's case study,

along with four others distributed across several small groups, provides the foundation for today's source evaluation activity. Using these real-world scenarios, students explore complex questions of authority and bias, while also considering the context and purpose of subjects in their case studies. In a reflection assignment a few days later, a student muses, "Monday, the library day, was very helpful in learning how to evaluate sources, which is something I struggle with. I did not realize that so much research needed to be done about research."

When the class reconvenes in the library two weeks later—this time to practice identifying new facets of a research topic and finding sources using library databases—Taylor's group is energetic and engaged. Their exploration takes them down interesting paths, from 3D-printed ammo to the Second Amendment to broader issues with 3D printing technology. When the team shares their brainstorming and receives feedback from another group, it's clear that they're not just invested in Taylor's topic, they've also made a personal connection with their case study and put themselves in Taylor's shoes.

The team has the opportunity to step into Taylor's shoes one last time for a third and final library session. Passionate and eager to find a thoughtful solution to a complex issue, the group dives into synthesizing the sources they've found with additional sources provided by the librarians using a research matrix. The students then transition into writing, picking a main idea and drafting a paragraph weaving together evidence from various sources to support their claim. Bits of conversation rise above the din as each case study team races to write a compelling paragraph: "What argument is going to be the most persuasive?" "This is good, but it could be better with a stronger bit of evidence…." "Well, we can't say that because it would contradict what we just said…." and "We need a conclusion…." After the frenzy of drafting is done, everyone takes a breath before swapping their work for peer review. The students reviewing the paragraph written by Taylor's team are impressed; they cited three sources and addressed a counterargument while making a compelling claim. The student who pushed to include the counterargument smiled and shrugged in a gesture of "Yeah, I did that." As everyone begins trickling out of the room at the end of class, one student comments that he is considering using the topic for his final research paper and admits, half-joking, "That was probably the best paragraph I've ever written!"

Storytelling Goal

Storytelling was used as a method to teach research as real-world problem-solving. Through the use of case studies, storytelling provided lower-stakes scenarios through which students could practice source evaluation, topic development, and synthesis before beginning their own research projects. Building on the narrative foundation of their case studies, students were encouraged to consider different perspectives and enter a creative space as they collaboratively researched a topic and co-created artifacts that reflected their shared journey as researchers.

Audience

Students enrolled in ENGL 2010, a required general education course at Utah State University titled Intermediate Writing: Research Writing in a Persuasive Mode.

Every Utah State University student must pass ENGL 2010 in order to graduate. Seventy to eighty face-to-face sections of the course are offered each semester on the Logan campus, with additional sections offered online and through synchronous videoconferencing. On the Logan campus, ENGL 2010 students are typically first- and second-year students, though students may also be non-traditional or choose to postpone the course for later in their academic careers. As most have not yet declared a major, ENGL 2010 students have varied interests and academic goals.

ENGL 2010 and its prerequisite ENGL 1010 have their own separate objectives and learning outcomes, with the overall goal being that once students have finished the sequence, they will have developed foundational research and writing skills related to rhetorical argumentation. Students are sometimes reluctant to take English 2010, though the writing, rhetorical, and information literacy skills covered in the course are foundational to their work in future courses and necessary for becoming an informed and engaged professional and community member post-graduation. The culmination of ENGL 2010 is a ten- to twelve-page persuasive paper on a topic of each student's choice. Some wish to write about current controversies or hot-button social and political issues, though the most successful papers

typically explore topics that are personally meaningful to their authors and applicable to their future goals. In their work, students engage deeply with rhetorical strategies such as ethos, pathos, logos, kairos, audience, purpose, and effective engagement with opposing views.

Delivery

The library's integration with ENGL 2010 is delivered over the course of three library instruction sessions, with lessons that are grounded in active learning principles. Library lessons focus on source evaluation, topic investigation, and synthesis, and are designed to help students research and write a personal research essay (PRE). Originally, case studies were only used for our first lesson on source evaluation. But after observing high engagement from students in response to this approach, we wanted to test the benefits of using case-based, problem-based learning across the full sequence of lessons. We modified and piloted the new lessons with two fifty-minute sections of ENGL 2010 in fall 2019. For the modified lessons, students were grouped together and assigned one of five case studies, which they continued using across each subsequent instruction session.

Table 1.1 Case studies used in our fall 2019 curriculum		
Name	Scenario	Source
Taylor	Using a news source to lobby a senator	Editorial Board. "3-D-printed guns put carnage a click away." *The Washington Post*, July 28, 2018. https://www.washingtonpost.com/opinions/3-d-printed-guns-put-carnage-a-click-away/2018/07/28/3b254a18-91cb-11e8-b769- e3fff17f0689_story.html?arc404=true.
McKenzie	Using a popular source in an English 2010 essay	Haberstroh, Tom. "Who's the NBA's GOAT? Lebron May Have Already Answered the Question." *Bleacher Report*, 31 May 2018. https://bleacherreport.com/articles/2778733whos-the-nbas-goat-lebron-may-have-already-answered-the-question.

