

# Discreet Sexual Education

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## Problem & Solution Overview

Our design seeks to solve the problem of giving students access to highly relevant and reliable information in their sex education classes. We do this in two ways: making the coursework more relevant to individual students by understanding their needs, and by providing direct anonymous access to their instructor. Our design is an interface through which students will complete homework in the form of interactive instructional videos. These will give students a chance to ask questions so that they can receive further instruction tailored to their personal needs. It also gives students the option to anonymously ask questions to their teacher if they need additional information or help.

## Design Research Goals, Stakeholders, & Participants

Our goal is to improve the quality of sex education by helping students discreetly access the information relevant to them. So, our main group of stakeholders are students taking a sexual education class and our research will be focused primarily on understanding their needs. Many people go through some kind of sex education in school, ranging from the age of middle school to even college. However, most forms of sex ed have many gaps in information, leading students to not be fully informed. It will be useful to gather information from them regarding their experience in sex ed and their opinions on what could have been improved. In addition, those that have never taken a formal sexual education course can also provide information about the common gaps people can have in their knowledge concerning the subject. Since most university students are recent graduates of high school and have relatively fresh experiences with high school sex ed, we were able to find a fairly large sampling of student participants at the University of Washington. We interviewed several recent students of sex education courses and have anonymized their descriptions below:

Bob is an 18-year-old senior currently enrolled in high school at Central Kitsap High School in Central Kitsap School District and took a semester-long sexual education course in his sophomore year of high school. The participant identifies as a cis, straight male. The interview was conducted via Skype as the participant lives quite far from Seattle.

Brenda is a 19-year-old university freshman currently enrolled at the University of Washington. She attended Skyline High School and took a trimester-long health class, which included a unit on sexual education, in her junior year. The participant identifies as a cis female. The interview was conducted in-person in the atrium of a building on-campus.

Jack is a 21-year-old junior currently enrolled at the University of Washington. He attended Issaquah High School and did a two-week unit on sexual education in 10th grade as part of a larger health class. The participant identifies as a cis, gay male. The interview was conducted in person in an on-campus building.

Jane is a 21-year-old junior currently enrolled at the University of Washington. They attended Shorewood High School and participated in sex ed during their health class. The participant identifies as female. The interview was conducted off campus in the person's residence.

## Design Research Results & Themes

### Summary of Key Findings

To understand better how students and teachers feel about sexual education classes, we conducted interviews with four participants. The participants had a wide range of comfort in their classes, ranging from totally uncomfortable to fairly comfortable. The participants also had a wide range of trust in the sources provided in class, from thinking that the materials provided were severely dated and biased to being quite trusting of the material. We found that all of our participants believed their sexual education experience was highly un-specific and seemed anything but tailored to them as well as believing that they were missing at least one essential topic in each class. They were all, however, allowed to ask anonymous questions in class, written on paper slips.

### Common Themes

**Student Comfort:** Our participants generally said they were comfortable in their sex education classes, suggesting that discomfort within a sexual education setting is not as common as we thought it might be. The one exception to this was Jack, and his discomfort stemmed from his teacher's discomfort, not the material itself. It seems that because school is already a fairly familiar environment, students are less likely to be uncomfortable. This will help inform our design process as we now know that student discomfort (at least with setting / general sex ed material) is not a large problem.

**Relevance of information:** Another common theme was the relevance of information. Several candidates expressed that content often felt it was not targeted at them, or contained information not relevant to them. More specifically, Jack described how there was a severe lack of content about safe sex for gay men which would have been relevant to him. This exposes a potentially interesting space creating solutions in terms of bring more relevant and appropriate content to people. As Jack's interview shows, the informational needs of people vary widely, and by better understanding what people's individual needs are we can potentially feed them the most relevant information. An important caveat to this is that students often are not aware when they are in sex ed exactly what information *will* be relevant to them long term, so it does seem like a good idea to err on the side of providing too much non essential information. However as Jack's experience demonstrates, if even basic needs are not being there is still lots of room to bring more helpful and relevant information to people.

**Seeking outside information:** Several of our candidates had to seek out information outside the classroom at some point after their sex ed class. Although some of our candidates were pointed towards health resources / clinics, they did not seem to be pointed toward sources for general information. This leaves this as potential area for design work. It seems like there is room for a robust source of sexual health information that is easily accessible and trustworthy. With the amount of irrelevant/absent information our participants reported, providing high quality outside sources to students has a strong potential to help fill in the gaps in students' knowledge.

