Environmental Health Student Portal

Usability Test Findings & Recommendations

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Home Page

Home Page: Findings

Definition was challenging for some

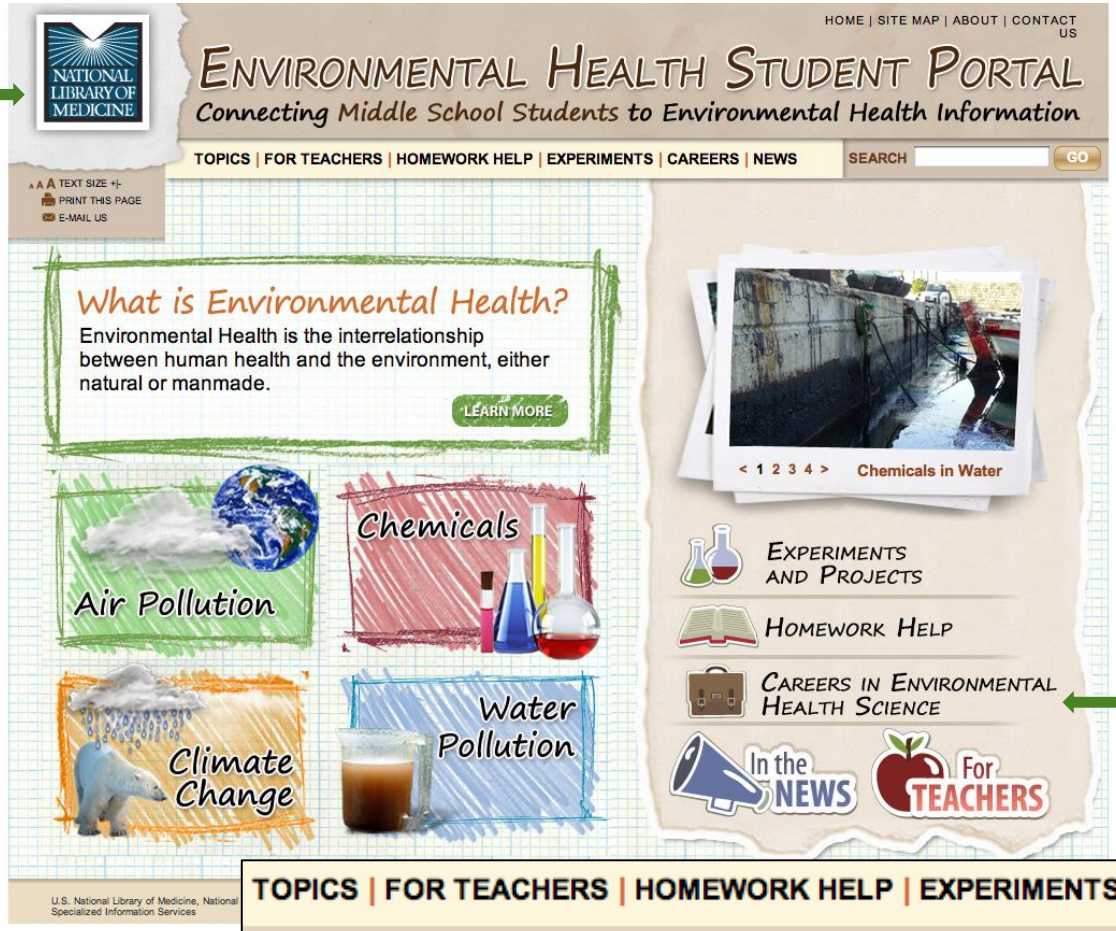
Crayon, fonts, colors, and graphics were generally appealing

Water pollution graphic was confusing for students

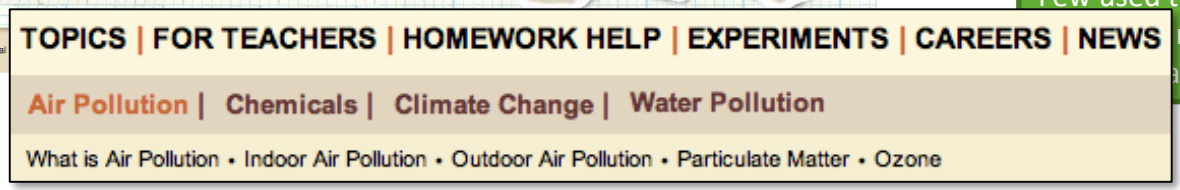
Image gallery was engaging (but function/purpose was confusing)

Home Page: Findings

Logo doesn't link to Portal home page



Right navigation changes on interior pages



Few used the nav to get ary pages

Home Page: Recommendations

Entire header image links to home page

Horizontal menu links directly to topics (no roll-over)