Table 1.1 Case studies used in our fall 2019 curriculum		
Name	Scenario	Source
Eric	Using an irrelevant scholarly article to petition city council	Morel, Chantel M., et al. "Cost-Effectiveness of Long-Lasting Insecticide-Treated Hammocks in Preventing Malaria in South-Central Vietnam." *PlosONE*, vol. 8, no. 3, March 2013. https://doi.org/10.1371/journal.pone.0058205.
Oliver	Using a satirical website to back a business plan	Maloney, Catherine, et al. "Feline Reactions to Bearded Men." *Improbable Research*. http://www.improbable.com/airchives/classical/cat/cat.html.
Brie	Using a blog for health advice	Sadeghi, Habib. "Could There Possibly Be a Link Between Underwire Bras and Breast Cancer?" *Goop*, 19 December 2017. goop.com/wellness/health/could-there-possibly-be-a-link-between-underwire-bras-and-breast-cancer/. Note: Brie's article is available as a PDF at https://tinyurl.com/engl2010brie because the original was ultimately taken down by Goop.

Lessons began with a brief lecture that introduced a concept or skill, then transitioned into a discussion or free-write activity that helped frame small-group activities. The evaluating sources lesson incorporated a think/pair/share discussion to surface strategies students already leverage to evaluate information. We connected these to an infographic we developed to invite students to consider their prior knowledge and emotion, take an iterative approach to evaluation, and encourage lateral searching. Students used this infographic to evaluate their case study's source in their small groups. The topic investigation lesson asked students to revisit their case study's topic from new angles. They cultivated an inquisitive approach to research through mind mapping, using Academic Search Ultimate to uncover new angles, peer review, and intentional reflection on alternate viewpoints. The final lesson,

covering synthesis, required students to read two sources they had found and selected from their research in the previous library visit and then incorporate ideas and evidence from them into a partially completed synthesis matrix. The case study teams then used the matrix to practice writing a paragraph that wove together multiple sources and ideas to make a claim. Peer review and debrief discussion helped students connect these in-class activities to their own processes of organizing research and writing before they were required to create and write from their own matrix for their culminating individual research paper.

Sessions were co-taught by two librarians who shared the roles of lecturing, facilitating discussions and activities, and helping students one-on-one. Because class sessions only lasted fifty minutes, lessons followed a tight schedule, with each portion timed closely to facilitate a smooth transition to each learning objective. Lessons were delivered in one of the library's open-plan instruction labs, which provided a flexible space that was well-suited for large classroom discussions as well as small group activities and individual research.

Theory

Moments like those described in this chapter's opening scenes, where students are meaningfully engaging with research materials and processes, demonstrate the power of case-based, problem-based learning (CBPBL) in library instruction. Case studies offer students narrative spaces in which to practice applying a range of information literacy and critical-thinking skills to a relevant scenario as a team. As Linda Carder, Patricia Willingham, and David Bibb explain, the "tightly focused mini-cases" in a CBPBL approach invite students to connect to "the problems or dilemmas faced by the character(s) in the narrative, calling upon the students' use of information gathering and decision-making skills in identifying key issues and postulating possible solutions."[1] The sequence of lessons in our pilot curriculum used CBPBL to allow students to actively work through the research process within the context of a single case study.

Case-based learning is a more structured form of problem-based learning (PBL).[2] Initially developed in the 1960s as curriculum reform for medical

education, PBL has been adapted for many disciplines and instructional contexts, including information literacy instruction.[3] Academic librarians have used this approach in a wide range of teaching scenarios.[4] English composition and technical writing instructors have also adapted PBL in their college and university classrooms.[5] Both librarians and English instructors have experienced positive impacts using PBL and CBPBL approaches to foster student engagement, collaboration, problem-solving strategies, writing skills, and understanding of the "real-world value"[6] of classroom learning.

Our story with CBPBL began in summer 2018 when the three librarians of our team put our heads together to re-think how we were teaching source evaluation to students in ENGL 2010. Drawing from previous uses of CBPBL in library curricula, our new source evaluation lesson was framed around five first-person narratives, presented as research case studies, that described how and why a source was being used. Our fictional researchers were designed to seem like peers, but rather than only reflect academic research contexts, we deliberately modeled our case studies to include real-world problems students might encounter beyond their academic lives. This provided a narrative hook, inviting students to step into the shoes of our characters and adopt a different perspective while they worked in groups to practice critically evaluating a text.