**Taking the class seriously:** One thing we were worried about when preparing our inquiry was that students would not take sex ed seriously and that this would be detrimental to their learning. We found that most candidates said they did not take the class super seriously, but that despite this they still largely trusted their teachers and the information they were getting. Knowing that students take the content of these classes seriously certainly is positive to the degree that we can utilize this trust to present them high quality information.

## Answers to Task Analysis Questions

### **Who is going to use the design?**

Public high school students in the Puget Sound region will use our design to aid their learning during sex education classes to meet their needs.

### **What tasks do they now perform?**

Students currently listen to lectures given by teachers and complete reading assignments from a textbook or online. Some are given assignments such as individual or group presentations to engage with the material in more depth. Most are encouraged to ask anonymous questions by writing their question on a piece of paper and slipping it into a box, which the teacher answers during class. In addition, they may have a chance to discuss with the teacher after the class while it is really a shy experience for most students. So this would be restrictions for the performance they are taking now.

### **What tasks are desired?**

Some students wanted resources or access to someone who could answer very personal questions, such as professionals they could see outside of school. They also enjoyed hearing from guest speakers and wanted access to a more diverse collection of perspectives and experiences. Students also thought that a more anonymous method for asking questions would be helpful to students who are very shy and scared about being "seen" submitting questions.

### **How are the tasks learned?**

The material is learned based on the level of experience with previous teaching styles, such as submitting homework answers online or listening to lecture with powerpoint slides. Therefore, students can learn from the task, rather than focusing on how to interpret it. Besides this, the mini online forum which is an anonymous method for them to ask questions and get reflection learning through this platform.

**Where are the tasks performed?**

Tasks are performed in the classroom or wherever students study (i.e. libraries, home, coffee shops).

**What is the relationship between the person and the data?**

Interview method is used to collect subjective data about participants(people) ' attitudes, and we can extract useful information through collation and analysis from the data directly obtained by the participants(people), which may be chaotic and disorderly at the first time. While we could make a more useful and precise data to support the person facets and persona for the design process.

**What other tools does the person have?**

The person has traditional tools acquired through their sexual education class such as their textbook, pamphlets, and videos shown in class as well as outside resources including teachers, family practitioners, peers, family members, and the internet.

**How do people communicate with each other?**

People in sexual education classes usually communicate with each other through public question asking, anonymous question asking, and through completion of assignments. And also probably an offline meet-up.

**How often are the tasks performed?**

People in high school sexual education classes usually attend class five days a week, or a total of five hours a week depending on how class scheduling works at a particular school. Therefore, tasks related to such a class happen at least five times a week, generally on weekdays.

**What are the time constraints on the tasks?**

High school sexual education classes usually last for one quarter to one semester. This means that the tasks in total will only be performed from ten weeks to about fourteen weeks in total. They might not be able to continue their learning for their more mature age.

