

Science Techbook California Unit Page Redesign | Survey Results

Last Updated: 02.09.18

Elizabeth Schinazi, UX Architect

SURVEY GOALS

The goals of the survey were to

- Understand educator perceptions of both the anchor and the investigative phenomenon
- Understand the importance of students seeing standards text
- Gain better awareness of teacher use and understanding of NGSS

ABOUT THE SURVEY

A 22-question survey was sent to teachers the first week of January. The survey was a mix of selected-response questions, open-ended questions, and likert ratings. The questions were grouped into three sections. The first section asked questions related to participants knowledge and comfort with NGSS. The second section asked specific questions related to the designs as presented in a short video. Finally, participants were asked about their teaching background.

FINDINGS

Background Information

We received a total of 8 responses. All participants were science teachers with three teaching science specifically, three teaching all subjects, including science, at the elementary level, and two who focus on STEM and NGSS integrations. Seven participants teach at the k-8 level, one teaching k-2, three teaching 3-5, one 6-8, two k-6. Only one participant teaches high school. Of the 8 teachers that responded to the survey, half (4) teach in California, our target demographic. Three participants were from Maryland and one was from Pennsylvania. All participants are experienced teachers—two have taught for between 6-10 years, four teachers have taught 11-25 years, and two have taught for over 25 years.

Knowledge and Comfort with NGSS

Participants were all familiar with NGSS, with seven rating their familiarity as the highest on the likert scale - *I can explain NGSS to others and how the standards apply to my teaching practice*. Six of these participants are currently teaching to the NGSS. Participant comfort-levels were more varied. Five participants rated their comfort level as high (5), two rated their level at 4, and one rated their comfort level at 3. Five of these teachers felt it was important for students to see the NGSS standards text. When asked about the challenges they faced when teaching, three teachers mentioned their biggest obstacle related to finding aligned resources.

NGSS Unit Page Design Feedback

Overall, Initial impressions of the page were favorable. Six of the 8 participants gave the design high ratings. Five participants rated the page design at 4 on a scale of 1 to 5 and one participant rated the design at a 5. The other two participants were split between ratings of 2 and 3. Participants articulated that it was “nicely organized, easy to follow” and “great for teachers.” When asked how likely they would use similar resources, three participants responded with “extremely likely”, three responded “likely”, one responded “neutral”, and one responded with “unlikely”.

When asked what element was the most important element on the page for teachers, three participants responded “Student outcomes”, three responses related to the resources, one said “critical thinking questions” and one felt the investigative phenomenon and performance-based assessment were the most helpful. When participants were asked to select the most important teacher element from a given list, the responses were similar. Three participants selected Student Outcomes as the most important element. Two participants selected Investigative phenomenon, and one participant each selected performance assessments, Supportive text and guiding questions, and unit concepts.

When asked what the most important element for students, participants mentioned the media or resources six times. One responded that the concepts were the most important element. When participants were asked to select the most important student element from a given list, three participants selected anchor video/media, two selected supportive text and guiding questions, two selected unit concepts, and one selected investigative Phenomena.

Four participants were uncertain if they would use the term Anchor Phenomenon with students, selecting maybe. Two selected no and two selected yes-- indicating they would use the term Anchor Phenomenon with students. When asked about the label “Investigating Phenomenon” the break down was the same—4 maybe, 2 no, 2 yes.

SUMMARY

With experienced teachers, the content and design resonated well and indicates that we are on the right track. However, we do not know about inexperienced teachers and more research should be done to ensure the content and design works for that user group. There were also no real clear consensus on using the labels “Anchor Phenomenon” or “Investigative Phenomenon” with students, but the lack of certainty suggest that we may be better off using different labels for students.

APPENDIX

Survey:

https://drive.google.com/open?id=1kOnn69dvzGplmc-c8DyYwnACsr_fs1RdAGJK6ZNzMhE

Survey Data:

<https://docs.google.com/spreadsheets/d/1EJQDPyPI24PkiTMTdwTxp4FmW7UgOBR99GUgVhCO6V4/edit?usp=sharing>