Anecdotally, using case studies seemed to better connect with students' experiences and engage them more deeply in the lesson material. After observing the success of this approach, we recruited an additional team member, an ENGL 2010 lecturer, to tackle a larger-scale project: developing, delivering, and assessing a library curriculum grounded in CBPBL theory. Using our five case studies to frame learning objectives and activities across each library session, we hoped to create a common plotline that would connect lessons on source evaluation, topic development, and information synthesis.

We strategically took a more structured approach to CBPBL than what is typical for traditional problem-based learning. When teaching these lessons, we were faced with the time constraint of three fifty-minute class sessions. We utilized worksheets in each lesson to provide enough structure to keep students synchronously moving through the research process, while still allowing them the freedom to make critical decisions about their case study's research. Although fruitful group discussions and time for unpacking

complex concepts were sometimes cut short, this approach allowed us to meet specific information literacy learning outcomes in a limited amount of class time. Details about our assessment methods and results are available in an article published in *Reference Services Review*.[7]

Though the CBPBL approach was not enjoyed by all our learners, some of our students expressed in their own words what we had intended with our pedagogy. One student noted that the case studies offered a lower-stakes opportunity to learn without having to feel added pressure from their own assignment topic: "Learning and using research skills for another person's idea helped me learn how to navigate academic search engines and how to find sources that I desired. The low-stress environment of the library and the help of others made the idea of doing academic research much less intimidating and it actually was a fun experience." Even as some students grew reluctant to continue using the case studies, many still derived value from the lessons. For example, one student commented, "Every time we had [a library session], I was hesitant and wasn't sure what more we could possibly do with the case studies, but I was always pleasantly surprised at how useful they were. I think the best ones were the research and the synthesis day."

Cultural Considerations

Developing our case study personas and topics was a challenge as we reflected on issues of representation and power in the stories we were creating. On the one hand, we wanted our case studies to resonate with and reflect our learners' experiences and the information-seeking problems they might be facing now or could be confronted with in the future. For example, one case study is an ENGL 2010 student writing their persuasive essay, but other topics were deliberately non-academic, such as our case study on healthcare misinformation, signaling the role that evaluation, research, and synthesis can also play in everyday life. However, we also knew it was important to have our case studies provide representation more broadly in the facets of the characters and situations we were creating. Though our student body is not homogenous, the majority of its members identify as white and as part of Utah's predominant religious and political communities. For those students who identify as part of the majority, we wanted the case studies to showcase

diversity. For students who do not, we hoped deliberate representations of diversity would signal inclusion in addition to the other inclusive teaching practices we strive for in our work.

As we created our case studies, we considered representation in terms of racial, ethnic, and gender identity, and avoided assigning topics based on any stereotypes about particular identities. We created a non-binary case study (Taylor) with they/them pronouns and used an image from Vice Media's "Gender Spectrum Collection," a collection of stock photos with trans and non-binary models.[8] While perhaps appearing subtle, these choices do matter. In the case of our pilot, they also contributed to one of the course instructor's learning goals: facilitating opportunities for students to think critically about their "cultural eye" and consider cultural and social perspectives different from their own. In a reflection on the first library lesson about evaluating sources, one member of the Brie case study group wrote the following: "I was able to contribute a unique opinion to my group, being the only male. This article didn't register to my mind because I have never worn a bra. Instead of thinking of how this affected me personally, I researched the author of the article to find out his cultural eye."

Reflecting on and observing our teaching provided another lens through which we can improve our lessons. After developing our case studies and activities to accompany them, our pilot project was intentionally designed to provide ample opportunities for peer observation and reflection as well as time for instructor debrief and discussion, making it feel like an immersive, active learning experience for us as teachers. On reflection, we recognize our case studies are not perfect and could be more diverse and more inclusive, both in their depictions of underrepresented groups and in providing research topics that would appeal to different learning styles. Moving forward to make CBPBL better in this respect, it would be helpful to develop a menu of case studies that perhaps students could choose from. Longer scenario stories would also give us more room to tell diverse stories. Though we did involve student employees and interns in some of our case study development, it would be helpful to engage them in the creation of additional cases. Finally, it would be powerful to consider how themes of justice could be embedded in case study narratives and become tools for more meaningful discussion, particularly by opening questions about the politics and power of information.

As Maria Barefoot has demonstrated, PBL can be a successful means of teaching cultural literacy and empathy alongside information literacy.[9]

Practical Examples

TAYLOR

Editorial Board. "3-D-printed guns put carnage a click away." The Washington Post, July 28 2018, https://www.washingtonpost.com/opinions/3-d-printed-guns-put-carnage-a-click-away/2018/07/28/3b254a18-91cb-11e8-b769-e3fff17f0689_story.html?arc404=true.