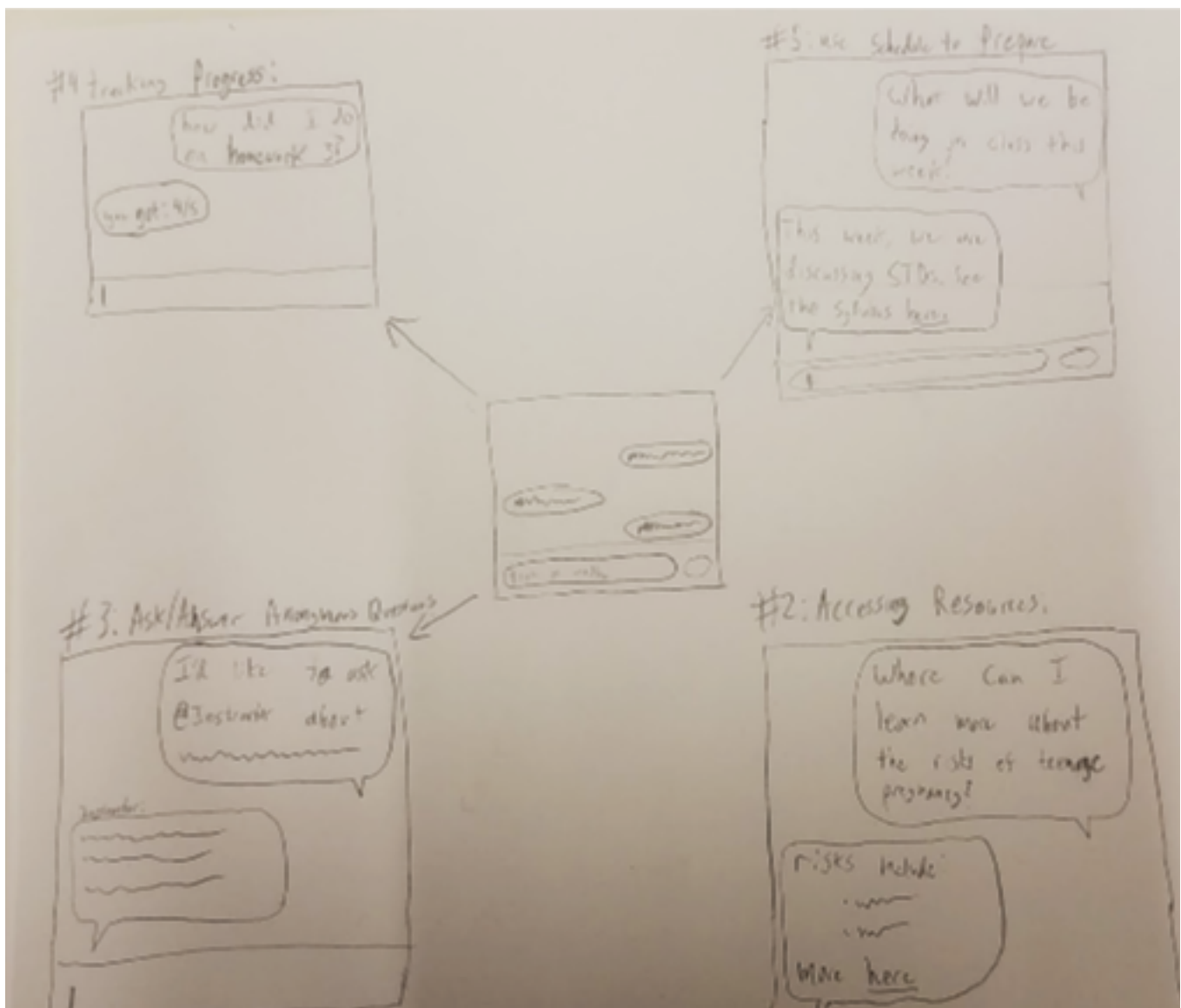
**What happens when things go wrong?**

When things go wrong with sexual education, misinformation can be spread. In mild cases, there might just not be perfect for their class performance and lack of good guidance and practices. To make matters worse, misinformation in terms of sexual education can manifest in sexually transferable disease spread, accidental pregnancy, confusion about sexuality/gender, drug abuse, and many other issues.

