DBQ Debut Design Document ECI 514

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DBQ Debut Design Document

Change Table

Instructor/Peer Feedback	Actions Taken/Implemented
[From pin-up #1] "Currency is very important and something for your team to consider as you develop your app"	We decided our app would be free. We know funds are limited, and as teachers contribute DBQs to the program, the bank will become larger.
[From pin-up #1] "An automated score for writing very interesting and complicated to build!" "Writing skills encompass quite a variety of skills pretty complex functionality here or a proprietary algorithm!"	Our app will include automatic grading using an algorithm that will scan for certain words based on the documents and examples selected. The app does offer additional rubrics and answer keys for teachers who would like to grade the writing themselves to give additional feedback.
[From pin-up #1] "[Filter are a] Very important search feature."	As teachers save their DBQ question and documents to the app, they will be prompted to create their own "tags." These tags will be used when teachers are searching for a DBQ to use. Examples: "US History" "Feudalism"
[From pin-up #2 Rough Draft] "Hmm we need more convincing details here in future versions. On an early draft, this lack of specificity is expected. As you progress further into your design work, please revisit these principles throughout your draft and add them as appropriate." Under prototype.	Added and outlined the contiguity principle, the active processing principle, the multimedia principle, giving experienced leaders more control, and keeping the wording clear.
[From pin-up #2 Rough Draft] "SAS does this pretty well. How will yours distinguish itself?" Under competing products.	I logged into SAS and completed a DBQ activity to find and discuss the specific differences between SAS and DBQ Debut. The largest difference being the immediate graded feedback (in DBQ Debut) allowing the student to edit and correct their summaries as they are working through their documents and writing their essay.

[From pin-up #2 Rough Draft] "Interesting there are a host of motivational issues to consider if you limit student's ability to progress. Will the teacher be provided support tools if kids can't move on? Will this application be feasible if the class has a huge variety of skill variances among learners? Consider how your design could accommodate those differences." Under Competing Products.	We decided that the students will be able to move both forward and backward while progressing through DBQ Debut. However, there will be a gap in their essay, if a student chooses not to complete a portion of the program. This will negatively affect their grade, as they will not have all of the required elements needed for a successful DBQ Essay. The program is designed to help students write a DBQ on their own, but the teacher should still be around for when the students are stuck.
After reading Keith's instructions in gmail	Rachel created wireframe in google slides, Tambrie and Rachel created Google Site to create basics to make screenshots for wireframe. Edited linoit and added screenshots to pin-up #2.
After reading Keith's instructions in gmail	Tambrie and Rachel created and edited wireframe. Tambrie created wireframe video, Rachel created linoit video. Websites were edited to reflect APA format.

Overview

Our "DBQ Debut" is so organized and up-to-date that students can simply fill in a digital template with a thesis, contextualization, document-based examples, supporting evidence, and historical thinking skills. They will find and select examples from an extensive "evidence bank" in order to write the perfect DBQ. This program grades the DBQ instantly and students can revise in order to earn points back. This product will consist of four elements including

- Document-based question prompts from American History time decades (1492-2000)
- Annotation tools on documents to highlight, underline, and circle text
- Space directly next to documents for students to type responses
- Drop-down menus for students to select outside evidence and corresponding evidence

This product will allow students to analyze documents and write DBQ responses in manageable segments. Prompts will include seven documents, and students will be prompted to use the content from six in order to write a response to the original prompt. Other segments of the DBQ include contextualization, or background information, historical analysis of the documents,

outside evidence, and complex understanding. This product follows the College Board AP United States History DBQ rubric, and it aligns with common core and North Carolina Essential Standards for American History.

Instructional Objectives

This program will reinforce American and World History content knowledge, help students practice historical thinking skills and provide timely feedback on DBQ construction. This program is for use in 9-12th-grade classrooms, and it will enforce the AH1.H.1.1-4 and AH2.H.1.1-4 North Carolina curriculum standards.

AH2.H.1.1	Use Chronological thinking to: 1. Identify the structure of a historical narrative or story: (its beginning, middle and end) 2. Interpret data presented in timelines and create timelines.
AH2.H.1.2	Use Historical Comprehension to: 1. Reconstruct the literal meaning of a historical passage. 2. Differentiate between historical facts and historical interpretations. 3. Analyze data in historical maps. 4. Analyze visual, literary and musical sources.
AH2.H.1.3	Use Historical Analysis and Interpretation to: 1. Identify issues and problems of the past. 2. Consider multiple perspectives of various peoples of the past. 3. Analyze cause-and-effect relationships and multiple causation. 4. Evaluate competing historical narratives and debates among historians. 5. Evaluate the influence of the past on contemporary issues.
AH2.H.1.4	Use Historical Research to: 1. Formulate historical questions. 2. Obtain historical data from a variety of sources. 3. Support interpretations with historical evidence. 4. Construct analytical essays using historical evidence to support arguments.

