



Discreet Sexual Education

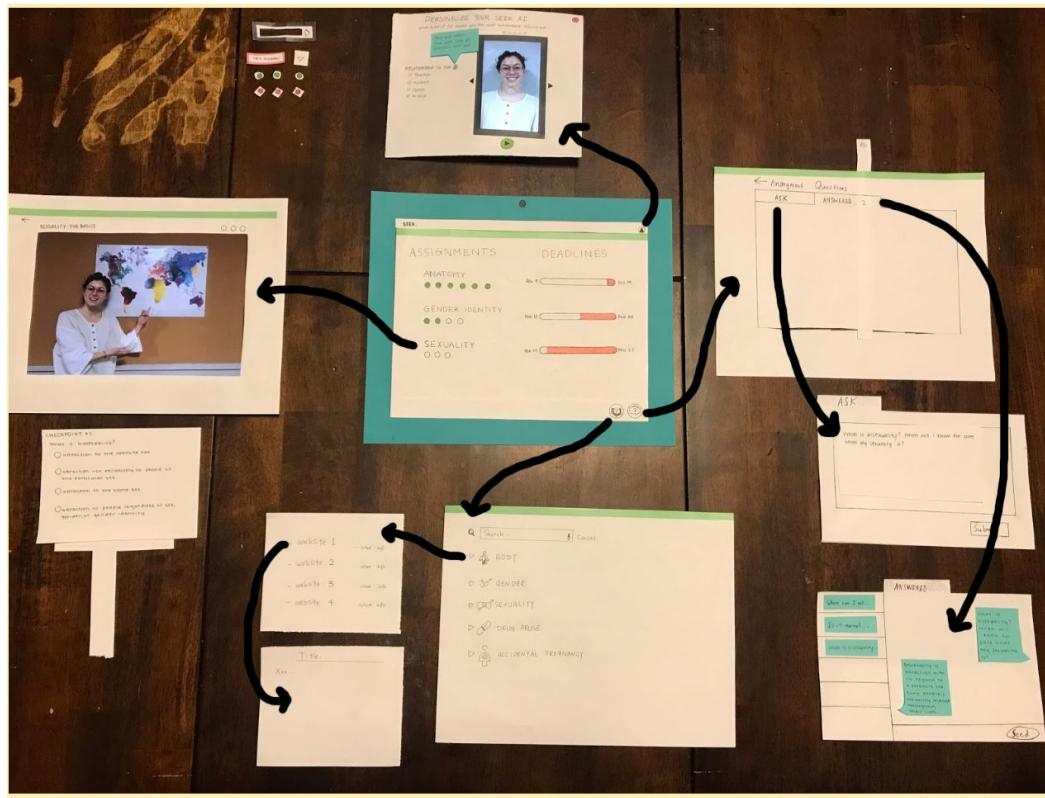
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Problem & Solution Overview

The goal of our design is to supplement classroom sex education by providing students a interface they trust through which they can get access to highly reliable and relevant information. We do this by understanding individual students needs and making the coursework more relevant to them, and by providing discreet access to reliable information. The Seek interface lets students complete homework in the form interactive videos, which are taught by and instructor they can customize to their comfort, and who learns to cater more specifically to their needs as students interact with site. We provide a resource center of highly reliable catered content as well as a direct anonymous line to their class instructor, both of which they can use to get their questions answered.

Initial Paper Prototype

Our initial paper prototype centered around a homepage that displays a list of class assignments.

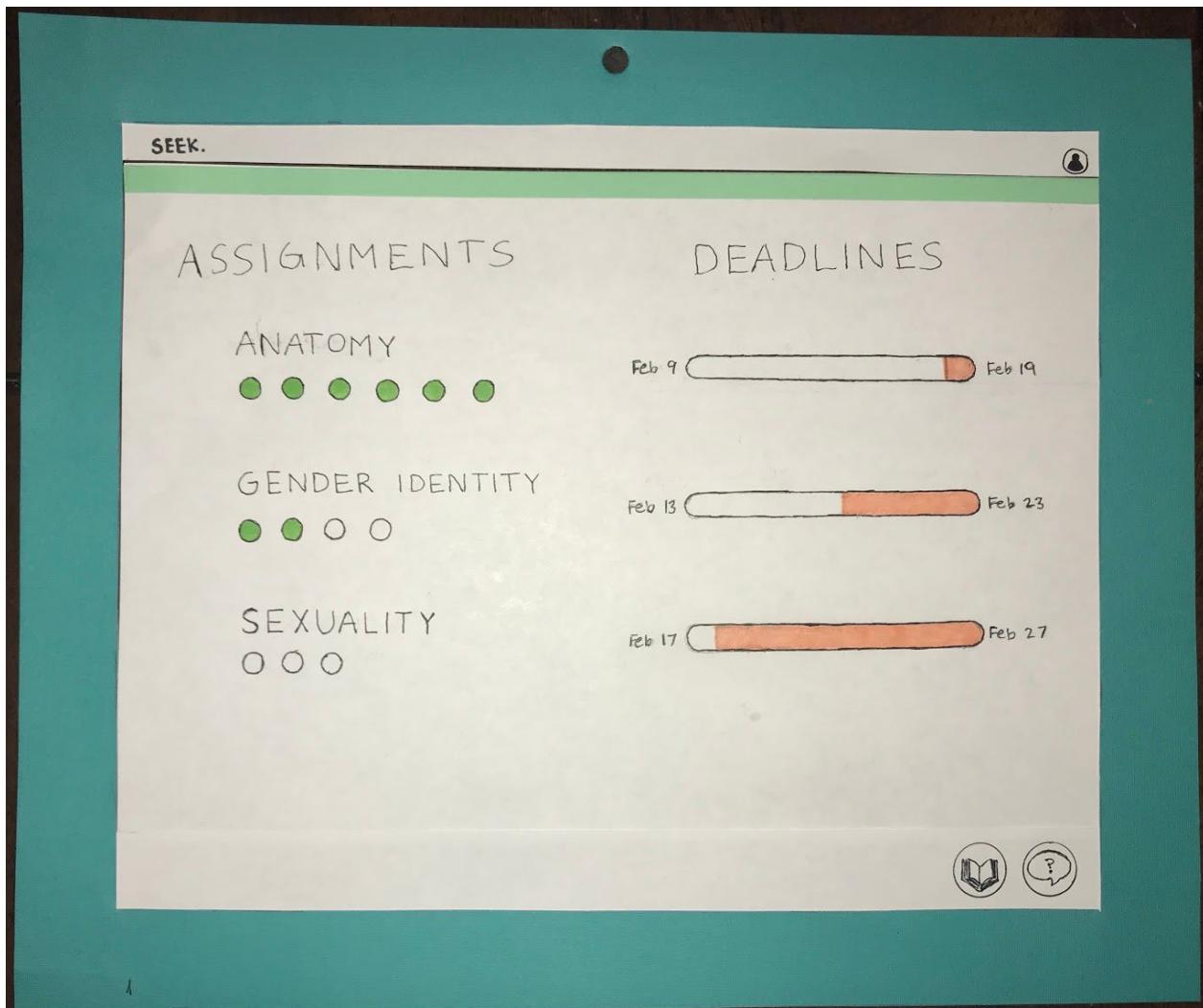


(Figure 1.0) Black arrows represent immediate connection. The interface has a persistent header and footer shown on the central screen, allowing the student to access the major areas of the interface. The teal frame represents the frame of the computer screen.

Task 1: Using AI to tailor content

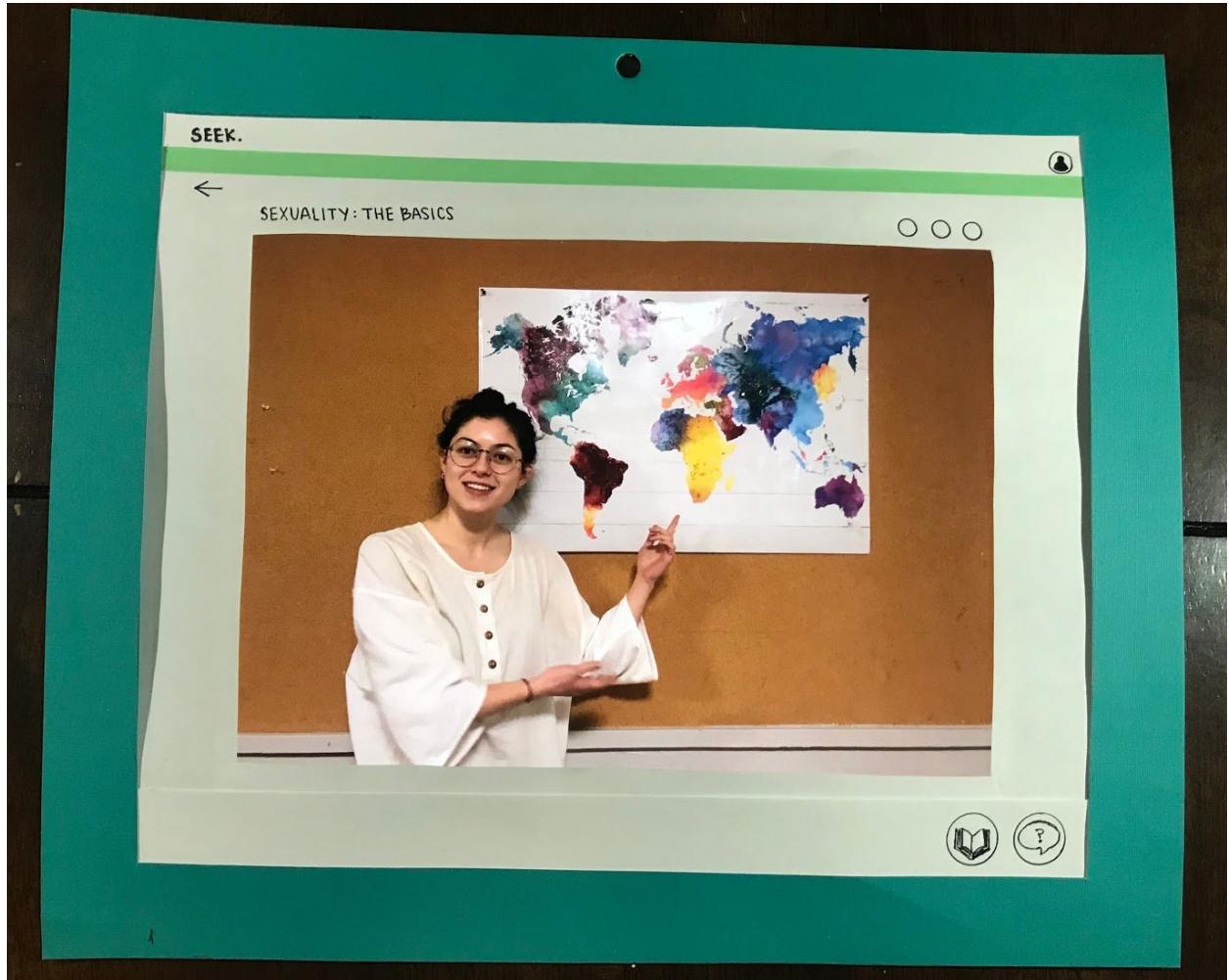
The following images and descriptions demonstrate how the course can be tailored to individual students through a personalizable AI agent. This enables students to complete homework and learn material relevant to them without judgement from an actual person, and they can customize the look and personality of their agent in a way that makes them most comfortable interacting with it.

Student begins at the home page, which displays assignments and deadlines.



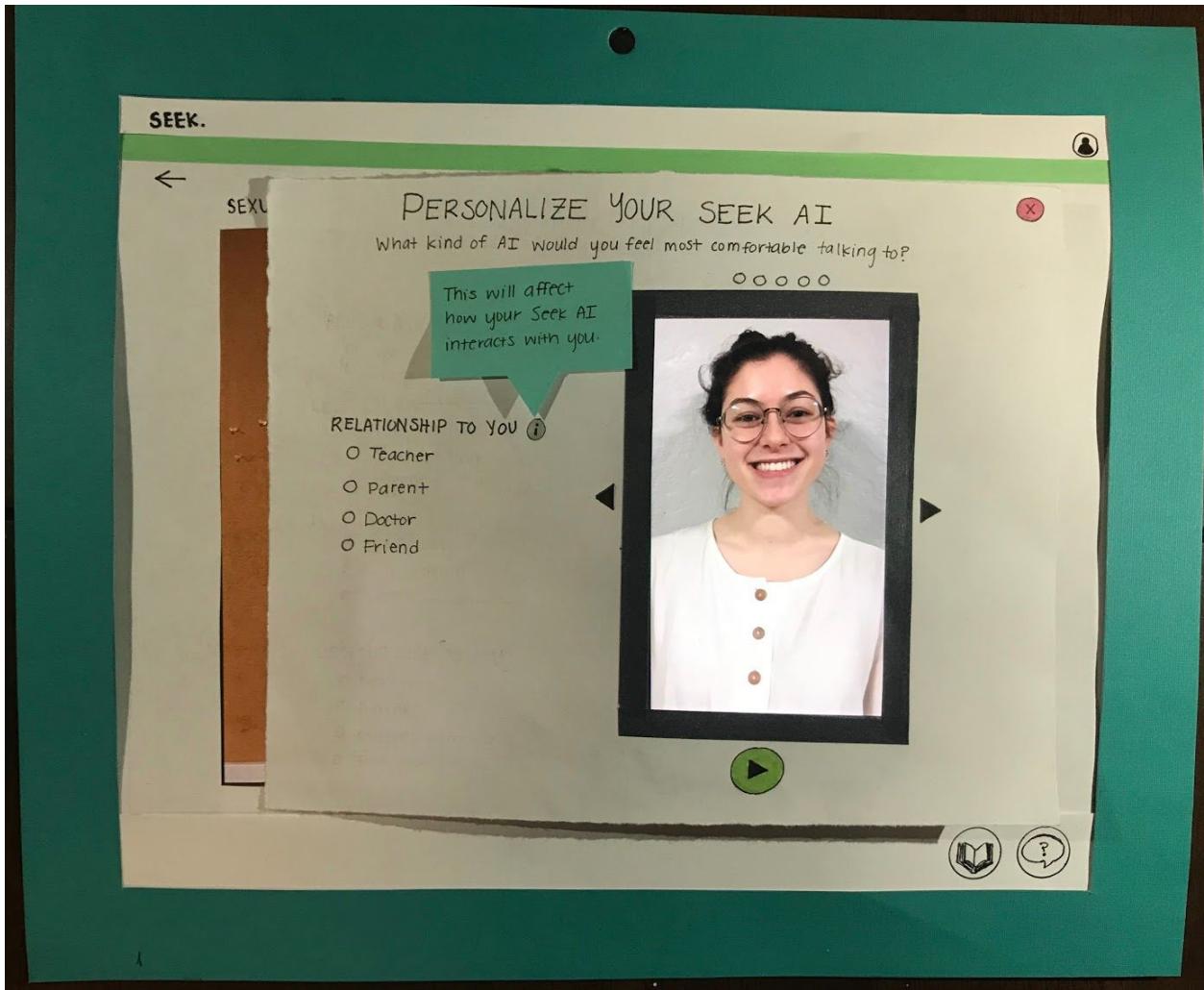
(Figure 1.1) Displays assignments with progress bubbles (green fill indicates completion of a checkpoint) and assignment deadlines with timeline bars indicating time left before due date.

Click on 'Sexuality' assignment → Opens interactive video led by a personalizable AI.



