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**K-12 DIGITAL PEDAGOGY:
AN OPEN EDUCATIONAL RESOURCE DESIGNED TO
BUILD A COMMUNITY OF PRACTITIONERS**

by

KELLY HAMMOND

**A master's capstone project submitted to the Graduate Faculty in Digital Humanities in
partial fulfillment of the requirements for the degree of Master of Arts,**

The City University of New York

2022

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**K-12 Digital Pedagogy:
An Open Educational Resource Designed to Build a Community of Practitioners**

by Kelly Hammond

This manuscript has been read and accepted for the Graduate Faculty in Digital Humanities in satisfaction of the capstone project requirement for the degree of Master of Arts.

Date

Matthew K. Gold
Capstone Project Advisor

Date

Matthew K. Gold
Executive Officer

THE CITY UNIVERSITY OF NEW YORK

ABSTRACT

The COVID-19 pandemic created the need for a necessarily steep increase in technology use among K-12 teachers around the world, as education shifted suddenly to remote learning in the early spring of 2020 and then to a mix of remote, hybrid, and in-person learning where it remains. Over the same time period, events in the United States sharply increased the visibility of systemic racism, particularly against Black and Asian American citizens—racism that, like all social biases, is often replicated or intensified through misapplications or uncritical uses of technology, data gathering, and analysis. The rapid development of teachers’ practical skills and the backdrop of the social upheaval both came with little time or cognitive energy for teachers to plumb the underpinning philosophy that shapes the important critical evaluation of technology into effective teaching and learning while mitigating the digital replication of injustice—the digital pedagogy that can shape the use of digital tools now and in the future, regardless of classroom setting.

This project is intended to serve as an open starting point for exploring that philosophy. Created for teachers of students K-12, the open resource defines and investigates discrete components of digital pedagogy (such as OER, collaboration, and mapping), providing curricular examples and applications and pointing users to scholarship in the field, all while inviting active participation and community-building in the form of comments, reading groups, additions, or shared remixes.

ACKNOWLEDGMENTS

All capstone project creators owe others for their successes. But my debt of gratitude is double during these pandemic years as those who have given freely of their time and energy have done so under their own intensified personal and professional pressures.

This project would not have been possible without Matt Gold. As my capstone advisor, Matt offered generously his insights, guidance, feedback, and even contacts. In his leadership of the Digital Humanities program at CUNY and as a classroom instructor, he has championed the extension of DH into K-12 environments—a sentiment clearly shared by the full faculty.

Also critical to this project were Andie Silva and Shawna Brandle whose digital pedagogy courses and enthusiastic encouragement pointed me to creating an OER in the first place and gave me great starting points for my research. In fact, I owe huge thanks to the entire faculty at CUNY including Kelly Baker Josephs, Natalie Etoke, Jeff Allred, J. Bret Maney, Michelle McSweeney, and Patrick Smyth. Bits of their courses have made their way into every stage of this endeavor. (And I'm grateful to CUNY's broader network of support, from the digital fellows at the GCDI to Open Educational Technologist Robin Miller and Manifold fellow Wendy Barrales, and from program librarian Stephen Zweibel to program assistant Jason Nielsen.)

Lehman College professors Stacy Katz and Jennifer Van Allen graciously shared their experiences and expertise crafting OER and working with K-12 educators. And K-12 teachers themselves—former colleagues as well as complete strangers from around the country—provided feedback on the site.

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DIGITAL MANIFEST

1. Capstone white paper (PDF)
2. WARC files of project website, <https://cuny.manifoldapp.org/projects/k12-digital-pedagogy>, archived at time of deposit
3. Zip file containing ingestion materials, including images and HTML/CSS

A NOTE ON TECHNICAL SPECIFICATIONS

The archived site was built using Manifold version 6.0.0. To take advantage of content blocks on Manifold's project homepage, I used Markdown release 0.30. In order to have maximum control over the formatting of a table, captions, and references, I coded the HTML and CSS for the OER page using Atom version 1.58.0.

NARRATIVE

I began my master's work in Digital Humanities after two decades of seeking to build best practices in K-12 teaching with technology in my own classroom, in the two schools where I served as a faculty leader, and in other schools through conferences and consulting. During my master's studies, I found myself wishing that I had had a greater awareness of and access to the literature and practices of the field growing in higher education. At the same time, I joined the Editorial Collective at the *Journal of Interactive Technology and Pedagogy (JITP)*—a journal, like some others in higher education, that fostered growth, broad conversation, and the sharing of ideas through its open access publication, signed peer reviews, social media presence, and public comment feature available to its audience. In the fall of 2019, I first articulated the idea for this capstone: creating what I imagined then to be an online journal for K-12 teachers—something of a junior *JITP*. I hoped then that such a publication would create community between the handfuls of dedicated digital practitioners and schools scattered around the nation (and even the globe) who I knew, from first-hand experience, felt siloed at best.