Prominent image gallery with captions and easier paging

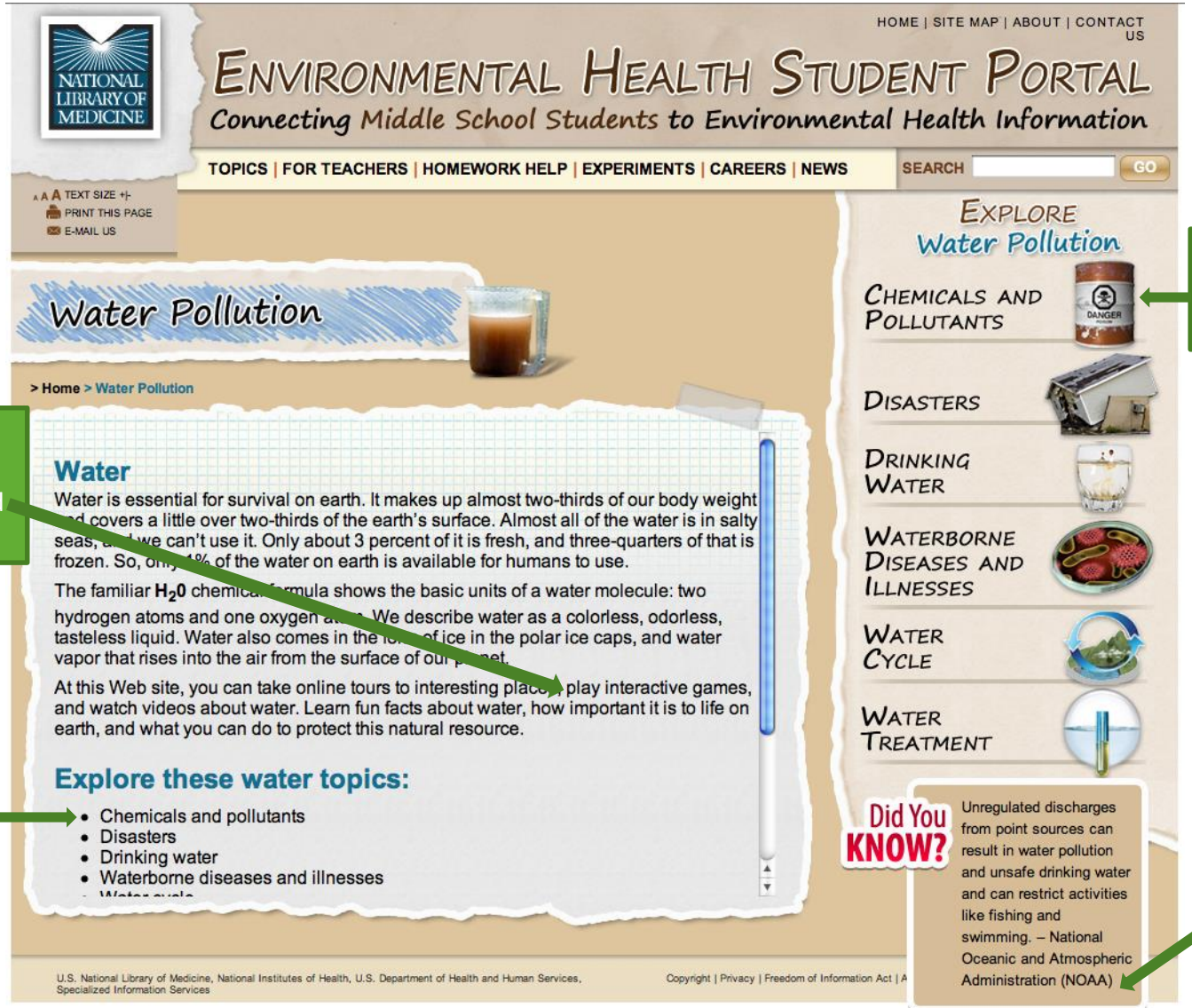
Search tool is more prominent

Student-friendly language in definition

Easily recognizable graphics

Primary Topic Pages

Primary Topic Page: Findings



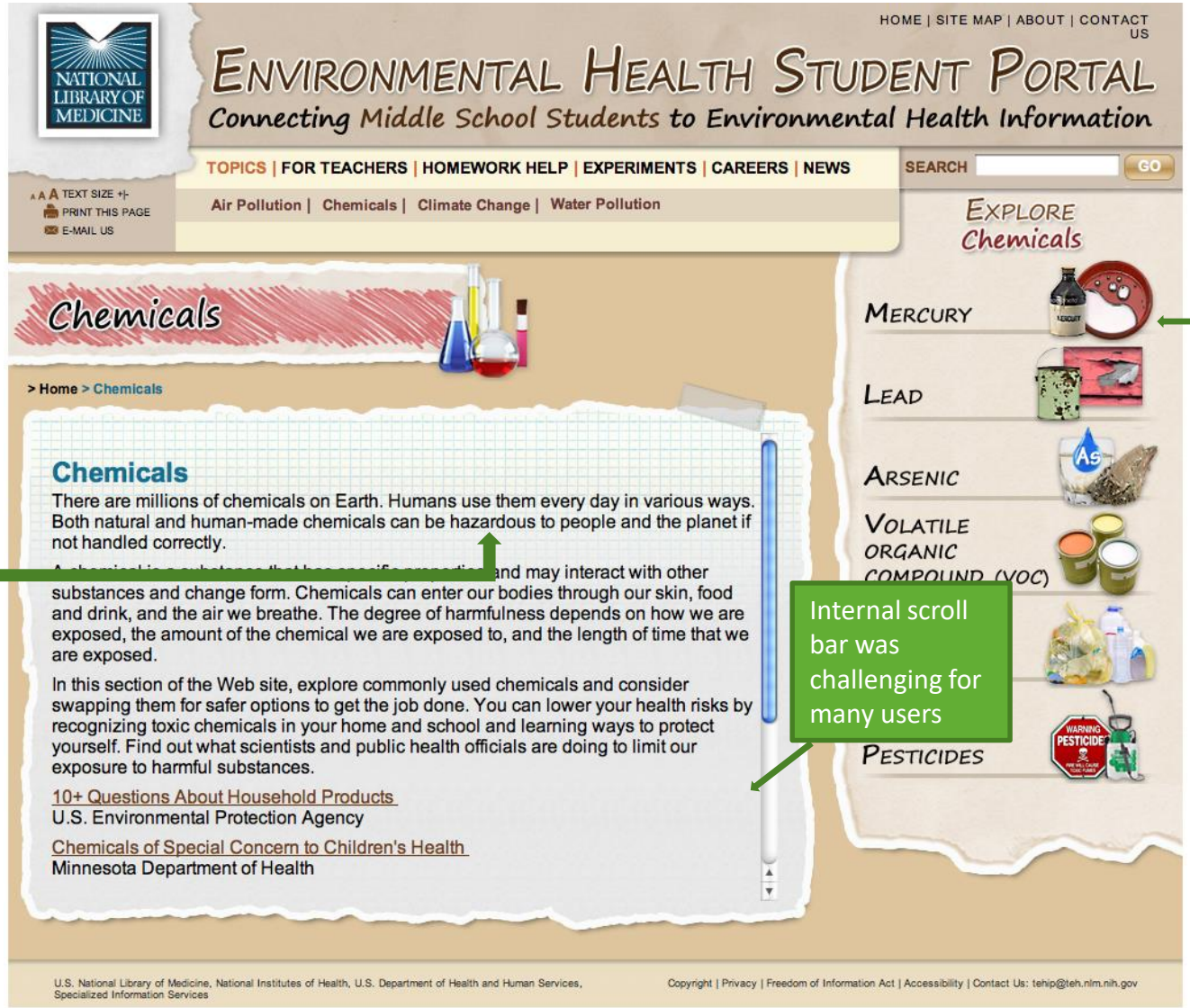
It was difficult for users to find the resources described in content