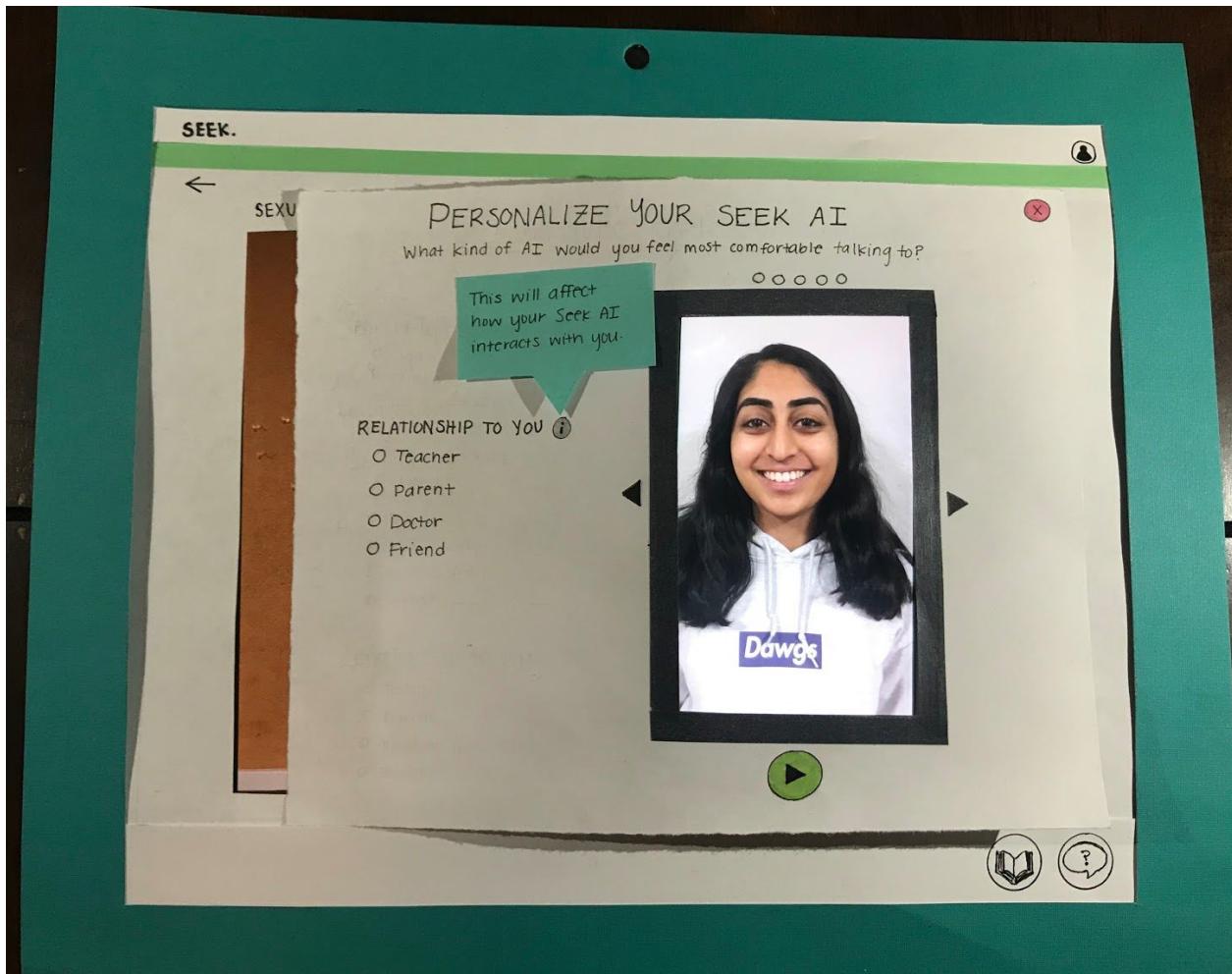
(Figure 1.2) Interactive video with default AI (shown here as a real-life person, but intend to make this an animated character) starts playing.

Don't feel comfortable with this representation of the AI. Click on 'Personalization' button in top-right corner to change it → Opens AI personalization pop-up.



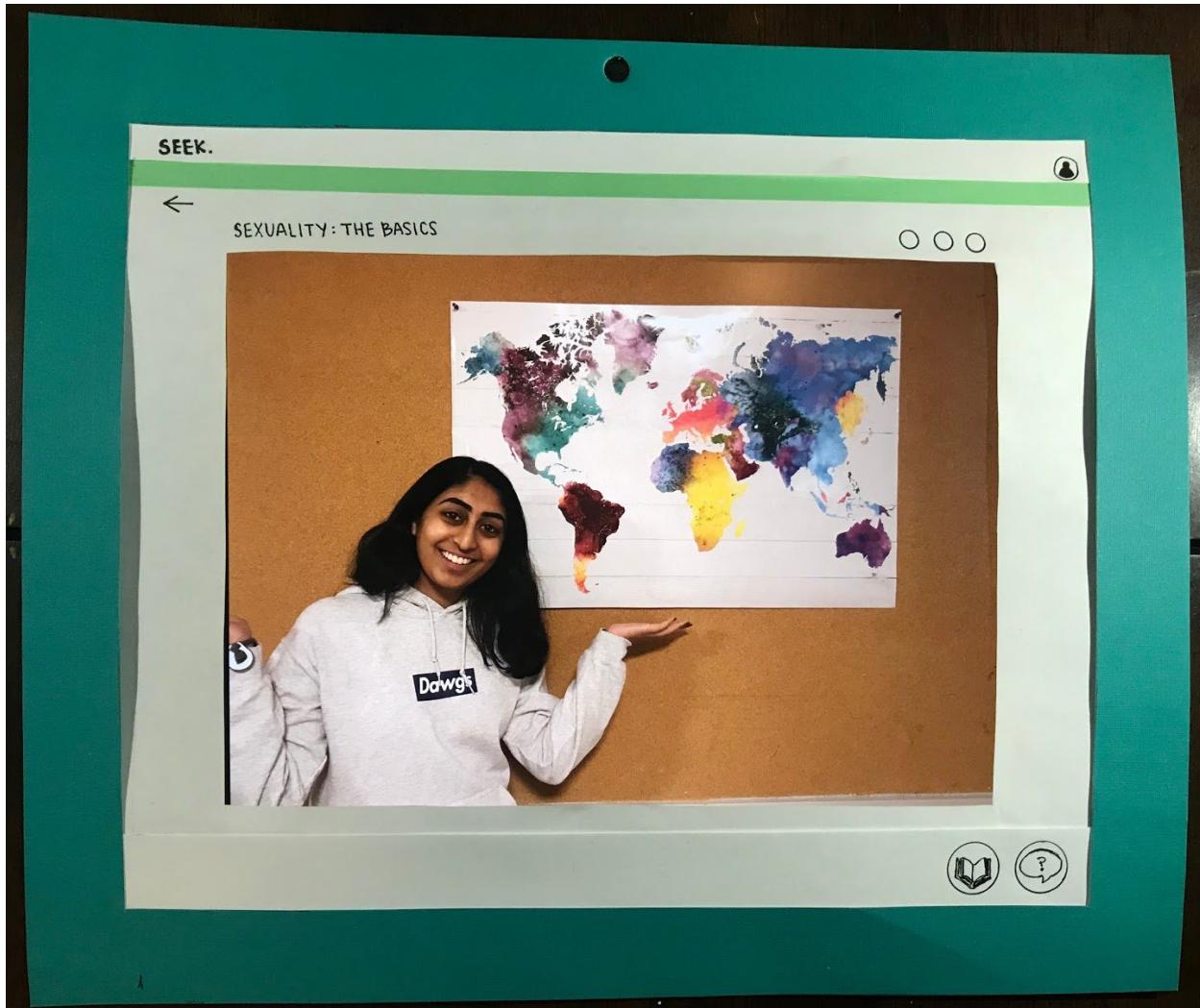
(Figure 1.3) Screen pops up where you can choose the AI that you want to present the content to you. Can also choose how the AI will interact with you by choosing an option in the 'Relationship to You' section, or leave it as 'Teacher' default.

Click the arrow button to the right of the photo preview → Displays a different AI representation.



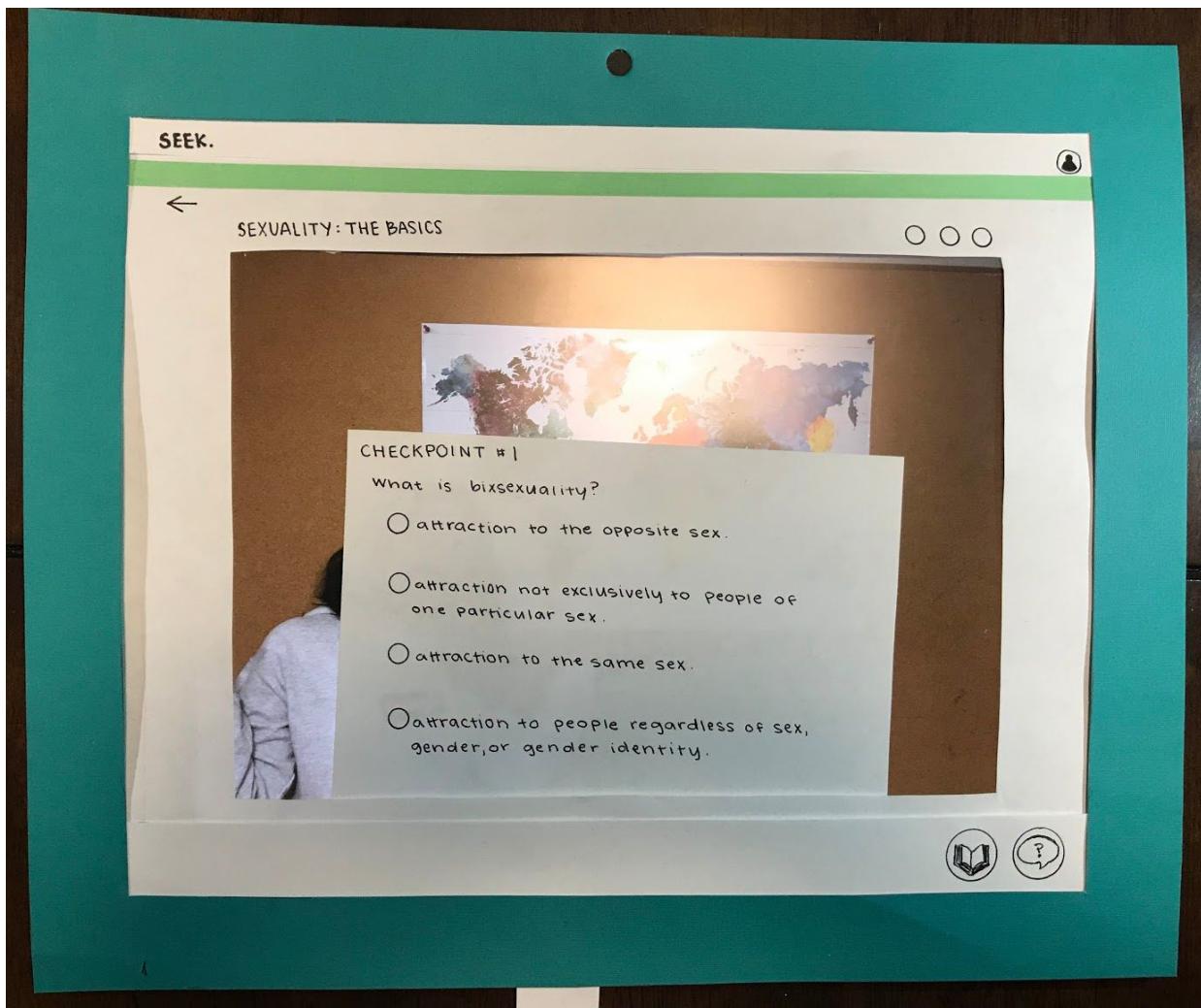
(Figure 1.4) Pop-up screen now displays a different AI representation. Can preview this AI by pressing the 'play' button underneath the photo preview. Can also exit out of the pop-up at any time by pressing the X button in the top right corner.

Press play button to watch chosen AI speak. Satisfied with this representation, so click the 'X' in the top right of the pop-up to save changes and return to the previous screen.



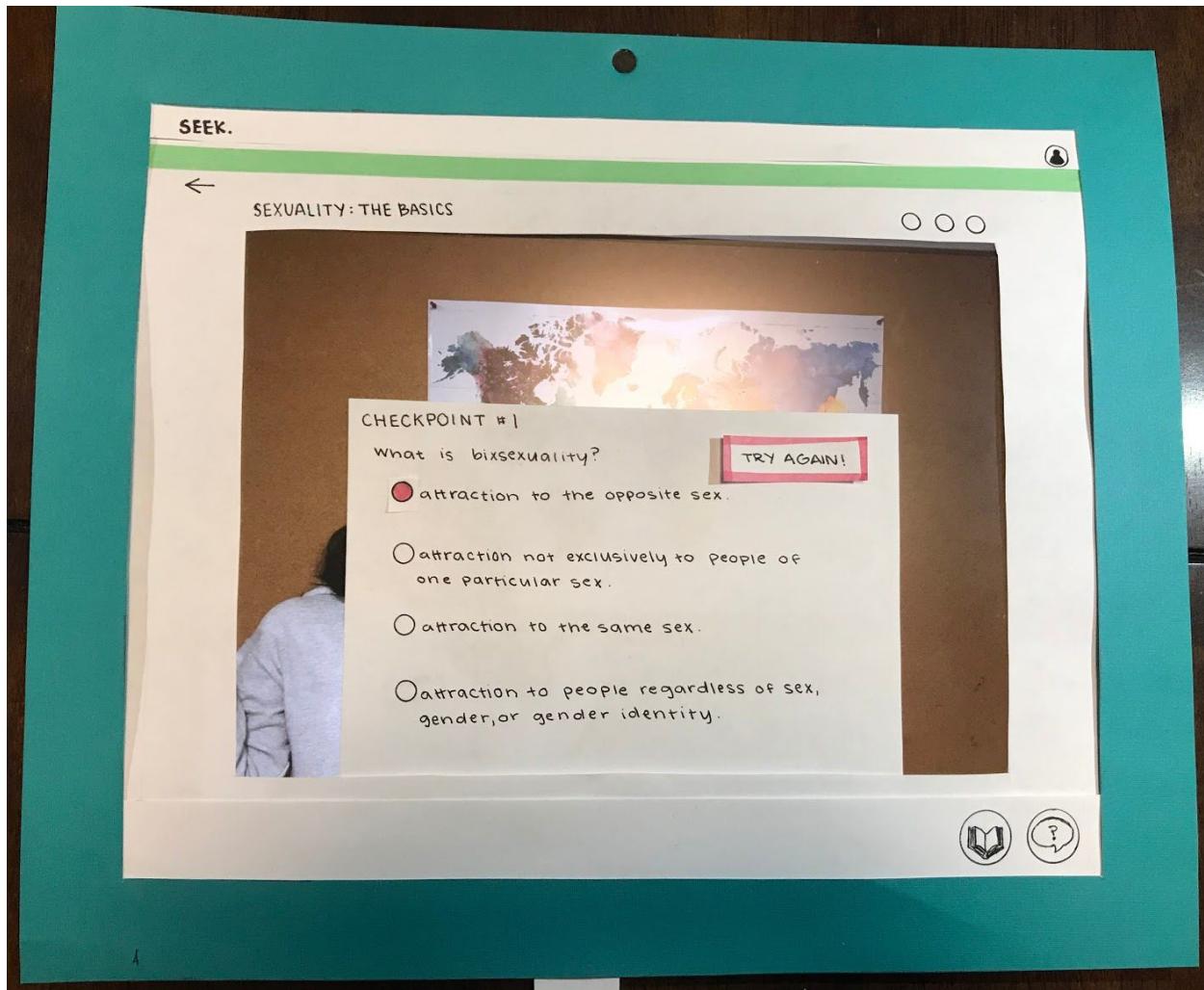
(Figure 1.5) The AI chosen in the “Personalization” section will determine what form the AI will take from then on.

