http://mathdl.maa.org/mathDL/

Math Gateway

Ed Level: Undergraduate   Discipline: Mathematics

Math Gateway, a project of the Mathematical Association of America (MAA), brings together collections with significant mathematical content and services of particular importance to the delivery and use of mathematics on the Web. The portal site features *Math in the News* – a daily column, *This Day in Math* –mathematical related events on this day in history, and the ability to search over materials in 16 partner collections. In addition, Math Gateway also offers a "My Library" feature that allows users to save and share articles. Launch date: September 1, 2006.

Project Goals: Assume stewardship for undergraduate web-based mathematics education; support the existing community of individuals and organizations concerned with creating and delivering mathematics on the Web; and increase awareness and usage of MathDL, Math Gateway and NSDL within the mathematics community.

Personnel: Lawrence (Lang) Moore – PI , Don Albers – Co-PI, Pamela Richardson – Web Master (all technical issues)

Partner collections: Convergence, Journal of Online Mathematics and its Applications (JOMA), Digital Classroom Resources, MAA Reviews, Classroom Capsules and Notes, MathWorld, Math Forum, iLumina, causeweb.org, Demos with Positive Impact, National Curve Bank, Virtual Laboratories in Probability and Statistics, Ethnomathematics Digital Library, Connected Curriculum Project, Mathematics Survey, NSDL Middle School Portal.

Additional Partners: webODE, Eduworks, WeBWorK, College Board, MERLOT.

Collection size and collection development: 20,000+ online resources in sixteen partner collections.

Web portal: Current site is MathDL, the primary MAA library of Math Gateway. A new portal is in development and testing – will resolve to: http://mathgateway.maa.org.

Search and browse: Search engine will partner OAI metadata on a regular basis and will enable users to search over keywords. Searches may be refined.

Special features: Personalization will include My Library links with the option for participation by others, space to upload materials, and discussion board capability for community collaboration.

Community sign-on: Math Gateway will employ a centralized authentication system with initial emphasis on coordination between MathDL and Math Gateway. As soon as the initial portal is in production, developers will begin working with the CI on this.

Cataloging/metadata generation/ NSDL MR: Content management system is developed and provided by Lucidea Corporation. A CWIS tool is available for cataloging small collections and making metadata available on an OAI server. Rights management and restricted metadata issues are of interest to this Pathway.

Web 2.0 technologies such as blogging, tagging/bookmarking systems (e.g. del.icio.us); RSS feeds; gaming technologies: Math Gateway is participating as a tester for the developing NSDL Expert Voices blogging system, and is conducting a blog around the topic of *Presentation of Math on the Web.* The second release of Math Gateway will include RSS feeds for at least the Math in the News columns.

Evaluation activities: Evaluation workshop participation in August 2006. Omniture is being implemented on Math Gateway.

Outreach activities: Partners meeting April 2006; Pathway workshop scheduled for October 6-8, Washington DC.

Privacy policy: Available at http://mathdl.maa.org.

Unique assets / synergies: Strong professional society sponsorship and relationships. MAA is the largest professional society focused on undergraduate math education. Extensive membership includes university, college and high school teachers, computer scientists, statisticians, researchers, business, government, and industry. Collaborating with ComPADRE – Physics and Astronomy Pathway to produce math tutorials suitable for physics and astronomy education. Potential user/testers within partnership for the Content Alignment Tool (CAT) for standards application to K-12 resources (MathForum and the Canadian Mathematics Society) .