Topics listed, but not linked, from main content area

Right navigation bar is different from home page

"Did You Know" covers up footer on some pages

Primary Topic Page: Findings



Many students struggled with unfamiliar vocabulary words

Internal scroll bar was challenging for many users

Right navigation bar is different between topics

Primary Topic Page: Recommendations

Breadcrumbs and print tool are easier to see

Strong left navigation menu to explore

Content looks easy-to-read; vocab words are defined

No internal scroll bar

Homework Help and *News* are integrated into topic content

Primary Topic Content: Before and After

Chemicals

There are millions of chemicals on Earth. Humans use them every day in various ways. Both natural and human-made chemicals can be hazardous to people and the planet if not handled correctly.

A chemical is a substance that has specific properties and may interact with other substances and change form. Chemicals can enter our bodies through our skin, food and drink, and the air we breathe. The degree of harmfulness depends on how we are exposed, the amount of the chemical we are exposed to, and the length of time that we are exposed.

In this section of the Web site, explore commonly used chemicals and consider swapping them for safer options to get the job done. You can lower your health risks by recognizing toxic chemicals in your home and school and learning ways to protect yourself. Find out what scientists and public health officials are doing to limit our exposure to harmful substances.

Introduction to Chemicals

We use chemicals every day. There are millions of different chemicals on Earth. Some chemicals can be harmful to people (and the planet!), especially if they are not handled properly.

How do chemicals enter the body?

Chemicals can enter your body through:

- Your skin
- Food and drink
- The air you breathe

You can lower your health risks by recognizing toxic (harmful) chemicals in your home and school and learning ways to protect yourself.

Learn more about chemicals

In this section of the Web site, you will learn about common chemicals that you might use in your home or school. Find out how you can replace harmful chemicals with safer options to get the job done. Explore what scientists and public health officials are doing to protect people from toxic chemicals.

Primary Topic Content: Recommendations

Use Headers Strategically.

Using different styles for first and second level headers helps users quickly scan content on the page.

Try plain language strategies.

Text appears easier to read when:

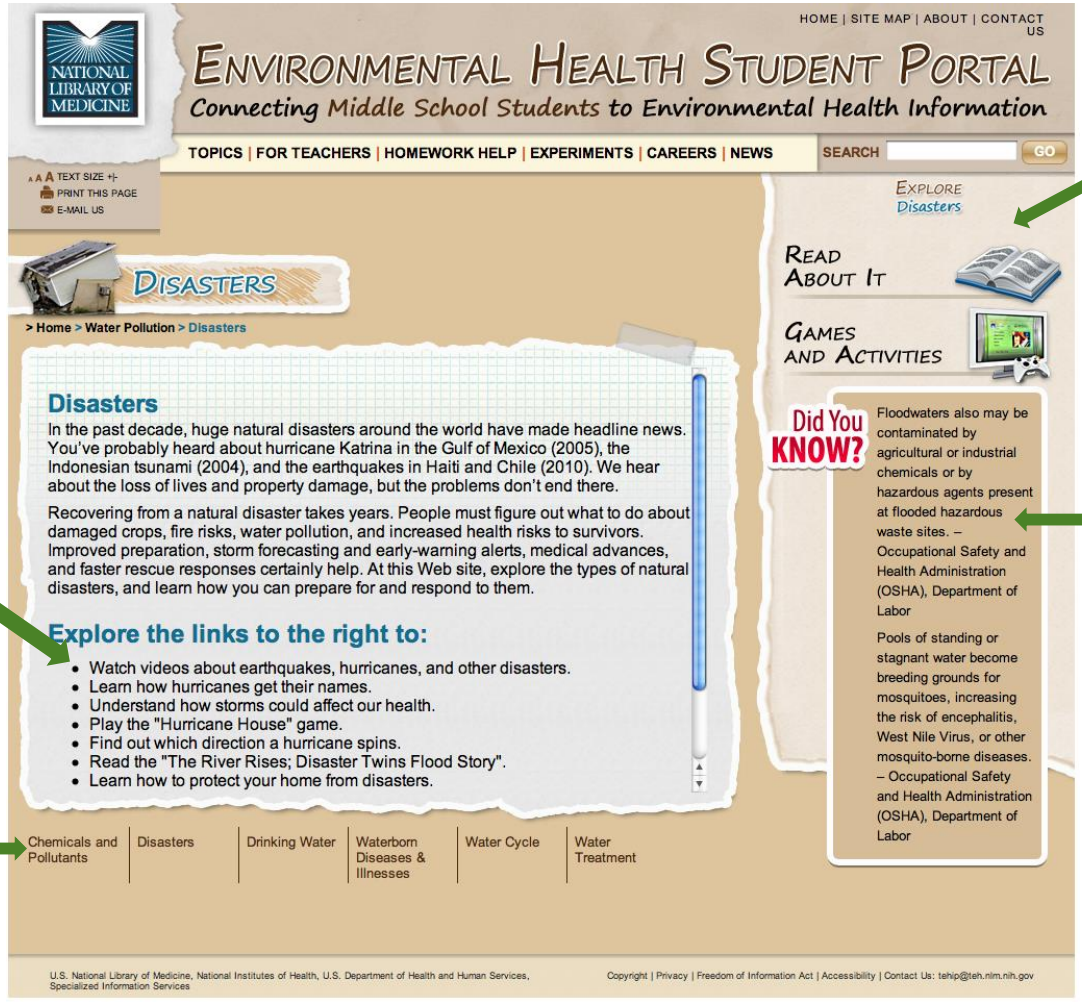
- Paragraphs are short (no more than 5 lines)
- Bullets present lists of information
- Pages have plenty of white space

Improve health literacy.

