CS4EDU
Computer science for education

Julie Alano
Hamilton Southeastern High School
Fishers, IN
Computer Science
Grades 9-12

Education

Indiana State University
Terre Haute, IN
BS Math Education with minor in CS 1998

Indiana University
Indianapolis, IN
MS Educational Technology 2008

Project description

Our project has three objectives:

- have AP Computer Science considered part of the mathematics curriculum
- improve teacher preparation in computer science
- develop and offer a computer science methods course as part of a computer science endorsement for education majors at Purdue University

The focus of the coursework is no longer what programming language is used; instead, the focus is on topics that allow students freedom to use the latest environments for developing programs.

The incorporation of Scratch into the curriculum has proved to be successful. Activities completed using Scratch helped the students better understand projects in other programming languages such as Visual Basic, C++, and Python.

Highlights

The highlight from my experience was the addition of Scratch to my curriculum. This programming language really engaged all of my students and helped them to better understand computer science concepts.

Impact/results

Not only has my experience helped my students, but I was also able to share my experience with the computer programming teacher at the other high school in my district. We have collaborated before since he only teaches the first year of programming and his students must travel to my high school to take AP Computer Science with me. But, we really discussed and revamped our curriculum at the beginning of this school year and plan to meet each year to update our curriculum.

CPATH Project PI
Dr. Christoph Hoffmann
Purdue University

Nancy Lasley
W H Harrison High School
West Lafayette, IN
Computer Science
Grades 9-12

Education

Indiana University
Bloomington, IN
B.S. Secondary Math Education 1976

Indiana University
Bloomington, IN
MS Secondary Math Education 1981

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Conferences

International Society for Technology in Education (ISTE)
Philadelphia, PA • June 2011

Computer Science and Information Technology Symposium (CSTA)
New York, NY • July 2011