That fall, the environmental scan I conducted revealed that online resources dedicated to what we might recognize as aspects of digital pedagogy for K-12 teachers have significant, even troubling, limitations. Some, such as famed [Edutopia](#), explore a range of general practices in education including some digital approaches (in Edutopia's case, categorized as “technology integration”). These sites look at technology as an add-on to enhance learning objectives rather than as a force that can change those objectives. Though often useful or thought-provoking, posts on these sites often present application strategies fairly uncritically, without cuing teachers to the potential pitfalls or limitations. For example, in Edutopia's [How to Turn Math Word Problems Into Engaging Comics](#), author Suzanne Ciminesi shares how she uses Pixton to help students

visualize word problems. The post lacks the critical note that classroom visuals transmit powerful messages about identity as the creators make choices that convey gender, race, age, body type, and ability. Unfortunately, of Ciminesi's four math-performing cartoon characters featured in her post, three are white-presenting youth who play video games and eat ice cream while the fourth is a brown-skinned woman working as a food truck employee. Those choices may send unintentional messages about inequities in gender roles, class, and race or ethnicity. In addition, the technology integration highlighted here is limited to teacher use only without consideration of the agency it might produce in the hands of students.

While many (though far from all) of the posts on such sites are written by classroom teachers, they are all static: no comments, no incentives for dialogue or community, and no invitation to remix and reuse. In a more dynamic environment, readers may have been able to point out the problematic visual message, allowing Ciminesi the chance to revise the images both in the article and in all of her classroom visuals while at the same time inviting fellow readers to be critical of their own visual representations. Commenting readers might also have provided ideas for remixing Ciminesi's approach where students used Pixton themselves, expanding her good ideas to a wider audience.

Other sites such as [EdTech](#) or [Creative Educator](#) offer similarly wide-ranging posts, including some DH-friendly categories such as "digital storytelling." But, as products of for-profit businesses, the posts are peppered with ads and promotion of each platform's own for-pay services. While some posts on these commercial sites are made by classroom teachers, others are written by the editors or are unattributed altogether. Further, there is no transparency on these sites that demonstrates expertise in the field or support from research.

Some non-profit sites that were born out of higher education intend to speak to (and hear from) K-12 teachers, but haven't been successful in sustaining the conversation beyond initial efforts. Take, for example, [Hybrid Pedagogy](#), which broadened its scope in 2013. A site search reveals that the few articles tagged as K-12 are largely those from that inaugural year, with little activity since.

A few months after I formulated this capstone idea and conducted the environmental scan, the pandemic reached the United States, and every teacher was forced to become a digital practitioner. While necessitated out of extreme circumstances and stress, teachers explored first-hand digital strategies that were effective and those that were not. Digital skill levels rose astronomically, as teachers practiced day in and day out. Given the strained cognitive and emotional loads of both instructors and students, “low hanging fruit,” such as engaging the chat in Zoom to increase engagement or collaborating digitally on shared documents to increase accountability, became as second-nature as their analogous classroom practices of turn-and-talks and group work.

Teachers and school systems, in their haste to control the school experience outside of the classroom, often turned to programs or practices antithetical to meaningful learning that is so dependent on trust and community. The use of invasive proctoring software, camera-on policies during synchronous online classes, and even timestamps to judge ethics, engagement, and investment often eroded the very trust, community, and good progress made as teachers expanded their skills and showed up digitally for their students daily. These invasive practices gained, and continue to get, media attention both within industry publications and national news: “[The Surveilled Student](#)” was the third featured article in *The Chronicle of Higher Ed*'s 2021 Trend Report, *Inside Higher Ed* ran articles such as “[Instead of Surveilling Students, Try an](#)

[Ethic of Care](#),” *EdWeek* published pieces such as “[Teachers Are Watching Students’ Screens During Remote Learning. Is That Invasion of Privacy?](#)”, the Atlantic’s offered “[The Pandemic Is No Excuse to Surveil Students](#),” and the Washington Post noted “[Mass school closures in the wake of the coronavirus are driving a new wave of student surveillance](#).”

In other words, the need for an online space to investigate and even interrogate digital practices was never greater, and yet the mental energy to explore and question was never more radically reduced. This reality made it clear that the *JITP* model of research-laden, peer-reviewed scholarship could significantly hinder the very community I was hoping to engender.

In response, I redesigned the project, looking to remove barriers to access, sustained focus, and participation. First, I chose Manifold as the platform, knowing that its annotation features would make public and private group conversations easy for users—an ideal setting for inviting a range of perspectives and promoting use and reuse of the resource within natural communities such as departments and divisions.

Second, for inspiration on how best to structure the offering, I looked to resources that I myself found easy to dip in and out of even during the pandemic, such as [Digital Pedagogy in the Humanities](#), with its keyword focus and curated classroom examples. Adopting a similar approach would help me share the language and practices I’d gathered or honed during my master’s program, rather than limit content creation to a handful of contributors who already had them. The keyword approach would also allow the regular maintenance I hoped to provide post-master’s to be doable. I also researched other approaches to community building, such as Cohn et al.’s [approach to building EdTech Commons](#) and Buckley-Marudas and Rose’s [cultivation of the Cleveland Teaching Collaborative](#).