Continue watching video until graded checkpoint is reached.



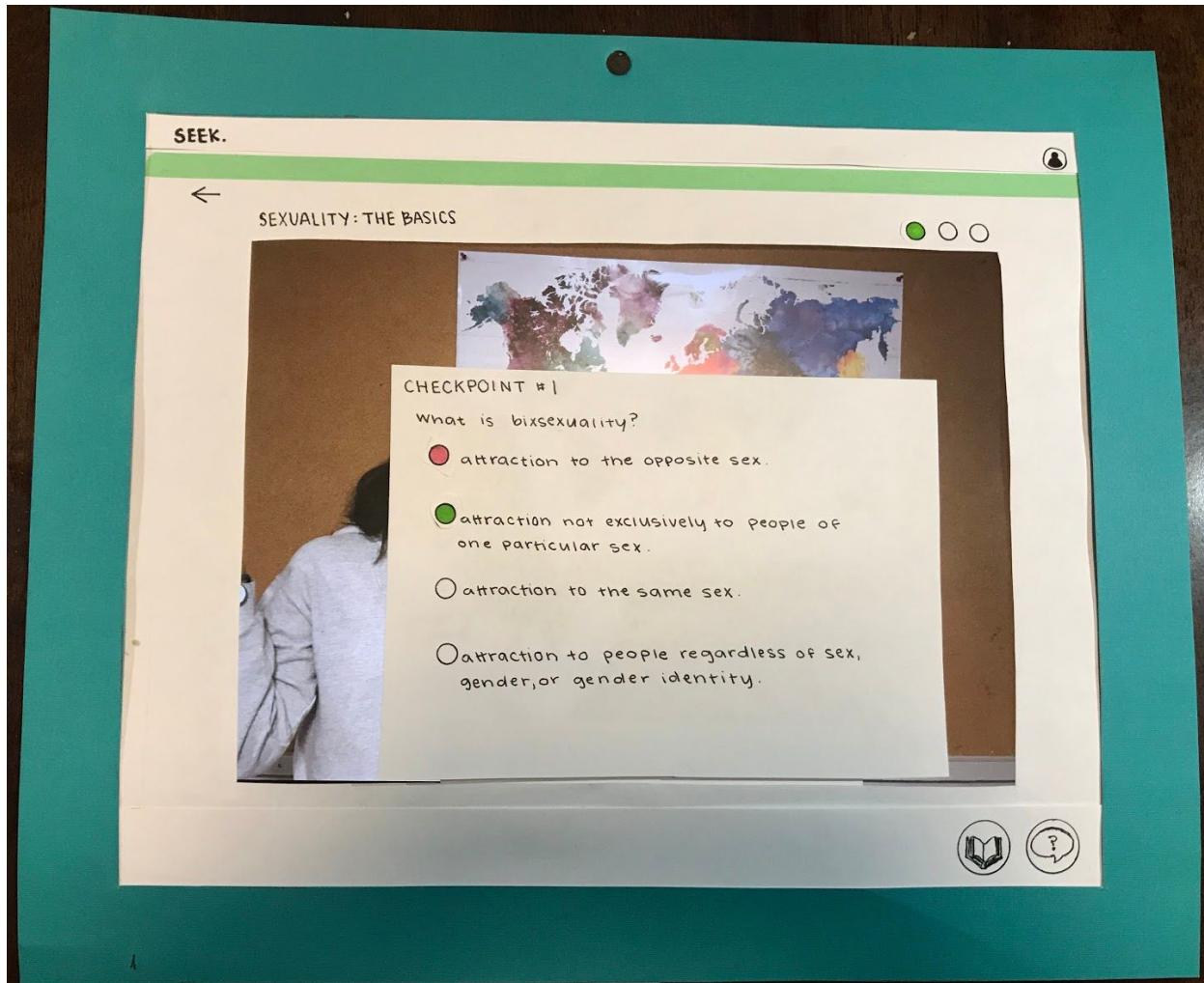
(Figure 1.6) Checkpoint boxes will appear periodically throughout videos, prompting the student to choose the correct answer, summarizing the previous section of the video.

Click on the answer that you think is correct.



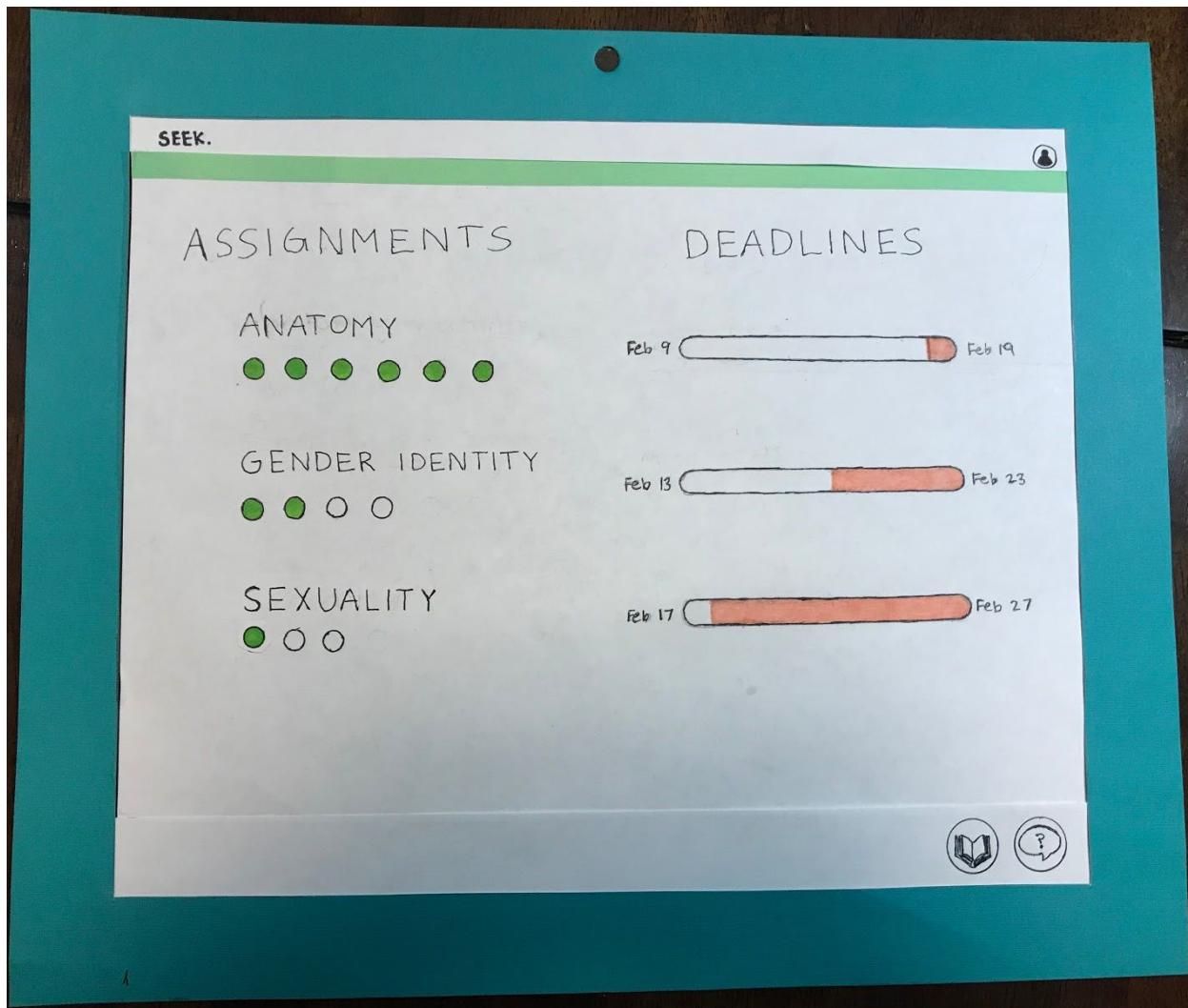
(Figure 1.7) Clicking on an incorrect answer will mark the answer red and prompt the student to try again.

Click the correct answer.



(Figure 1.8) Clicking the correct answer will turn the answer green and fill in a checkpoint marker in the upper right portion of the page to show that a checkpoint has been completed. The AI will ask if student has any questions after each checkpoint, using the discussion to tailor following lesson content to student needs. Then videos continues (if checkpoints remain) or will exit to the homepage (if all checkpoints are complete). Student can press the back button to leave at any time, saving current progress.

Press back button → Takes student back to main page.

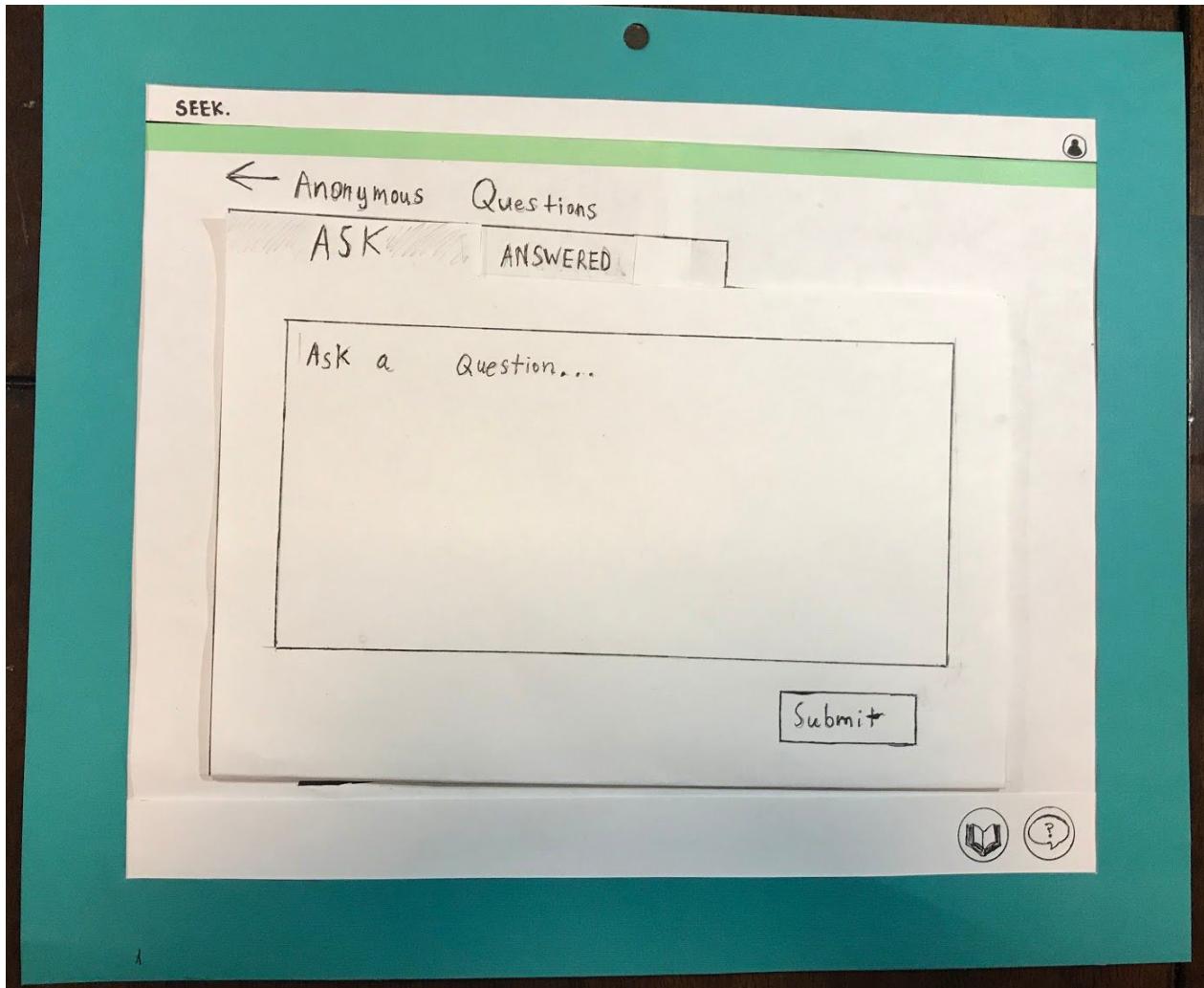


(Figure 1.9) Same home page displaying assignments. Now 'Sexuality' section has a progress bubble filled in to show that one checkpoint of three has been completed.

Click the 'Question' button in the bottom right section of the footer (the rightmost button).

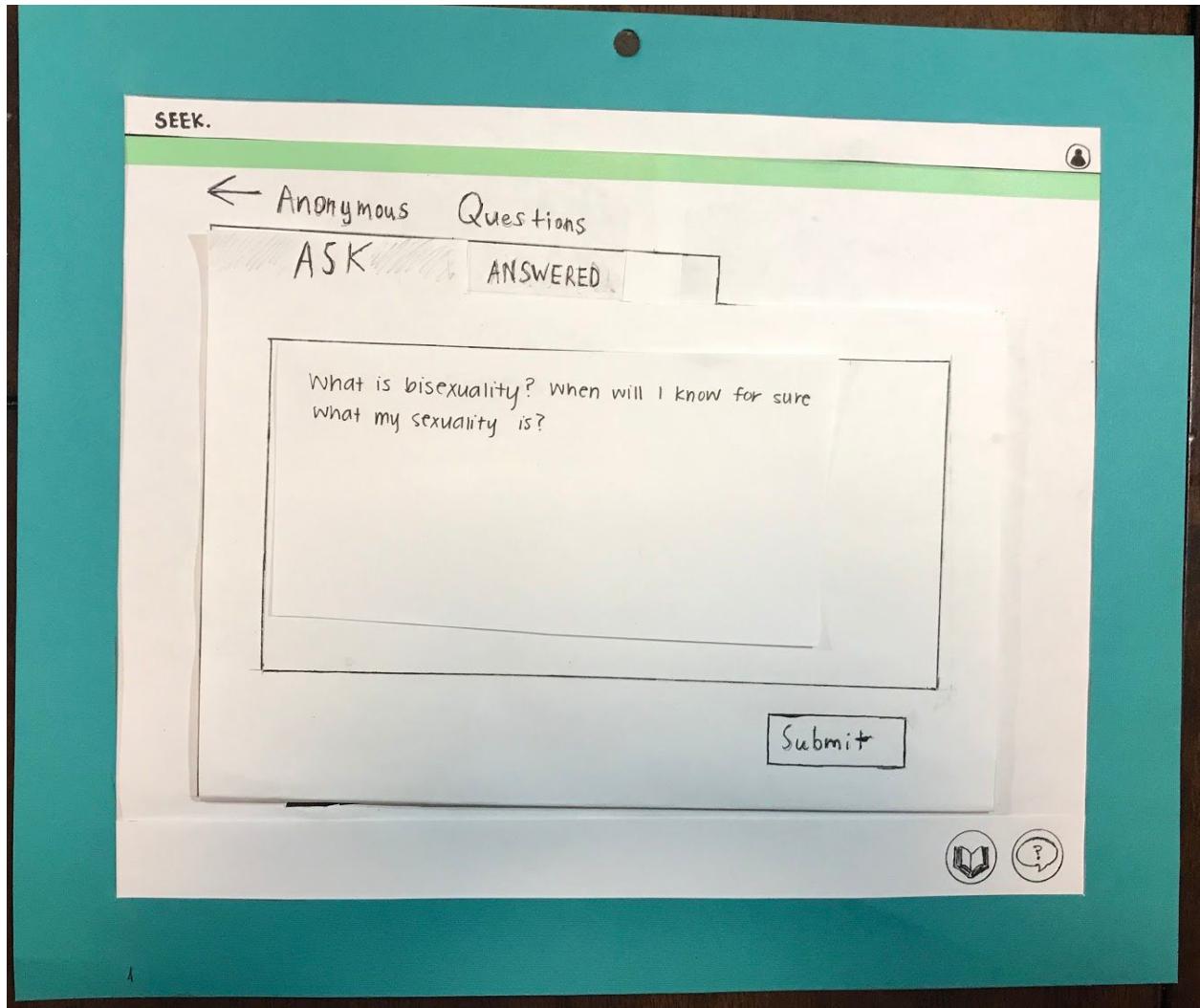
Task 2: Procuring answers to questions anonymously

Our prototype allows students to submit anonymous questions to their teacher through a form, creating a new Question thread. They are alerted when new answers are available. They can then ask additional follow up questions for each thread they have formed through the chat window. Students can also find answers to their questions through the resource center, which links them to reliable outside resources about several topics.