# Proposed Design Sketches | DESIGN #1

## Chatbot

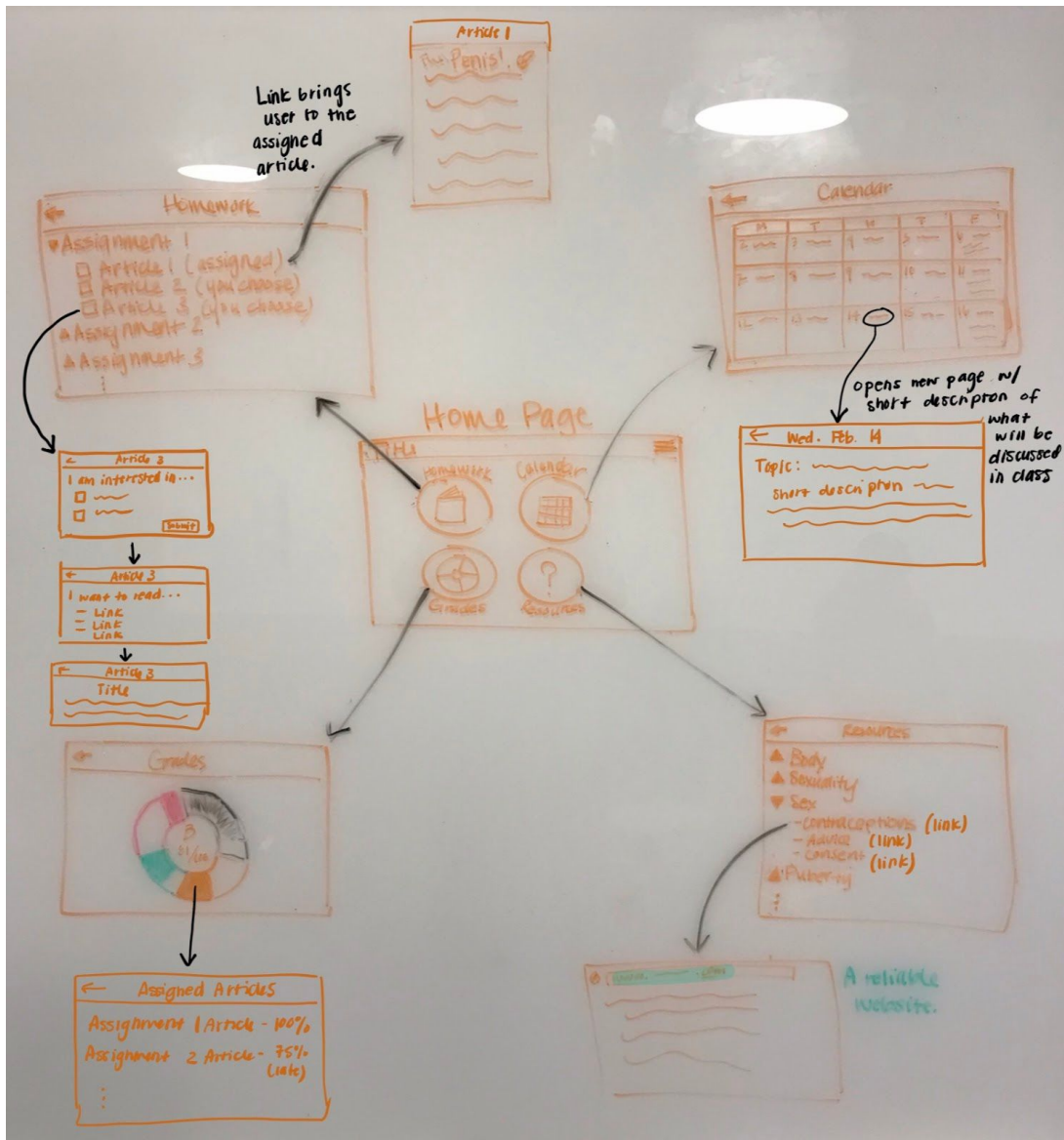
The goal of Design 1 is to enable students to ask questions anonymously and gain access to outside resources in a simple and user-friendly manner. It is a chat interface through which sex ed students can communicate with both the course instructor and a chatbot. Students can ask questions about material they do not understand, and the chatbot will provide answers and point students to additional resources when appropriate. They can also address questions specifically to the course instructor, who will then be able to respond through the chatbot without seeing which student asked the question. Students can also ask about the course schedule and check on their grades. This design allows students to ask for information and complete many different tasks in a very fluid and familiar manner, as the interface closely resembles a texting or messaging platform. It also preserves anonymity when communicating with teachers.



# Proposed Design Sketches | DESIGN #2

## Course Management System

The goal of Design 2 is to improve student engagement with content by providing a more structured learning environment and customizing material. Students can easily access and complete assigned homework, and they also have the ability to choose readings that they find interesting or more relevant and get credit for them. They can view their gradebook, which will allow them to reflect on their progress and motivate them to stay engaged and complete assignments. They can also see upcoming topics and assignments through the course calendar, which allows them to prepare questions about these topics before class. Compared with the traditional sex ed class format, this design actually tracks students' participation in out-of-class assignments to ensure they are taking the class seriously, which in turn will improve their understanding of the content.

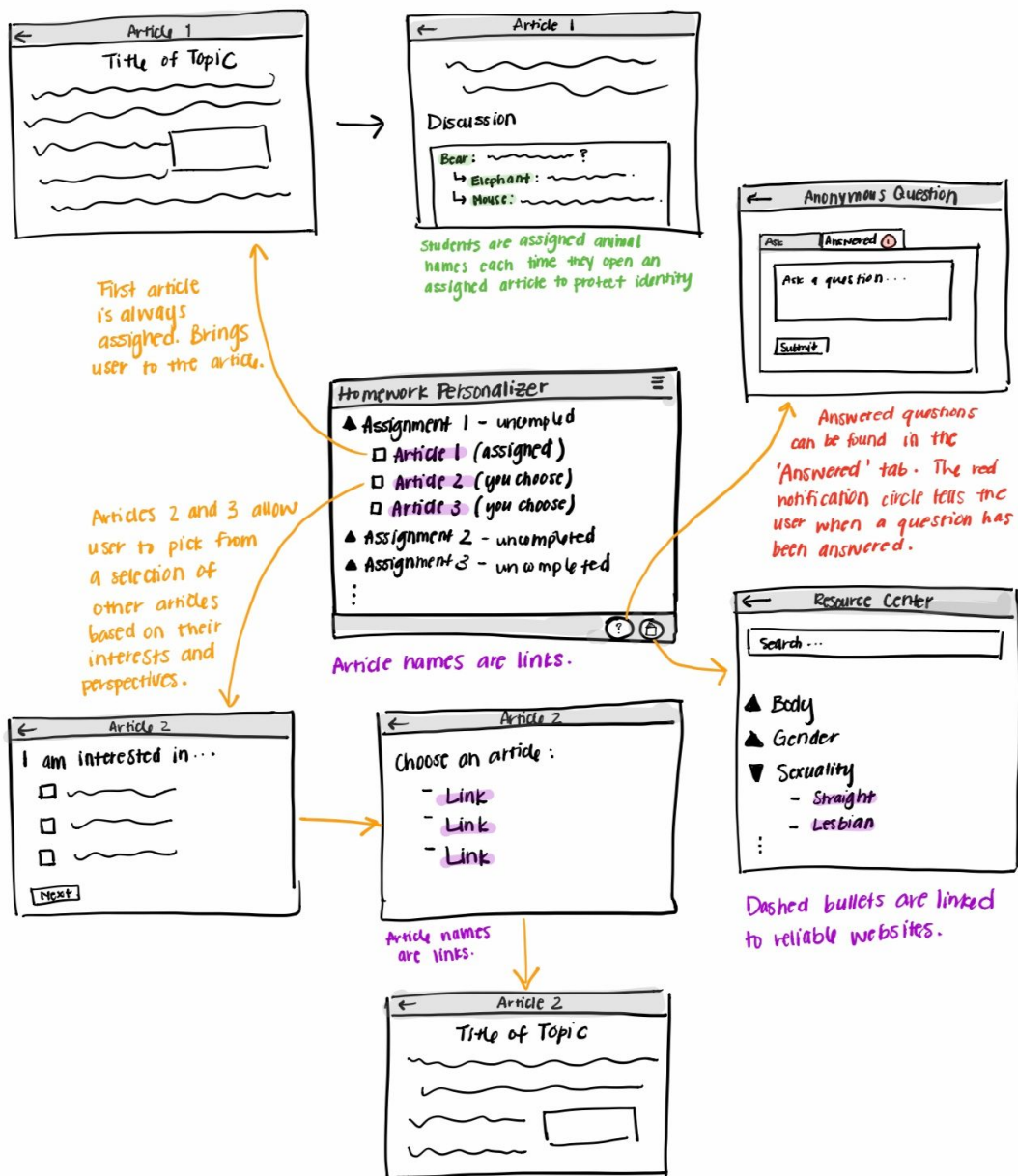




# Proposed Design Sketches | DESIGN #3

## Tailored Interaction Tool

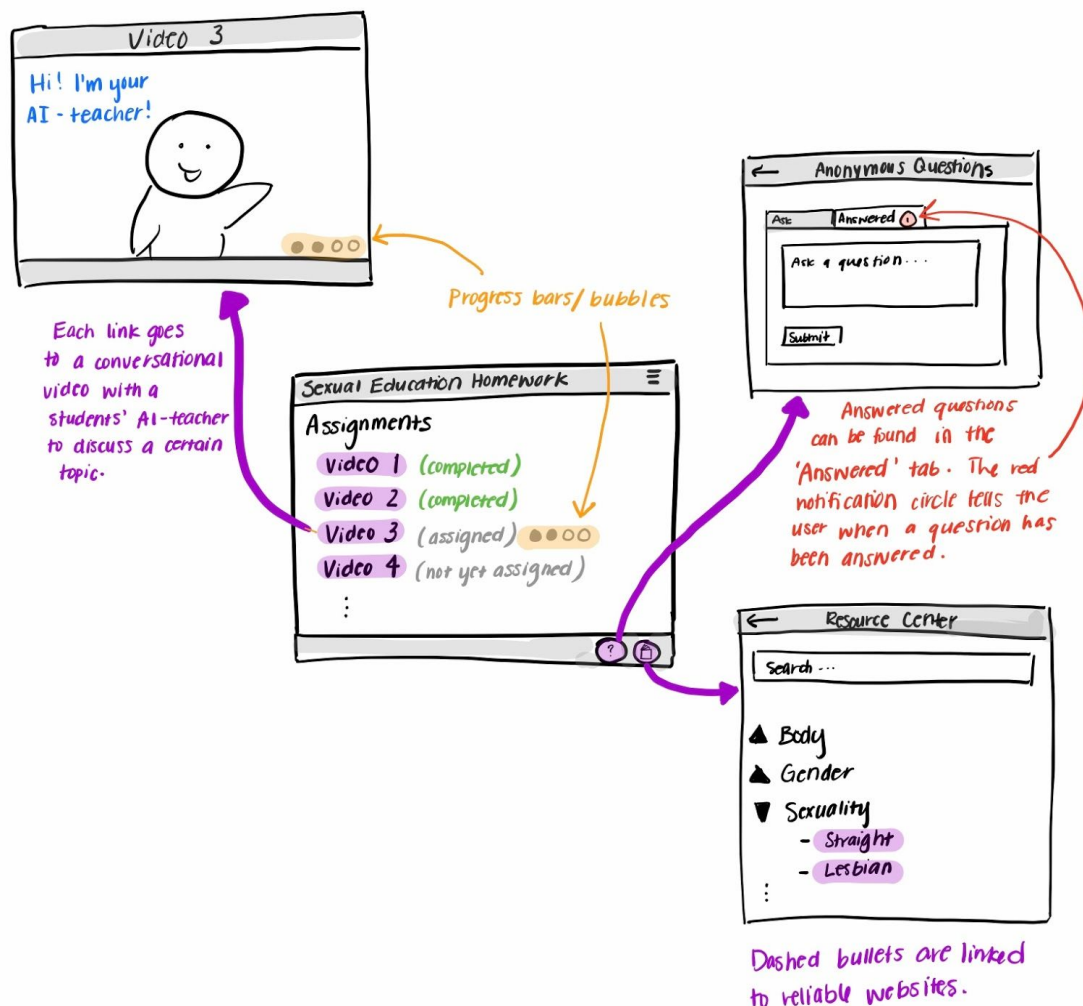
The goal of Design 3 is to facilitate interaction and exploration between students and their available resources, as well as to customize course content to be relevant to individual students. Students have the option to filter articles to read when given an assignment, allowing them to access content specific to their interests. They also have the ability to anonymously discuss these readings with fellow classmates through discussion forums on the bottom of each article, as well as ask the teacher questions about material they are curious about. They can access additional resources as well if they have questions that the teacher is unable to answer. This design preserves privacy but still encourages discussion of stigmatized topics. It also allows students to explore more personalized material that may not have been covered in class.



# Proposed Design Sketches | CHOSEN DESIGN

## AI Teacher

We decided to combine ideas from the Chatbot and Tailored Interaction Tool designs to create our final design. We felt it was important to retain the Resource Center and Anonymous Questions pages from the Tailored Interaction Tool. Our research participants stressed the lack of access to outside information in their courses, and they also wanted a way to interact with their course instructors anonymously in a more efficient and private way than using paper slips. We also kept the concept of customizing homework content to be more relevant to individual students, but we improved the interface through which this would occur. The main strength of the Chatbot design was its centralization of tasks in a user-friendly texting interface. We modified this idea to instead use an audio/video interaction in which students can watch videos and ask an AI teacher questions verbally. The AI teacher will be able to respond to students' comments and questions, and it will also be able to alter content after each checkpoint to be more relevant to each student based on the questions or comments the student gave it. This allows the interaction to feel more like a natural conversation with an actual teacher, but in a way that preserves anonymity between students and the course instructor. The AI teacher can also redirect students to the Resource Center or the Anonymous Questions page when verbally prompted, tying together all three features of this design.