Give users actionable information. Define medical or technical terms. Explain the health benefits of addressing environmental issues.

Secondary Topic Pages

Secondary Topic Page: Findings



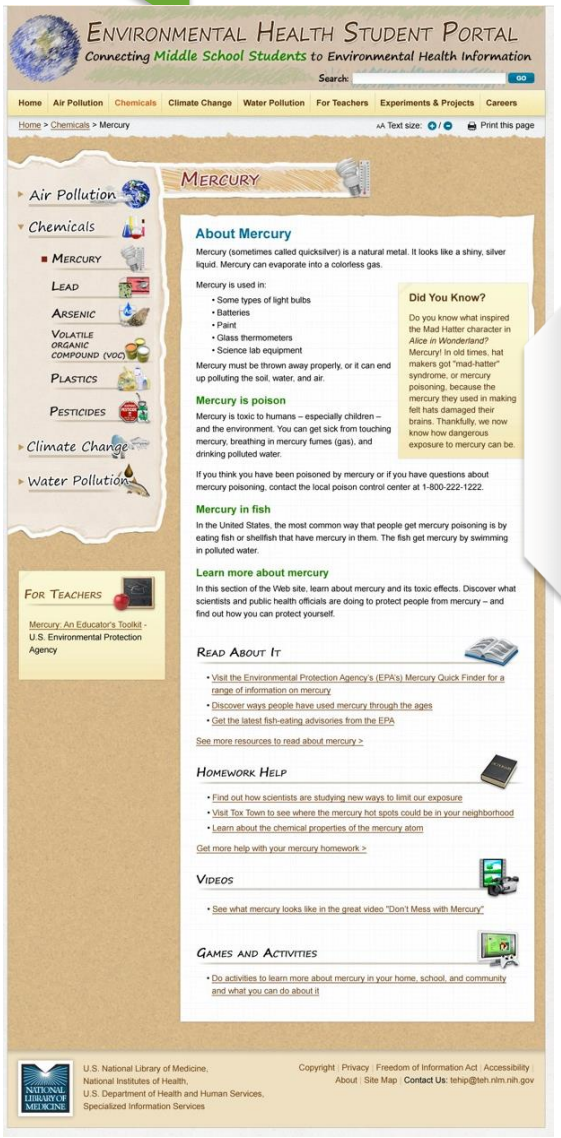
Right navigation menu is different from primary topic pages

