



TOYOTA Production Systems Laboratory

Industrial and Systems
Engineering

Fall 2012.

Website: www.rit.edu/Toyotalab

TPS Lab Has Very Busy Summer and Fall

This newsletter summarizes our activities during Summer and Fall 2012.

Visitors

The Toyota Lab just had its busiest summer ever in terms of outreach activities (WE@RIT camps for girls, K-12 grants, and other activities), as well as visitors from industry and academia. In June, 50 teachers from South America visited the lab to learn about our educational practices. We also hosted industry and academic leaders from Klein Steel, Ryerson University, Raymond Corporation, California Polytechnic Institute, and Maine Maritime Academy. We hosted a visit from 74 teachers involved in Project Lead the Way. In addition to the 87 girls from the WE@RIT camps, which we conduct every year, we hosted an additional 78 students (boys and girls), some of whom came from places as far away as Erie, PA, in programs such as "Robocamp" and Mind, Body, & Soul.



Toyota USA Foundation Grant

We have continued developing and testing educational modules which will be used to teach math and science to students in grades 5 through 12 (our project is called REMS – Relevant Education in Math and Science). We are currently finishing up the first 18 of 27 in-lab modules, and will be soon implementing plans we have for the on-line versions of these modules, which include

simulations for some of them in addition to video of the lab.

National Science Foundation Grant

The faculty in the Toyota Lab kicked off the National Science Foundation sponsored project to increase technical problem solving skills in deaf and hard of hearing students. This Fall, three sections of deaf students came to perform A3 problem solving activities in the lab.

Lab Operations and Other Activities

Staffing

Our most senior student staff, Abbey Donner, "graduated" from our staff this summer and went on to work in the healthcare industry. The current student staff is composed of: Srinath Sriram, Sourabh Jain, Tim Schmoke,

Kaitlin Peranski, Jeff Wojtusik, and Atul Ghadge.

Toyota (Kentucky) Visit

In August, six of us visited the Georgetown plant (TMMK) and spent time in gemba watching assembly and jidoka. We also received some training at

NAPSC, and visited TEMA to meet with some of the HR personnel who continue to be great partners for us. We also met with 7 of the RIT coops.

Operations

Some fixture development work has been completed for the

inlet pump assemblies provided to us by Toyota. For some of the grant activities we are assembling skateboards, and now have a complete set of fixtures for that work. Deployment of the pick to light and build to light systems we built last summer continues.

NEWS

- THE LAB HOSTED 6 EVERY-DAY ENGINEERING (WE@RIT) SUMMER CAMPS IN JULY, AND THE "WE'RE IN MOTION" PROGRAM FOR INCOMING 1ST YR WOMEN
- THE LAB ALSO HOSTED 50 FACULTY FROM SOUTH AMERICA, AND 74 PROJECT LEAD THE WAY TEACHERS
- SIGNIFICANT PROGRESS HAS BEEN MADE ON THE TOYOTA FOUNDATION AND NATIONAL SCIENCE FOUNDATION GRANTS

QUICK FACTS

NUMBER OF STUDENTS (GRADES 5-11) THAT PARTICIPATED IN SUMMER 2012 CAMPS OR EXPERIENCES	165
NUMBER OF INCOMING FRESHMAN WOMEN THAT PARTICIPATED IN "WE'RE IN MOTION" EXERCISES	40
OTHER VISITORS	146