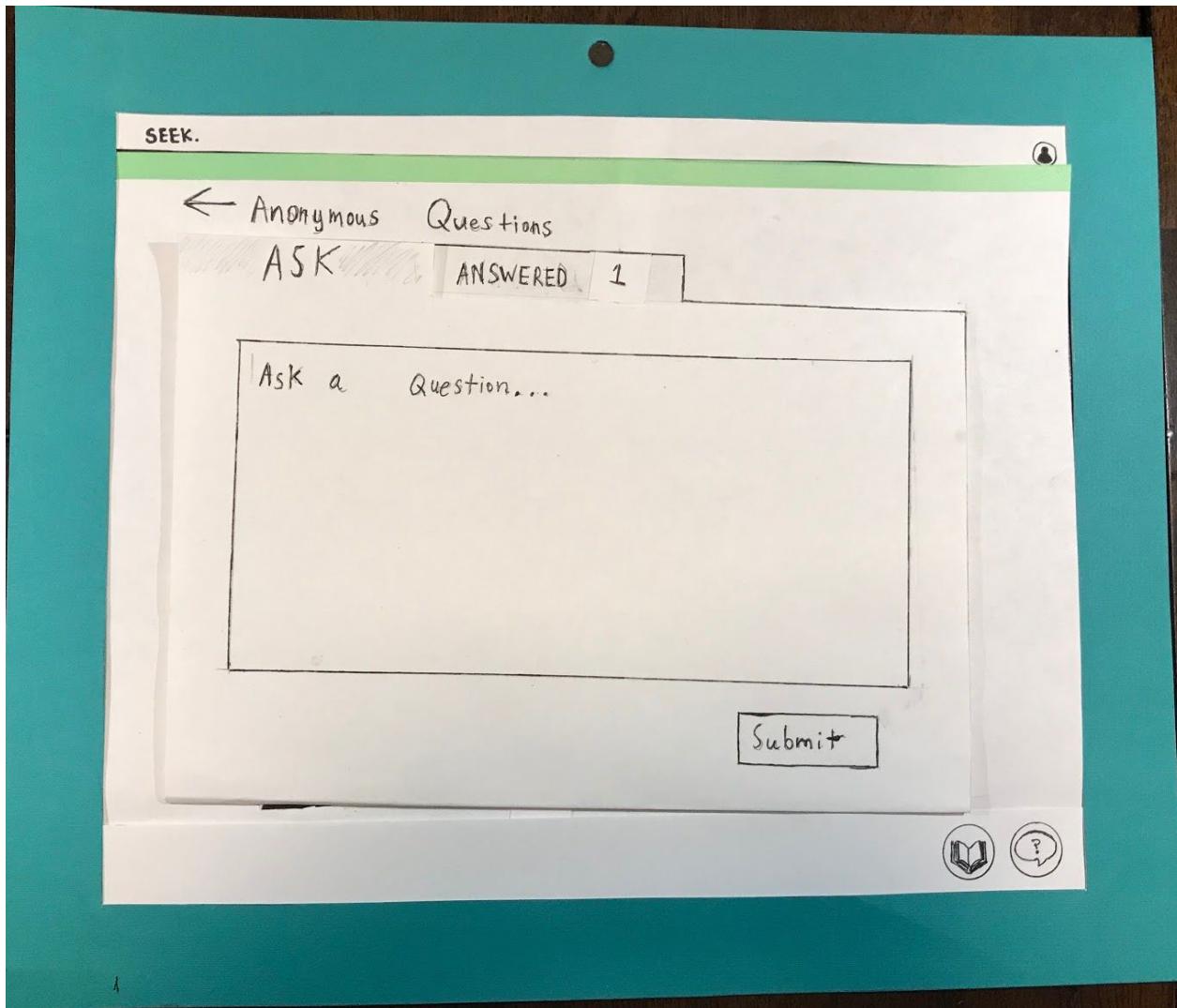
(Figure 2.0) When a student first navigates to the anonymous question page they will see a form where they can submit questions.

Type in the text box to write a question.



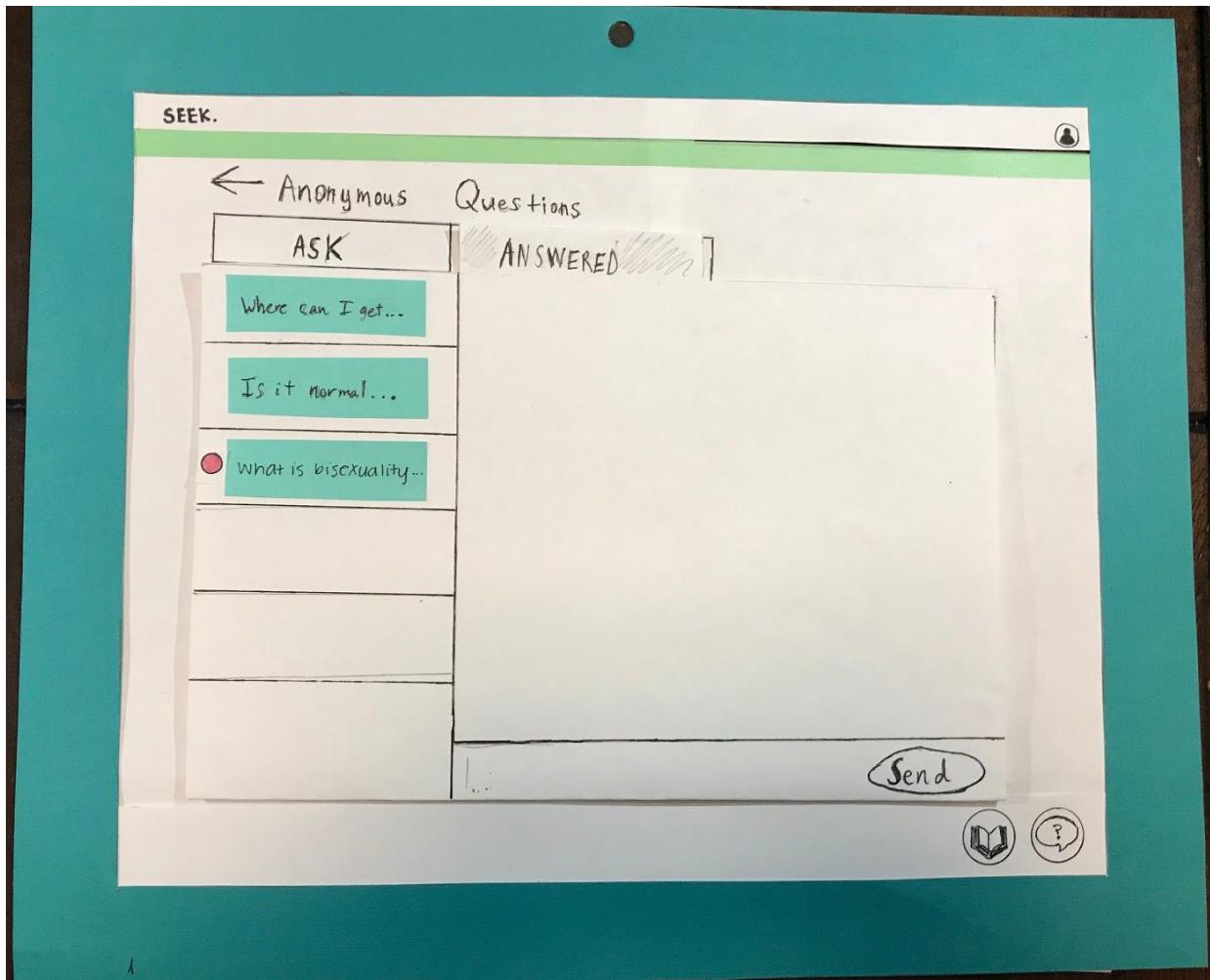
(Figure 2.1) After typing in a question, students can press the “submit” button to send the question to their teacher, who will be able to see and respond to the question without knowing which student asked it.

Click ‘Submit’ to anonymously ask a question to an instructor.



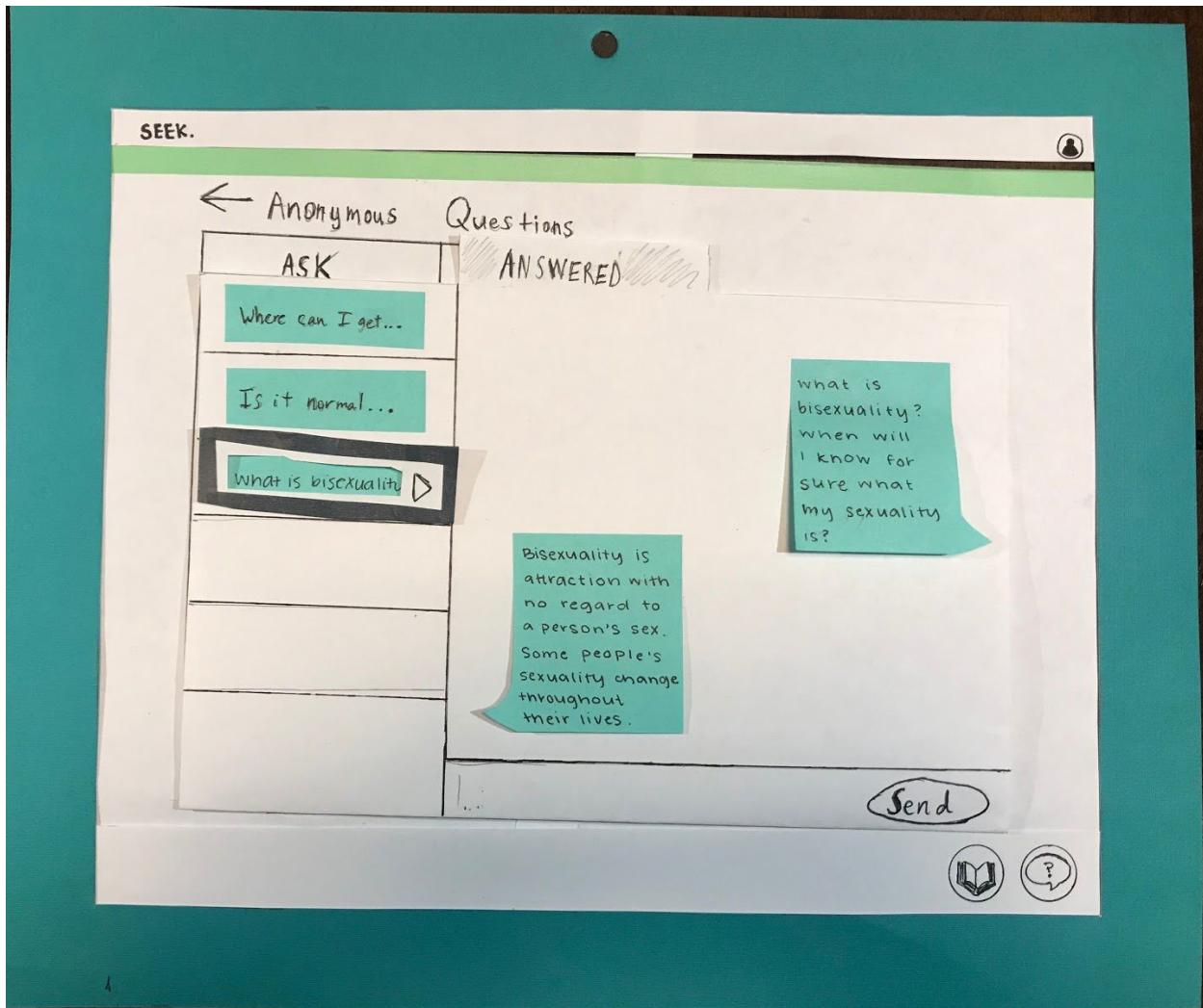
(Figure 2.2) Once the teacher answers the question, the answered tab will display a notification indicating they have 1 unread response.

Click the 'Answered' tab to view answered questions.



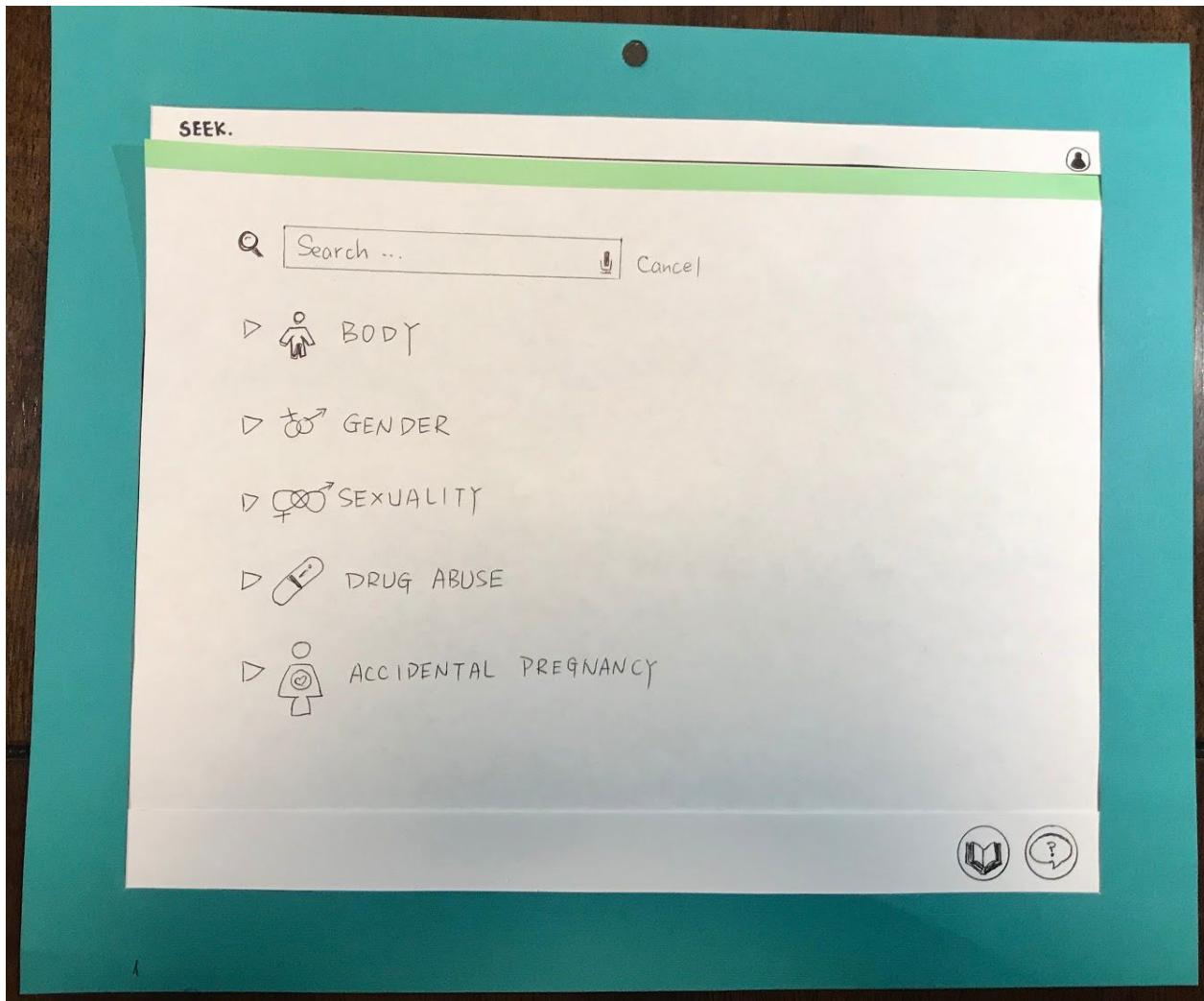
(Figure 2.3) “Answered” tab displays all question threads started by the student. They can see a new thread has been created for the question recently asked, with a red circle next to it to indicate that it contains an unread message.

