Building Partnerships with High Schools

Piedmont Virginia Community College
Team

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1.

Program Motivation

History and Motivation
2. Teacher Development

Local K12 teachers and project-based learning modules
Tools for Learning
Community Space
“...incorporating several different tools into one PBL and challenging students to engineer projects that incorporate working parts.”

-B. M.
Skills for Learning
Maintenance
“I am more likely to try things that I am not an expert in and to let the student's interest drive the narrative.”

-Frances R.
Develop for Learning
Student Impact
“Being around other teachers with more experience and ideas, sparked new ideas.”

-Nancy M.
Ideas for Learning
Natural Collaboration
“We pursued some projects that were new for our teacher, and watched him troubleshoot and learn alongside us. I feel empowered to open more experiences to students and the teachers with whom I work, and go after the learning together.”

-Stephanie P.
Excitement for Learning
Purposeful Sharing
Outreach

Connecting communities
Tech Tour
Hosting Community Events
PVCC Recruiting
“Thank you for organizing manufacturing day! Our students didn't know anything about it but now are eager to go to PVCC!”

- Caroline B.
  HS Career Coach
Manufacturing Day
Schools + Business
“I am now genuinely interested in manufacturing as a future career choice for me... What started as a way to skip school turned out to be a wake up call about my near future.”

- WAHS Student
High School Outreach
The Takeover
### Ball Bearing Tests in OpenSCAD:

```plaintext
// ball Bearings.scad

// Define module for ball bearing

module BallBearing(radius, height) {
    // Define dimensions
    parameter float R = radius;
    parameter float H = height;
    // Code for drawing ball bearing
    // ...
}
```

![Diagram of ball bearing design in OpenSCAD](image_url)
Shared Resources
Questions?

Resources: