BUILDING DEMOCRACY FOR ALL OER EBOOK: A DESIGN CASE

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In this paper, we discuss the design and development of an eBook titled *Building Democracy for All: Interactive Explorations of Government and Civic Life*, which serves as an open educational resource for the eighth-grade Massachusetts social studies curriculum standards. This design case offers an example of an interactive, student-centered, multimodal, multicultural open-access eBook.

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INTRODUCTION

In 2019, the Massachusetts Department of Elementary and Secondary Education reorganized the state's eighth-grade history and social science curriculum around 50 civics and government learning standards. That same year, the state's legislature passed "Chapter 296: An Act to Promote and Enhance Civic Engagement," which required that all public school districts serving eighth graders, as well as all high schools, offer at least one student-led, non-partisan civics project for each student every year. The state's emphasis on civics and civic engagement is part of a national trend emphasizing the importance of increased civic education for students in K-12 schools in the United States (Hansen et al., 2018).

Civics (from the French word "civique," meaning "citizen") is the study of what people need to know as members of a democratic society. Civic education includes the activities and experiences that help young people become fully engaged citizens.

The arrival of a brand new curriculum for eighth-grade history and social sciences classes, coupled with the surging interest in civics education nationally (interest that has increased greatly in the aftermath of the events of January 6, 2021), signaled a need for free and easily accessible civics and government learning materials for students and teachers across the state.

In response to this need, we designed and developed an eBook titled *Building Democracy for All: Interactive Explorations of Government and Civic Life* (see Figure 1) to support teachers' and students' exploration of government, politics, and civic life—past, present, and future. We envisioned an eBook that was student-friendly, interactive, multimodal, and multicultural.

We choose to develop an eBook over other e-learning formats, such as wikis and websites, for several reasons. First, we wanted to go with a visual format that students and teachers are familiar with—a textbook. Using a well-known visual format can reduce the cognitive load required to learn how to navigate a new e-learning material. Second, eBooks can be easily edited to include new information, which

means that readers—both students and teachers—can stay up to date with rapidly changing information regarding civic and government life. Third, an eBook allows for interactive and multimodal learning.

We began building the eBook by writing separate chapters for each of the 50 learning standards in the eighth-grade Massachusetts curriculum. The Massachusetts Department of Elementary and Secondary Education organized these standards into seven broad topics:

- Topic 1: The Philosophical Foundations of the United States Political System
- Topic 2: The Development of United States Government
- Topic 3: The Institutions of the United States Government
- Topic 4: Rights and Responsibilities of Citizens
- Topic 5: The Constitution, Amendments, and Supreme Court
- Topic 6: The Structure of Massachusetts State & Local Government
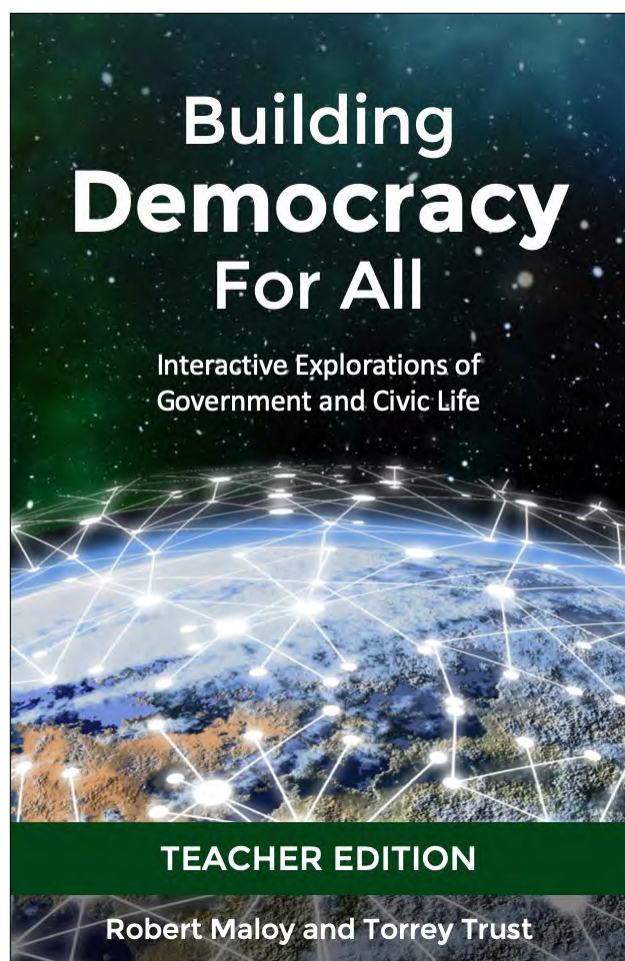- Topic 7: Freedom of the Press and News/Media Literacy

FIGURE 1. *Building Democracy for All* Cover.

FIGURE 2. Screenshot of the EdTech Books Analytics Page for *Building Democracy for All* from April 20, 2023.

Since its publication in August 2020, *Building Democracy for All* has been viewed more than 472,000 times and down-loaded more than 112,000 times (see Figure 2). It has been identified as a "High-quality Educational Resource" by the Massachusetts Department of Elementary and Secondary Education and designated as a "Featured Educator Resource" by the Educating for Democracy Initiative. It also earned the "Trending" badge on EdTech Books for being "among the most highly trafficked works on the site" (Kimmons, n.d., para. 1). In this paper, we offer insights regarding how we went about designing this eBook.

DESIGN PROCESS

Throughout the design process, we were guided by the philosophy of creating a digital learning resource that was easy to use and increased readers' engagement with the content. As we worked on the design of the eBook, we made four key decisions, guided by our philosophy, which we will detail in the following section.

Design Decision 1: Build an Open Access eBook Rather Than a Traditional Print Book

For this project, we decided to build an open-access eBook—one that would be freely available to educators and students worldwide under a Creative Commons license. eBooks have emerged as popular teaching and learning resources in K-12 schools and higher education, with their usage increasing during the shift to emergency remote teaching (Hodges et al., 2020) due to the COVID-19 pandemic. In a recent survey, 85% of K-12 school administrators said eBooks are in use in their districts, with 67% of the respondents reporting more use of eBooks in the past year (OverDrive Education, 2021). Another study found that "during the 2019-20 academic year, 62 percent of faculty members [in higher education] used eBooks, compared

with 53 percent the previous year" (Whitford, 2021, para. 4). When eBooks are intentionally and thoughtfully designed to activate student engagement through interactive features, multimodal learning experiences, and culturally relevant, up to date content, they can positively impact student learning and academic progress (Biranvand & Khasseh, 2014; Asrowi, 2019).

We decided to build an eBook for several reasons. First, we did not want to be restricted by the limitations set forth by publishing a traditional print textbook. While traditional textbooks are bounded by academic content restrictions set forth by publishers, politicians, curriculum designers, or administrators, we wanted to include "counternarratives," which are "stories that reflect the critical perspectives of storytellers and challenge injustice" (Hickman & Portfolio, 2012, p. 36). Specifically, we wanted to feature the voices, insights, and lived experiences of marginalized individuals and groups—those traditionally left out of textbooks and curriculum materials. Our goal was to provide teachers and students with ways to connect major events and institutions of United States democracy to the struggles of diverse individuals and groups to achieve equal status in American society. Like the Washington Post newspaper's section "Retropolis" (meaning, "the past, rediscovered"), we sought to tell the stories of those whose experiences are often missing from the school curriculum.

Second, eBooks can be revised, refreshed, and updated without incurring additional costs, and these changes are immediately available to readers. Since issues and topics in government and civic life are constantly evolving – and sometimes even reverting following elections, the passage of new laws, Court decisions, and shifts in public opinion – we wanted to be able to create an eBook that would stay relevant and up to date based on what was happening in the local, national, or global community. In June 2022, for example, we revised and updated sections of the eBook following Supreme Court decisions about the powers of federal and state government in the areas of reproductive rights, gun control, and school prayer. We also updated information about state-level changes to voting practices and added newly published research studies on several topics. These changes are examples of how, with eBooks, what is published can be revised, repeatedly, with ease. Ongoing revisions make eBooks into living books that expand as an evolving tapestry rather than remain largely fixed as a static, printed document.

Third, digital authoring tools used to create eBooks often provide features, such as hyperlinked text, embedded media, and accessibility capabilities (e.g., alt text that provides a description of an image to a screen reader), that enhance the text and can create a new type of learning experience—one that is choice-based, nonlinear, interactive, and fully accessible for students of all abilities.

When determining which digital authoring tool to use, we looked for one that would allow us to publish our eBook as an open educational resource (OER). OER are "teaching, learning, and research materials that are either (a) in the public domain or (b) licensed in a manner that provides everyone with free and perpetual permission to engage in the 5R activities [retain, reuse, revise, remix, redistribute]" (Creative Commons, n.d., para. 2). We decided to publish our eBook under a Creative Commons license because, like the eBook's focus on building democracy for all, we wanted to democratize civics and government education by providing open access materials that teachers and students could reuse, remix, and reinvent to benefit their learning.

At the time of the eBook development stage, there were only two robust digital authoring tools supporting the publication of open-access eBooks—Pressbooks and EdTech Books. We decided to use EdTech Books because it had a user interface that was easier to navigate and because the platform designer—Dr. Royce Kimmons at Brigham Young University—was willing to add new features and capabilities based on our design needs and goals. For example, during our design process, Dr. Kimmons added two new features—a hyperlinked glossary and an interactive index—to create new interactive ways for readers to explore and engage with eBook text. The hyperlinked glossary (see Figure 3) enables readers to move seamlessly from the definition of a key term to the chapter where the term is featured. In this way, learning a term becomes much more than simply getting a written definition; readers can explore the context of how the term is used within the book.

The interactive index features links to places in the eBook where common terms are used. With the index, readers can locate a term quickly and move easily to where it is used in different sections of the book. While the Glossary provides a working definition of a term, the index enables readers to see how often a term is used in the book, such as the Bill of Rights or the First Amendment, which appear in multiple chapters. Exploration and analysis of the terms within the index, along with how often the terms are used, provides a new way for readers to interact with and investigate the eBook content based on interest, popular concepts, and themes.

When determining which features to use and how to use them, we were guided by our philosophy of creating an easy-to-use eBook that increased readers' engagement with the content. Our goal was to use the available features to increase readers' engagement with the content in ways that would improve, rather than detract from, learning. For example, while embedded multimedia and hyperlinks can increase readers' interactions with the content, using these features too often can distract readers. At the same time, if there are too few of these options, the book will read and feel more like a traditional static textbook. Similarly, having
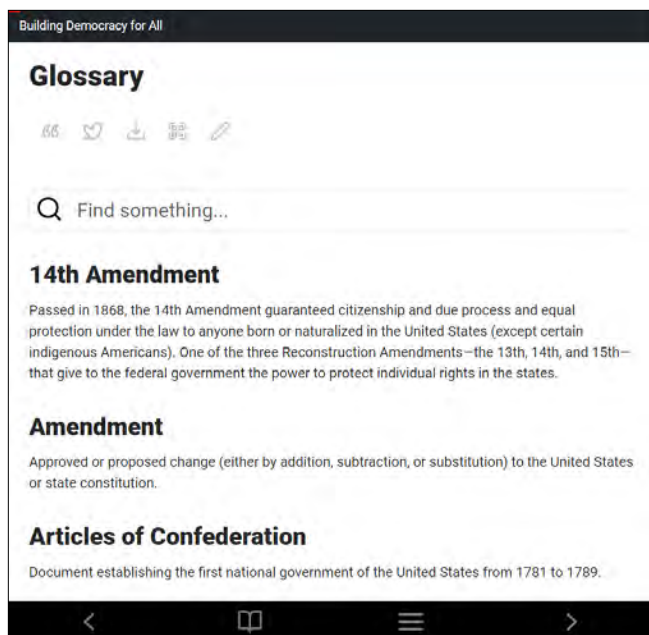
Glossary

🔍 Find something...

14th Amendment

Passed in 1868, the 14th Amendment guaranteed citizenship and due process and equal protection under the law to anyone born or naturalized in the United States (except certain indigenous Americans). One of the three Reconstruction Amendments—the 13th, 14th, and 15th—that give to the federal government the power to protect individual rights in the states.

Amendment

Approved or proposed change (either by addition, subtraction, or substitution) to the United States or state constitution.

Articles of Confederation

Document establishing the first national government of the United States from 1781 to 1789.

FIGURE 3. Screenshot of the *Building Democracy for All* Glossary.

key terms in an index or glossary adds clarity for readers, but not every term needs to be listed—with too many terms, the value of the feature is minimized. Since there is no magic number for how many features to use and how often to use the features, we sought informal feedback from graduate students and educators by having them read chapters and discuss how the design of the chapters influenced what they learned, which allowed us to make strategic design decisions.

Design Decision 2: Build a Multimodal eBook

Since researchers have established that combinations of text, visuals, and sound enhance learning for students (e.g., Mayer, 2005), we embedded videos, images, and brief audio recordings in each of the 50 chapters in the eBook. While some written text is needed to convey ideas and impart information, images, graphics, GIFs, cartoons, memes, photographs, and embedded audio and videos can expand and enliven the reading experience. For example, in our chapter about elections, we included a GIF of an animated map showing the results of every Presidential election from 1952 to 2004. In our "Leadership and the Qualities of Political Leaders" chapter, we embedded a video featuring President Harry Truman discussing how "the buck stops" here when it comes to making tough decisions as a leader (see Figure 4). These embedded multimedia serve to capture the readers' attention and provide multiple ways to interact with history.

Throughout the eBook, images, videos, and animations were chosen to engage readers and show diverse histories and cultures. When looking for videos, we explored YouTube and other media sites (e.g., BBC, KQED) to find ones that featured diverse perspectives and voices, unique insights and ideas,

3. ENGAGE: How Can Young People Become Civic Leaders in Schools and Society?

What does it mean to be a leader? It is widely assumed that a leader is the person in charge of a group or organization -- a manager is the leader of a retail store; a principal is the leader of a school; a CEO is the leader of a corporation. In this view, the leader is the person who makes the final decisions, as in the famous "The Buck Stops Here" sign on President Harry Truman's desk. Watch former President Truman discuss "The Buck Stops Here" in the video below.

Watch on YouTube

FIGURE 4. Screenshot of the Leadership and the Qualities of Political Leaders chapter featuring an embedded video.

present-day connections (e.g., using artificial intelligence to bring historical photos to life), and/or authentic examples of history (e.g., original footage of the Kennedy-Nixon presidential debate). When looking for images, we sought out ones that showcased diverse settings, stories, and perspectives to pique students' interest. Specifically, we looked at Wikimedia Commons for compelling images that connected directly to the topic being explored in the text. For a section on the Electoral College, for instance, we included an image of the state of Oregon's 2012 signed Presidential Elector Certificate Vote. In a chapter about political parties, we included a picture of a 1970 Black Panther Party rally poster (see Figure 5). For a chapter on voting, we added a 2016 bilingual "Vote Here" sign from Texas. For viewers, images build interest and invite multimodal explorations and understandings of the academic content.

We also incorporated short 1–2-minute audio recordings in every chapter (see Figure 6). We collaborated with graduate students to write scripts for and record audio-based introductions to the chapter content. Audio recordings can provide "multiple means of representation" of the academic content (CAST, Inc., 2018). The audio introductions featured everyday (rather than academic) language to provide a student-friendly entry into the chapter. Rather than being read-alouds of the text in each chapter (since there are several text-to-speech tools that can do this already), the

FIGURE 5. Screenshot of The Role of Political Parties chapter featuring an image of a Black Panther Party rally poster.

FIGURE 6. Screenshot of the top of the Becoming a Citizen chapter featuring an audio introduction.

recordings were brief audio files designed to spark interest in the chapter content. These embedded audio files provided another means of interactive exploration of the academic content.

Design Decision 3: Design a Visually Appealing and Easy to Use eBook

To design a digital learning resource that would aid, rather than overwhelm, learning, we used the principles of Cognitive Load Theory (Sweller, 1988) and Multimedia Design (Mayer, 2005), as well as writing for the web techniques (Trust, 2019), to build an eBook that was easy to read and navigate, visually appealing, and engaging. For instance, we made sure not to include extraneous or distracting materials (e.g., unrelated content, visuals, or advertisements), we chunked text into smaller paragraphs and used bullet-point lists to create more white space, we used bolded text to signal key information to the reader, and we provided headings and subheadings to guide the reader. We also incorporated visuals (e.g., public domain images, symbols, graphics, and videos) throughout every chapter to provide a visually appealing learning experience.

Design Decision 4: Design with Students in Mind

An educator-designed eBook does not have to be a full-scale replacement for a published textbook. There are already well-regarded online textbooks that fulfill that information retrieval function for nearly every subject, such as *Digital History* from the University of Houston, *U.S. History* from Independence Hall Association, and *Outline of U.S. History* from the United States Department of State, which are three examples of online textbooks for exploring history, government, and civics.

Designing an eBook with students in mind means focusing on the instructional elements that are largely missing from traditional textbooks and humanizing the learning experience (Mehta & Aguilera, 2020; Pacansky-Brock, 2020) so that students can see themselves as part of the text and engage critically with the material. In our civics and government eBook, this meant making learning relevant by tying it to present-day events, incorporating historically hidden histories and untold stories not commonly found in traditional texts, providing digital choice boards, learning pathways, and eBook features to support interest-driven, choice-based, culturally relevant explorations of content, and embedding activities that encouraged students to act as historians and civically engaged members of local, state, and national communities. It also meant giving students higher-order thinking activities to write, build, invent, and create their own connections between the past and present.

We subtitled *Building Democracy for All* "Interactive Explorations of Government and Civic Life" to signal the eBook's purpose as an online teaching and learning resource where teachers and students could access interactive, multimodal content and utilize historical thinking and civic engagement skills to learn academic material. As we were not bound by a "cover the content" approach, we could design an eBook that promoted student exploration, facilitated inquiry-based learning, and introduced students to diverse perspectives and ways of thinking.

FIGURE 7. Screenshot of the Investigate Section for the Freedom of the Press Chapter.

Design Decision 5: Use a Critical Instructional Design Framework

Since many instructional design models "fall short in providing sufficient guidance for creating environments, strategies and materials that embrace diversity and cultural inclusiveness—aspects that are critical to the design of e-learning" (Heaster-Ekholm, 2020, p. 59), we built a new instructional design model to guide our eBook development—the Investigate, Uncover, and Engage framework. We designed this framework to ensure that every chapter in our eBook offered readers three choices for how to approach and explore academic content: 1) investigate core concepts and ideas; 2) uncover historically hidden histories and untold stories of diverse individuals and groups; and 3) engage as citizens in a democratic society. We developed separate sections in each chapter entitled "INVESTIGATE," "UNCOVER," and "ENGAGE" to give readers different ways to critically engage with civics and government content.