It will also follow the Advanced Placement DBQ rubric provided by the College Board.

Learners

Learners will consist of students in grades 9-12. All students should be enrolled in a social studies course while using this product, and they must have prior knowledge about each American History decade prior to attempting DBQ prompts in the corresponding era. Students must have a working knowledge of English literacy, and they must have basic computer skills. Students targeted will be in the Advanced Placement Capstone Program or plan to take AP United States History during high school.

Learner Characteristics

Item	Weaker learners	Average learners	Stronger learners	
Age	14	15-16	17-18	
Educational level	9th Grade	10th Grade	11th-12th Grades	
Reading level	Grade 8-9 Grade 10-11		Grade 11-12 or better	
Motivation	Low	Medium	High	
Prerequisite knowledge of computers and technology	Some basic computer knowledge	Comfortable with computers and technology	Efficiently use computers and comfortable with new technology	
Prerequisite technical and computer skills	Little knowledge of Microsoft Office applications	Some knowledge of Microsoft Office applications.	Advanced knowledge of Microsoft Office applications.	
Prerequisite knowledge of historical inquiry	ledge of historical inquiry		Broad experience working with historical inquiry – comfortable with historical argumentation	
Facility with a computer	Basic	Good	Advanced	

Familiarity with the Web	Basic	Good	Advanced
Typing ability	Basic	Good	Good
Access to computers Good		Good	Good
Access to Web	Good in general	Good in general	Good in general
Time availability	4 – 6 weeks	6 – 8 weeks	8 – 10 weeks

Context of Use

This tool will be used at home and in school by 9th-12th-grade social studies students. Students need access to computers and internet access to use this program. This interactive template hosts essay prompts, examples, and documents to guide students in creating a model Document Based Question essay. Prior to using this program, instructors must teach students historical thinking skills such as causation, continuity and change over time, compare and contrast, and contextualization. Students must learn content knowledge in World History or American History in order to use this program. After using the "DBQ Debut," students will be able to create a DBQ response following the template steps and using evidence from the documents. Pop-up assistance is provided when users move the mouse over the "help" icon in each section. This program will not require students to write a DBQ from scratch, but students should be able to do so after practicing with this template. This would be used within the formal instructional setting by individual students. Instructors may use this program to coach a group of students through the DBQ writing process, and this is designed to be used throughout an entire unit or semester as many times as needed to ensure students understand how to craft DBQ responses. A single playthrough of this product will take between 30 minutes and one hour, and a timer function is available for timed writing practice. This product will be developed independently but can be an add-on function for Albert.io and SAS Pathways writing curriculum.

Scope

This instructional multimedia will be limited in scope. The goal and idea are simple, and we want our program to be as well. The amount of time it takes for a student to complete a DBQ from start to finish will have two factors. One, the length of the document(s) being read, and two, the number of documents the students are required to read. Our program is created to teach students of varying ages and levels to write DBQs. Eighth grade students writing a DBQ for the first time will have a different experience than an 11th grade AP US History student writing their last DBQ of the year. The number of questions will range with the number of documents. Each run through will have a question surrounding the introduction, thesis, and a conclusion. Beyond that, there are three questions per document: Select the passage, reword the passage, explain

the passage, and to support the thesis. There is one screen for the introduction, one for the thesis, one for the conclusion, and one per document.

Object of the Instructional Multimedia

The instructional multimedia goal is to teach students how to answer a document-based question (DBQ). The end state that players are striving for is a well-written 3-5 paragraph essay answering a question accurately using historical documents and practicing historical thinking skills.

Universal Elements

The tools that we incorporate into the product will be easily identifiable by the users as they follow the steps to creating their DBQ. The various sections will have large text that clearly labels the steps. Additionally, the text will be inviting to the user by being in a standard font, Arial. The evidence bank will be user-friendly with labels that allow the user to find examples that match their topic. The layout of the product will also be engaging because of the use of colors that clearly distinguishes the different sections.

Competing Products

Similar instructional multimedia that already exist are SAS Curriculum pathways, Albert io, and Big History Project. Our instructional multimedia is similar to others regarding our end goal, answering a question using historical documents. Ours is different because we are not having students answer one or two questions about a single document, our program will teach students how to write an entire essay, through prompts, using documents. The questions posed by SAS are optional. SAS also does not follow the Contiguity Principle. Students must scroll up and down, multiple times to get all of the information needed. DBQ Debut also has a grading algorithm, which will score a student's summary immediately. This gives the student an opportunity to edit and revise their work before it is submitted to the work of the entire essay. Students will be able to move forward and backward through the program. If a student elects to skip a document, or a question prompted in DBQ debut, that will negatively affect their score on the essay. The program is designed to help students write a DBQ on their own, but the teachers can still be used as support if a student is stuck. Teachers can upload their own questions, documents, and rubrics to help streamline the grading process.

Motivational Issues

Students often prove arguments through writing or oral presentations. However, we have noticed that students lack the motivation to complete a writing task for a variety of reasons. Reasons include: students not feeling confident in their writing ability, students not feeling supported when writing, or students not understanding the writing process. Document Based Questions (DBQs) are a cornerstone in school studies education. Middle school through college education within the discipline is about studying the facts and then using the facts to prove your argument. Our platform will take the stress away from students and encourage them to complete the writing task. Like other platforms on the market, our tool will allow students to check and correct spelling and grammatical errors as they go through the writing process. Not only will students be supported as they write, but they will also have the opportunity to learn from their mistakes. As students use the tool over time they will become stronger in their craft and be able to write a response while using documents with ease. The tool will be designed in a way that allows learners of all levels to gain skills through work.

Reference:

The design of this product was based on instructional tools that would benefit social studies classroom teachers. Websites that provided writing content were used during the development process. By looking at competing products, we were able to find gaps in resources provided for students and create the DBQ Debut in order to meet those needs.

Books & Journals

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- Golombisky, K., & Hagan, R. (2017). White Space is Not Your Enemy: A Beginner's Guide to Communicating Visually Through Graphic, Web and Multimedia Design (3rd Edition). New York: Focal Press.
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Statement of Work

This team of instructional designers is tasked with creating an instructional multimedia app for social studies teachers to aid with the teaching and grading of document-based question essays. The team has been provided with resources from Dr. McKeown, Mr. Keith Lindsay, Dr. Evans, and a variety of resource texts.

Understanding the Scope of the Product

The goal of this product is to streamline the DBQ process for both teachers and students. Social Studies teachers can use this program to have students work with documents in a way that will help students craft quality responses to big idea questions through the use of primary and secondary resources. This program will be accessed through the internet using our free website. This product will not become quickly outdated because teachers will have the ability to upload and save their own document-based questions building the bank for other teachers to use. Document-based questions are also largely used in many Social Studies classrooms and provide a level of 21st-century thinking and skills that are not fading away any time soon.

Prototype

We created our prototype to be eye-catching, yet clean, and simple. We chose to use the Arial font. The background colors are bright, and no pictures will be used in the background while the students are working. Since the students are reading documents, we did not want background images to be distracting. Each page has easily identifiable buttons. The button location differs depending on the screen. The home screen buttons are located in a different area from the

on-screen prompting buttons while the students are working. While creating the prototype we considered the following principles:

- The Contiguity Principle: This principle regards the relationship between graphics and text, and we do not want our students to struggle in connecting the pieces that should fit together. We are aware of the violations of this principle and know to avoid them (Clark & Mayer, 2016, p. 109). It is most effective to present text and graphics together rather than separately on a screen because it avoids splitting users' attention (Clark & Mayer, 2016, p. 92). Our product will have space for users to type directly next to primary and secondary sources such as speeches, political cartoons, and articles. This will allow users to focus on the task at hand without distraction. We will also provide further information about the documents through mouse-overs where the text pops up as the mouse rolls over the document/graphic (Clark & Mayer, 2016, p. 93). We will include hyperlinks to further information as well, giving students access to approved historical content for the course and prompt.
- The Active Processing Principle: from the Knowledge Construction View, "learning occurs when people engage in appropriate cognitive processing during learning, such as attending to relevant material, organizing the material into a coherent structure, and integrating it with what they already know (Clark & Mayer, 2016, pg. 54)." This principle is a basic outline for the purpose of DBQ debut.
- <u>Multimedia Principle:</u> We have images with text that provide clear examples to students. We check each step of the process to ensure that there are no barriers to student learning. In doing so, we want students to be successful even if teachers are not around. That said, we hope that the images provide enough detail to students that are stuck in the process. We do not want to add too much, because in doing so the product will lose its purpose as students will either be distracted or confused.
- Giving Experienced Learners More Control: As students use the DBQ Debut tool, they will be prompted to craft a DBQ by highlighting documents, rewording evidence, creating a thesis, and selecting outside information from evidence banks. Users will have diverse learning backgrounds and abilities prior to using this tool, so allowing users to pace themselves and access learning support will improve the tool (Clark & Mayer, 2016, p. 320). We will also use section tabs in the left-hand frame to provide menus for students to select specific prompts within time periods. There will be links place within the window that allow learners to access content from other sites on the internet or documents/learning support from other prompts in this program. Pop-up assistance will be provided in order to give learners additional information about the document or instructional help without the learner having to leave the screen. Finally, users will access forward, backward, and quit buttons to pace among pages within the prompt (Clark & Mayer, 2016, p. 320-321).
- Keeping the Wording Clear: "The theoretical rationale against adding extraneous words to multimedia presentations is based on the cognitive theory of multimedia learning, which assumes that working memory capacity is highly limited. Adding extra words to a multimedia lesson can interfere with the learning process" (Clark & Mayer, 2016, p. 155). We want to ensure that any text that we include on the product is in the

text that is readable and does not overwhelm the reader. So far, we are doing a good job of keeping text to a minimum.

Reviews

Tambrie, Rachel, and Kristofer communicated multiple times a week and edited each Pin-up prior to submission. They delegated work for the group, and they made sure that everything was finished prior to submission, regardless of which member was supposed to complete the work. Our group utilized Google Hangout meetings and text conversations to discuss the product. We were timely and professional in our meetings. Each of us had assigned elements of the project, and most of the group took on the responsibility to complete them. Our goal is a comprehensive common program.

Signoffs

Dr. McKeown and Mr. Keith Lindsay have final say in our completed app. They have put forth the requirements of the project and the tasks needed to complete a final product. Other groups will also have a chance to give feedback on our app is finalized. We will listen and take their feedback seriously. All elements of the app are important and valued regardless of which group member completes it.

Conclusion

In meetings with the group, work was delegated, and most members were extremely productive and helpful. We continue to set high expectations for one another, and the product DBQ Debut should reflect the hard work that went into its creation. Texting, phone calls, and Google Hangout were the simplest ways to communicate, as was communicating in chats in Google Docs as we worked on the product. Towards the end, email proved to be the most effective.

Timeline

Description	Date
Introduction of Project and Pin-up #1	2/11/19
Group Work Time (Each group member reviews expectations for the Precedent study and begins task)	2/15/19-2/23/19
Pin-up #1 Complete	2/24/19

Group Work Time (Team members review client feedback and discuss changes to be made while reviewing expectations for Pin-up #2)	2/28/19-3/3/19
Group Work Time (Team members begin working on Pin-up #2.	3/4/19
Group Work Time (Review feedback from client and discussion about what adjustments will be made moving forward)	3/18/19
Wireframe and Linoit are created and added to Pin-up 2 document based off feedback from instructor.	3/30/19
Group Work Time(Team members will review expectations for Pin-up #3)	4/8/19
Pin-up 3 final document was created	4/12/19
Group Work Time (Group members will collaborate to create storyboard and assess any feedback that is given)	4/10/19-4/21/19
The technical demonstration video was created. The Final Document for Pin-up #4 was created	4/24/19
Group Work Time to review video and make final revisions to the document before final submission	4/30/2019
Final Project Deadline	5/1/19

Media Fidelity Chart

		Degree of Fidelity	
Asset Type	Low (Hand-drawn, low quality, minimal	Medium (Some digital representation and editing, attempt to integrate assets, some talent used	High (Approaches comparative levels to other products on the market)

	budget, no professional talent used)	or available)	
Text		Text will be Arial font that will be created via google doc.	
Images		Images will be either high-resolution copy-right free photos found on various media sites or will be created by the team using photo editing software.	
Editing Tool		Students will be able to correct grammatical errors in their writing using software that is found on similar platforms. All of the examples were created using digital software.	

Screen Captures, Linoit Board, Storyboard, and Technical Demonstration

<u>Linoit page</u> contains screenshots of a basic layout of the program, questions and comments we had, and notes for the project. Included are images of hand drawn sketches of the program, and the wireframe video.

First video of the Linoit page describes the development of the screenshots and layout.

A <u>storyboard</u> created in Google Slides shows further development of the design concept.

<u>Video</u> of the Storyboard describes the flow of the program from a users perspective.

A technical demonstration video shares our vision for this product.