Corporate Citizenship & Corporate Affairs

Teachers TryScience

"Teachers TryScience is an excellent new resource for science teachers that want to strengthen their instruction in project-based learning. Not only does it offer free, high quality lessons, but it links them with strategies and resources that will give teachers the skills and knowledge to make the most of them in their classrooms."

— **Margaret Honey, President**
New York Hall of Science

Wanted: Great science teachers

Building the base of scientists and engineers and preparing the next generation of innovators requires great science teachers with the skills and knowledge to educate, inspire and motivate students.

But the demand for science teachers continues to far outweigh the supply. In the US for example, about one-third of all middle school science teachers are not certified to teach science.

The challenge is providing teachers with the resources they need to strengthen their instruction and better prepare students for the jobs of the 21st Century, many of which will increasingly be in STEM (science, technology, engineering and math) fields. According to a 2011 report from the U.S. Department of Commerce, STEM jobs are expected to grow at a faster rate than other jobs in the coming decade, with STEM workers are less likely to experience unemployment.

Teachers TryScience helps educators strengthen their instruction in STEM subjects and better prepare students for 21st Century careers.

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Teachers TryScience: Free lessons and supports for teachers

Using Teachers TryScience, teachers, primarily at the middle school level, are able to improve their instruction in project-based learning, with a focus on environmental science.

This site provides free and engaging standards-based lessons, integrated with teaching strategies and resources, which are designed to spark students' interest in science, technology, engineering and math (STEM).

"Engineering as a focus makes sense for IBM in a number of ways; we have some of the smartest engineers on the planet," said Stanley Litow, Vice President, Corporate Citizenship & Corporate Affairs and President, IBM International Foundation. "But more importantly, engineering gives us a way to enable teachers to teach students broader science and math concepts."

The site also provides social networking tools that enable educators to comment on and rate the lessons and resources; submit their own teaching materials; and form public and private groups to engage in focused discussions with colleagues in the same district or around the globe.

Teachers TryScience is a collaboration among IBM, the New York Hall of Science, and TeachEngineering.org

What is project-based learning?

Project-based learning is an instructional strategy in which students explore real-world problems and challenges hands-on. Research has shown that project-based learning can raise student achievement by helping students understand, apply and retain knowledge, and build critical thinking, communication and collaboration skills—skills that students will need in the 21st century.

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Lessons + Supports = Real Learning

What distinguishes Teachers TryScience is the integration of lessons with instructional supports.

"There are literally thousands of lessons on the web," said Litow. "Teachers TryScience features some of the best and then helps teachers implement them effectively in the classroom by giving them the real tools to do so."

Each lesson – whether building a solar car, wind turbine, or zero-energy house – is linked to easily digestible supports that give teachers relevant information on demand. The supports are presented in engaging, multimedia formats, many using real teachers.

Supports include:

- *Pedagogy:* Provides teachers with information to strengthen their pedagogy in a range of areas, from group work and assessment to differentiated learning and working with English language learners.
- *How-tos:* Gives teachers a practical guide on how to conduct specific project-based lessons with students.
- *Bridge resources:* Provides additional information that teachers can use for their own knowledge or bring into their classrooms to share with students.

For more information on Teachers TryScience, please visit: www.teacherstryscience.org

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