The "INVESTIGATE" sections feature core concepts and information related to the chapter topic as well as links to external sources, such as digital primary source materials, interactive timelines, online biographies, and multimodal resources, for further exploration of the content. These sections focus on topics commonly found in textbooks and curriculum frameworks. For example, chapters in The Structure of Massachusetts State and Local Government topic, feature "INVESTIGATE" sections that cover the powers of state and national government and tensions between them, the Enumerated and Implied Powers of the U.S. Constitution, the Bill of Rights, the 14th Amendment, people's taxes and how they are spent, and town meetings as a form of local government. In the Freedom of the Press and News/Media Literacy topic, "INVESTIGATE" sections describe notable freedom of press court cases (see Figure 7), the history of newspapers and online news, news writing formats, editorials, Op-Ed commentaries, and political cartoons, and strategies for evaluating information and combating "fake news."

The "UNCOVER" sections present little-known histories and stories of Black Americans, women, indigenous peoples, LGBTQIA individuals, Mexican Americans, Latinos/Latinas, Asian Americans and Pacific Islanders, children and teens, disabled individuals, and others who are underrepresented in United States K-12 textbooks, curriculum, and learning plans. These sections connect the struggles of diverse and marginalized individuals and groups to the development of United States democracy. For example, in The Philosophical Foundations of the U.S. Political System topic, "UNCOVER" sections showcase the legend of Pheidippides, the Heraean games, Spartacus and slavery in the Roman world, Toussaint L'Ouverture, and Black American slave revolts (see Figure 8), Mary Wollstonecraft, Olympe De Gouges, and the rights of women, and the Peskeompskut-Wissatinnewag Massacre. The Rights and Responsibilities of Citizens topic includes "UNCOVER" sections about the history of Puerto Rican citizenship, youth activists and change makers, Black inventors' contributions to math, science, and politics, Queen Liliuokalani and the American Annexation of Hawaii, and political protests, including Mother Jones and the March of the Mill Children (1903), the Stonewall Uprising (1969), and the Standing Rock Pipeline Protest (2016–2017). The "UNCOVER" sections were designed to provide students with a broader view of a topic and to help students see themselves and their ancestors represented within the text and throughout history.

Following research findings that have shown how policy-based discussions among students can increase civic knowledge while expanding students' perspectives beyond those of immediate family and friends (Hess & McAvoy, 2014), the "ENGAGE" sections feature political policy-based questions that ask readers to think deeply about the choices they face and the actions they might take as engaged members of a democratic society. For example, in The Structure of Massachusetts State and Local Government topic, "ENGAGE" sections feature public policy questions such as: Should governments pay reparations to Black Americans? Should the nation adopt a living wage rather than a minimum wage (see Figure 9)? What single-use plastic items should local

2. UNCOVER: Spartacus and Slavery in the Roman World, Toussaint L'Ouverture, and Black American Slave Revolts

Though slavery was widespread throughout the ancient world, ancient Rome was the society most reliant on slave labor with the highest number of slaves among its population. Estimates vary, but many sources estimate it was between one-fifth and one-third of the ancient Roman population was enslaved.

Photo of "Roman collared slaves - Ashmolean Museum" by Jun is licensed under CC BY-SA 2.0

The institution of slavery was interwoven into all areas of Roman life.

- Slaves were status symbols for the wealthy.
- Slaves were forced to do manual labor (e.g. farming) in horrible working conditions.

FIGURE 8. Screenshot of the Uncover Section for the Government of the Roman Republic Chapter.
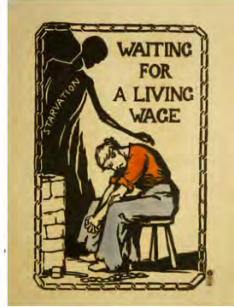
governments ban to help save the environment? Should states expand lotteries to raise money for communities? In The Constitution, Amendments, and Supreme Court Decisions topic, "ENGAGE" sections include questions such as: What new amendments to the Constitution are needed today? Whose images should appear on United States currency? Do supreme court dissents make a difference to the law? Is kneeling during the national anthem an effective form of political protest? What steps can communities and governments take to reduce gun violence?

The "INVESTIGATE," "UNCOVER," and "ENGAGE" sections were designed to provide multiple ways for students to approach and learn the chapter content. For example, in the standard about Enlightenment Thinkers and Democratic Government, students can investigate well-known male Enlightenment thinkers, uncover lesser-known, but equally important, contributions by women during the Enlightenment era, and engage with content about diverse change-makers in history (see Table 1).

3. Engage: Should the Nation Adopt a Living Wage Rather Than a Minimum Wage?

A **Living Wage** is the minimum income needed for an individual or a family to meet their basic needs for food, shelter, clothing, health care, and other needs (What is a Living Wage? from Global Living Wage Coalition). A living wage is based on the reality that most people cannot live adequately earning a minimum wage.