Other structural inspiration included the [OER Starter Kit Workbook](#) that served as a community-building model of an OER on Manifold. I spent time in conversation with Stacy Katz (Assistant Professor and Open Resources Librarian at Lehman College and co-author of the OER Starterkit Workbook) and Jennifer Van Allen (Assistant Professor of Literacy at Lehman College) who shared their experiences with Manifold, OER, and promoting OER, providing insights into how to structure my project and leverage Manifold's features (like easy Google Doc integration and hero-block buttons) to encourage engagement.

Finally, I relied heavily on a theme from feedback I received during the 2020-2021 school year as I provided digital pedagogy development to my own colleagues at the Chapin school: keep explanatory text short and action-steps shorter.

Ultimately, to provide as much content as possible to an audience made cognitively thin by the pandemic, I created a consistent structure across each topic explored built of the following questions:

- What is it?
- Why do K-12 educators care?
- What can it look like in the classroom?
- What should I be careful about?
- How can I try it?
 - Got 5 minutes?
 - Got a class period?
 - Got a whole unit or course?
- Where can I learn more?

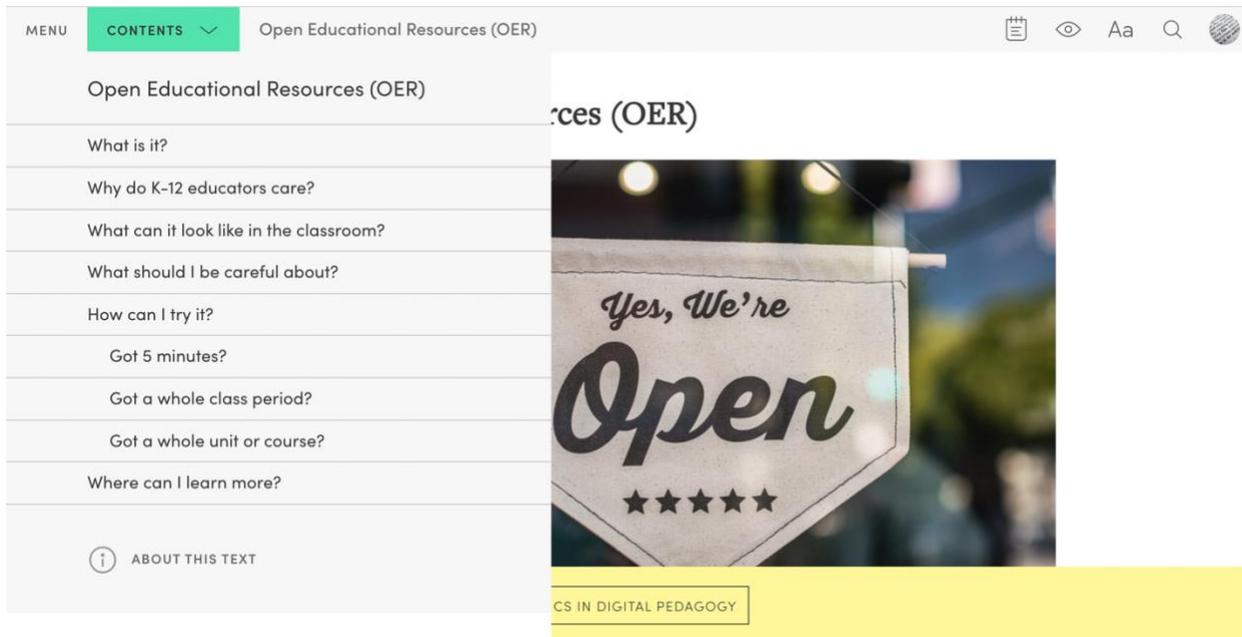


Figure 1. A screenshot of the OER Contents menu which reveals the purposeful questions that guide the reader in every piece.

In addition to minimizing the cognitive burden by chunking within each topic and repeating the structure across topics, I hoped to model a process of inquiry that I'd developed in my teaching and DH coursework—one that actively sought both the affordances *and* potential pitfalls of approaches, and one that promoted active engagement and experimentation.

Once these structural decisions were made, I began drafting the topics. I chose to start with Open Educational Resources (OER) for two reasons. First, the project itself is an OER, and I wanted to help teachers understand what they could do with my project in addition to what OER might look like in their classrooms. Second, as remixing and resharing are key affordances of OER, I wanted to promote the community building and anti-racist interventions that OER can allow. I then chose to focus on digital collaboration. As more schools return to in-person learning (and in perhaps misguided reaction to the misery of the pandemic, start to view in-person learning as inherently preferable to remote learning), I wanted to highlight a digital capacity that

can transform collaboration outside of the limits of class walls and the classroom. I chose mapping as the third topic to explore as a test of my audience reach, as digital mapping can seem beyond elementary students' capacities. I was then thrilled to find a pedagogically powerful example of mapping—complete with data collection and community activism—in a third-grade classroom.

