

How faculty focused on pre-college engineering education and outreach can leverage this free digital library of engineering resources. (Pre-college Resource/Curriculum Exchange)

Mrs. Stephanie Weber, National Center for Women & Information Technology

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Dr. Lyn Swackhamer is the PI on the NSF funded Teach Engineering grant. Teach Engineering is a digital library of K-12 engineering education materials. Dr. Swackhamer has a PhD in education innovation with an emphasis on research and evaluation methodology. She has been the Director of Aspirations Evaluation at NCWIT for the past 9 years.

Level up on pre-college engineering education and outreach



TeachEngineering.org is a free digital library of over 1900 classroom-tested, standards-aligned K-12 engineering resources created in collaboration with educators across the nation. Our goal is to help educators put the 'E' in STEM by making applied science, technology, and math come alive through engineering design and design thinking.

"When I first started incorporating engineering into my science curriculum, I was left grappling with the question, 'What does K-8 Engineering look like?' Teach Engineering came to my rescue with a plethora of lesson plans and hands-on activities that were ready to use tomorrow, utilizing easily accessible materials."

- Elementary School STEM Teacher

THE TEACH ENGINEERING CURRICULUM IS:

ACCESSIBLE

Free hands-on K-12 engineering resources that use low-cost, readily available materials.

HANDS-ON, DESIGN-BASED

Improve students' understanding of fundamental engineering, math, science and technology concepts by engaging their design, visualization, creativity and teamwork skills.

TEACHER-TESTED & PEER-REVIEWED

All resources are written by educators for educators, have been classroom tested and are reviewed by external educators and engineers.

STANDARDS-ALIGNED

Most of our resources are aligned to K-12 math and science educational standards such as Next Generation Science Standards, Standards of Technology and Engineering Literacy, and/or Common Core Math Standards.

INTERACTIVE

Our comprehensive "how-to" videos augment our curriculum, providing step-by-step guidance to help educators seamlessly integrate hands-on engineering lessons and activities into their classrooms.

How can you use the Teach Engineering Digital Library:



CURRICULUM

Download and use thousands of free engineering lessons, activities, and how to videos.



REVIEW

Use your teaching and classroom experience to review incoming materials.



PUBLISH

Work with the editorial team to submit and publish original hands-on engineering activities.



PROFESSIONAL DEVELOPMENT

Learn more about engineering design, broadening participation in engineering, and how to use the digital library.

“Teach Engineering’s greatest strength lies in its ability to support teachers at all levels, from novice to expert. This program has been there to support my growth as an educator and my students' learning.”

- K12 STEM Educator



TRANSLATE THE RESEARCH

Participate in webinars specifically designed for the National Science Foundation’s Research Experiences for Teachers (RET) sites and Engineering Research Centers (ERCs) to learn how to translate educators’ research experiences into a K-12 engineering curriculum suitable for the collection. Email info@teachengineering.org for more info.



For more info visit
TeachEngineering.org