Waiting for a Living Wage Poster 1913, by Catherine Courtauld, Public Domain

A **Living Wage Calculator** from Massachusetts Institute of Technology demonstrates the gap that exists between minimum wage and a living wage. In 2019, a single adult with one child earning $11 an hour minimum wage actually needs to earn $29.66 an hour to support their family.

FIGURE 9. Screenshot of the Engage Section in the Enumerated and Implied Powers Chapter.

INVESTIGATE	UNCOVER	ENGAGE
Locke, Montesquieu, Rousseau, and Their Influence on Government	Mary Wollstonecraft, Olympe de Gouges, and the Rights of Women	Who Were History's Most Important Women Change-Makers in Math, Science, and Politics?

TABLE 1. Sections for the Standard on Enlightenment Thinkers and Democratic Government

INVESTIGATE	UNCOVER	ENGAGE
The Three Branches of U.S. Government	Shirley Chisholm: African American Politician and Presidential Candidate	Should Puerto Rico or the District of Columbia Become the 51st State?

TABLE 2. Sections for a Standard on the Branches of the Government and Separation of Powers.

In another example, the Branches of the Government and the Separation of Powers chapter features three sections that offer multiple entry points for exploring the Legislative,

Executive, and Judicial branches of the U.S. government (see Table 2). "INVESTIGATE" outlines the three branches of government. "UNCOVER" presents the mostly untold history of the first African American woman to run for President (the head of the executive branch). "ENGAGE" raises public policy questions about adding more states and thereby expanding the size of the legislative branch.

The "INVESTIGATE," "UNCOVER," and "ENGAGE" sections provide multiple ways for readers to explore and engage with each civic and government learning standard. The purpose of this new instructional model was to create eBook chapters that would connect students with hidden histories, untold stories, diverse perspectives, and the real-world issues they face as members of a democratic society.

UNFORESEEN OBSTACLES

Throughout the design process, we faced several unforeseen obstacles that influenced the design and development of the eBook, which we will discuss in the following section.

Obstacle 1: Teachers' Conflicting Needs

To begin the design process, we convened a small group of local history and social studies teachers to help us build the eBook. However, disagreements over the design of the book quickly surfaced. Some of the teachers wanted learning plans and teaching resources for the Massachusetts state standards; other teachers wanted a text with short sections written in student-accessible language that could be used as assigned readings as part of a middle or high school class.

Unfamiliar with eBook technology and design, the teachers had difficulties envisioning what a published text could look like, and this made it hard for them to develop draft materials for the project. In the face of disagreements and uncertainties, most of the teachers in the group stopped working on the eBook design project. Without the local teachers to help design materials and content, we [Dr. Trust & Dr. Maloy] had to build the entire eBook on our own. To get started, we used feedback from the teachers to create an eBook that featured both short sections of text for students based on the standards and learning plans and teaching resources for educators. While the local teachers did not stay throughout the project, their initial feedback regarding what to include in the eBook helped frame the design of each chapter.

Obstacle 2: Shifting Government and Civic Life Amidst Political and Social Upheaval

Throughout the design process, we continually updated, revised, and redesigned the eBook on a daily basis to keep up with shifting government and civic life amidst the political and social upheaval. *Building Democracy for All* was developed within the context of what Joe Biden, in his presidential inaugural address, called the "cascading crises of our era" (i.e., COVID-19, accelerating climate change, wide-spread economic inequality, long-denied demands for racial justice, America's shifting position in the world, and attacks on democracy and the rule of law) (The White House, 2021). As events have occurred, we have been adding new content and media, including the tensions between state and federal power in the wake of the COVID-19 pandemic, the aftermath of the January 6, 2021 Insurrection at the Capitol, the adoption of Juneteenth as a national holiday, and efforts by the government to restore Native American names to geographic places while also removing offensive and racist names for lakes, mountains, and other landmarks.

Additionally, as societal and political issues were being raised by different groups (e.g., the Black Lives Matter movement), we wanted to curate materials to honor these groups and social and political issues and to help students and educators draw connections between past and present-day government and civic issues. While the initial outline for *Building Democracy for All* followed the sequential order of the Massachusetts state curriculum framework, we decided that we, and our readers, did not have to be limited by a linear learning progression. So, we developed learning pathways to curate collections of links to different sections in the eBook based on a particular, relevant group or issue. For example, the Black Lives Matter learning pathway was inspired by the Black Lives Matter movement as it was gaining traction in 2020. This pathway features cross-links to sections in the
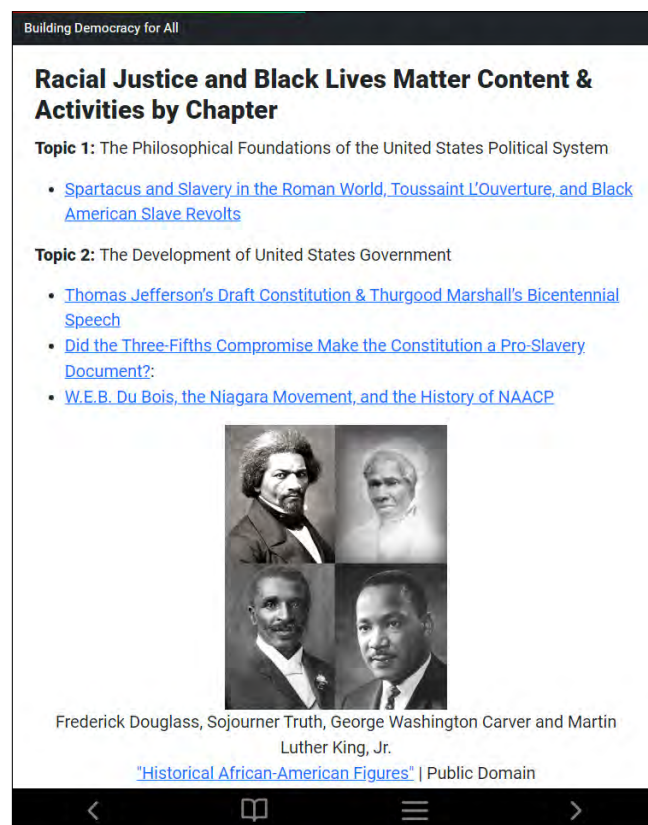
FIGURE 10. Screenshot of the Black Lives Matter Learning Pathway.

eBook that explore Black Americans' influence throughout history, including the Black American slave revolts, the Constitution's Three-Fifths Compromise, the Amistad Case, the Black Panther Party, the impacts of Black change-makers including Benjamin Banneker, George Washington Carver, Elizabeth Freeman, Harriet Tubman, Claudette Colvin, and two pioneering women cartoonists, Jackie Ormes and Dale Messick (see Figure 10).

Following this model, we developed a Student Rights learning pathway in response to recent controversies about what students could say and do in school and on social media. This pathway features cross-links to sections about students' rights at school, supreme court cases every student should know, transgender students' rights at school, and the speech rights of student journalists.

We chose the other learning pathways based on current events and ongoing political issues. For instance, the Influential Women learning pathway, featuring links to sections about the lives and times of Frances Perkins, Margaret Sanger, Dolores Huerta, Alice Paul, Helen Keller, Nellie Bly, Ida Tarbell, and Rachel Carson, was inspired by Women's History Month. While the Election 2020 learning pathway emerged from the dynamics and pressures surrounding the Presidential candidates and their campaigns leading up to the 2020 election.

The Critical Media Literacy learning pathway came from the rapid spread of misinformation and targeted disinformation, especially in communities of color, that was influencing politics and civic engagement (Austin et al., 2021). While the other learning pathways curated links to sections already in the eBook, the Critical Media Literacy learning pathway required adding new sections—in the form of callout boxes—to every chapter in the eBook. We partnered with Allison Butler, Senior Lecturer in the Communication Department and Director of the Media Literacy Certificate Program at the University of Massachusetts Amherst, and her undergraduate and graduate students, to develop critical media literacy callout boxes for each of the 50 chapters in the eBook. We linked all of these callout boxes together in the Critical Media Literacy learning pathway.

While in traditional print textbooks, callout boxes are static presentations of information related to the text, in an eBook, they can function as interactive extensions of the text. Each critical media literacy callout box consists of a short introduction that presents the need for critical media literacy as it relates to the chapter topic, an image or video to pique readers' interest in the topic, and a link to one or more activities to support the development of critical media literacy knowledge and skills (see Figure 11). The activity links take readers to the corresponding chapter in the OER eBook *Critical Media Literacy and Civic Learning* (Maloy et al., 2021),

FIGURE 11. The Role of Political Parties Critical Media Literacy Activity.

which provides more details about the topic and step-by-step directions for completing the activities.

In these activities, readers are asked to analyze social media posts, algorithms, platforms, political websites, newspapers, photographs, media coverage of political events, representations of marginalized groups in the media, sports mascots and logos, political advertisements, memes, cartoons, Tik Toks, and other ways that media intersects with the government and politics. In The Role of Political Parties chapter, for instance, readers are invited to critically examine political websites using prompts from the *Critical Media Literacy Guides* (Butler et al., 2021) and then build a website for a new political party; making sure to employ the design and persuasion techniques they uncovered during the analysis phase to influence others to vote for their party. This activity puts students in the roles of critical thinkers and active creators to build their critical media literacy skills. Rather than researching how political parties use websites to deliver messages to voters (research that teachers can certainly make part of the activity), students are asked to immediately apply what they learned about how political parties use media by constructing their own webpages, images, and messages for a new political party.