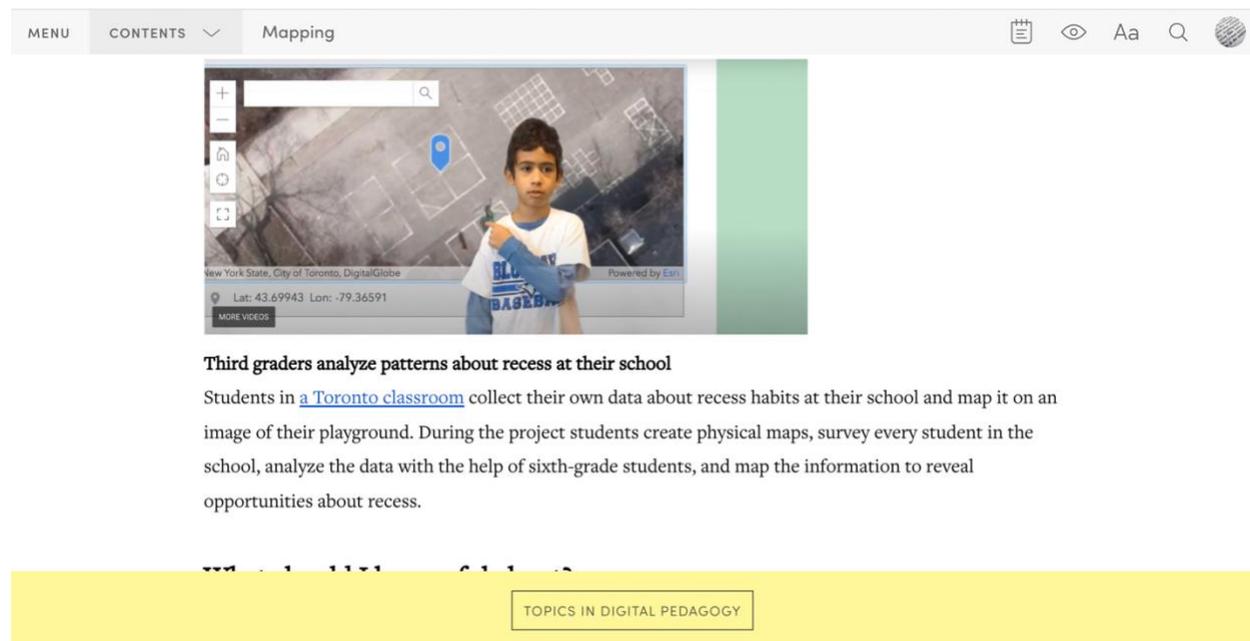


Figure 2. This screenshot shows how mapping, as a third topic, provided the opportunity to show K-3 teachers evidence that the process can be done powerfully in elementary school.

With a draft ready for critique, another big shaper of the project was feedback directly on the project provided by teachers with significantly different perspectives and experiences from mine and my colleagues. My experience has been working with humanities and technology students 4 - 12 in private schools in big cities, so I actively sought feedback from teachers working in rural, public, or charter schools teaching K-3 students or working in mathematics or science. While I did not receive feedback from many teachers, those who did respond helped make clear ways that the project could better meet the needs of a broad education audience. For

example, it was clear from all responses, from a private school teacher in Cincinnati to a public school PreK-5 librarian in New York City to a Kindergarten public school math teacher in Missouri, that I needed to frontload a definition of digital pedagogy, particularly differentiating it from technology integration and instructional technology.

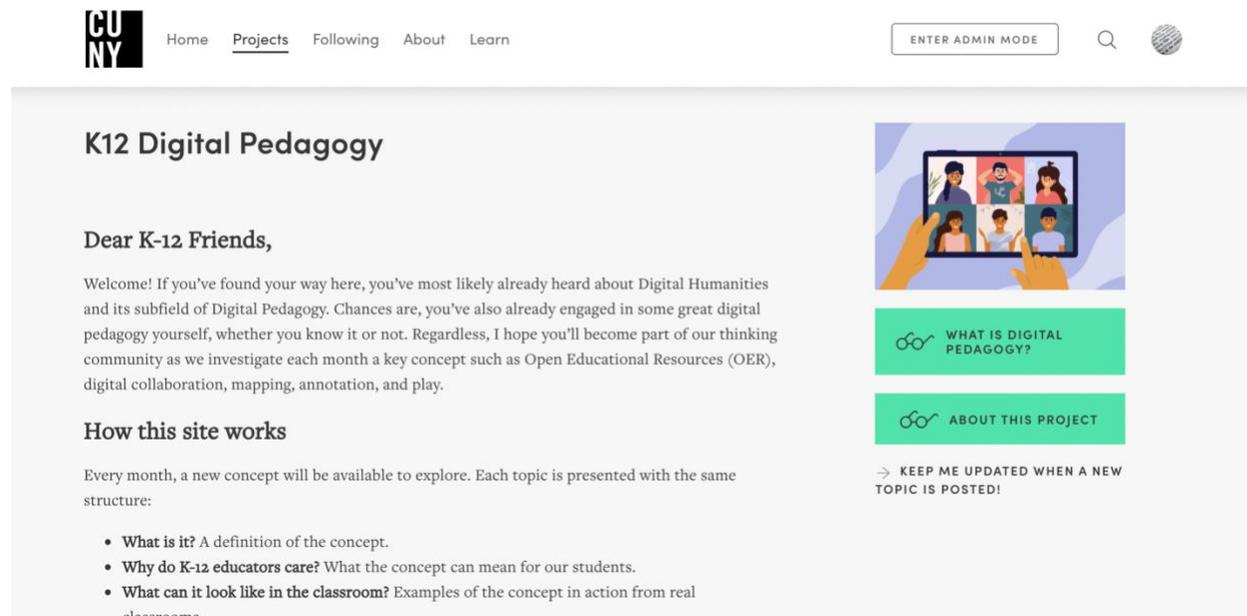


Figure 3. This screenshot displays the "What is Digital Pedagogy?" button on the project's homepage—an addition based on teacher feedback.

