

Project Year

2001

Project Team

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Project Title

What is Engineering?

Audience

Undergraduate students enrolled in the *What is Engineering?* course will benefit from online resources developed especially for the class. A secondary goal is to develop resources that can be re-purposed so that high school educators can use them to enrich their introduction of science and math concepts within an engineering context.

Pedagogical Issue

Engineering involves many concepts and principles that relate to motion: viscosity, stability, chaos, dynamic similarity, acceleration, and diffusion. Traditional educational materials—text, graphs, and pictures—restrict the presentation of such ideas.

Solution

The goal of this project team is to put *What is Engineering?* completely online, and to take advantage of the Web's versatility as a medium, especially the ability to display animated films, for the benefit of students enrolled in the course. *What is Engineering?* could be enhanced through the use of animations and film clips. It would help students to learn the concepts if they were able to visualize the dynamic processes being discussed. A web-based virtual laboratory for the course already exists, and a web-based supporting monograph is in preparation. This project will further the educational value of that monograph by illustrating dynamic processes with appropriate animated visuals.

Technologies Used

Web Design, Multimedia-Flash & Quicktime, Adobe Acrobat

A link to the Virtual Laboratories website for *What is Engineering?* is available here:

<http://www.jhu.edu/virtlab/>