Technical Overview

The National Science Digital Library (NSDL) provides a suite of APIs for developers that include the Search API, Strand Map Service APIs, and an OAI Data Provider. The APIs provide access to collections of educational resource metadata, annotations, and use data/paradata and to AAAS Benchmarks, Maps and visualizations.

NSDL also produces Open Source Software products that aid in indexing, creating, and consuming digital library collections and other content. These include the Digital Collection System (DCS), jOAI, and Digital Discovery System (DDS).

NSDL Technical Platform

The NSDL repository contains collections of resource metadata, annotations, use data/paradata, and a collection of collection metadata (metadata about the collections). Collections are ingested into the repository from partners via OAI-PMH or are managed directly through the NSDL Collections System. Once in the repository, collections and records are made available through the Search API and the NSDL OAI data provider and are published to the Learning Registry. In addition, the Strand Map Service APIs provide access to AAAS Benchmarks, Maps and visualizations. Developers can use the Search API, SMS APIs and OAI data provider to search and browse a wide range of educational resources and to build innovative applications that support teaching and learning. The diagram below shows an overview of the NSDL technical platform.