Strandmaps Training

About the Strand Map Service

The Strand Map Service (SMS) provides an interactive graphical interface that helps K-12 teachers and students understand the relationships between science concepts. The interactive maps are generated through a Web 2.0 JavaScript API or REST API that lets developers embed the maps in Web sites and display educational resources and other information in the maps.

Frequently Asked Questions

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Training

Technical Training

NSDL TNS Brown Bag: Tools You Can Use

- Audience: PIs, Developers, Technical Integrators
- Description: NSDL's Technical Network Services team provided an overview of the suite of open-source tools and support services for the STEM education community, including the Strand Map Service (SMS), Collection System (NCS), and Digital Discovery System (DDS).

2007 NSDL Annual Meeting Presentation

- Audience: PIs, Developers, Technical Integrators
- Description: Provides information about the background research for the Strand Maps and an overview of the Javascript API. View more information about the Javascript API.

SMS JavaScript API Documentation

- Audience: PIs, Developers, Technical Integrators
- Description: In addition to the API, the documentation includes a JSON explorer that provides access to the JSON data that is available from the service, an image explorer that provides access to the JPG, PNG, PDF and SVG images that are available from the service, and an example code section that contains working clients that illustrate how to use the API, and may be used as a template for customizing the interactive maps within a Web site.

Tutorials

Basic Tutorial

- Audience: Developers
- Description: This tutorial will show you how to develop your own basic Science Literacy Maps user interface for your website that display several features that are provided with the Strandmaps API including: common student misconceptions, National Science Education Standards and access to all available maps in an interactive display.

Advanced Tutorial

- Audience: Developers
- Description: This tutorial shows how to use the Strand Map Service and NSDL Search Service to build a custom map browser to display specific maps and display relevant NSDL resources in the Information Bubble for the benchmarks and covers creating a custom strand selector to provide access to a subset of maps, adding custom tabs to the information bubble, and describes a method of providing resources within the information bubble via a search API..

General Training

Resource Alignment

- Audience: Collection Builders
- Description: How to align resources to benchmarks so they will be discoverable from the Science Literacy Maps.

How to use the Science Literacy Maps UI

- Audience: Teachers, Curriculum Developers, Students, General End Users
- Description: Describes how to use the navigation widgets and features of the Science Literacy Maps user interface.

Additional training options, including a tutorial on how to make basic and advanced implementations of the Strand Maps will be available soon.

Documentation

- Overview - Overview of the SMS technology including how to harvest the benchmarks using the Open Archives Initiative Protocol for Metadata Harvesting.
- Javascript API - The SMS JavaScript API lets Web developers insert interactive Strand Maps into Web pages using JavaScript and place custom content into the maps.
- CSIP REST API - The Concept Space Interchange Protocol (CSIP) is a REpresentational State Transfer (REST) service API that lets developers search through concept maps and find digital library resource supporting concept maps. Developers can access concept maps in number of formats e.g. XML, OWLLite, SVG, PDF, PNG, TIFF, and JPEG.