The final project now resides and will continue to grow at:

<https://cuny.manifoldapp.org/projects/k12-digital-pedagogy>

Relationship to Focus Area and Previous Course of Study

My DH focus area is digital pedagogy, and, happily, that digital pedagogy includes all of the approaches to digital humanities that I've learned throughout my coursework. In its current iteration, the site includes a "What is digital pedagogy?" section, informed heavily by my Digital

Pedagogy I course, and the first issue explored is OER, which I first explored myself in the OER-focused course Digital Pedagogy 2: Theory, Design, and Practice. The second issue explored, digital collaboration, includes recommendations based on my experience in Digital Humanities: Methods and Practice, where my group and I relied on skill sets and collaborator's agreements promoted by our instructor to keep our group project on track. I chose the third issue—mapping—because of the profound effect that the mapping unit in the Introduction to Digital Humanities had on my own world view and my teaching. And many of the promised upcoming topics on data visualization, bias in algorithms, text analysis, and play spring directly from the rest of my coursework at the Graduate Center.

In some ways, the project is also a testament to the skills component of my master's coursework, from formal assignments to informal support from the Digital Fellows and other resources at the [GCDI](#). For example, I was given license to choose Manifold as a project platform in my Textual Studies in the Digital Age course, and I sharpened the HTML, CSS, markdown, and versioning skills necessary for troubleshooting Manifold ingestion in the Software Design Lab.

In fact, this project is really a direct translation of all of my coursework into the K-12 environment. It is an invitation to all K-12 educators to co-create an informal “graduate” experience.

Evaluation

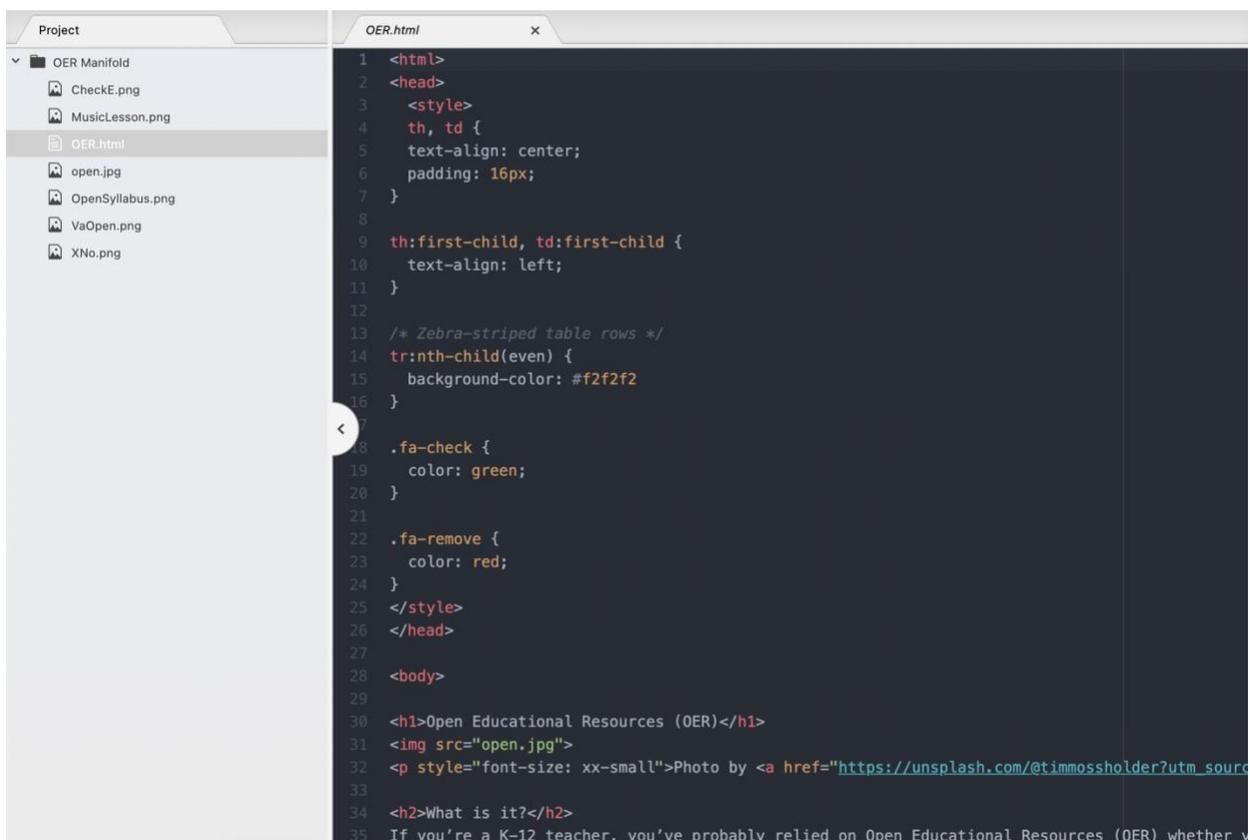
This capstone captures most of the objectives outlined in my prospectus. It provides an easily accessible online space for exploring key ideas in digital pedagogy for classroom teachers. It already provides three such ideas (the outline estimated 3 - 5). It invites community building of

