# EDUCATION WEEK

# U.S. Learning Registry Aims to Tailor Online Content for Educators

## Federal effort aims to collect and vet academic materials for educators

**By Sean Cavanagh**

Federal officials are trying to build participation in an online information network designed to organize and vet academic content for educators, a tool meant to free them from having to go through time-consuming, site-by-site searches for materials.

The U.S. Department of Education and other entities have been working on the network, known as the **Learning Registry**, for two years, though they say they only recently finished the computer code for the system. The agency has spent about $1 million on the project so far.

The registry has no single website. Instead, it's designed to work like an online highway or a network of roads that brings content to educators at the home pages they're already using to find resources—sites that need only to tap into the system.

Whether the registry evolves into a prized tool for the K-12 community, or one that fades into online obscurity, remains to be seen.

Education Department officials are trying to increase participation in the registry among content providers and publishers who can feed academic materials into the system—and among educators and others who will use the network and help their peers distinguish good resources from weak ones.

Attempts to guide educators to online resources too often have focused on "let's make these big content libraries ... let's create this one portal, this one location," said **Richard Culatta**, the director of the department's office of educational technology. When the question "how do we make it easier" for educators was asked, he said, the response too often was "Oh, I know, let's create another portal!"

But for teachers, the problem usually is not finding classroom materials, it's that "there are 700, and you need one," Mr. Culatta said. The registry, he said, is meant to help educators figure out "what's the best one for the kids I'm teaching, at the time I'm teaching, at the level I'm teaching."

The registry was built to receive all content, including materials from commercial providers, so some of what it houses may not be free, though the vast majority is likely to be, said Steve Midgley, a senior adviser at the department who has worked on the system.

## Refined Searches

Online visitors looking for a single home website for the Learning Registry won't find one. Instead, it's accessed through any of the individual home pages that arrange to tap into it, such as **free.ed.gov**, where educators could begin their search for resources.

One of the big goals of the registry is to allow educators to avoid going through a cumbersome, site-by-site search for resources, and allow them instead to tap into a library of materials, which have been rated by peers and other trusted sources, that can be accessed through the websites already familiar to them.

A diverse mix of sources—government agencies, nonprofits, or commercial publishers—can contribute resources to the registry, the department says. That means no one controls what resources are initially put into it. About 500 unique publishers have brought resources to the system so far, including the National Science Digital Library, the Library of Congress, and the Smithsonian.

The managers of individual websites that tap into the registry—which could include state departments of education or online networks of educators—determine what information they will present to their audiences, whether they're high school biology teachers, middle school math curriculum specialists, elementary school

### Online Partners

Many organizations are providing resources or tools to assist the Learning Registry, an online information network. Those organizations include:

### Library of Congress

Describes itself as the largest library in the world, housing millions of books, maps, manuscripts, photographs, and recordings.

### European Schoolnet

A network of European ministries of education; operates a "learning resources exchange" designed to allow schools to find education content from different nations.

principals, or others.

Existing websites can use the registry by establishing application-programming interfaces, a common strategy for pulling data from one site to another, Mr. Culatta said.

Whether online users are directed to free or for-cost materials through the registry will depend on the sorting done by the individual websites that those audiences are using to link to the system, Mr. Midgley said.

While the Education Department oversees the registry, the U.S. Department of Defense also supported its development, and other federal agencies contributed, too. In addition to the Education Department's investment in the site, a private entity, Amazon Web Services, hosts it and has spent $20,000 on it, the department estimates.

The success of the system will depend in large part on educators' ability to find materials that meet their classroom-specific needs–resources that the registry will be able to deliver, Mr. Culatta argued.

He recently cited an example of a 5th grade science teacher leading a class with a lot of English-language learners. Rather than doing an ad hoc online search for appropriate lessons, the teacher would connect to the registry from a site he or she uses now and secure access to lesson materials vetted by educators working with similar populations.

Federal officials also see larger-scale payoffs.

Individual states are collecting resources they believe are aligned to the Common Core State Standards. Hypothetically, if 50 states each cobbled together 100 of those aligned materials and shared them through the registry, teachers connecting to it could access a menu of 5,000 aligned resources from their keyboards, tailored to their specific needs, Mr. Culatta said. (All but four states have adopted the common standards.)

## Potential Barriers

Mark Schneiderman, the senior director of education policy

### California Department of Education

The registry is tapping into the state's "Brokers of Expertise" portal, designed to provide resources to educators.

### Shodor

A nonprofit in Durham, N.C., focused on mentoring and providing hands-on learning for students; has published information about its resources on interactive models and simulations in the registry.

### Florida's CPALMS

Collaborative platform that connects educators, researchers, subject-matter experts and others; developed by a research center at Florida State University.

### FREE

Federal Registry for Educational Excellence, a repository containing more than 1,600 K-12 teaching and learning resources; backed by the U.S. Department of Education.

### Benetech

A nonprofit focused on developing technology for social good; will provide the registry with meta data about learning resources available in its "Bookshare" collection of books and textbooks.

Source: U.S. Department of Education

for the Washington-based Software and

Information Industry Association, which represents software and digital-content providers, said his organization is supportive of the registry. But he questioned the system's long-term viability, and said that its success would hinge partly on educators' and others' ability to make sense of it and promote it among colleagues and peers—which are not sure bets.

"Is it going to be sustained, supported, and implemented?" Mr. Schneiderman said. "The jury's still out."

Mr. Midgley of the Education Department cited several factors that he believes will give the registry a lasting presence. One is technological: The system does not rely on a central server, but rather functions in a way that's more comparable to an email network—a model that should encourage growth within the community of users, he argued.

In addition, the interest in the registry outside the federal government, and the sharing among some current users of it, including states, suggest that there's a K-12 network keen on keeping it vibrant, he said.

Eventually, the Education Department hopes to become just "one of many supporters" of the system, Mr. Midgley said.

The power of the registry—and one of the biggest challenges it faces—is not its ability to provide "metadata," or basic information on the resources it contains, but how it will present "paradata," such as shared reviews and educator opinions of academic content's usefulness, said Steve Nordmark, the chief academic officer of **Knovation Inc.**, a Cincinnati-based provider on online personalized learning and other services to districts.

In theory, that system could be comparable to the comments and recommendations consumers can post on Amazon.com, Mr. Nordmark said.

But it will be important for designers and users of the registry to agree on standards for those reviews that allow "apples-to-apples" comparisons of learning resources, he added.

As it stands now, the registry's technology "is still pretty green," Mr. Nordmark said. The challenge, he explained, is to make the registry "so drop-dead easy anybody could run with it."

One barrier to commercial providers' participation in the registry is their fear of giving away too much content they've spent money developing, Mr. Schneiderman said. In addition, academic materials are sometimes packaged in comprehensive ways that make it difficult to present them as "finite pieces of content" through the registry, he noted.

He drew an analogy to how music today is created and then delivered to consumers. In some cases, the registry may work "better for songs," he said. "Most commercial publishers are publishing albums, or CDs."

But assuming the flow of content is strong, the system

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will also rely on the willingness of teachers and experts on various academic subjects to help their peers sort through its materials—and offer recommendations on what's valuable, and what's not, the Education Department's Mr. Culatta said.

There's a need for more "expert curation," he said. The process of winnowing and organizing the offerings, he said, creates an environment "where [the best] resources rise to the top."

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