## Written Scenarios

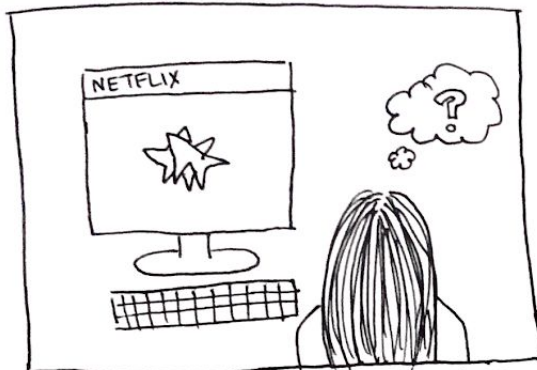
### **Scenario 1: Enabling anonymous communication between students and teacher (Figure 1)**

Daisy is at home watching Netflix when something she sees triggers a question about sex. She debates on whether to Google it or use the sex ed app from school to ask her teacher about it. She knows that the answers she may find on Google may not be entirely credible, and trusts that her teacher could give her a safer answer. Since her question will be sent anonymously, Daisy feels less embarrassed reaching out to her teacher and is comforted by the fact that her teacher won't be able to confront her about it in person. She opens her sex ed app and sends the question, then returns to Netflix. 30 minutes go by and Daisy gets a notification from the app. She reopens the app and reads her teacher's response.

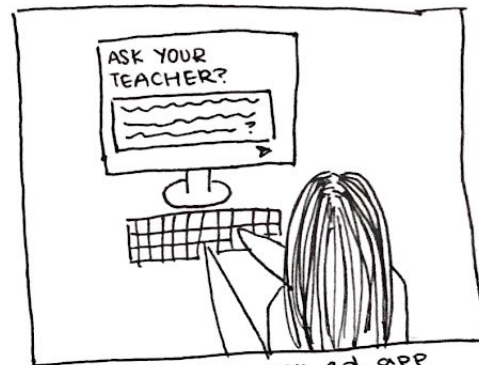
### **Scenario 2: Making course content more relevant using AI to tailor content (Figure 2)**

In sex ed class, John is given the next homework assignment: to complete a conversational video with his AI teacher. Walking home, John wonders what the topic will be. When he begins the video, the AI teacher introduces the topic to be sexuality. She gives a quick introduction about sexuality, including different types of sexuality that people may have. John has heard the term "bisexual" before and chooses to learn more about it, asking his AI teacher what it means to be bisexual. The AI teacher then gives a brief overview, which she is able to do by pulling from credible online sources. Being able to get information directly from the web and process it allows her to give students relevant, reliable answers from any number of perspectives. After explaining, John reaches a CHECKPOINT where the AI teacher asks him if he has any questions before moving onto more specific subtopics. The AI teacher answered his question well so John moves on with the video. The next day, John's friend asks what he learned about in their homework and John replies that he may be bisexual! He thought it was easier to ask questions from the AI teacher because he knew she wasn't a real person. He is affirmed by his friend, who also chose to learn about bisexuality.

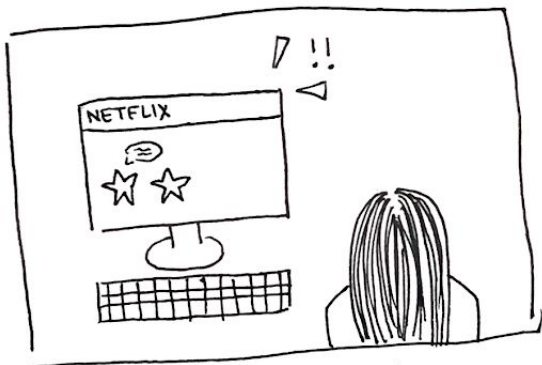
# Storyboards of Selected Design | BOARD #1



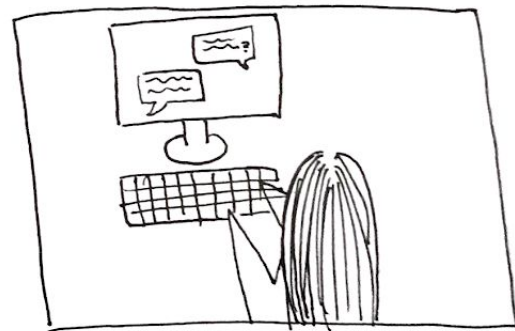
Daisy is watching Netflix when something she sees triggers a question about sex ed.