practitioners through Manifold's comment feature, opt-in notifications of new content, and an invitation to contribute content. While it does not yet provide a Spanish translation as I had originally hoped, I have expanded the audience scope from the proposed grades 6 - 12 to K-12 and have received feedback from K-5 teachers that the expansion is effective and valuable.

If my studies in Digital Humanities have taught me anything, it's that collaborative, iterative processes are essential to high-quality, meaningful, and useful public-facing work. So, one of the greatest challenges of this project was working a great deal in isolation during a time when volunteers with extra time to provide feedback were hard to find. I had hoped to get lots of feedback from a range of diverse teachers around the country, and to get that feedback early and often so that the project would develop quickly and efficiently. While I did get lots of initial interest in providing that feedback, the pandemic made it understandably difficult for volunteers to deliver. Three volunteer Spanish translators and thirteen faculty reviewers eventually fell through, with long lag times between expressing interest and ultimately declining. My advisor helped tremendously here, by directly providing a contact who did, indeed, provide feedback (both in a Zoom call and in writing) and by suggesting ways to make giving feedback feel more doable, which helped a few previously identified volunteers come through.

Working with Manifold also proved to be more challenging than I originally thought. My experience with the platform had been a single-text annotation project for Textual Studies in the Digital Age with no project homepage text. Ingestion of the public-domain text for that project was easy thanks to a plain-text version from Project Gutenberg and a little clean-up in Google Docs, and the ease I experienced in that project of adding annotations is what made Manifold seem so perfect for this community-building project. But, the platform proved a little more challenging when working with this project's multiple texts that included images, a table, and

other special formatting. While I ingested initial drafts first from Google Docs and later, via recommendations from CUNY’s Manifold support, Microsoft Word, I ultimately ended up preparing or tweaking some of my texts directly with HTML and CSS, using Atom as a source-code editor. Working directly in HTML made both my writing and editing process a little clunkier than usual, but it certainly gave me greater control with special features like a table, small icons, and captions.



```
1 <html>
2 <head>
3 <style>
4 th, td {
5   text-align: center;
6   padding: 16px;
7 }
8
9 th:first-child, td:first-child {
10  text-align: left;
11 }
12
13 /* Zebra-striped table rows */
14 tr:nth-child(even) {
15   background-color: #f2f2f2
16 }
17
18 .fa-check {
19   color: green;
20 }
21
22 .fa-remove {
23   color: red;
24 }
25 </style>
26 </head>
27
28 <body>
29
30 <h1>Open Educational Resources (OER)</h1>
31 
32 <p style="font-size: xx-small">Photo by <a href="https://unsplash.com/@timmosholder?utm_source">
33
34 <h2>What is it?</h2>
35 If you're a K-12 teacher, you've probably relied on Open Educational Resources (OER) whether y
```

Figure 4. Screenshot of the HTML code behind the OER page, requiring CSS table styling and custom figure captioning.

In addition to those ingestion challenges, I also had to learn a bit more to take advantage of Manifold’s project homepage functionality, such as reacquainting myself with markdown, the language of the project description, and experimenting with Calls-to-Action to style and place

links to a page on digital pedagogy, a section about the project itself, and a sign-up form for new content alerts (see Figure 3).

One final challenge was that of resolving the tension between audience interest and jargon-heavy scholarship. I entered the project imagining that I would provide and embed copious research, but found that, either because of the pandemic or because their energies are spent elsewhere, the K-12 teachers who gave me feedback prefer a lighter, more straightforward presentation of digital pedagogy concepts. I forgot to recognize my own positionality: I don't have children, I am not caretaking for aging parents daily, I love text, I speak academia, my teaching course load through the Spring of 2021 was single-prep, and my feedback responsibilities at their greatest were to 60 students. So, my initial drafts were harder to process for those who were personally or professionally more strapped for time, attention, and energy. I responded to that challenge by pruning and moving the research to the "Where can I learn more?" sections, and by trying to diversify those offerings in terms of density, length, medium, and intended audience. I also used Manifold's resources feature to embed optional information, such as the difference between Creative Commons licenses and what public domain is, for those who might need it.

