

Thank you for Attending our 4th Annual Education Technology Conference!

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**CENTER FOR CONTINUING AND
PROFESSIONAL EDUCATION**

WILLIAM PATERSON UNIVERSITY

Co-sponsored with The College of Education

4th Annual Education Technology Conference

“Learning by Doing with
Educational Robotics!”



K-12 Educators



Date: November 22, 2013

Time: 8:30 – 3:30 pm

Location: 1600 Valley Road
Wayne, NJ, 07470

Agenda for 4th Annual Education Technology Conference

8:30 am - 9:00 am: Registration, Breakfast

9:00 am - 10:30 am: Concurrent Session I

- 1) **Engineering for K-6 with WeDo (Elementary): - V1021**
By Sandra Mueninghoff, Robotics Education Consultant
LEGO Education has created WeDo Robotics specifically for elementary students. Participants will explore how to use the software, motors, and sensors by doing hands-on activities that teach robotics, as well as science, math, literacy, and social studies. After learning the basics, participants will create their own innovative projects.
- 2) **LEGO Mindstorms (Grade 2 and up): - V1020**
By Dr. Amy Eguchi, Bloomfield College
The LEGO Mindstorms for beginners session provides basic construction and programming skills necessary for you to start using the robotics tool. It covers the construction of a simple robot and programming with two motors, a couple of sensors, and basic programming concepts.
- 3) **GameMakers! Teach your Elementary and Middle School students to program games and animation using SCRATCH! (3rd through 8th grade): - V1004**
By Erich Bassler, Little Ivy Academy
This hands on class will give you a basic overview of MIT's SCRATCH Tile Based visual programming environment along with some ideas about how to use this exciting tool in the classroom with students from 3rd through 8th grade. Scratch is a graphical programming environment that makes it easy for children to create their own video animations, games, stories and much more. Scratch can be used across the curriculum. The possibilities are only limited by your imagination!



2:15 pm - 2:25 pm: Break

2:25 pm - 3:55 pm: Concurrent Session III

- 1) **Engineering for K-6 with WeDo (Elementary): - V1021**
By Sandra Mueninghoff, Robotics Education Consultant
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- 2) **Learning Robotics with iPads (Elementary): - V1022**
By Dr. Heejung An, Conference Chair, William Paterson University
The goal of this workshop is to help children to learn the concepts of building and programming robots by using iPads. This workshops will cover applications such as "Move the Turtle" and "Robo Logic 2 HD."
- 3) **Engineering Design Basics: Concepts, Problem-solving and Annotation (Middle and High School): - V1007/8**
By Robert Yost, Wayne Hills High School
The goal here is to help teachers to structure class robotics/design and build projects with student learning, comprehension and documentation at the top of importance. In a nutshell, the aim is to be able to have a portfolio of student work which records thinking, sketching, explanations and problems encountered within the exercise/lesson unit.





12:45 pm - 2:15 pm: Concurrent Session II

1) **Engineering for K-6 with WeDo (K-6): - V1021**

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10:30 am - 10:40 am: Break

10:40 am - 10:45 am: Introductory Remarks

(Dr. Candace Burns, Dean, College of Business)

10:45 am - 12:00 pm

Keynote Address – “Robotics for Everyone”

(Dr. Amy Eguchi, Bloomfield College)

V1012–Auditorium

This keynote session aims to address how educational robotics can enhance students' learning experiences. Dr. Eguchi will introduce the theories behind educational robotics and discuss how and why educational robotics help students to learn. She will also introduce various educational robotics tools from the popular LEGO robotics set and then discuss more advanced robotics applications. The audience will gain enough information to start their own robotics program to suit their students' needs.

Bio of Dr. Amy Eguchi: Amy Eguchi is an Associate Professor of Education at Bloomfield College in New Jersey, USA. She holds her M.A. in Child Development from Pacific Oaks College, Ed.M. in Education from Harvard Graduate School of Education, and Ph.D. in Education from the University of Cambridge and has extensive teaching experience in educational robotics both with students and teachers in K-12 settings. She also teaches educational robotics to undergraduates. She runs a competitive robotics after school team at The School at Columbia University. Dr. Eguchi has been involved in RoboCupJunior, an educational robotics competition, since 2000, on technical and organizing committees, while also being the co-chair and general chair, at international, national, and local levels. In addition, she is the vice president of the RoboCup Federation representing RoboCupJunior, and is a member of the RoboCup Federation Board of Trustees.

12:00 pm - 12:45 pm: Lunch