Obstacle 3: Shift to Emergency Remote Teaching

The COVID-19 pandemic-induced shift to "emergency remote teaching" (Hodges et al., 2020, para. 5) created an immense need for pre-designed, curriculum-aligned materials to support student learning in any setting, including remote, online, in-person, and HyFlex environments. While the *Building Democracy for All* eBook was filled with student-centered, technology-rich activities and multimodal content to support student learning in any setting, we recognized that educators, scrambling to adapt their teaching to multiple settings amidst the global pandemic, did not have time to browse through the more than 700 pages of the eBook to find and curate activities for their students. So, we did this work for them.

We designed a series of open-access digital choice boards for teachers, featuring thematic collections of content in the eBook, that could be immediately used by students for school or homework activities during the pandemic. A choice board is a "graphic organizer that allows students to choose different ways to learn about a particular concept" (Reinken, 2012, para. 1). In The Presidency in U.S. History & Politics digital choice board, for example, learners can choose to expand their understanding of the role of the President in the U.S. by remixing text from a historical State of the Union speech or Inaugural Address to create a new speech for a sitting President, writing a children's book about women who ran for president, designing a game to educate younger students about the presidency, proposing presidential actions related to a current environmental or social justice issue, or rewriting Article II of the Constitution in kid-friendly language, among other options (see Figure 12). Learners might choose an activity based on the topic, the

task, or the technology—that is, they might select to write a children's book about women who ran for president because they are interested in learning more about women who ran for president, or they might select this task because they are excited to write a children's book. Digital choice boards put learners in the driver's seat of their learning; and regardless of what they choose, they get to act as historians by critically engaging with the eBook material and drawing connections between the past, present, and future.

We designed the digital choice boards as Google Documents with a series of boxes in a grid-like format (see Figure 12 as an example). For each box in the choice boards, we included a title, a freely available public domain or Creative Common image, a hyperlink to a section or chapter in the eBook, and a creative learning activity where students had to do more than just recall and report information, they had to design, code, create, predict, build, analyze, evaluate, and/or investigate. The use of action verbs for creative learning activities emphasized that higher-order thinking is required to develop civics and government knowledge. Where appropriate, we chose an image for the center box to convey the overall theme of the choice board, such as the Presidential Seal for "The Presidency in U.S. History & Politics" choice board. The digital choice boards received tens of thousands of views and shares on social media, indicating that these resources were in great demand by educators during the shift to emergency remote teaching.

Obstacle 4: Politically Motivated Negative Ratings

Our final obstacle emerged almost immediately after the first sections of the eBook were published in late 2020. The EdTech Books platform allows readers to rate each chapter in an end-of-chapter survey from a scale of 1 (Very Low Quality) to 5 (Very High Quality) (see Figure 13).

FIGURE 12. 8 of the 12 Boxes of The Presidency in U.S. History & Politics Digital Choice Board.

FIGURE 13. Screenshot of the End-of-Chapter Survey in the EdTech Books platform.

Several readers posted negative ratings for chapters with content about recent elections as well as freedom of the press and media literacy. Given that the chapters without politically polarizing content were receiving high ratings (5 out of 5 stars - indicating "very high quality"), and that the chapters that were receiving negative ratings were also receiving hateful comments on social media by far-right individuals, it was determined that these negative ratings were politically motivated rather than based on the quality of the writing and content. With concerns that educators and students might not read a chapter with a low rating (even if it were high quality), we chose to use the "hide this survey" function to avoid what happens on other sites like YouTube where a resource can be followed by a string of disrespectful, and sometimes hateful, statements and negative ratings. However, this did not prevent us from receiving feedback from readers. When we shared the eBook chapters and digital choice boards on social media, we received several comments from educators, and we used these comments to make informed decisions about how to improve the eBook. For instance, reader feedback helped us realize we should revise the ENGAGE questions to have a stronger focus students developing their own views about public and educational policy questions. For example, we shifted the title and content of the section for "ENGAGE: What Latin Words and Phrases Should Every Student Know" to "ENGAGE: Should Every High School Student Be Required to Know Common Latin Legal Phrases to Graduate?" We further included a learning activity that asks students to create memes or TikToks to define Latin legal phrases to their peers to promote a wider understanding of the law. Ultimately, even though we removed the rating feature, we have still been able to collect data to continually improve our eBook.

CONCLUSION

While eBooks are becoming more widely used in K-12 schools and higher education settings, their design and format differ greatly—with far too many replicating traditional print books. In this paper, we discussed the design and development of an eBook titled *Building Democracy for All: Interactive Explorations of Government and Civic Life*. This design case offers an example of an interactive, student-centered, choice-based, multimodal, multicultural eBook.

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