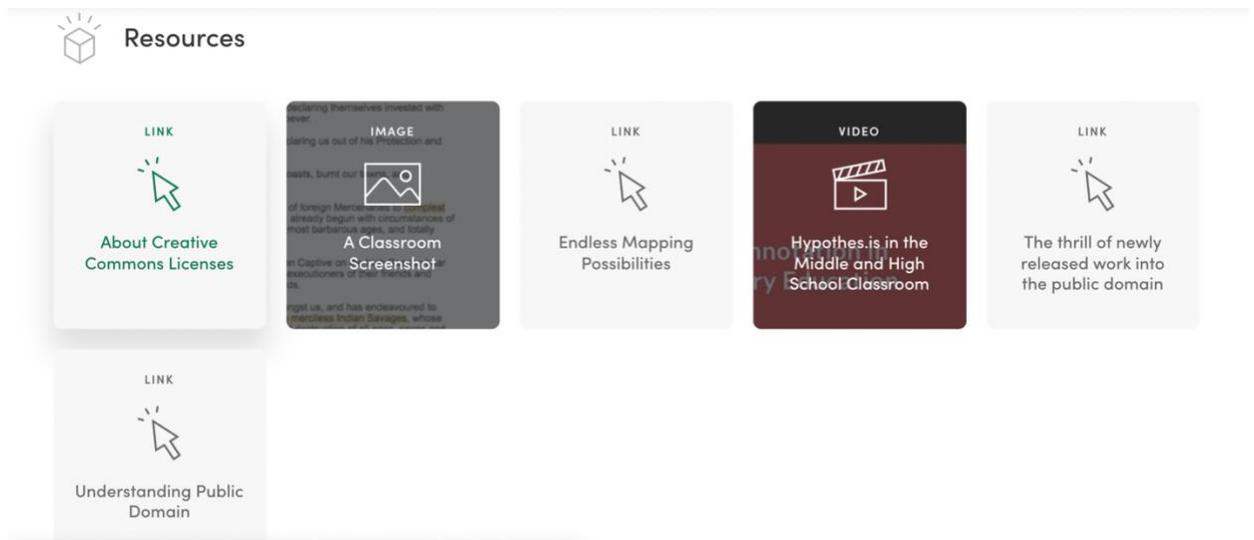


Figure 5. Resources on the site provide options for exploration for those with the need, time, or energy.

This tension, while I’ve addressed it structurally in part, will remain and need continual addressing. Already the audience is broad given the range of grade levels, disciplines, geographic locations, and institutional types I hope to serve. But, as repeat visitors grow in their understanding and practice, the site will need to continue to serve them while still reaching those brand new to DH and DP. In their approach to creating EdTech Commons at UC Davis, Cohn et al. articulate the issue well: “A key reason for carefully considering audience in the development of EdTech Commons was our goal of creating a website that is more than a repository of resources. We wanted a space for community members to ask questions, share ideas, and discuss real examples of class activities so that faculty with diverse interests and experience levels could participate.”

One of the chief successes of this project has been the proof it provides that digital pedagogy, as the higher-ed field of digital humanities is defining it, already exists in K-12 education. There are indeed Kindergarten teachers invested in OER creation and use, elementary

school educators who ask students to gather and map data to make meaningful change in their communities, middle-school faculty who co-create knowledge with their students, and high-school instructors who employ Twine to investigate Ancient History.

Further, my capstone's online space is the first of its kind to consider a range of digital pedagogies (as opposed to open-education hubs, for example, that focus solely on OER) while remaining free from corporate interests (unlike EdTech) and promoting active engagement and commentary (unlike edutopia). Form follows function, as the free, open-source, and interactive publishing platform of Manifold promotes conversation and community of the openly licensed material. If the project grows as hoped, it will be a unique spot for the open exchange of modern digital pedagogy and practice that truly embraces the barrier-breaking and evolving nature of digital humanities as contributors and commentators reach across institutional types, disciplines, and grade levels to share, challenge, and refine philosophy and practice.

Teachers providing initial feedback point to a few other successes: the frontloading of a definition of digital pedagogy, engaging text, application suggestions that seem practicable, and palatable portions.

The project is not without its failures, however. First, it is still only available in English, which both limits the audience and replicates the hegemony of the language. Second, it has been shaped by a far narrower range of perspectives than I had hoped. I did not receive feedback from instructors in charter or parochial schools and the majority of those providing feedback were white (and all were women). My respondent pool did include perspectives from those who taught in public and private institutions, taught a range of grades K-12, taught in several disciplines (mathematics, the humanities, special needs, and library), represented three states (New York, Ohio, and Missouri), include at least three races/ethnicities (white, Black, and Latinx), and

reported at least one cognitive disability (ADHD). Another failure was that I'd hoped, even in this early stage, to have guest curators, but it seems as though that may need to wait until after the pandemic.

Continuation of the Project

My intent from the start was to create a living, growing space for an ever-widening community of educators to explore that would continue far beyond my capstone. While in my proposal, I chose to begin with three to five issues fleshed out, it is my intention to create one per month moving forward. Upcoming topics include text analysis (yes, even for elementary students!), bias in algorithms, and games (with the assistance of a guest contributor). The project currently includes the option for visitors to sign-up for notification when new content is available, and it actively invites comments, feedback, and participation. I have learned that it is unlikely that teachers will help create content while the pandemic continues, but I have already had interest from one feedback provider and her team to share classroom examples on the site this summer. I also plan in February of 2022 to share this project through a range of teacher networks (such as [K-12 Voices for Open](#) and [NAIS](#)) as well as through social media. Expansion will also allow project visitors to take advantage of new OER functionality in the next release of Manifold (due in out in February or March of 2022).

