NEEDS—The National Engineering Education Delivery System
www.needs.org

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Action Agenda Goals (1998-2001)

✔ Provide a service to the engineering education community
✔ Grow and evolve NEEDS as the foundation for an on-line engineering education community
✔ Expand courseware review and evaluation efforts
✔ Serve as a bridge to the development of a National SMETE Digital Library
How does NEEDS help teachers/learners “re-use” learning materials?

• **Help user find materials**
  - Digital library of multimedia engineering learning resources
  - With standardized descriptions (metadata) to describe resources

• **Help users evaluate the “quality of materials”**
  - Premier Award
  - User Comments and Reviews
  - Threaded Discussions

• **Developed upon an extendable platform to:**
  - Support multiple uses
  - Integrate new services and features
  - Integrate research
The Premier Award for Excellence in Engineering Education Courseware

- A national competition to identify and reward the authors of high-quality, non-commercial courseware designed to enhance engineering education.
  - The Premier Award is about the entire experience of using the courseware by learners, not just the courseware itself.

Over 7,000 CD-ROMs Distributed Internationally
For more info or to receive copies go to http://www.needs.org/engineering/premier/
Major Accomplishments

• Under Action Agenda...
  – System use more than doubled
  – Engineering courseware increased 213%
  – Total holdings increased 441%
    (plus NSF-DLI2 funding)

• Continuing Premier Award, over 7,000 CD’s distributed

• Implementing discussion systems, prototype in-place

• Expanding user comments and other review mechanisms

• Re-engineering NEEDS to allow for further expansion

• Setting stage for NSF’s National SMETE Digital Library program, expanding into Chemistry, Physics, and Mathematics

Total Collection

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Engineering</td>
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<tr>
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<td>Other</td>
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