

■ Igniting a Learning Revolution with The Henry Ford's Innovation Education Incubator

By Paula Gangopadhyay, Chief Learning Officer, The Henry Ford

The Henry Ford includes Henry Ford Museum, Greenfield Village, an IMAX® theater, the Benson Ford Research Center, the Ford Rouge Factory Tour and a public charter high school, Henry Ford Academy. It is America's largest indoor-outdoor history destination, with more than 1,500 full- and part-time employees, 600 volunteers and an annual attendance in excess of 1.5 million people, including over 200,000 school group visitors.

At the outset of 2008 and in the midst of an economic downturn, The Henry Ford made a strategic decision to become a catalyst and make a positive impact on American education. With its collection of 26 million artifacts that tell the story of American innovation, ingenuity and resourcefulness, The Henry Ford felt uniquely positioned to unlock the potential of one of the world's greatest collections of content, stories and experiences about American innovation and to address the issue of the nation losing its global competitive edge.

The institution adopted a 10-year strategic plan to better fulfill its mission of inspiring people to learn from America's traditions of ingenuity, resourcefulness and innovation to shape a better future. The Henry Ford also adopted a new vision to "be a nationally recognized destination and force for fueling the spirit of American innovation and inspiring a can-do culture."



Brian Zevotek and Mark Rogers, 2013 PBS-THF Teacher Innovator winners, learn how to teach innovation at The Henry Ford's Innovation Immersion workshop.

In close collaboration with education partners, The Henry Ford used the "co-creation" approach and launched over 220 new and paradigm-changing educational curricula and resources aimed at changing how teachers teach and students learn. The new resources not only support national and state standards in social studies but also in STEM, 21st-century skills, English language arts, and career and technical education. They are aligned with Common Core State Standards and are now being

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Visionaries thinking out loud.™

Innovation curricula offer educators tools to develop innovative mindsets in K–12 youth.



aligned with the Next Generation Science Standards. The common strands running through the new curricula are innovation and creativity, which The Henry Ford is encouraging teachers to make room for in the curriculum.

In 2010, The Henry Ford launched **OnInnovation.com**, a dynamic educational website with oral history interviews with some of today's leading innovators, including Bill Gates, Steve Wozniak, Dean Kamen, Will Allen and others. The institution also added unique content in the form of curator interviews about legendary innovators like Henry Ford, Thomas Edison, George Washington Carver and Rosa Parks.

To offer an explicit digital tool to K–12 educators, The Henry Ford created a game-changing digital curriculum, **Innovation 101**, which is designed to inspire the next generation of innovators and thinkers with stories of today's innovators, told in their own words and juxtaposed with stories of legendary innovators. The curriculum seamlessly integrates 21st-century skills development in the methodology of instruction. Each lesson allows learners to reflect on real-life stories of innovators, to think creatively and

critically, to communicate and collaborate, and to develop a problem-solving mindset that they can apply in any scenario.

The Henry Ford conducted a pilot testing of the innovation curricula through the **Innovation Education Incubator (IEI)** initiative. Forty teachers, representing public, private and parochial schools across the nation, tested the material with over 1,000 students. A third-party evaluation conducted by the national research firm Moore and Associates highlighted the following:

- The Innovation 101 materials could be integrated in several subject areas, including English language arts, health and fitness, entrepreneurship, history, technology, social studies and visual arts.
- Teachers felt these materials were an important curriculum support tool.
- Most teachers reported that there were no other materials like this available.
- Virtually all of the teachers indicated the Innovation 101 module promoted critical thinking and creativity and helped introduce students to the concept of innovation.

- Students felt the materials helped them “a lot” to learn new things, change how they thought about things and learn things they will need in the future.

With the success of the pilot testing and the enthusiastic adoption by educators, The Henry Ford has now commenced a major next-phase effort to increase the distribution and ongoing evaluation of its curricula to make a large-scale educational impact. The Henry Ford was invited to make a “commitment to action” at the Clinton Global Initiative, America and through the **Innovation Learning Accelerator** plans to:

- train and empower 5,000 innovative teacher-leaders to teach innovation with The Henry Ford’s innovation curricula
- ignite 125,000 students to “think and act” like innovators
- continue to gather qualitative and quantitative evidence that The Henry Ford’s innovation curricula and teaching and learning tools are effective, compelling and inspiring for teachers and students.

The Henry Ford is pursuing this project to give every child in America access to the critical ideas, content and problem-solving skills that will enable him or her to be the innovator or STEM practitioner of tomorrow and to help create substantive change in the American education system for a better work force.

The Henry Ford’s carefully designed efforts around teaching innovation showcase an example of how a traditional museum made the national education agenda its top institutional priority, redefined a vision to become a force for change in education, realigned its resources to augment and deploy its assets in new and innovative ways, and is now scaling up its efforts for national impact.



High school students from Henry Ford Academy, Dearborn, Michigan, listen to interviews of famous innovators and learn about traits of innovators and processes of innovation. Photo: Rudy Ruzicska