"Did You Know" content was particularly challenging for readability

Users were frustrated that these bulleted items were not linked text

Lateral navigation to other topics was missed / confusing

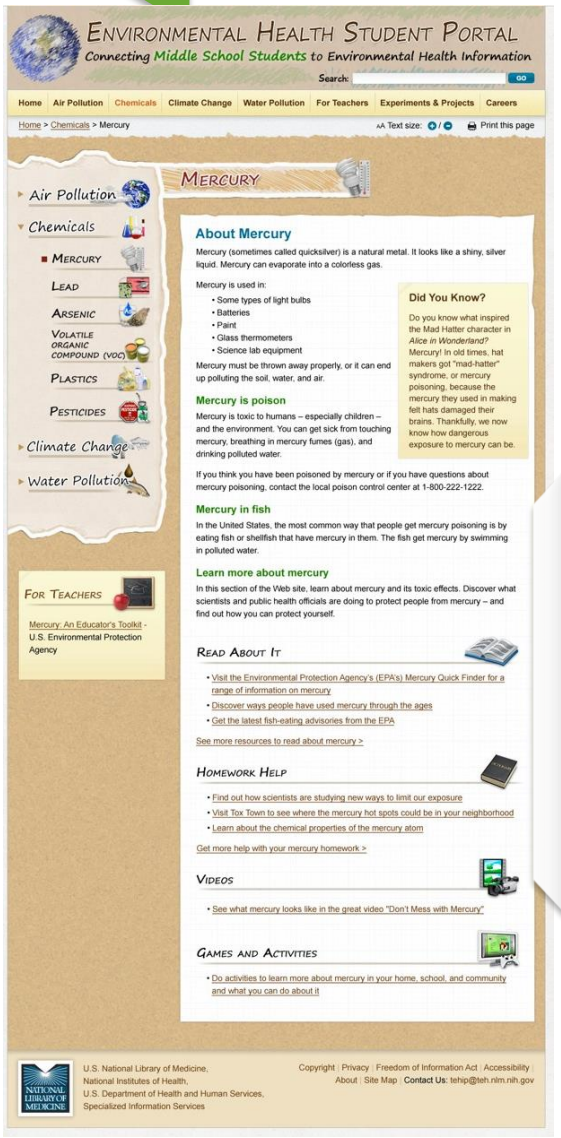
Secondary Topic Page: Recommendations

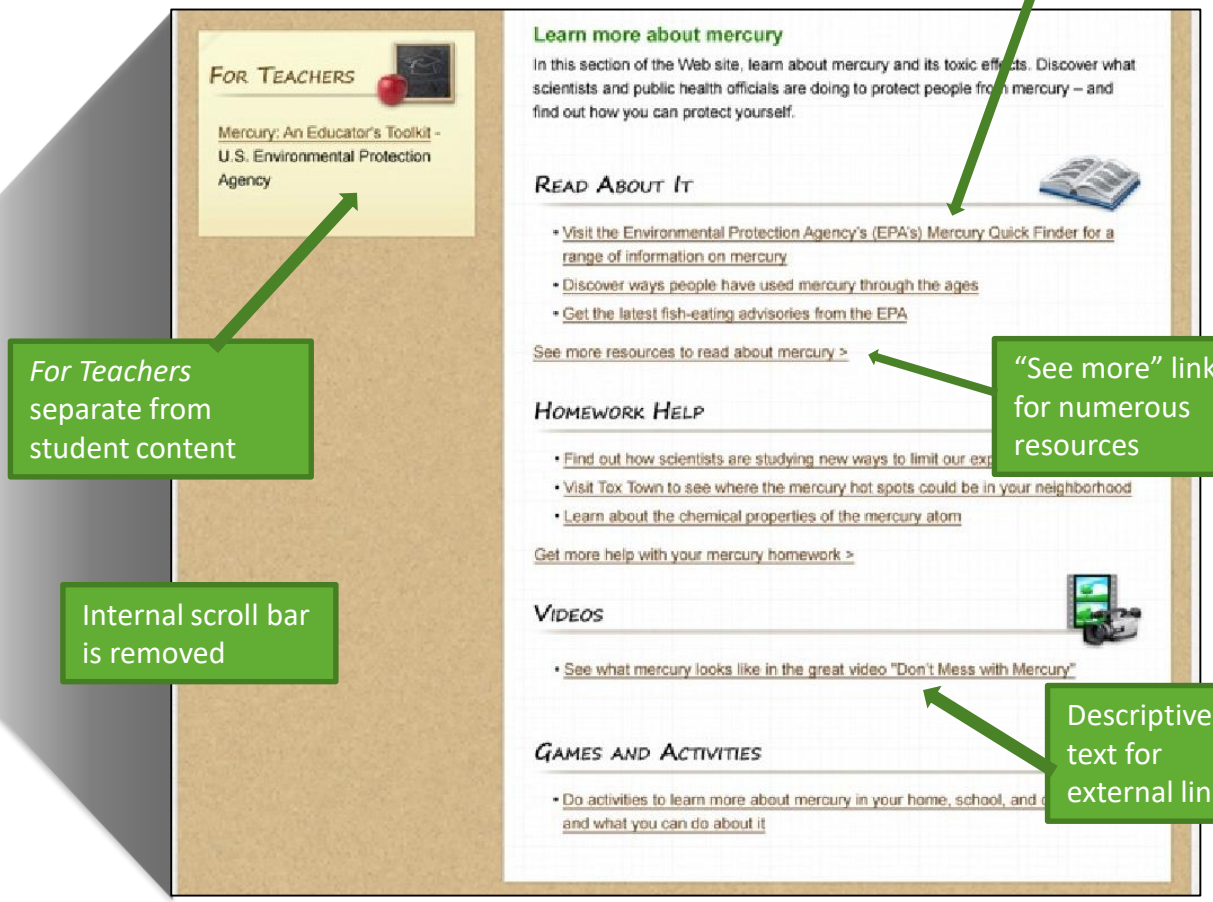


Navigation menu stays consistent

"Did You Know" is in main content area

Secondary Topic Page: Recommendations





Resources linked directly from topic page

For Teachers separate from student content

