

# IMMERSIVE HIGH-IMPACT LEARNING: FROM WPI TO GEORGETOWN

Posted on [January 29, 2015](#) by [Chelsea Burwell](#), Research Associate, Georgetown University

While many higher education institutions are still grappling with the transition from traditional to more project-based experiential curriculums, a private research university in Worcester, Massachusetts has been an innovator in this area for more than 40 years. Worcester Polytechnic Institute upholds a standard of learning that requires students to immerse themselves into hands-on, project-based learning and apply their in-course knowledge to real-world problems. Invited by the Red House, in December 2014, Rick Vaz, Dean of Interdisciplinary and Global Studies at WPI, spoke to a group of Georgetown faculty and students to pinpoint about trading courses for experiences. Following his presentation, we spoke with him about his viewpoints on the current and future state of higher education across the nation and at WPI.

## **1. What is the biggest hurdle standing in the way of expanding experiential learning at colleges/universities? How do we get traditionalists in academia to embrace this gradual shift in the educational sphere?**

The biggest challenge for most institutions is carving out sufficient curricular turf for the experiential activity to have impact. Experiential learning requires students to devote substantial time and attention to something outside the traditional curriculum – that activity has to map into students' curricular requirements. Of course, it demands faculty engagement as well, so a second challenge is for the experiential learning to map into faculty loading models and reward structures. The interdisciplinary nature of authentic learning experiences adds to both of those mapping challenges.

## **2. The Interactive Qualifying Project has had great success at WPI, particularly in regards to students completing IQP at one of WPI's centers**

**overseas. How much does studying internationally have an effect on the success of the program and the success that students have upon receiving their degree (versus completing the IQP strictly at WPI)?**

For those unfamiliar with it, the IQP is an experiential general education requirement, equivalent to three courses. Even though half of our students complete the IQP overseas, we never envisioned the project as an explicitly international experience. Our primary objective has always been for students to experience deep, impactful learning from solving authentic problems, with particular emphasis on critical thinking and writing, and on understanding the social and cultural context of those problems. Over time, we've found that when that problem solving happens in cultures outside of our students' prior experience and comfort zones, the learning opportunities are greater. And of course, those experiences can layer a range of global learning outcomes on top of the problem-solving abilities.

Assessment of students' project reports shows clear benefits of projects completed off campus – every single learning outcome is demonstrated more strongly than for projects done on campus. A study of our alumni has confirmed this effect – alumni who completed projects off campus reported greater long-term benefits from the project work in 33 of 39 areas related to professional success and personal fulfillment.

**3. Where do you see the IQP project in the next 5 years?**

Based on the evidence I just described, WPI is committing to providing an off-campus project experience for every student. That will mean establishing new off-campus centers, both domestic and international, and it'll mean raising money both to build those programs and to make participation possible for all students, regardless of their ability to pay.

**4. As a professor, what have your students — current and past — told you about their overall college experience? What have they said is missing or needs to be improved upon in the curriculum? Based on your observations as a dean and professor, what separates IQP students from those who do not have such a program at their institution?**

Most WPI students major in engineering or science, and many of them come to us with very specific technical and scientific interests. However, it often takes less than a year or two for them to start getting very excited about the humanities, social sciences, and their interdisciplinary project work. That's why we're building more project work into the first year – it lights a spark for many of our students that burns throughout their time at WPI. The result, I think, is graduates with multiple interests and foci – they may be experts in mechanical engineering or biotechnology, but their passions are often based on global problems such as sustainable energy, food security, or global health.

**5. The Designing the Future(s) initiative places a great emphasis on high-impact learning by way of interdisciplinary learning, credit-based research immersion and the fusion of theory and practice. In a time where the value of a college degree is being constantly questioned, how do you see these elements increasing the value of obtaining a higher education?**

The most pressing problems facing mankind are messy and interdisciplinary, demanding solutions that are based on an understanding of science, technology, economics, cultures, and communities. I can think of no more relevant task for higher education than to prepare students to tackle those ill-defined, complex problems. That requires more than academic preparation – it requires practical experience and also the development of a sense of mission.

**This blog from [Designing the Future\(s\) of the University](#) is courtesy of [Georgetown University](#).**