



Building the Federal Learning Registry: Efficient Public Access to Digital Learning Resources



The Need for a Learning Registry: Resources are everywhere but not easily found

Imagine you are a high school physics teacher working as the curriculum coordinator for a school district. You want to improve an introductory physics course using resources from the early years of the U.S. space program in a way that integrates history, writing, and physics, and you want to use resources available from the federal government. In searching for those resources, you find that each agency has its own repositories (often many of them) and you must search each one. Moreover, Internet search engines, although of significant help, are designed primarily for general information searches and do not always return results relevant for educators (e.g., pedagogy, curriculum standards and grade levels are hard to specify within the major search engines). Another challenge is that some repositories do not expose data to search engines that crawl public web pages to find material. Finding the right information stored in different agency websites requires significant web research expertise. You might give up your search or compromise on lower quality resources because finding the resources you want will take too much time.

The federal government has recognized these problems and in the following three recent policy documents called for increased openness and use of digital learning resources¹ owned and managed by the federal government. Specifically, the Federal Learning Registry project is responding to the challenges to:

- Design and validate an “integrated approach for capturing, aggregating, mining, and sharing content...for multiple purposes...across many learning platforms” (National Educational Technology Plan, 2010 p. 78);
- “Take steps to create a pool of digital educational resources” (National Broadband Plan, 2010, p. 228); and
- Eventually, support the guideline that “information created or commissioned by the Government for educational use by teachers or students and made available online should clearly demarcate the public’s right to use, modify, and distribute the information” (Federal Open Government Directive, 2010, 3.a.ii, p. 8).

¹ For this project, learning resources are defined as: primary source documents, historical and culturally significant materials, and more complex resources designed specifically for educational use.



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The Purpose of the Learning Registry

The Learning Registry project is designed to ensure that educators, learners, innovators, and the general public can access learning resources easily from a variety of platforms—websites, community portals, and other repositories of digital learning resources. Users will also be able to contribute to the registry their own knowledge about existing and new learning resources and about how the resources are used.

The Learning Registry will be a permanent network of digital learning resource providers. It will enable each provider to share its content with any other repository or resource aggregator that wants to harvest it. With this integration, a user need search only a single website to find resources produced from many sites. The Learning Registry will be robust, having no single point of failure or control, and flexible, allowing different levels of participation.

The Learning Registry will help improve access and use of learning resources in the following ways:

- Enable repositories to share anonymous usage data about learning resources (e.g., ratings, reviews, instructional use, pedagogy, content areas, links shared, social networks;
- Provide a mechanism for integrating learning resources with usage data to provide more sophisticated recommendations, usage analysis, and research on user behavior; and
- Create opportunities for better integration of existing resources into larger, more complete and useful works.

The Learning Registry project team is evaluating several technical methods to make federal learning resources available. Throughout the development process, knowledge and information from many organizations (both nonprofit, governmental and for-profit) are being collected and incorporated into the design requirements. A technical working group will make recommendations and vet the approaches to help the project team make a final decision. In the initial phase, this project will address only the learning resources from a limited number of partners, but will be opened for wider participation thereafter.

Community Activity

The Federal Learning Registry was announced in July 2010 by Arne Duncan, Secretary of Education, G. Wayne Clough, Secretary of the Smithsonian Institution, and Federal Communications Commission Chairman Julius Genachowski. The project has engaged many other agencies and organizations, both inside and outside the federal government.



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Participating Federal organizations include the Office of Education Technology of the Department of Education; the Advanced Distributed Learning (ADL) Initiative of the Department of Defense; the Office of Science and Technology Policy at the White House; the National Institute of Standards and Technology; the National Archives and Records Administration; the data.gov team; and the Federal Chief Information Officer and the Chief Technology Officer. The technical team has also had partnership discussions with NASA, the Smithsonian, Library of Congress, the National Science Foundation, and the Department of Energy.

Representatives from PBS, Creative Commons, CapStone Digital Publishing, Institute for Knowledge Management in Education, Agilix, European SchoolNet, GLOBE, other international organizations and educational partners are members of the project technical working group. Technical working group members are interacting with all interested parties via a public e-mail list, as well as through presentations at conferences and other public settings.

Public comment has been solicited via an IdeaScale site with a corresponding open Google discussion group. The IdeaScale site allows comment and voting for ideas. learningregistry.org (maintained by ADL) also contains news items, as does the [@learningreg](https://twitter.com/learningreg) twitter feed.

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Community resources

- Discussion Group: <http://groups.google.com/group/learningregistry>
- IdeaScale Site: <http://learningregistry.ideascale.com/>
- Project Website: <http://www.learningregistry.org/>