Click the unread thread to view the unread message.



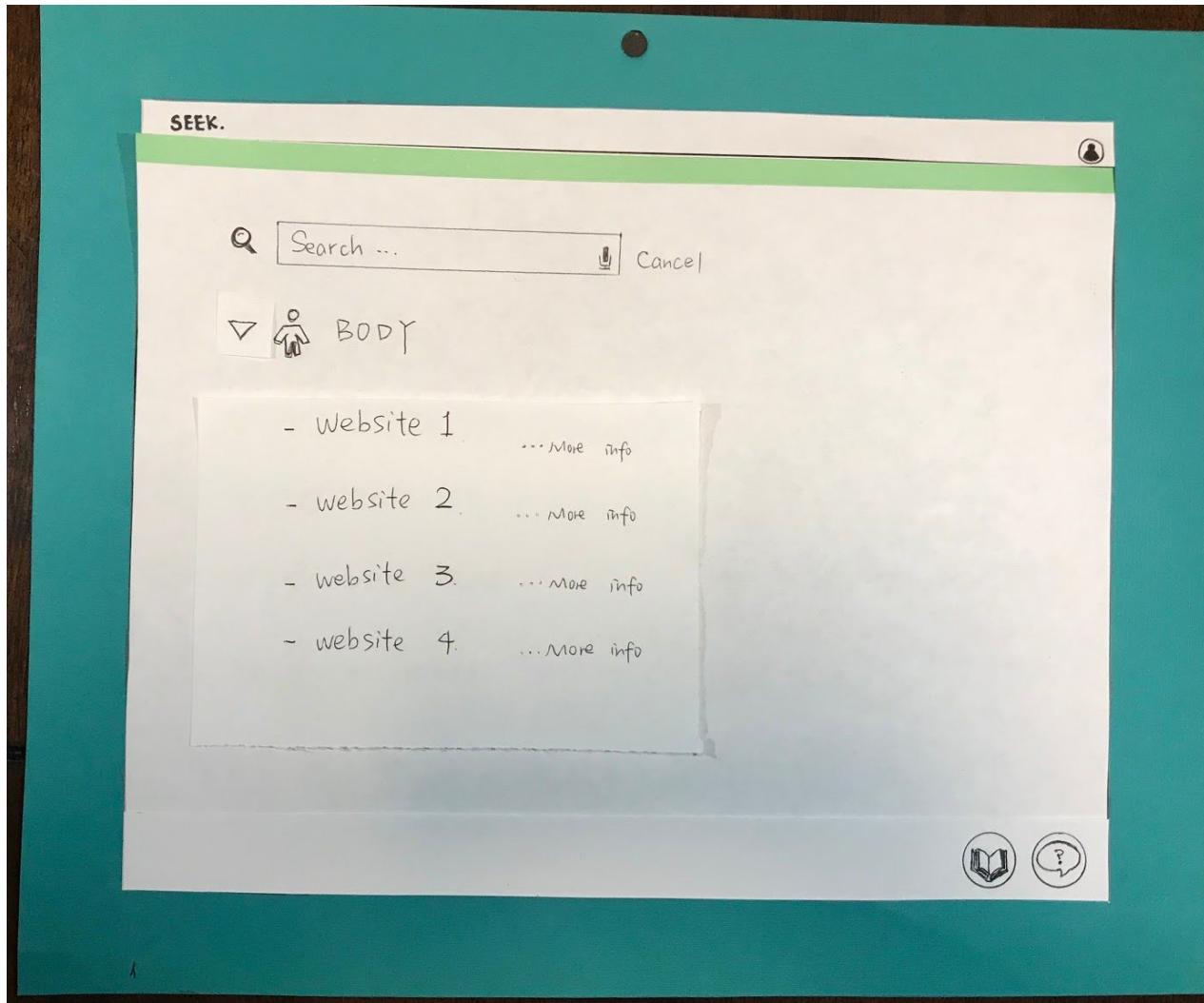
(Figure 2.4) By selecting the thread with the indicator, the chat window is populated with their question and the answer. A black window surrounds the thread to indicate that it is currently being viewed. Follow up questions can be asked by clicking the textbox in the bottom of the screen and then pressing send.

Click the 'Book' button in the bottom right side of the footer to access the Resources page.



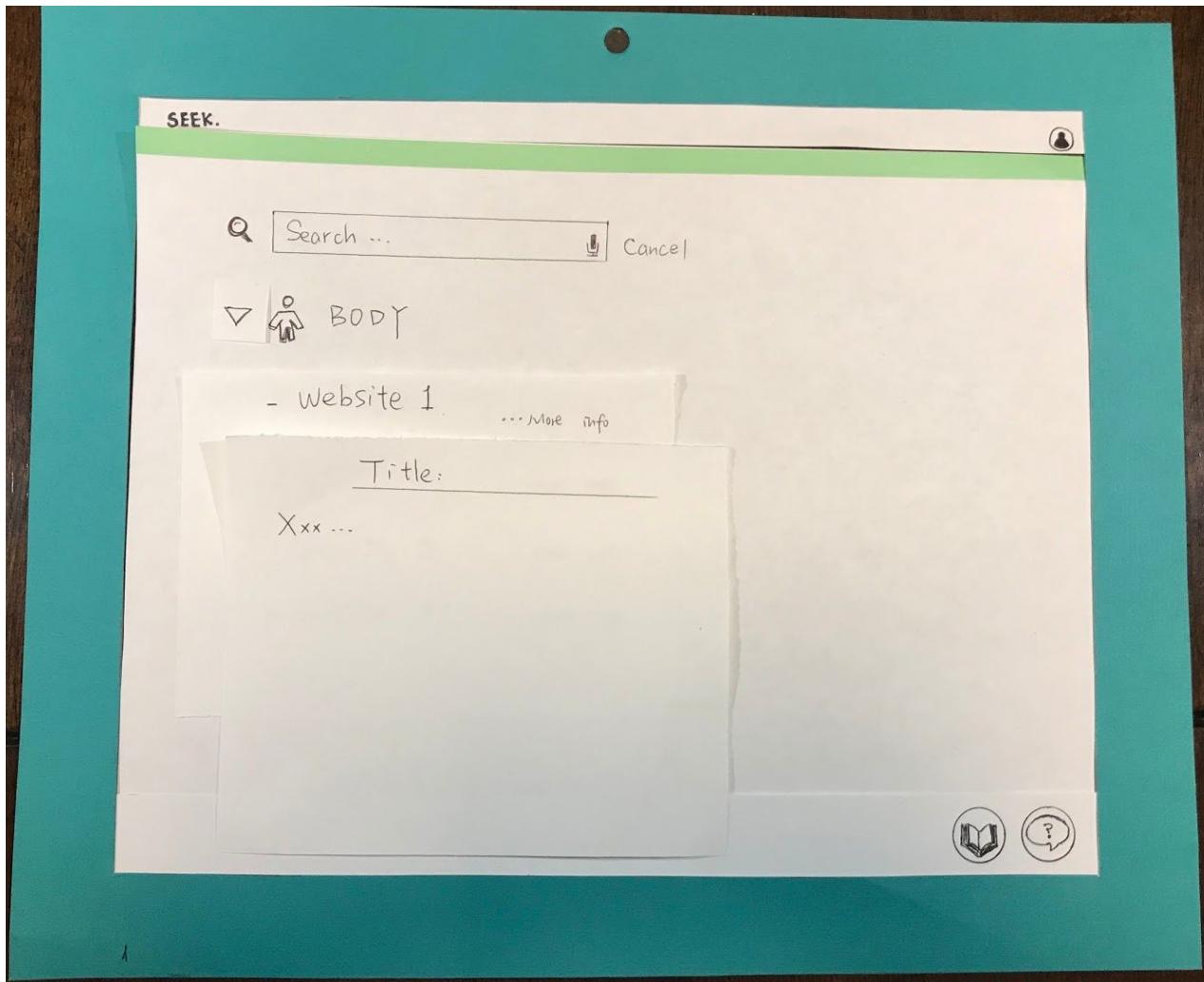
(Figure 2.5) Students can search or scroll to find a topic to expand.

Click the 'Body' topic to view resources.



(Figure 2.6) Clicking a topic will expand to show a list of websites about the chosen topic, along with the option to view descriptions for each website. Clicking on a website will redirect to the clicked website. Clicking the topic again will collapse the topic.

Click '...More Info' next to Website 1 to see more information about the site.



(Figure 2.7) The article title relevant to the expanded topic and information about the website will be displayed.

Testing Process

Heuristic Evaluation

We began our testing process by conducting heuristic evaluations with two different students in our class. As instructed, we used Nielsen's 10 Usability Heuristics to group the issues we found with our prototype. We also had our participants rate the issues they found on a severity scale from 1 to 5.

We began our heuristic evaluations with a brief summary and description of our project to get the participants up to speed with what they would be evaluated. To differentiate this from a user test, we walked participants through our two chosen tasks by doing them ourselves while explaining what we were doing. The participants freely wrote what they saw on notecards while we presented. After we completed our two tasks, we answered questions and the participants explained their issues in more detail than what they could write on their cards. We conducted both heuristic evaluations in the same way, without changing our process.

After we finished our heuristic evaluations, we made changes to our prototype to address issues found before we moved onto the more involved usability testing.

Usability Tests

After completing the two heuristic evaluations, we moved on to conducting three usability tests. All three participants were UW students, slightly older than the target age of students using our project (19-21). One usability test was conducted in a group member's apartment, the other two were conducted back-to-back in the Gates Center.

To conduct the usability tests, we followed a script (linked in the Appendix) to give a summary of our project and its goals and then walk the user through a sequence of actions that add up to accomplishing two separate tasks. After both tasks had been completed, we answered questions and let users elaborate on issues they had during the usability test. We did, however, make some changes to the script and action sequences between usability tests after realizing that we may be missing some insights in our tests. For example, we switched some actions in task two to see how a participant would choose which icon corresponded to the "resource center".

After we finished our usability tests, we made changes to our paper prototype to address unearthed issues before moving on to creating our final digital prototype.

Testing Results

Heuristic Evaluation Results and Changes

Our heuristic evaluation results mainly focused around the affordance of buttons. Specifically, the participants illustrated the following issues:

- The participant found that it is not clear that you can click the subjects on the Assignments page to access homework.
- The participant noted that the “Customize SEEK Agent” button looks more like it would link to a profile.
- The participant noted that pressing “X” to automatically save changes in the “Customize SEEK Agent” screen doesn’t seem natural.
- The participant noted that the “Resource Center” buttons looks more like it would link to a textbook.

We learned from this heuristic evaluation that many of our perceived affordances from icons don’t hold true across many users. On top of this, we learned that users find “Save” buttons very important and feel uncomfortable with automatically saving changes without any indication that something has saved.

To address these issues, we made the following changes:

- We added a highlighting ability when a student hovers over a homework topic on the assignments page to indicate that the student can click the topic.
- We changed the icon for the “Customize SEEK Agent” icon to resemble a gear rather than a person.
- We added a save button on the “Customize SEEK Agent” page in order to allow students to be sure that their changes have been saved.
- We changed the icon for the “Resource Center” to resemble a magnifying glass hovering over a computer screen.

Usability Test Results and Changes

Our usability test results focused still on the affordance of buttons, but also focused on misunderstanding on how customization of the SEEK Agent works. Specifically, the participants had the following issues:

- The participant was confused that clicking the save button on the “Customize SEEK Agent” page didn’t automatically close the page.
- The participant found the “Customize SEEK Agent” icon resembled an icon for a settings page, but didn’t know exactly what was for until they were instructed to customize their SEEK Agent.
- The participant was confused by the difference between choosing the relationship with the agent and the look of the agent.

- The participant did not know what the “Resource Center” icon linked to.
- The participant was confused how to access the websites linked in the Resource Center.

We learned from these usability tests that many of our perceived affordances from icons still didn’t hold true for many users. We also found that we didn’t give enough explanation on our “Customize SEEK Agent” and “Resource Center” pages.

To address these issues, we made the following changes:

- We changed “SEEK AI” to be “SEEK Agent” to make the purpose of the agent as a conveyor of information more clear, and to differentiate the agent from the course instructor.
- When the save button is pressed, the “Customize SEEK Agent” page automatically closes and the preferences are saved.
- The “Customize SEEK Agent” page displays automatically when a student first logs in to set initial preferences and teach the user what the upper-right icon means.
- We have added a step-by-step process with explanations and progress bar to help users distinguish between different steps of the customization process for the “Customize SEEK Agent” page when they log in for the first time.
- After so many issues with the bottom icons, we removed graphic icons and replaced these with hyperlinks named after the page they link to.
- To indicate that websites on the “Resource Center” page can be clicked, we added an underline to afford clickability (like a hyperlink).
- We filled in same titles and description in the “Resource Center” as the vague placeholder text confused participants.