I fervently believe that the resource will be more effective if I can get it translated into Spanish—a feature that may also have to wait until after the pandemic if I am to rely on volunteers. The 2020 Census estimates that over [8 million students, ages 5 - 17, speak Spanish at home](#), so a translation, even after launch, would better reflect classrooms and communities around the country and may promote broader remixing of the ideas and curricular examples.

Translation might also help chip away at the predominance of English resources for professional development, encouraging translation in similar endeavors.

SELECT BIBLIOGRAPHY

Buckley-Marudas, Mary Frances (Molly), and Shelley E. Rose. "Collaboration, Risk, and Pedagogies of Care: Looking to a Postpandemic Future." *The Journal of Interactive Technology and Pedagogy*, 11 May 2021, <https://jitp.commons.gc.cuny.edu/collaboration-risk-and-pedagogies-of-care-looking-to-a-postpandemic-future/>.

Ciminesi, Suzanne. "How to Turn Math Word Problems Into Engaging Comics." Edutopia, <https://www.edutopia.org/article/how-turn-math-word-problems-engaging-comics>. Accessed 16 Jan. 2022.

Cohn, Jenae, et al. "Creating Online Community: A Response to the Needs of 21st Century Faculty Development." *The Journal of Faculty Development*, vol. 30, no. 2, 2016, pp. 47-57. ProQuest, <http://ezproxy.gc.cuny.edu/login?url=https://www.proquest.com/scholarly-journals/creating-online-community-response-needs-21st/docview/1931651070/se-2?accountid=7287> .

"Digital Pedagogy in the Humanities | MLA Commons." Accessed September 14, 2021. <https://digitalpedagogy.mla.hcommons.org/>.

D'Ignazio, Catherine, and Lauren Klein. "2. Collect, Analyze, Imagine, Teach." *Data Feminism*, 2020. data-feminism.mitpress.mit.edu, <https://data-feminism.mitpress.mit.edu/pub/ei7cogfn/release/4>.

Elder, Abbey and Stacy Katz. "'The OER Starter Kit Workbook' on Manifold Scholarship at CUNY." Accessed September 14, 2021. <https://cuny.manifoldapp.org/projects/the-oer-starter-kit-workbook>.

Froehlich, Heather. "Distance-Reading the Feminine Landscapes of The Awakening." *CLiC Fiction*, <https://blog.bham.ac.uk/clic-dickens/2018/06/29/distance-reading-the-feminine-landscapes-of-the-awakening/>. Accessed 16 Dec. 2021.

Geospatial Revolution. <https://geospatialrevolution.psu.edu/>. Accessed 28 Dec. 2021.

Hirsch, Brett D. : "Digital Humanities and the Place of Pedagogy." In *Digital Humanities Pedagogy : Practices, Principles and Politics*, 3–30. Digital Humanities Series. Cambridge: Open Book Publishers, 2015. <http://books.openedition.org/obp/1613>.

Mitchell, Katharyne, and Sarah Elwood. "Engaging Students through Mapping Local

History.” *The Journal of Geography* vol. 111,4 (2012): 148-157.
doi:10.1080/00221341.2011.624189.

Paravisini-Gebert, Lizabeth. “Review of Puerto Rico Syllabus: Essential Tools for Critical Thinking about the Puerto Rican Debt Crisis.” *Sx Archipelagos*, no. 3, Small Axe Project, July 2019. *smallaxe.net*, <https://doi.org/10.7916/archipelagos-xnx4-bz51>.

Philips, Natalie, et al. “Creating Spaces for Interdisciplinary Research across Literature, Neuroscience, and DH: A Case Study of The Digital Humanities and Literary Cognition Lab (DHLC).” *Digital Humanities Quarterly*, vol. 014, no. 3, Sept. 2020. <https://www.digitalhumanities.org/dhq/vol/14/3/000478/000478.html>.

O’Dell, Kaylin. “Modern Marginalia: Using Digital Annotation in the Composition Classroom.” *Computers and Composition*, vol. 56, 2020, p. 102570, <https://doi.org/10.1016/j.compcom.2020.102570>.

Stommel, Jesse. *Textbooks, OER, and the Need for Open Pedagogy*. Hybrid Pedagogy Inc., Sept. 2018. *Criticaldigitalpedagogy.pressbooks.com*, <https://criticaldigitalpedagogy.pressbooks.com/chapter/textbooks-oer-and-the-need-for-open-pedagogy/>.

Tuck, Eve, and K. Wayne Yang. “Decolonization Is Not a Metaphor.” *Decolonization: Indigeneity, Education & Society*, vol. 1, no. 1, 1, Sept. 2012. *Jps.library.utoronto.ca*, <https://jps.library.utoronto.ca/index.php/des/article/view/18630>.