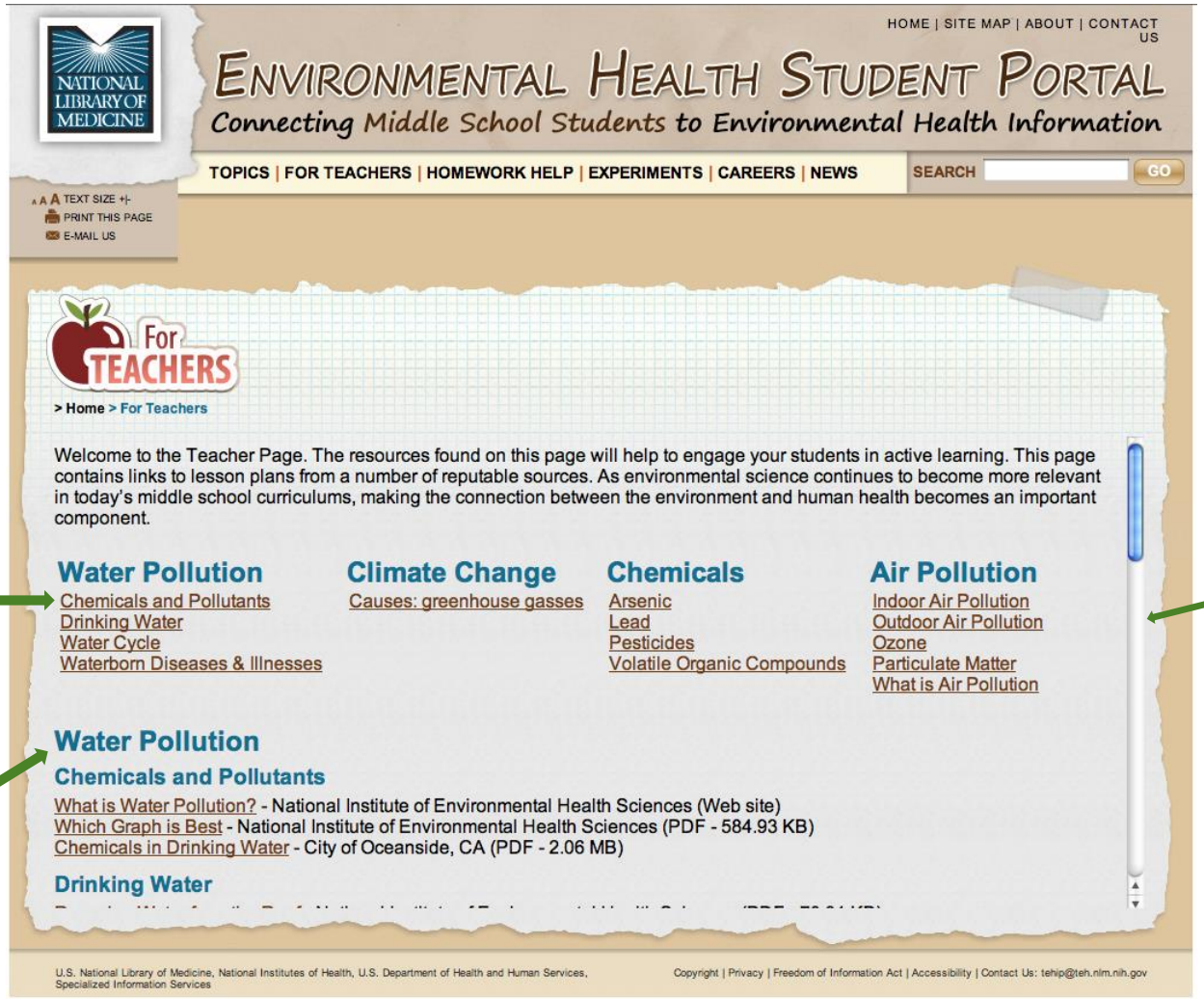
"See more" link for numerous resources

Internal scroll bar is removed

Descriptive text for external links

Supplementary Pages

For Teachers: Findings

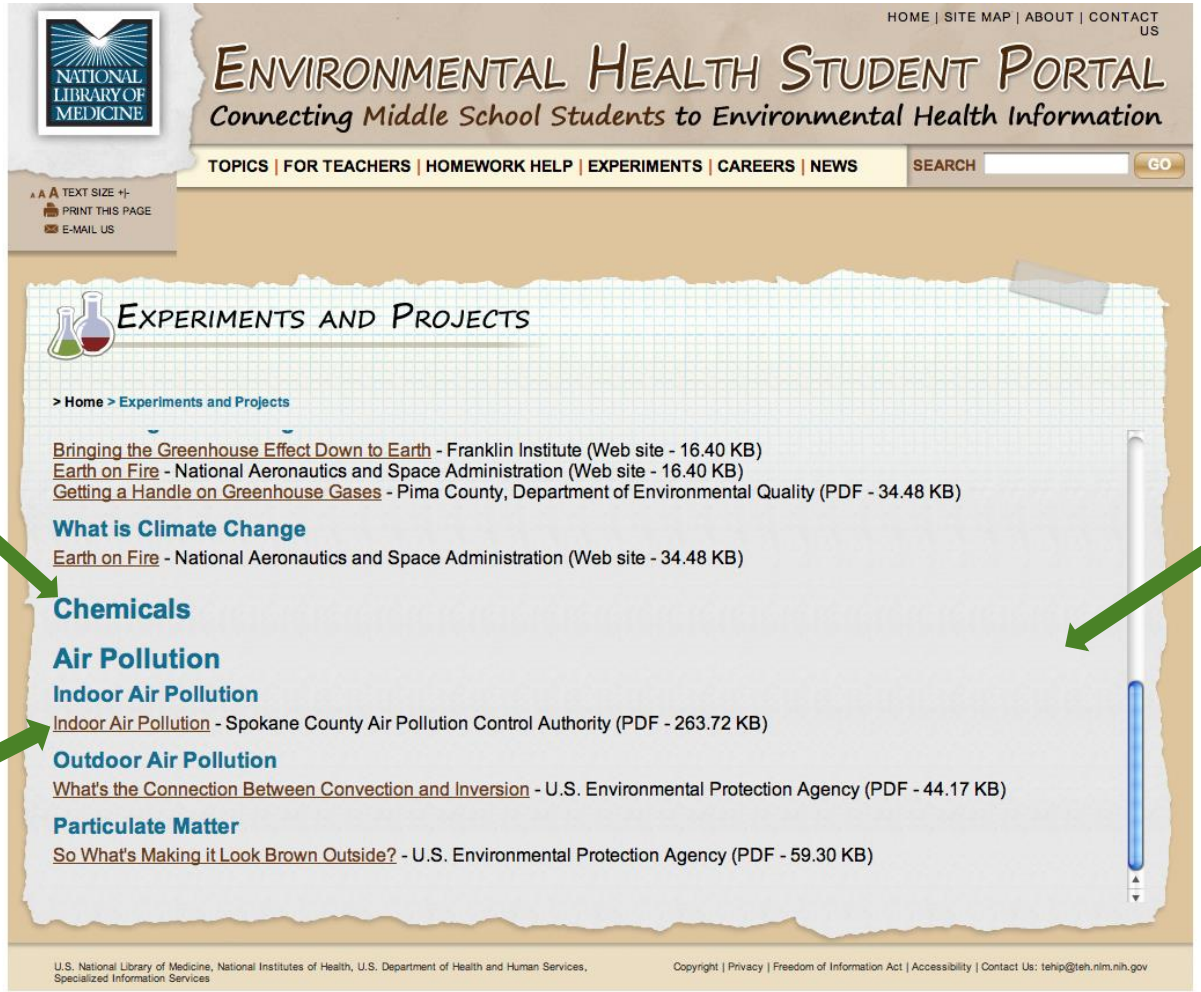


Anchor links were confusing for some users; only used for secondary topics

Similar styles for different headings on the page

Internal scroll bar was again challenging for many users

Experiments and Projects: Findings

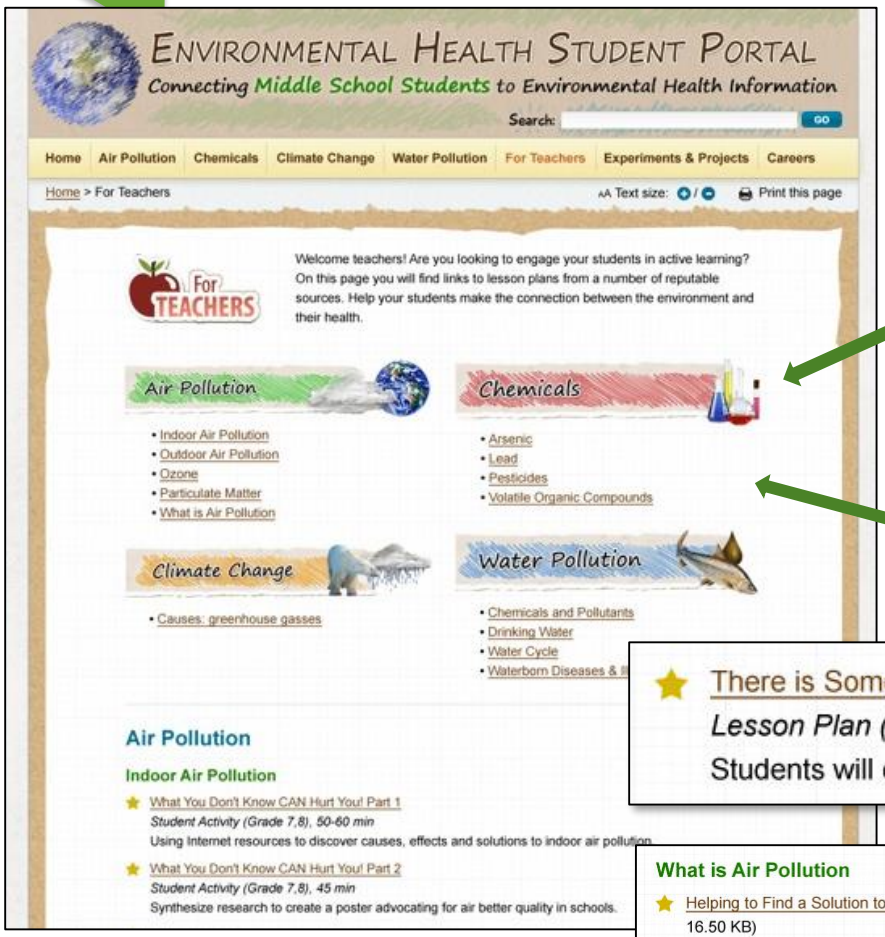


Page includes headers with no content

Users wanted more description of linked resources

No “back to top” links – users must use internal scroll bar

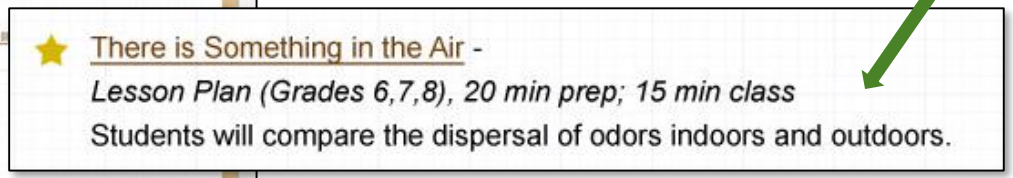
Supplementary Pages: Recommendations

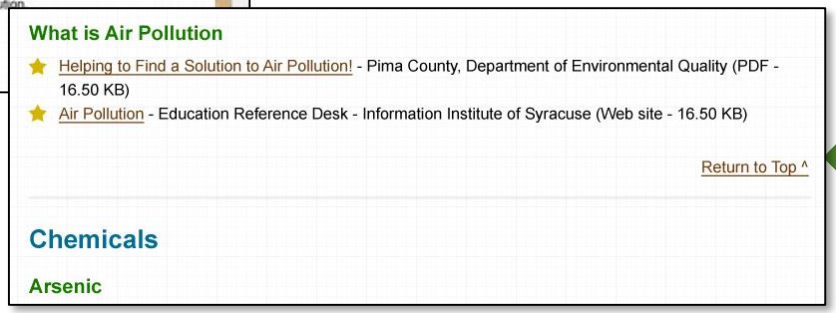


Graphical, eye-catching links to page sections

Anchor links in clear grid pattern

Resources include detailed descriptions





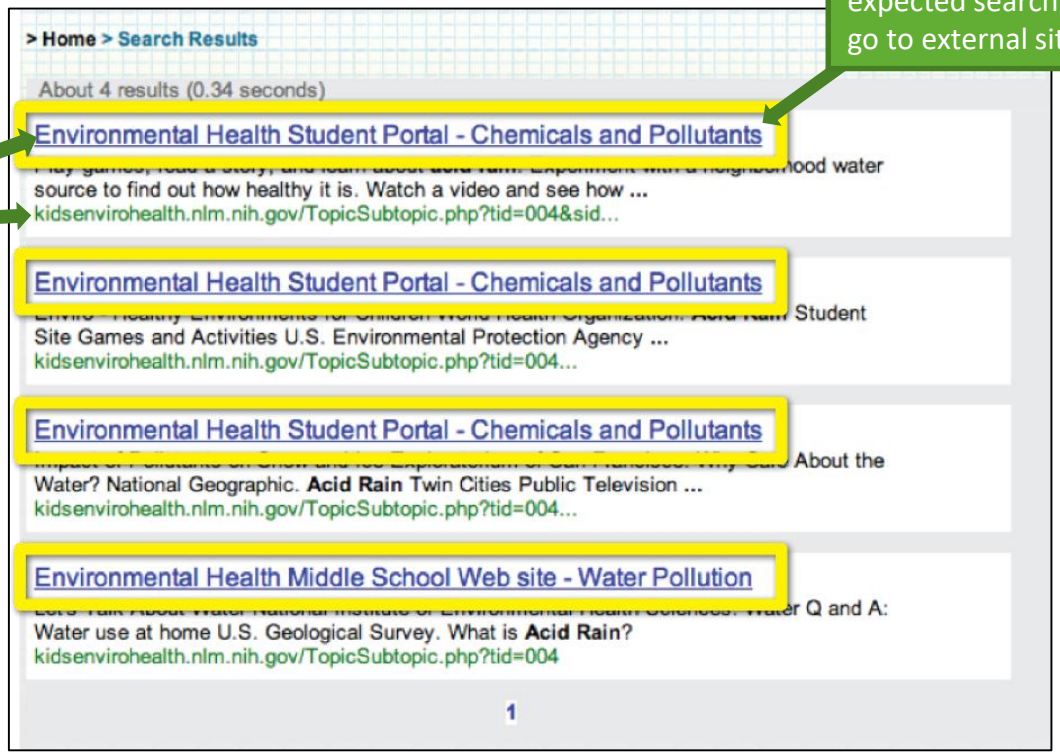
"Return to Top" links make it easy for users to navigate elsewhere on the page

Other Key Findings

Search

Students often expected search links to go to external sites

The 4 search results for 'acid rain' have almost identical titles and URLs



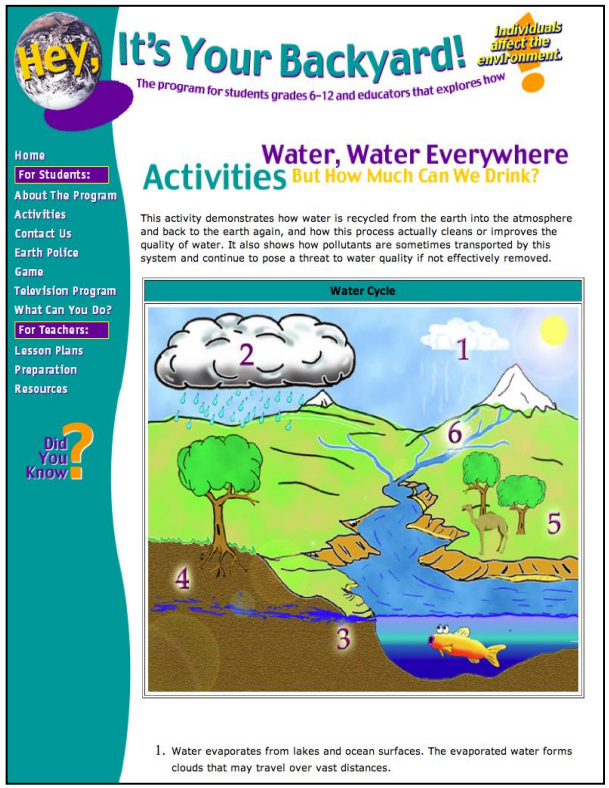
"A lot of trial and error."
— Teacher

External Resources

- Resources generally perceived as engaging and valuable
- Both students and teachers wanted descriptions
- Broken links caused frustration and were often mentioned by participants in wrap-up interviews
- Look and feel quickly ‘cue’ users to whether or not a resource will be age-appropriate

External Resources

"This is much more interesting. There are words in different colors, and there are these cartoon pictures" – Student



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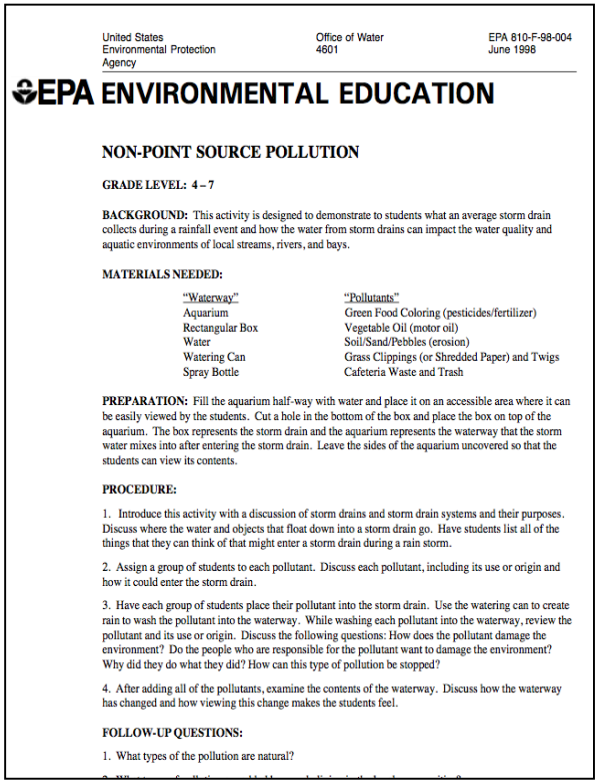

Summary

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- Continue adding a variety of resources (videos, lesson plans, etc.) to the Portal
- Change layout of navigational elements to help users complete tasks
- Use plain language best practices to improve readability of original site content
- Give more context for external resources
- Consider tools to help teachers incorporate EH into the curriculum

Quick Hits

- Remove “Topics” drop-down in top navigation and replace with direct links to 4 primary topics
- Use unique page titles to improve search result display
- Use student-friendly language for ‘*What is Environmental Health?*’ on home page
- Use headers, bullets, and white space to make content easier to scan and more approachable

Summary on Redesign

- Navigation
  - Home page; primary topic pages; secondary topic pages; supplementary pages
    - All make good sense; all equally important and cost-effective
- Introductory texts for primary and secondary topic pages
  - Headers, white space, bullets, plain language, no previews
    - Can be involved, but should prob do, because everyone was frustrated with previews
- Descriptive texts for internal links
  - Everyone wanted this; should be done in-house, but CMS or LMS needs to accommodate this
- Search
  - Search results have almost identical urls; Communicate Health suggests we use unique page titles to improve search result display
    - Discuss with developers whether this is feasible, given the cost (I am out of my depth)