She opens her sex ed app and writes out her question to anonymously ask her sex ed teacher.



She goes back to watching Netflix until she gets a notification from the app.



She reopens her sex ed app and reads her teacher's answer to the question.

Figure 1: Enabling anonymous communication between students and teacher

# Storyboards of Selected Design | BOARD #2

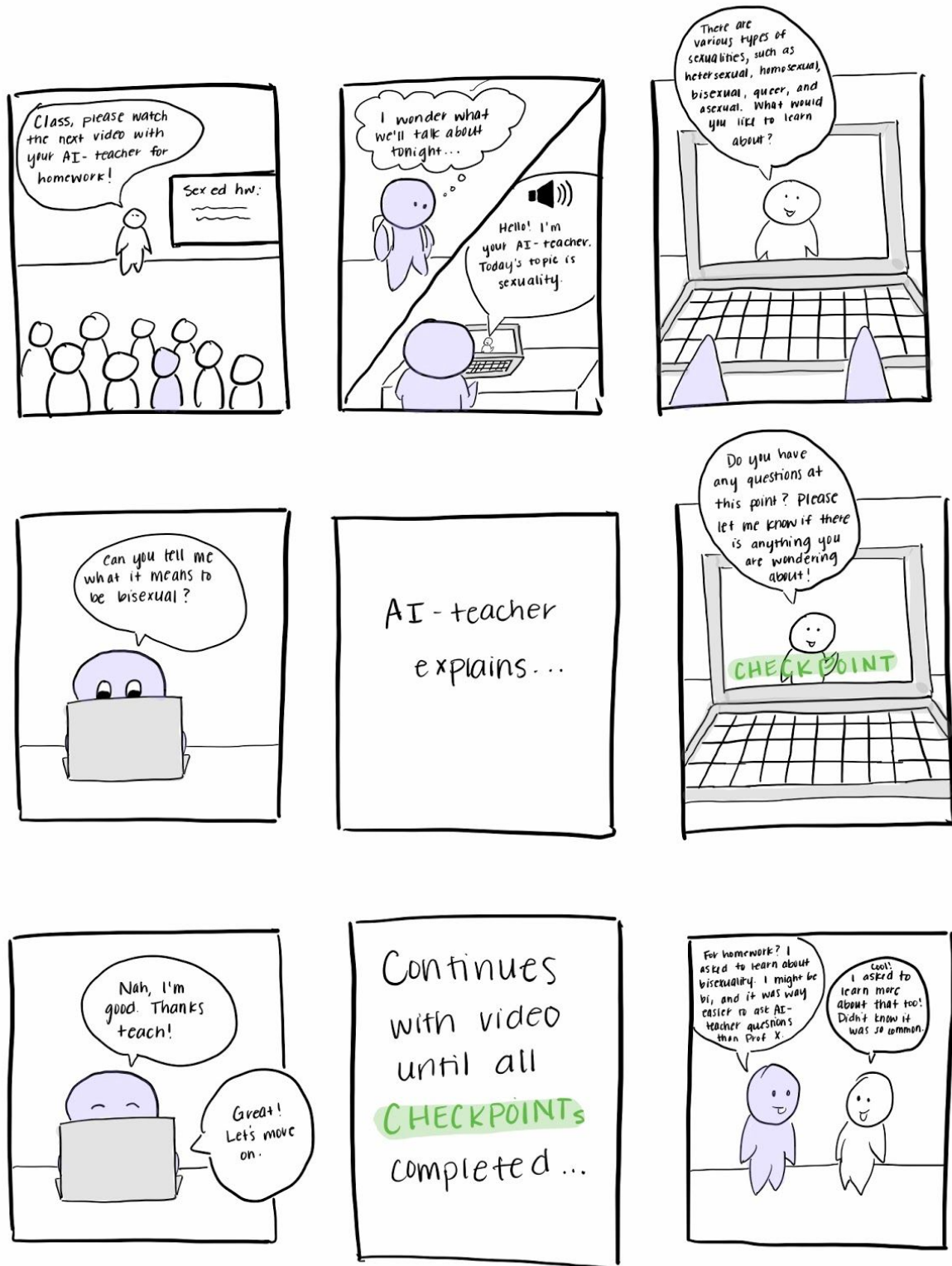


Figure 2: Making course content more relevant using AI to tailor content