Design Critique Results and Changes

Our design critique happened in class with two separate TAs. It focused on the addition of extra functionality within tasks and addition of descriptions. Specifically, the TAs suggested the following changes:

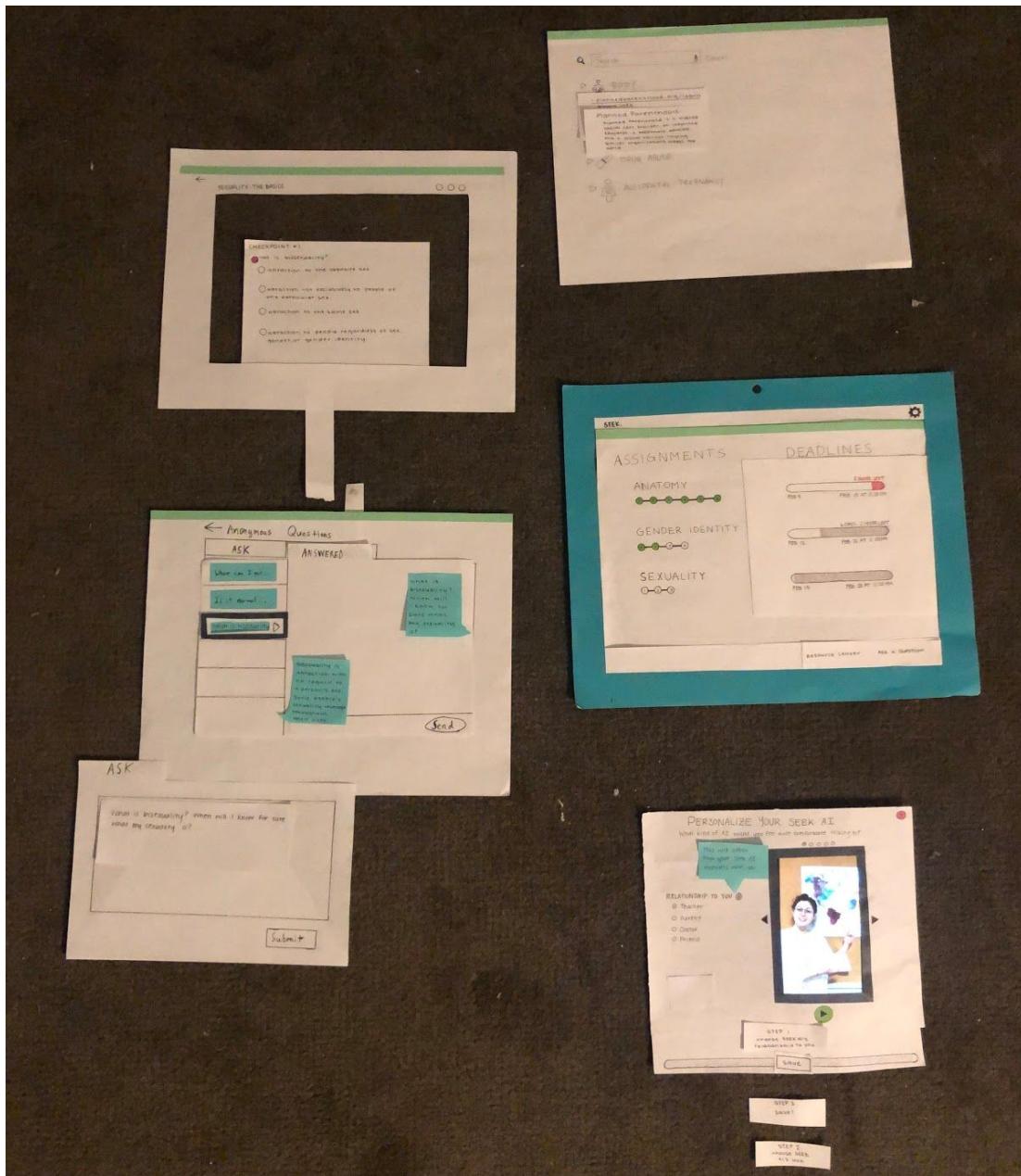
- Show access to only one step at a time during the first access to the customization of the SEEK Agent so users don’t confuse the description of the steps with another option.
- Add a “link to question” option in the “Resource Center” page to better tie together actions in our second task and allow students to give context to teachers when their questions pertain to resources provided in the “Resource Center”.

We ended up implementing both of these suggestions as we thought that they promoted cohesion between different actions in our project and also ensure that students understand how to correctly use the “Customize SEEK Agent” page.

Final Paper Prototype

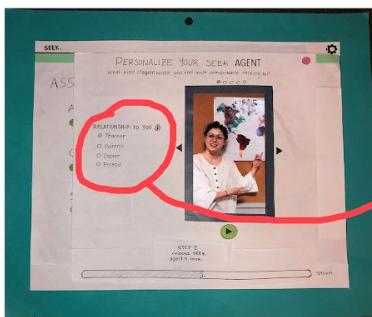
Overview

Below is the overview of our final paper prototype. We kept all of the strong features of our initial prototype and modified parts of it to incorporate the changes described above from our testing process. The critical aspects of our prototype remain the same, but we introduced more clarity into a student's experience while using them.

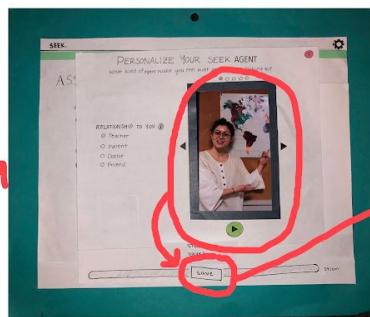


Task 1: Engaging with tailored content

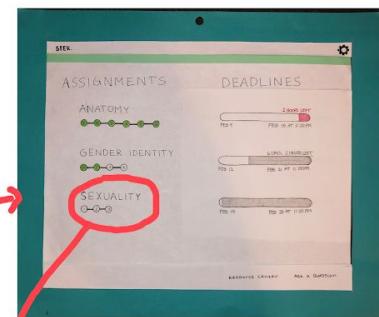
The major changes in the execution of task 1 from our initial prototype involve the AI Agent Personalization pop-up, mainly establishing its existence and usage. Since this page is now the first to be displayed when a student opens the application for the first time, students will now be aware of this feature so they can access it in the future. In addition, the progress bar and step-by-step instructions makes it much clearer to students how to change the two customization options, as well as how each option affects the agent's representation. Pressing "Save" also causes the pop-up to close, so students do not have to take the extra step of pressing the "x" button. Once at the "Assignments" page, the completion of assignments and changing of agent customization using this prototype is nearly identical to that using the initial version.



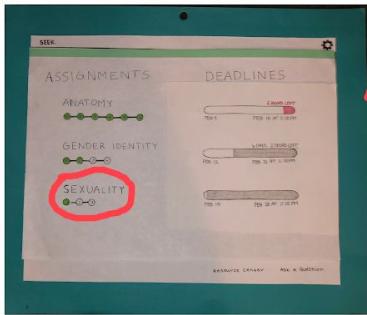
The student will set their Seek Agent preferences on their first login. First they will choose the Seek Agent's relationship to them.



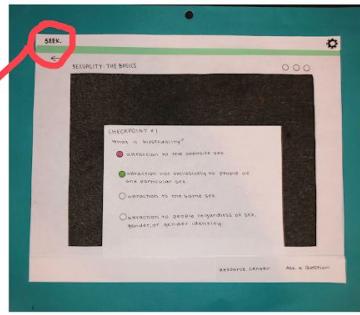
The student will then choose the Seek Agent representation that they want to see, then click 'Save'.



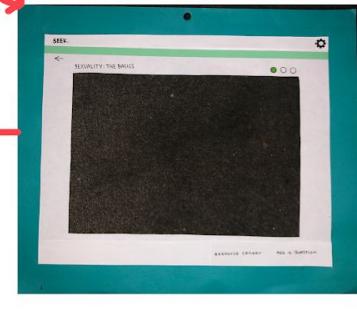
From the main page, student can view assignments and deadlines. From here, they can click on an assignment to work on completing it.



When the user returns to the main page, their checkpoint information will be recorded.



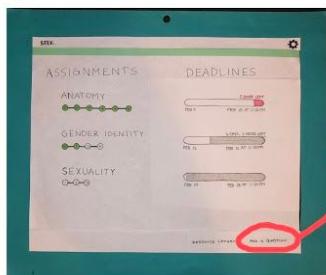
Checkpoints throughout the content ask the student to answer questions about the content that they have learned. When a student answers the question correctly, they will finish a checkpoint.



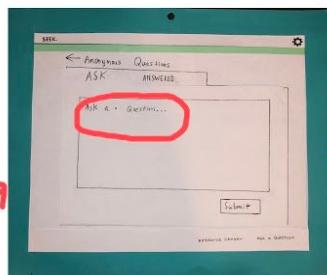
From an assignment page, the student will interact with their SEEK agent to learn the assigned content. They can ask questions intermittently and the agent will pull factual data to answer.

Task 2: Procuring answers to questions anonymously

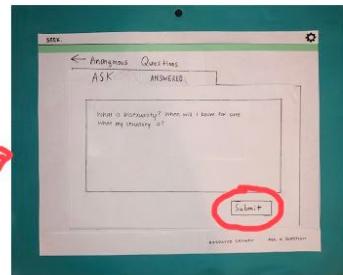
Our final prototype solves the confusion that participants had about the affordances and functionalities of buttons while completing task 2. Students can now clearly understand the features behind the two footer buttons because of their descriptive labels. The walkthrough of the “Anonymous Questions” feature is relatively unchanged from our initial prototype. In the Resource Center, students will now know that each resource in the list is clickable and will redirect them to a website because the underlined URL, replacing an unmarked title, clarifies that it is a hyperlink. The “More Info” feature still exists from our initial prototype, but the caret next to each “More info” button enables students to minimize the description after opening it rather than it persisting.



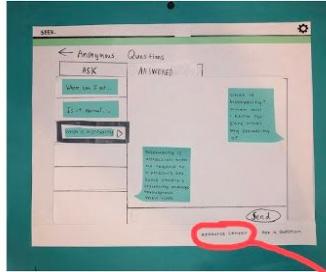
The student can ask a question by pressing the “Ask a Question” button on any screen.



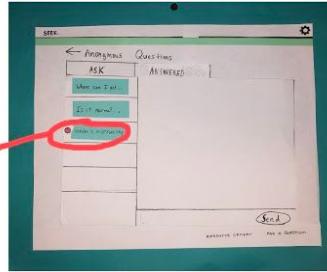
The student can fill in their question in the box that says “Ask a Question...”



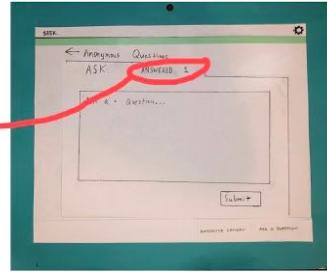
After asking a question, the student will press the “Submit” button to create a new anonymous thread with their teacher.



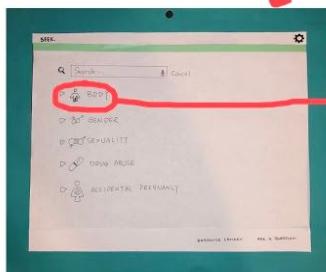
Students can respond to the thread if there are any follow up questions that need answered. The student can access the resource center by clicking the “Resource Center” link on any page.



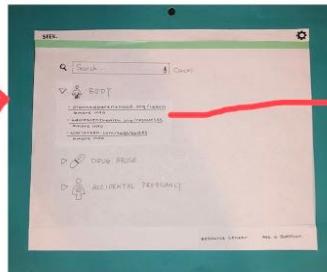
Unread messages will have a red mark next to them. Clicking any message preview on the side will open the exchange in the space to the right.



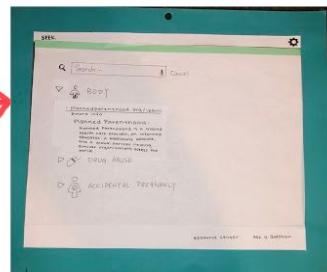
When a student’s question is answered, there will be a notification of the number of unread messages on the “Answered” tab. The student can click the “Answered” tab to see previously answered questions.



The resource center shows resources sorted by topic. Students can either use the search bar or click a topic to view applicable resources.



Clicking a topic will expand to a list of resources. Clicking a resource will link to that resource.

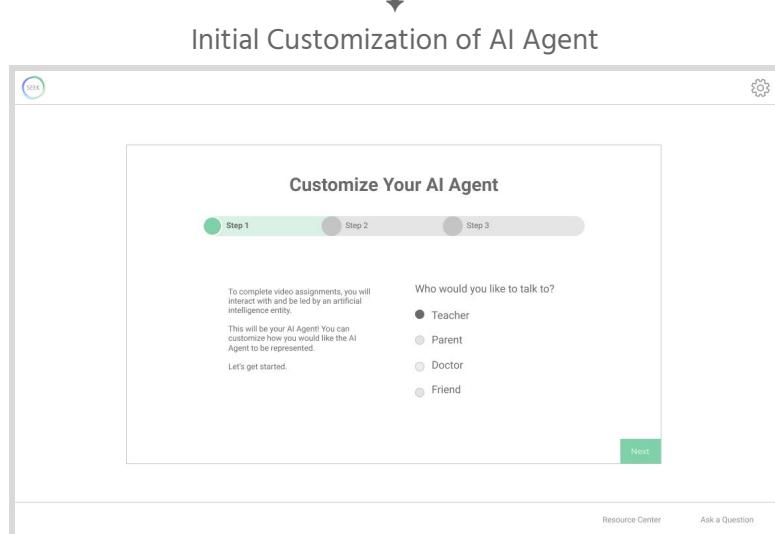
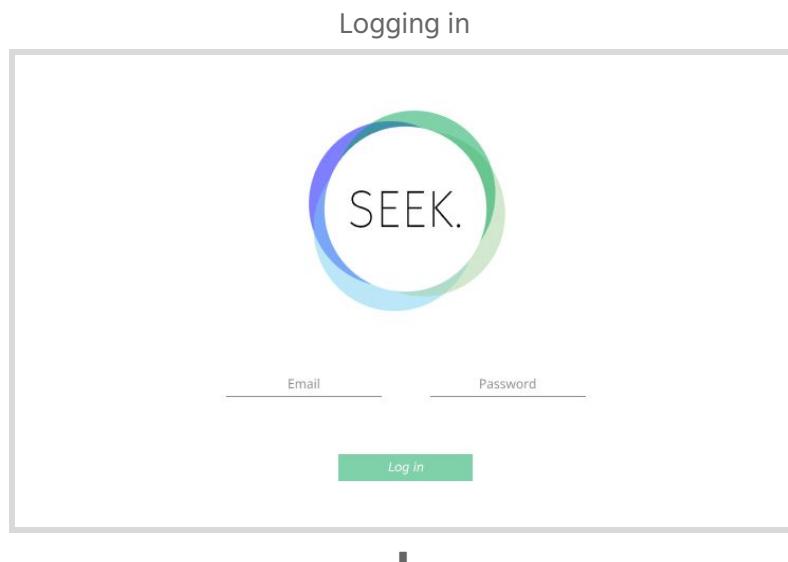


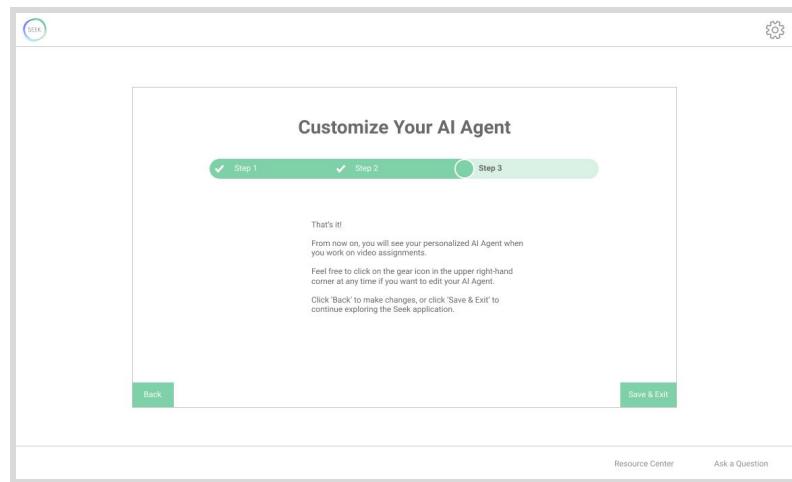
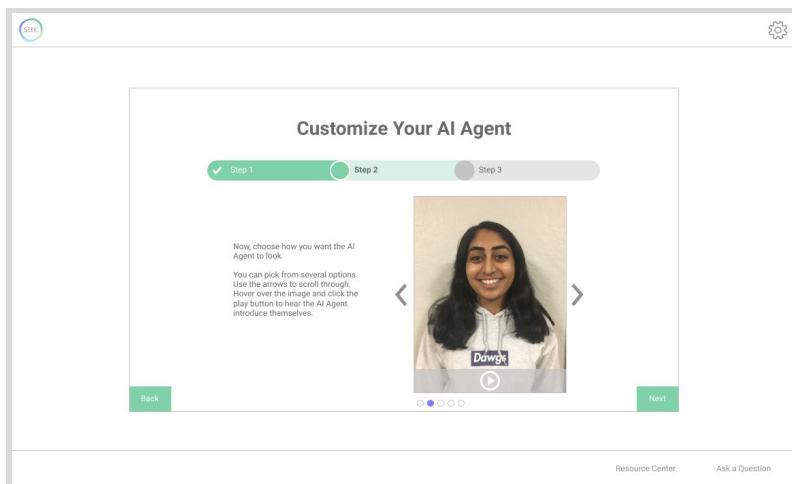
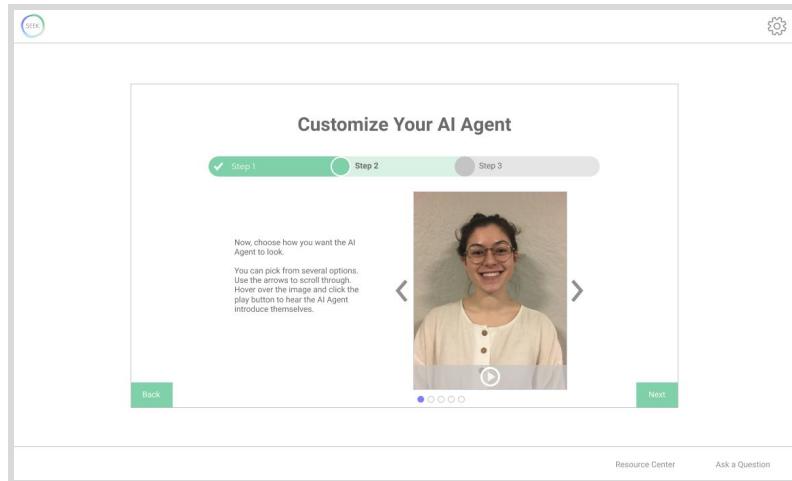
Clicking “more info” shows the title of the resource as well as a short informational note about the resource.