PURPOSE

I just learned that people can just print their own guns, and there are no regulations on this at all. I'm so charged up I'm emailing my senator immediately to get this under control! I found this article that really shows the danger this could pose to society. Is this a good article to include in my email and spur my senator into action?

MCKENZIE

Haberstroh, Tom. "Who's the NBA's GOAT? Lebron May Have Already Answered the Question." Bleacher Report, 31 May 2018, bleacherreport.com/articles/2778733 whos-the-nbas-goat-lebron-may-have-already-answered-the-question.

PURPOSE

I am writing a persuasive research paper for my college English course, and we were told to choose a topic that we feel passionate about. There's nothing I am more passionate about than proving that Lebron James is a better athlete than Michael Jordan. He's just better no matter how you slice it! I found this great article that drives my point home, but I am worried it's not good enough for college level research. Do you think I can use this one or should I dive back into those stuffy scholarly journals?
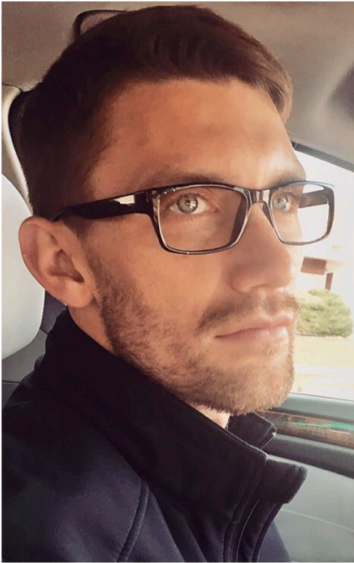
ERIC

Morel, Chantel M., et al. "Cost-Effectiveness of Long-Lasting Insecticide-Treated Hammocks in Preventing Malaria in South-Central Vietnam." Plos ONE, vol. 8, no. 3, Mar. 2013, doi:10.1371/journal.pone.0058205.

PURPOSE

What is this world coming to? A citywide ban on hammocks in public spaces has been put into effect. As president of my hammocking club, I am devastated as our entire way of life is being ripped away from us! Along with my fellow hammocking enthusiasts, I will be addressing the city council. I found a scientific article that proves that hammocks have health benefits. Is this the article that will make Logan city reverse the ban?

OLIVER

Maloney, Catherine, et al. "Feline Reactions to Bearded Men." Improbable Research, www.improbable.com/airchives/classical/cat/cat.html.

PURPOSE

Hey! I am doing research for a business pitch to potential investors. I am dreaming of opening my own barber shop/cat cafe called Kitty Kuts. I found this fantastic study where researchers analyzed how cats react to bearded individuals to use in my presentation. Is this the article that is going to make my investors purr?
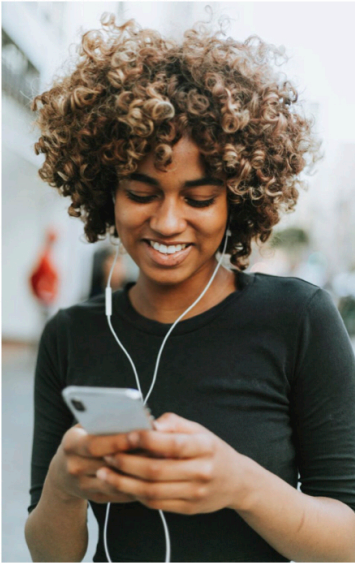
BRIE

Sadeghi, Habib. "Could There Possibly Be a Link Between Underwire Bras and Breast Cancer??" Goop, 19 Dec. 2017, goop.com/wellness/health/could-there-possibly-be-a-link-between-underwire-bras-and-breast-cancer/.

Read at: tinyurl.com/engl2010brie

PURPOSE

I don't mean to scare you, but yesterday I stumbled upon this terrifying article. It was written by an actual doctor and basically says that bras cause cancer! I have so many girlfriends on social media and you know they just put one of those Victoria Secrets in at the mall. I feel like I have an obligation as a woman to share this with as many people as possible. It could save lives! Should I hit that share button and pass this important health information along?

Endnotes

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5. Lisa Beckelhimer et al., "Problem-Based Composition: The Practical Side," *The CEA Forum* 36, no. 1 (Winter/Spring 2007): 1–7; Kelly Diamond, "Problem-Based Learning and Information Literacy: Revising a Technical Writing Class," in *Teaching Information Literacy and Writing Studies: Volume 2, Upper-Level and Graduate Courses*, ed.

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8. Vice Media Group and Zackary Drucker, "The Gender Spectrum Collection," accessed January 7, 2021, https://genderphotos.vice.com/.

9. Maria R. Barefoot, "Identifying Information Need through Storytelling," *Reference Services Review* 46, no. 2 (2018): 251–63, https://doi.org/10.1108/RSR-02-2018-0009.

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