

Science Techbook California Unit Page Redesign | Test Plan

SUMMARY

This study aims to gather feedback on the perception and placement of the 'anchor phenomenon' required for California / NGSS Science Techbook. We will use a combination of moderated user/usability tests and surveys to collect this information.

TESTING GOALS

- Identify the strengths and weaknesses of the new design and provide additional feedback for improvements.
- Gain better awareness of teacher use and understanding of NGSS

RESEARCH QUESTIONS

1. What is the user's knowledge and familiarity with NGSS?
2. What is the users first overall impression of the course page and table of contents?
3. What is the user's first overall impression of the unit page layout?
4. What is the educator's initial impressions of the anchor phenomenon?
5. What are the users' thoughts on the Investigative Phenomenon?
6. How important is it to show students the NGSS standards?
7. Are users able to successfully navigate to a desired concept?
8. Are users able to successfully navigate to the unit assessment?

METHODOLOGY

A usability study will be held remotely from through WebEx online conferencing with up to 10 participants. The target audience would be K-8 teachers with Science Techbook subscriptions. Ideally, those teaches would be from California, but educators in states that have adopted NGSS would also work. Those states are: LA, MD, DC, OR, WA, NV, NJ, or IL. Each participant session will last 60 minutes encompassing interview and task analysis with an interactive wireframe prototype.

POTENTIAL RECRUITMENT PARTNERS

DE employees who may be able to aid in the recruitment of California participants.

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TASKS

Interacting with the anchor phenomenon, interacting with an investigative phenomenon, navigating to a concept from the unit page, and locating the unit assessment.

Consistent breaks have been included for possible overtime risks and reworking notes. Interviews will be recorded and transcribed into a coded workbook with themes, pain points, and user needs. End results will be reporting success and error rates, time on task, scaling measures, likes/dislikes, and recommendations.

PROTOTYPE:

https://discovery.invisionapp.com/share/SEG011UVMN5#/screens/280998436_Course_Overview_3

SCRIPT

Hi, _____, my name is Elizabeth Schinazi and I'm a User Experience Architect here at Discovery Education. I will be conducting today's test session with my research colleague here, Geoff. He'll be interested in what you have to say while taking notes and observing our session.

You probably already know, but let me explain why we've asked you to come here today. We are testing a new design for a Science Techbook Unit page that we're working on to see what it's like for actual people to use it. The goal here is to understand what works about the page and to understand what your needs are so we can work toward making the page better. I want to make it clear that we're testing the page, not you. You can't do anything wrong here. In fact, this is probably the one place today where you don't have to worry about making mistakes.

We want to hear exactly what you think, so please don't worry that you're going to hurt our feelings. We want to improve it, so we need to know honestly what you think.

As we go along, I'm going to ask you to think out loud, to tell me what's going through your mind. If you have questions, just ask. I may not be able to answer them right away, since we're interested in how people do when they don't have someone sitting next to them, but I will try to answer any questions you still have when we're done.

In order for us to kick off today's test, we'd like to record the test for research purposes only. Your feedback will be kept anonymous and only used for the research time - unless you give approval otherwise.

Do you have any immediate questions before we get started?

First, I'd love to learn a little more about your background as a teacher.

Research Question

Introduction

Interview Questions

1. How long have you been a teacher?
2. What grade level do you teach?
3. What subjects do you teach?
4. How often do you use Science Techbook?
5. How do you first introduce new topics or units to students?

Now I'd like to learn a little bit more about your experiences with NGSS.

Research Question

What is the user's knowledge and familiarity with NGSS?

Interview Questions

1. Which of the following describes your familiarity with NGSS?
 - I haven't heard of NGSS
 - I have heard of NGSS, but I don't know a lot about the new standards
 - I know about NGSS
 - I can explain NGSS to others and how the standards apply to my teaching practice
2. Are you currently teaching to the NGSS standards?
3. On a scale of 1 to 5, with 5 being the most comfortable, rate your comfort with the NGSS standards.
4. What is the biggest challenge you face when teaching to NGSS?

Thank you for providing the background information. It helps us to understand what change For today, I will be walking you through a working prototype that showcases the new course and unit pages. We'll start off with a general scenario and then dig into certain situations. Please stop me at any time if you have any questions.

So, let's imagine that you are teaching a first grade science course.

(SHOW COURSE PAGE)

Research Question

What are the users' first impressions of the new course page and TOC design?

Interview Questions

1. Tell me your initial thoughts about what you are seeing.
2. What sticks out to you?
3. What topics do you think are covered in this course?
4. Where do you think you would view the table of contents?

(SELECT TABLE OF CONTENTS)
5. Is this what you expected to see? - Tell me your initial thoughts about what you are seeing?
6. Where would you go to find course materials pertaining to a particular standard?

7. You need to plan a unit on plants. Where would you go to find those materials?

(SHOW PLANT SHAPES UNIT PAGE)

Research Question	Interview Questions
<i>What are the users' first impressions of the new unit page design?</i>	<ol style="list-style-type: none">1. Tell me your initial thoughts about what you are seeing.2. What sticks out to you?

Now I want to direct your attention to the top of the page

(SHOW ANCHOR PHENOMENON -- Don't use those words)

Research Question	Interview Questions
<i>What are the user's impression of the Anchor Phenomenon?</i>	<ol style="list-style-type: none">1. What do you think is the purpose of the text and video?2. What do you think will happen when we select the video?3. Would you use the term "anchor phenomenon" with students?<ul style="list-style-type: none">- Is there another term you would use with students instead?4. What else would you expect to find on this page?

Let's look at the rest of the page (SHOW CONCEPTS TABLE)

Research Question	Interview Questions
<i>What are the users' thoughts on the Investigative Phenomenon?</i>	<ol style="list-style-type: none">1. What are your initial impressions on this part of the page?2. What do you think is the purpose of this text and media?3. What do you think will happen when we select the media?4. Would you use the term "investigative phenomenon" with students?<ul style="list-style-type: none">- Is there another term you would use with students instead?

Research Question	Interview Questions
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How important is it to show students the NGSS standards?

1. Is this where you would expect to see the Standards text?
2. How important is it to show students the NGSS standards?

Now let's say you wanted to go to the concept "Growing Plants."

Research Question

Are users able to successfully navigate to a desired concept?

Interview Questions

1. Describe how you think you would navigate to this Concept?
(SELECT CONCEPT)
2. Is this what you expected to happen?

Let's say you have completed teaching the unit and are ready to test your students.

Research Question

Are users able to successfully navigate to the unit assessment?

Interview Questions

1. Where would you expect to find the Unit Assessment?
(SELECT UNIT RESOURCES)
2. Is this what you expected to happen?
3. What are your thoughts about this page?

Before we wrap-up for today, we'd like to know your thoughts about your testing experience.

Research Question

Wrap-up

Interview Questions

1. How likely are you to use a resource like this for your grade level while teaching NGSS?
 - Describe how you think you might use this page?
2. How would you score the new enhancements - poor to excellent?
3. Have we missed anything that you would like us to know?
4. I'm just going to see if anyone on the call would like to ask any follow-up questions.

So now we will stop recording audio and notes. We greatly appreciate your time and honest feedback with search by subject for streaming and techbook subscriptions. Our next steps will be

*aggregating all the participant feedback and driving design decisions from emerging patterns.
Thank you again and hope you have a good rest of your day.*