Digital Mockup

Task 1: Engaging with Tailored Content

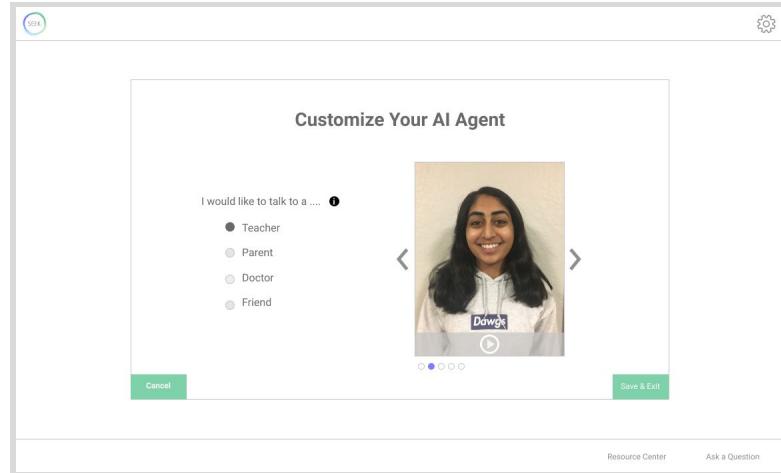
When a student first opens SEEK, they will be prompted to log in and customize an AI agent for the first time. This AI agent will lead the student through video assignments for class, and it will learn about the student as the student learns about course content. This enables students to complete homework and learn material relevant to them without judgment from an actual person, and they can customize the look and personality of their agent in a way that makes them most comfortable interacting with it. Overall, Task 1 demonstrates how the course can be tailored to individual students through a personalizable AI agent that caters to their needs.





Done.

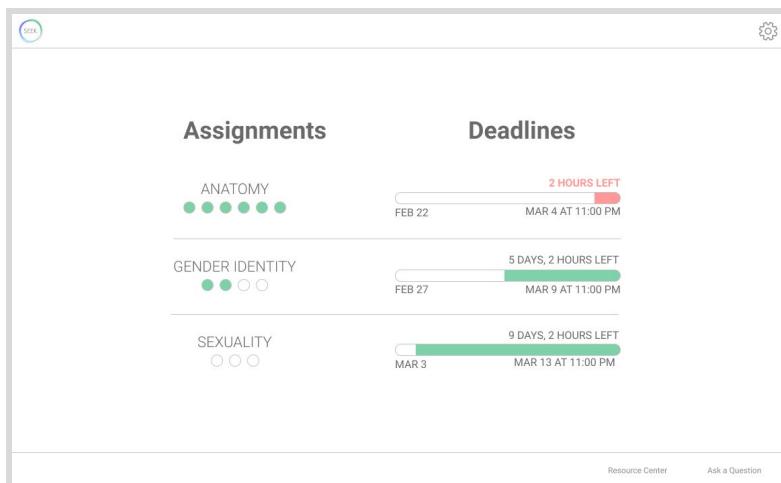
General Customization of AI Agent (after initial set-up)



(accessible from any page)

Done.

Looking at Assignments from the Home Page



Working on Video Assignment (selected from home page)

The screenshot shows a video player interface. At the top, it says "SEXUALITY: THE BASICS". Below the title is a video frame. In the video, a woman with dark hair, wearing a grey hoodie with a "Dawg" logo, is smiling and pointing towards a world map on a wall. The map is painted with various colors. A white text box appears over the map with the text: "Bisexuality is attraction not exclusively to people of the opposite sex...". At the bottom of the video frame, there are three circular progress indicators. Below the video frame, there is a navigation bar with links for "Resource Center" and "Ask a Question".



This screenshot is similar to the one above, showing the same woman and world map. A white text box appears over the map with the text: "Do you have any questions before we move on to the first checkpoint?". The video player interface includes the title "SEXUALITY: THE BASICS", three circular progress indicators, and a navigation bar at the bottom.



This screenshot shows the woman and world map again. A white text box appears over the map with the text: "Checkpoint #1". Below this, a question is displayed: "What is bisexuality?". Four options are listed, each preceded by a radio button:

- attraction to the opposite sex
- attraction not exclusively to people of the opposite sex
- attraction to the same sex
- attraction to people regardless of sex, gender, or gender identity

The video player interface includes the title "SEXUALITY: THE BASICS", three circular progress indicators, and a navigation bar at the bottom.



The screenshot shows a digital assignment interface. At the top, the title "SEXUALITY: THE BASICS" is displayed above a video thumbnail. A white overlay box labeled "Checkpoint #1" contains the question "What is bisexuality?" followed by four multiple-choice options. The first option, "attraction to the opposite sex," is marked with a red dot and selected. The other three options are marked with small circles. In the top right corner of the overlay, there is a red "Try Again!" button. Below the video thumbnail, there are three circular progress indicators. At the bottom of the screen, there are links for "Resource Center" and "Ask a Question".



This screenshot shows the same assignment interface as the previous one, but with a different selection for the checkpoint. The "attraction not exclusively to people of the opposite sex" option is now selected, indicated by a green dot. The other three options remain unselected with small circles. The rest of the interface, including the video thumbnail, progress indicators, and bottom links, is identical to the first screenshot.



(back to) Assignment Home Page

The screenshot shows the "Assignment Home Page". It features two main sections: "Assignments" and "Deadlines". Under "Assignments", there are three entries: "ANATOMY", "GENDER IDENTITY", and "SEXUALITY". Each entry includes a progress bar and a deadline. The "ANATOMY" assignment has a progress bar showing "2 HOURS LEFT" and a deadline of "MAR 4 AT 11:00 PM". The "GENDER IDENTITY" assignment has a progress bar showing "5 DAYS, 2 HOURS LEFT" and a deadline of "MAR 9 AT 11:00 PM". The "SEXUALITY" assignment has a progress bar showing "9 DAYS, 2 HOURS LEFT" and a deadline of "MAR 13 AT 11:00 PM". The "Deadlines" section lists the same three assignments with their respective deadlines. At the bottom of the screen, there are links for "Resource Center" and "Ask a Question".

Done.

Task 2: Procuring Answers to Questions Anonymously

Task 2 demonstrates how students can discreetly get their questions answered by either submitting anonymous questions to their teacher through a form or by searching through the Resource Center, which links them to reliable outside resources about several topics. If a student comes up with a question while looking up information in the Resource Center, they can be linked to the Anonymous Questions Tool to ask their teacher via the '?' button next to the website link.

Asking a Question through the Anonymous Questions Tool

The diagram illustrates the process of asking a question using the Anonymous Questions tool. It consists of two vertically stacked screenshots of a web-based application window.

Top Screenshot: The window title is "Anonymous Questions". At the top, there are two buttons: "Ask" (white background) and "Answered" (green background). Below these buttons is a large input field containing the placeholder text "Enter a question...". At the bottom right of the input field is a blue "Submit" button. The bottom of the window features a navigation bar with links for "Resource Center" and "Ask a Question".

Bottom Screenshot: This screenshot shows the same interface after a question has been entered. The input field now contains the text "I had a question about bisexuality". The "Submit" button remains at the bottom right of the input field. The rest of the window, including the title, buttons, and navigation bar, is identical to the top screenshot.

Anonymous Questions

Ask Answered 

Enter a question...

Submit

Resource Center Ask a Question



Anonymous Questions

Ask Answered

I had a question about whether it

Could you please explain how this

I had a question about bisexuality 

Resource Center Ask a Question



Anonymous Questions

Ask Answered

I had a question about whether it

Could you please explain how this

I had a question about bisexuality

Lorem ipsum dolor sit amet, consectetur adipiscing elit.
Duis a porttitor elit, sit amet blandit elit. Pellentesque ac sem semper, feugiat tortor ut, facilisis enim. Vestibulum non nisi id nisl euismod lacinia. Sed et ultricies nunc. Nullam id tellus, ut tincidunt nulla. Suspendisse consectetur rhoncus mi id varius. Fusce turpis ligula, tincidunt id augue eget, pharetra suscipit tellus.

Send

Resource Center Ask a Question

Done.

Looking Up Information in the Resource Center

The screenshot shows the 'Resource Center' page. At the top is a search bar with a magnifying glass icon and the placeholder 'Search...'. To its right are 'Cancel' and a gear icon. Below the search bar is a list of categories: BODY, GENDER, SEXUALITY, DRUG ABUSE, and ACCIDENTAL PREGNANCY. Each category has a small icon and a downward-pointing arrow. At the bottom of the page are two buttons: 'Resource Center' and 'Ask a Question'.



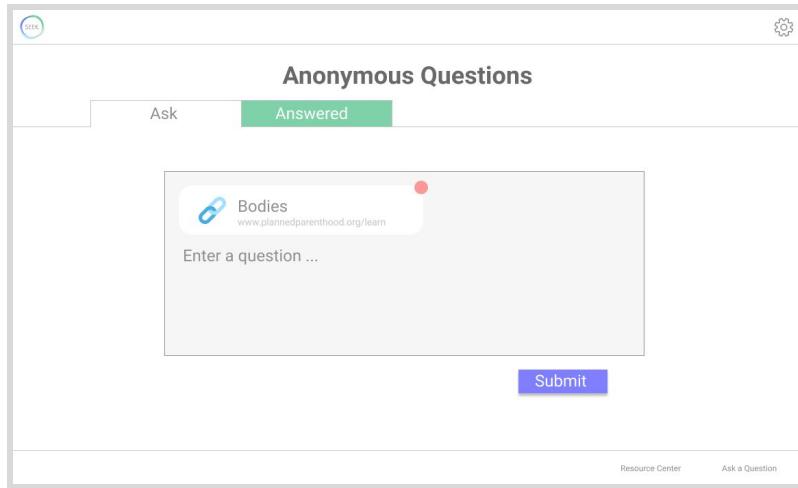
This screenshot shows the same Resource Center page, but the 'BODY' category is now expanded, indicated by a downward-pointing arrow next to the icon. Under 'BODY', there are three links: 'plannedparenthood.org/learn', 'adolescenthealth.org/resources', and 'scarleteen.com/tags/bodies'. To the right of these links are three small circular icons with question marks. The other categories (GENDER, SEXUALITY) remain collapsed with their respective icons and arrows.



In this screenshot, the 'BODY' category is fully expanded. The first link, 'plannedparenthood.org/learn', is highlighted with a green triangle icon. A tooltip for 'Planned Parenthood' is displayed, stating: 'Planned parenthood is a trusted health care provider, an informed educator, a passionate advocate, and a global partner helping similar organizations across the world.' Below this, the other two links ('adolescenthealth.org/resources' and 'scarleteen.com/tags/bodies') are shown again with their respective icons and arrows.



Asking a Question About Something Found in the Resource Center



Done.

Decisions, Changes, & Critique

Transitioning to digital tools instead of paper, we had the ability to make our design more cohesive by standardizing color palettes, white space, etc. This was crucial to reflect the interconnectedness of each component within our interface.

Iterating on feedback from usability testing and the critique, we made some design changes to address confusion about how the AI agent customization pop-up is supposed to work. In our digital mockup, we made two versions of the pop-up. The first version acts as an AI agent set-up. We added a progression bar to lead users through the customization process when they first begin using the application. Each step includes a detailed description of the user's options for that step. After they have gone through this process once, they will be able to re-open a simplified second version of the pop-up anytime to edit the AI agent (without the progression bar).

We also updated parts of the Resource Center center to make drop-downs and icons more specific and understandable. This included adding an 'i' button that shows more information about a resource link, and a '?' button for students to quickly ask their teacher about something they read from research in the Resource Center. The '?' links the selected website in the question they want to submit. This last change was heavily influenced by the design critique we received, which challenged us to find a way to connect the Anonymous Questions Tool and the Resource Center since both of these tools fall under our second task (procuring answers to question anonymously). Creating a relationship between these two tools strengthens our second task.

Discussion

What did you learn from the process of iterative design?

Through the iteration design process, we first conducted interviews/user research, during which we recognized the users' needs and then generated ideas and concepts to meet their needs. Moving on to heuristic evaluations with our paper prototype, we saw if our design made sense to users and seemed to meet the needs we identified in a meaningful way. We then modified our design based on what we learned from usability testing and continued to iterate until we reached a usable design. Like M Cobanli said, "Great design is the iteration of good design."

How did the process shape your final design?

From the design research, we drafted our initial paper prototyping for usability testings based on our assumptions of what our target users would want to see. During the testings and evaluation process, we were able to identify many areas of concern regarding usability. As we digitized our improved prototype to a mockup, we also made aesthetic improvements and added in features that made the different aspects of the design more cohesive. By going through all these testing procedures, our final design ended up being much more user-friendly than our initial iteration.

How have your tasks changed as a result of your usability tests?

Because we wanted to include some kind of anonymous question tool and a resource center, we modified our second task from just 'Asking anonymous questions' to 'Procuring answers to questions anonymously.' We felt that this encompassed what students can achieve in both the Anonymous Question Tool and Resource Center. While our first task largely remained the same throughout usability testing, focusing on how content should be tailored to students and their personal interests, it went through several name changes until we decided on 'Engaging with tailored content.' Our goal here was to address how content is tailored by means of the AI agent actively learning about the student, and the student feeling more compelled (and engaged) to learn because the AI agent makes material more relevant.

Do you think you could have used more, or fewer, iterations upon your design?

We thought in terms of the iterations, we might need more in-depth peer review/evaluation at each step rather than changing the number of iterations itself. This process gives us the opportunity to bounce ideas off of each other, helping us to identify strengths and weaknesses in our group work.

