

QUARTERLY NEWSLETTER

WWW.PC4A.ORG
PC4A-STEM@IUP.EDU

PC4A

PA Community College
Consortium Cooperative Agreement

MAY 2024

Year 2, Volume 3

PC4A PARTNERS



PC4A: STRENGTHENING THE CYBERSECURITY WORKFORCE IN OUR COUNTRY

Indiana University of Pennsylvania, in conjunction with six PA community colleges, has been awarded a substantial grant from the US Department of Defense with the increasingly important goal of supporting and strengthening the cybersecurity workforce in our country.

PC4A has the following main objectives:

- Increase certification attainment rates.
- Increase transfer rates.
- Increase interest in DoD/DIB employment.

PC4A Partners Include: Bucks County, Butler County, Montgomery County, Northampton, Penn Highlands, and Westmoreland County Community Colleges, led by Indiana University of Pennsylvania

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Faculty Development Workshops offered for all PC4A partner faculty.

Events held/attended for K-12 students focusing on careers in STEM.

PC4A partners continue financial support of students enrolled in targeted STEM programs.

Statistics on all PC4A activities provided since the start of the project.

Upcoming events for K-12 and college students.

Department of Defense
DoDSTEM
Science • Technology • Engineering • Mathematics

PC4A is proudly funded by the US Department of Defense. To learn more about the work that they are doing to develop exceptional STEM talent, visit their website at dodstem.us.

PC4A OFFERS POGIL DEVELOPMENT WORKSHOPS FOR FACULTY

During the first year of the PC4A project, faculty development workshops focused on technical cybersecurity topics were offered to faculty and staff at five PC4A partner schools. This year, faculty requested more general development opportunities with an emphasis on teaching strategies. Based on recommendations provided by DoDSTEM, POGIL development workshops were offered to all partner faculty and staff.

Process Oriented Guided Inquiry Learning, or POGIL for short, is a student-centered teaching strategy that allows students more control over their learning. Activities within the POGIL method are designed to be highly interactive, with instructors acting as facilitators for student-led small teams as they work through guided inquiry materials. Based on years of data, POGIL helps lower student attrition, increase mastery of concepts, and more students prefer learning through the POGIL method over more traditional approaches. For complete details on the POGIL method of instruction, visit the [POGIL website](#).

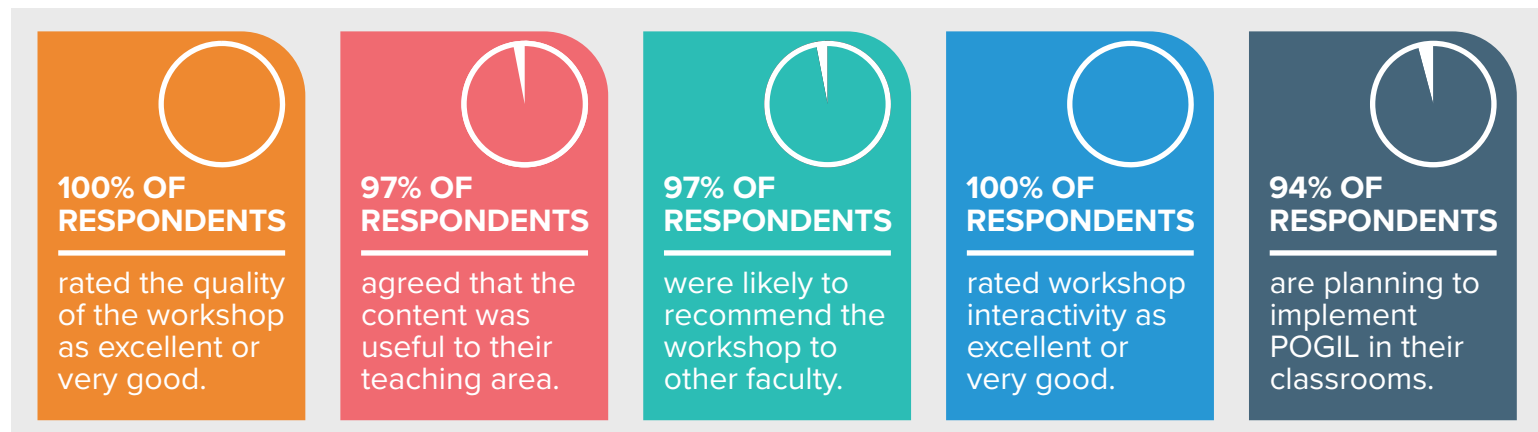
Two in-person POGIL workshops, hosted by Northampton Community College and Westmoreland County Community College, were offered to faculty and staff on April 5 and April 11, 2024, respectively. A total of 41 faculty attended the day-long workshops, and feedback from participants is below. Based on the success of the first POGIL workshops, partners are considering offering additional workshops to expand the POGIL knowledge of their faculty.

For complete details on faculty development workshops available at PC4A partner schools, please visit pc4a.org/faculty-development.



The photos above were taken during the POGIL Faculty Development Workshop held at Northampton Community College on April 5, 2024.

POGIL Faculty Development Workshop Satisfaction Survey Results



PC4A PARTNERS ENGAGE WITH K-12 STUDENTS THROUGH OPEN-HOUSES AND STUDENT-FOCUSED ACTIVITIES

To encourage more students to consider a career in cybersecurity and STEM related fields, PC4A partners have regularly attended and/or hosted events geared toward connecting with K-12 students.

Prospective students were invited to visit partner campuses with their families and explore programs through tours, hands-on demonstrations, and presentations provided by faculty on the benefits available to students through the PC4A project including scholarships, free textbooks, and paid internships.

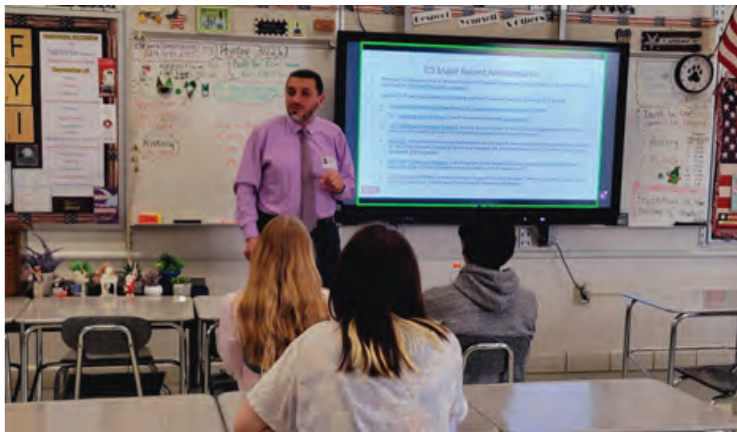
In addition, Montgomery County Community college hosted the “Discover your Future” event for young women to explore careers in STEM, and Program Director Dr. Waleed Farag gave presentations to local high-school students on benefits available through the PC4A project. Other partners connected with K-12 students through competitions, including the BotsIQ Combat Robotics semi-finals hosted at Westmoreland County Community College, and the 2024 SkillsUSA District 2 and District 11 competitions which feature competitions in cybersecurity and information technology. For complete details on all previous and upcoming events, please visit pc4a.org/progress-and-activities.



Prospective students and Penn Highlands PC4A Co-PI Greg Paonessa at an open-house hosted at the Blair campus in Altoona, PA on February 1, 2024.



Montgomery County Community College’s “Discover Your Future” event for young women to explore careers in STEM.



PC4A Program Director Dr. Waleed Farag giving a presentation to high school students at Homer-Center School District in March 2024.



Participants of the 2024 BotsIQ Combat Robotics Competition semi-finals hosted at Westmoreland County Community College in March 2024.

PC4A CONTINUES FINANCIAL SUPPORT OF STUDENTS

Since the start of the project, PC4A has focused on providing financial support to students in targeted programs. This quarter, over 100 scholarships and over 150 free textbooks and virtual lab vouchers were awarded to students. In addition, over 500 paid internships hours were completed by students at four PC4A partner schools.

To financially support students in obtaining DoD - approved industry certifications, two exam prep workshops were provided, with three additional workshops planned in the coming months.

DID YOU KNOW:

Since the start of the PC4A Project in September 2022, partners have spent **over \$470,000** to financially support students.

UPCOMING PC4A PARTNER EVENTS



PENN HIGHLANDS COMMUNITY COLLEGE CYBERSECURITY STUDENT BOOTCAMP

JUNE 17 - 19, 2024

This bootcamp will allow high school students to learn the theory behind cybersecurity best practices and other crucial topics including protection and defense strategies. Visit pennh.cc/CyberSecurityCamp for details.



WESTMORELAND COUNTY COMMUNITY COLLEGE SUMMER CYBERSECURITY CAMP

JUNE 17 - 19, 2024

Open to students in grades 7-12, participants will explore online tools used by cybersecurity professionals and will learn how to apply practical principles for staying safe online. Visit bit.ly/3QXGsN5 for details.



WESTMORELAND COUNTY COMMUNITY COLLEGE SUMMER CODING CAMP

JULY 15 -17, 2024

Students in grades 7-10 will gain an introduction to physical computing and coding using the Arduino microcontroller and the Smart Robot Car kit. For complete details, visit bit.ly/wccc-coding.



NORTHAMPTON COMMUNITY COLLEGE ROBOTICS AND CODING CAMP

AUGUST 9, 2024

Incoming freshman students are invited to attend a free robotics and coding camp to learn the Python programming language by working with a Raspberry Pi computer. Email ccounterman@northampton.edu for details.

PC4A ACTIVITY STATISTICS

Since the start of PC4A, all involved have worked tirelessly to offer activities and participate in events that will help reach project objectives. Below is an overview of all accomplishments through March 2024.

283

scholarships
awarded

873

lab/book vouchers
awarded

37

paid internships
offered

2,153

internship hours
completed

17

certification prep
workshops offered

169

workshops
participants

151

certification exam
vouchers awarded

26

certifications earned
by students

14

faculty training events
hosted or attended

80

faculty trained in
cybersecurity topics

1,585

hours of free
tutoring provided

24

courses added or
updated

74

events hosted or
attended

69

collaborations with
outside institutions

38

bi-weekly meetings
held with partners

200+

posts on PC4A
Social Media

PC4A PROJECT LEADERSHIP AND CONTACT INFORMATION

INDIANA UNIVERSITY OF PENNSYLVANIA

Dr. Waleed Farag, PC4A Program Director

Director, IUP Institute for Cybersecurity

Professor, Computer Science

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STEM Professor

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PENN HIGHLANDS COMMUNITY COLLEGE

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JOIN US IN REACHING PROJECT OBJECTIVES

Effective collaboration is at the center of PC4A, and it is an important factor in reaching project goals. Join us in our efforts as we strive to create a stronger cybersecurity and STEM workforce.

PC4A is actively seeking:

- Internships
- Employment opportunities
- Guest speakers
- Faculty development
- Transfer agreements
- Facility Tours

Contact us at pc4a-stem@iup.edu to get involved.

WANT TO STAY UP TO DATE WITH PC4A?

JOIN THE PC4A MAILING LIST
AT [BIT.LY/PC4ANEWSLETTER](https://bit.ly/PC4ANEWSLETTER)
OR CONNECT WITH US ON
SOCIAL MEDIA:

