




## Navigating NSDL: A Faculty Member's Experience

As a chemist, I initially learned about NSDL through an online workshop offered by ChemEd DL, NSDL's Chemistry Pathway. I quickly discovered the utility of the library by exploring the Chemistry and Physics resources. NSDL resources of special interest to school teachers in your district can be found by choosing the National Digital Science Library link in GALILEO then choosing the appropriate tab at the top. After choosing the Chemistry and Physics tab you will find that the next page displays links on the left side to Resources for K-12 and Higher Ed Teachers. K-12 teachers frequently ask about the availability of a virtual chemistry lab, one of which can be found in the NSDL. To access the virtual lab choose the Resources for K-12 Teachers, click on the Resources of Interest link, then scroll down to the ChemCollective: Online Resources for Teaching and Learning Chemistry. The Virtual Chemistry Lab appears after you click on the Find Activities link. You will have to download some software onto your computer but included in each lab are instructions for the experiment and simulated beakers, glassware, pH meters, and so forth. Your students can literally perform a lab from their computers. The Virtual Chemistry lab includes lesson plans and assessment ideas for high school and undergraduate level Chemistry courses.

A second highly useful resource is the Teachers' Domain Pathway to Multimedia Resources for the Classroom which is found near the bottom of the K-12 Teachers Pathways link. To use this free resource you will have to register as a member but nothing else is required. When the Teacher's Domain page appears, choose the Physical Science link to have access to nearly 400 different multimedia pages for classroom use. Your students will certainly enjoy some of the clever activities under the Chemical Change link. Choosing the movies link on the right side will allow them to see rockets and cars propelled by the reaction of lemon juice and baking soda or how fireworks are designed to generate their dazzling displays. The NSDL is a huge resource that every teacher in Georgia can now access and use in their classrooms. Please direct them to this new GALILEO link: <http://www.galileo.usg.edu/express?link=nsdl>.

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**NSDL Pathways**  
**Learn More**

**Biological Sciences Pathway**  
The Biosci EdNet (BEN) collaborative provides access to reviewed resources for college and university educators covering 77 biological science topics from multiple collections.

[NSDL Pathways News](#)





## New Tools for 21<sup>st</sup> Century Education: Examples from the National Science Digital Library

GALILEO exemplifies the geometrically expanded possibilities of information access available to today's students and educators. In addition to the journal titles and subscription databases to which GALILEO connects all Georgia citizens, the virtual library is also allowing its users to search millions of science and math learning resources through a new partnership with the National Science Digital Library (NSDL).

### The National Science Digital Library

NSDL was established by the National Science Foundation as an online library of exemplary resources for science, technology, engineering, and mathematics education and research. Like many digital libraries, it holds descriptive information about the 2.5 million resources it catalogs, and provides an organized point of access to these resources, as well as associated tools and services. As an educational digital library, NSDL's collection focuses on teaching and learning materials contributed by a network of more than 200 resource providers including professional societies, universities, museums, commercial publishers, and government agencies. NSDL supports all levels of education, from preschool through adult, with materials ranging from journal articles and lesson plans to interactive animations, and from blogs and podcasts to scientific data sets. No fees or registrations are necessary to use NSDL, although such requirements may be associated with some of the resources to which it links.

### Beyond the Search Engine

To optimize support and provide context for education communities, NSDL created a series of focused partner libraries known as Pathways. Pathways are discipline-specific (Biology, Chemistry, Computational Science, Engineering, Materials Science, Mathematics, Physics) or education level-specific partnerships (Middle School, K-12 Multimedia, Community and Technical Colleges, Informal Education) that provide stewardship for the educational content and services needed by major communities of learners; contribute in-depth knowledge of the educational needs of that audience; and are the primary means by which NSDL creates connections between the scientific research community and the classroom. Eleven Pathways support K-12 and higher education including community colleges and informal learning. A full list of Pathways appears at <http://nsdl.org/about/?pager=pathways>.

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