Appendix

Usability Testing Protocol

I. Interview/Warm-up

- Thank you for participating in our usability test. Before we begin, we want you to know you can stop at any time for any reason.
- Our goal here is to test our design. We are not testing you! If you don't know how to complete a task we give you, that shows us we need to update our design. Throughout this process, we'll ask to complete two tasks and give you minimal directions along the way. Other than that, make your best guess about how you would complete those tasks, and we'll correct you if step in the wrong direction. Please refrain from asking questions if you can.
- *Explain what each person's role is (computer, note-taker, administer)*

II. Transition

- Now we'll give you a brief overview of the paper prototype we are testing. This paper prototype represents a desktop application called SEEK. The goal of SEEK is to aid high school sex education classes, providing students with a more engaging presentation of material and the ability to ask questions anonymously.
- *Go over what each part of the paper prototype represents so they can familiarize themselves real quick (especially the AI agent!)*
- You will represent a typical high school student in a sex ed course throughout this usability test.

III. Test

- Now we will begin our usability test. There are two main tasks we want you to complete, and we will give you directions to complete those tasks along the way. The first task is to personalize how your AI agent looks while working on a homework assignment. First...
 - Navigate to 'Sexuality' video assignment
 - Change AI agent
 - Complete a checkpoint with new AI agent
 - Return to home page

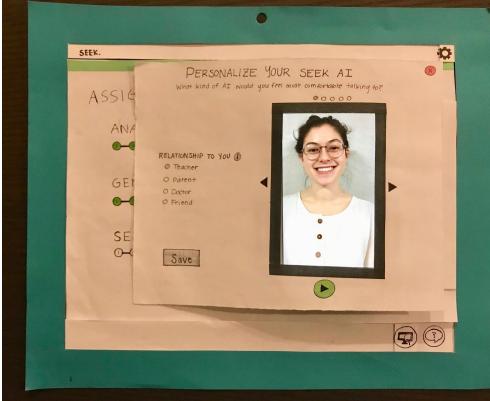
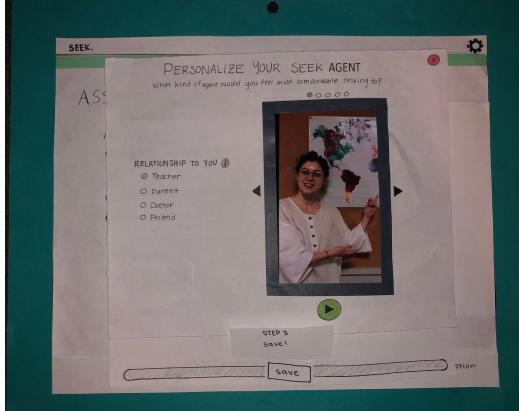
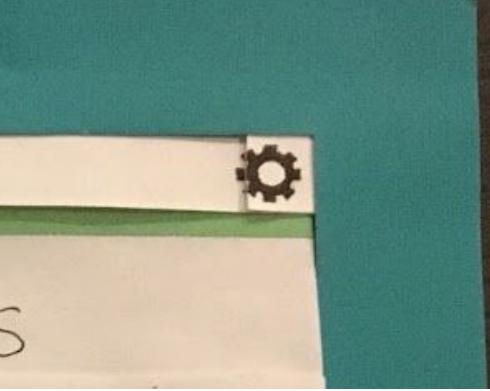
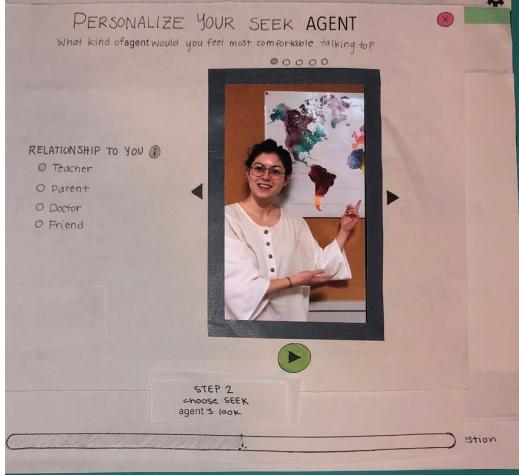
- Now we are back at the home page. The second task is to procure answers to questions anonymously. There are two ways you can do this: by asking your teacher an anonymous question or by looking up credible resources through the Resource Center (which is also essentially anonymous).
 - Navigate to where you might ask an anonymous question
 - Click on where you would begin typing out a question
 - Send the question
 - *Communicate that time passes... Then 'computer' marks that an answer from the teacher has been received*
 - Click on where you expect to see the answer to your question
 - Look at answer to your question
 - Now navigate to the Resource Center
 - You want to find information about your body. Where would you go?
 - Return to home page

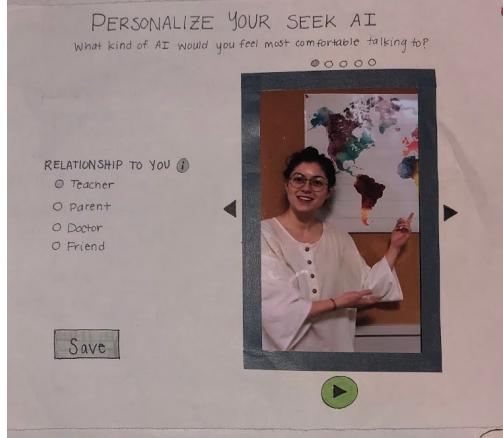
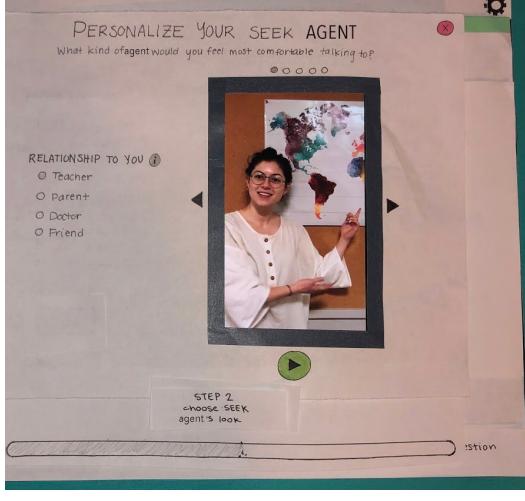
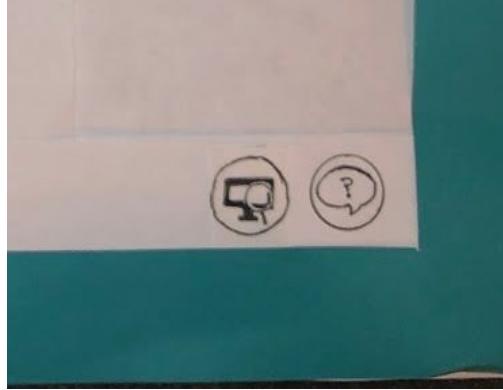
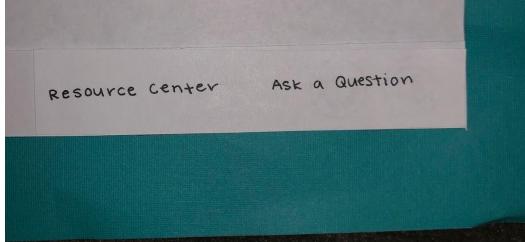
IV. Wrap-up

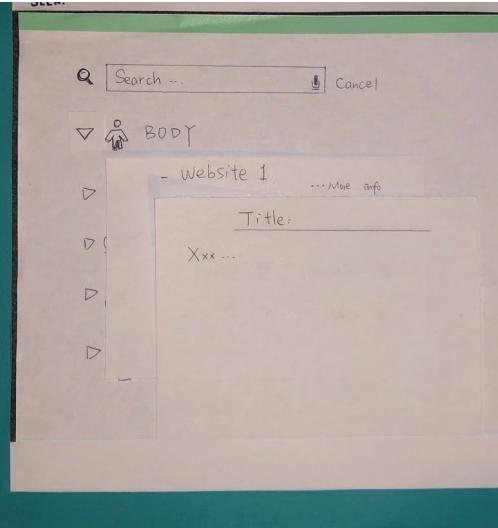
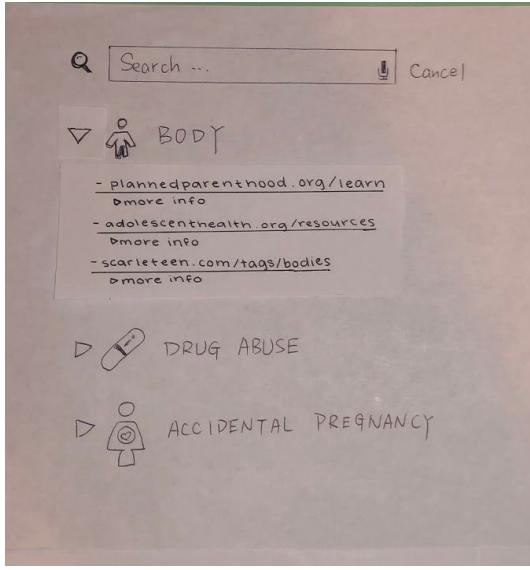
- Explanations
 - Our idea with the AI agent was to give students the ability to ‘talk’ to someone they resonated with, thereby helping them to feel more comfortable and/or engaged with the material they’re learning. The students will also be able to interact with the AI agent throughout the video assignment by asking clarifying questions or asking to learn about something from a different perspective. We wanted to do this to include those students who feel that sex ed is not relevant to them because sex ed is often presented from one perspective.
 - While a physical ‘anonymous questions’ box usually exists in sex ed classrooms, students still felt anxious about submitting questions that way (easy to be seen). Our tool dismisses this problem because it is entirely anonymous.
 - Because students don’t want to ask questions to their sex ed teacher, an overwhelming majority have reported going online to find answers. A lot of that information may not be credible. Our resource center provides at least some resources for students to be able to look up questions on their own.
- Follow up questions:

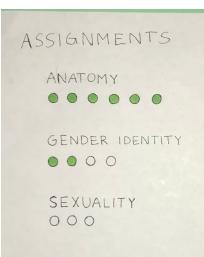
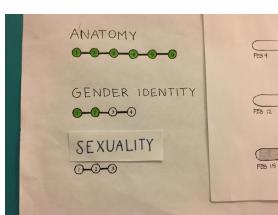
- Did you feel uncertain about how to complete a task at any point? Why?
- Did our design feel holistic to you?
- What needed to be improved to make it cleaner or easier to understand?
- Thank you for your time!

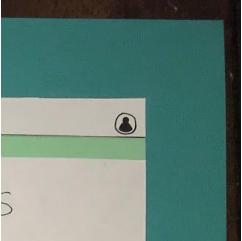
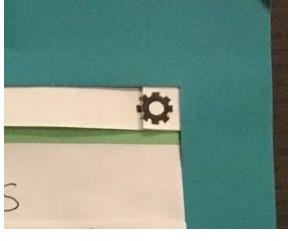
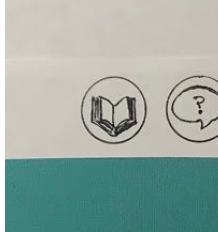
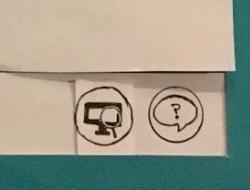
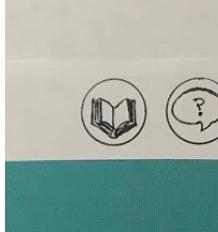
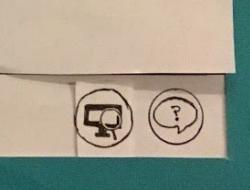
Critical Incidents and Revisions from Testing

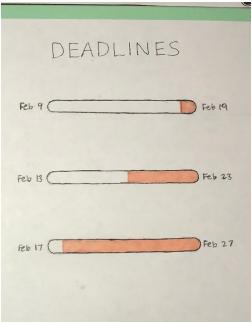
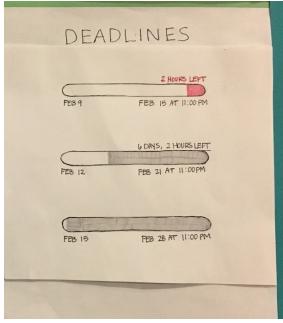
Severity	Incident	Revision
4	 <p>Save button seemed like it should close pop-up in addition to saving, but it only saves</p>	 <p>X button is used to close window without saving, Save button is displayed only after personalization steps are complete, pop-up closes when Save is pressed</p>
4	 <p>Button was clearly identifiable as leading to a Settings section, but participant was unclear what Settings contained until it was navigated to</p>	 <p>Settings page is open when design is used for the first time, making it clear that the agent personalization feature exists</p>

Severity	Incident	Revision
4	 <p>PERSONALIZE YOUR SEEK AI What kind of AI would you feel most comfortable talking to? <input type="radio"/> Teacher <input type="radio"/> Parent <input type="radio"/> Doctor <input type="radio"/> Friend RELATIONSHIP TO YOU ⓘ <input type="radio"/> Save ↶ ↷</p> <p>Participant was confused about the difference between changing agent look and changing relationship to user</p>	 <p>PERSONALIZE YOUR SEEK AGENT What kind of agent would you feel most comfortable talking to? <input type="radio"/> Teacher <input type="radio"/> Parent <input type="radio"/> Doctor <input type="radio"/> Friend RELATIONSHIP TO YOU ⓘ <input type="radio"/> Save ↶ ↷</p> <p>STEP 2 choose SEEK agent's look</p> <p>Make the AI agent selection process more clear by adding a progress bar and steps for the user to follow</p>
2	 <p>Participant was confused about what feature the left button navigated to because icon does not clearly indicate a resource center</p>	 <p>Resource Center Ask a Question</p> <p>The “Resource” icon and “Ask a question” icon have been replaced with clickable text to distinguish between the two</p>

Severity	Incident	Revision
3	 <p>Participant was confused about how to access resource description vs. go to resource itself from resource center page</p>	 <p>Underline links to resources to indicate they are hyperlinks. More Info button includes caret icon to indicate that description will pop up under link when pressed.</p>

Initial Image	Issue	Severity	Revision	Revised Image
	<p>Not clear you can click the subjects (Match between system and real world)</p>	3	<p>Created highlighting for Sexuality assignment link to demonstrate clickability of assignments</p>	

	<p>“Customize AI” button looks like profile icon (Match between system and real world)</p>	<p>2</p>	<p>Changed ‘AI Personalization’ button to have a gear icon (rather than a ‘Profile’ person)</p>	
	<p>Pressing x to automatically save seems unnatural (User control and freedom)</p>	<p>4</p>	<p>Added ‘Save’ button. ‘Save’ buttons turns green once a change is made. User can click ‘Save’ to save and exit, or the ‘X’ to just exit the pop-up page.</p>	 
	<p>Book implies textbook, less like “resources” (Match between system and real world)</p>	<p>2</p>	<p>Changed ‘Resources’ button to have a desktop and magnifying glass icon</p>	
	<p>Resources button seems to be more for a textbook than for resources in general</p>	<p>3</p>	<p>Same as above</p>	

	(Consistency and standards)			
 <p>DEADLINES</p> <p>Feb 9 — Feb 19</p> <p>Feb 13 — Feb 23</p> <p>Feb 17 — Feb 27</p>	Assignment progress bar seems confusing with less red meaning closer. (Match between system and real world)	2	Changed style of deadline bars: grey until little time left, then red.	 <p>DEADLINES</p> <p>2 HOURS LEFT FEB 9 FEB 15 AT 11:00 PM</p> <p>6 DAYS, 2 HOURS LEFT FEB 12 FEB 21 AT 11:00 PM</p> <p>FEB 19 FEB 26 AT 11:00 PM</p>

Contribution Statement

Haley Ruth: 20% - wrote testing process and results sections

Laura DeBoldt: 20% - contributed to digital mockup, discussion, and appendix sections

Aishu Murari: 20% - wrote final prototype section and contributed to discussion section

Max Kern: 20% - setup doc, updated problem and solution overview from last report, imported original paper prototype description

Jingjing Bu: 20% - updated part of digital mockup and discussion portion