Pathway for K-Gray Engineering Education

- Ed level: K-Gray     Discipline: Engineering
- A collaboration to provide a comprehensive engineering portal for high-quality teaching and learning resources in engineering, computer science, information technology and engineering technology – the Engineering wing of NSDL. Start date: October 1, 2005.

http://www.needs.org
http://www.teachengineering.com
K-Gray Engineering Pathway

• TeachEngineering:
  - Jacquelyn Sullivan & and Mindy Zarske—Univ. of Colorado at Boulder
  - René Reitsma, Oregon State University
  - Gary Ybarra & Paul Klenk, Duke University
  - Mike Mooney, Colorado School of Mines
  - Martha Cyr, Worcester Polytechnic Institute

• NEEDS – Higher Education
  - Alice Agogino, Jialong Wu, Andi Niess, Paul Mackinney, UC Berkeley

• Evaluation/ Sustainability
  - Joe, Tront, Virginia Tech
  - Nancy Van House, School of Information, UC Berkeley
  - Advisory Board
Project Goals are to:

1) merge NEEDS and TeachEngineering into a unified K-Gray engineering educational digital library; 2) significantly grow high quality resources in the NSDL Engineering Pathway in a sustainable way; 3) align the unified curricular materials with appropriate undergraduate (Accreditation Board for Engineering and Technology - ABET criteria) and K-12 educational standards, 4) grow the participation of content providers and users; 5) enhance quality control and review protocols for Engineering Pathway content; and 6) create a nonprofit strategy and partnership for the sustainability.
TeachEngineering: K-12 Resources

- 13 subject areas (algebra, biology, chemistry, data analysis and probability, measurement, physical science, etc.)
- 26 Curricular units (themes or related lessons)
- 163 Lessons (focused topics)
- 327 Hands-on activities
- Living Labs – Portals to engineering data
NEEDS: Higher Ed/Professional Society Target Audiences

- NEEDS is the oldest educational digital library operating since 1990.
- NEEDS has aimed at higher education with 8,000+ learning objects and 3,000 registered users.
- Accesses average 50,000 - 70,000 per month.