



PURDUE
UNIVERSITY



APLU

INNOVATION AND ECONOMIC PROSPERITY UNIVERSITIES
AWARDS PROGRAM

IEP CATEGORY • PLACE

CASE
STUDY
2019

**Purdue University: Purdue Polytechnic
High School - Trust Student
Exploration to Re-Invent Education**

ABOUT PURDUE POLYTECHNIC HIGH SCHOOL

Indianapolis needed at least 45,000 additional high-quality seats in schools to drastically improve education for its students, stated a report by IFF, a nationally recognized nonprofit community development financial institution (IFF, 2013). The report indicated that in 2013, only 17 schools in Indianapolis served high concentrations of students from low-income families that are high performing.

Purdue University's experience directly aligns with these findings. In 2014, Purdue's freshman class had only 12 students who were graduates of Indianapolis Public Schools. To remedy this shortfall, Purdue University pursued an ambitious goal: establishing an independent charter high school in Indianapolis. On July 31, 2017, Purdue Polytechnic High School (PPHS) welcomed its first class of ninth-graders with the goal of creating a pathway for underserved and underrepresented students to continue their education at Purdue University.



Figure 1

PPHS is dedicated to preparing students for future success in a science, technology, engineering or math (STEM) field – whether they choose to pursue college or other ambitions. It is the first high school of its kind: a university-aligned, non-traditional urban high school that uses design challenges and projects as a framework for STEM learning. The curriculum builds the skills necessary to succeed in an evolving workforce.

Of the first freshman class of 154 students, 63 percent of students identified as a minority and nearly 60 percent accepted free or reduced lunch. In August 2018, PPHS added its second cohort of freshman students.

The struggles of historically underserved students in Indiana served as a catalyst for the creation of a school designed to move students who are not currently preparing to go on to post-secondary education into a position where they are equipped to take advantage of opportunities to succeed, particularly in technical and STEM-related careers. PPHS is committed to changing the trajectory of students who otherwise may not matriculate to a post-secondary experience or high-paying technical job.

Plans for a second location in the Broad Ripple neighborhood of Indianapolis in July 2019 are underway, and the University is considering options to open more high schools around the state over the next few years.

“Two basic objectives [of Purdue Polytechnic High School] are to offer an alternative learning environment designed to better prepare students for today's workplace, and to increase

significantly the unacceptable low number of Indianapolis Public Schools students who are qualified to succeed at Purdue,” said Mitch Daniels, President of Purdue University.

Purdue Polytechnic High School serves the typical, average student. Often, the top 25% of students are provided with many educational opportunities to set them up for success in high school and beyond and the bottom 25% of students are provided with a number of supports and services to help them reach their maximum potential. It is the remaining 50% of students that have difficulty accessing academic programs where they can become successful during high school and be well-prepared for life after high school – whether that is moving on to post-secondary education or directly into a job with growth potential.

The driving force for the high school was the Purdue Polytechnic Institute, which is a leader in providing industry-relevant, student-centered education. At PPHS, the curriculum is designed around student exploration and individual development of skills rather than an entire class pursuing the same curriculum simultaneously. Key approaches that make PPHS unique include:

Industry-inspired hands-on experiences

PPHS is committed to providing different career pathways, work-based learning opportunities, and internships that will better prepare students for college and future careers. To that end, students begin working on challenges and projects created by business and industry partners. Through the design challenge process, students at PPHS have multiple contacts with professionals in a variety of career pathways through field trips, project kickoff events, one-on-one mentoring, and instructional delivery. The high school partnered with a variety of local employers including Subaru, Fair Oaks Farms, Eskenazi Health, Eli Lilly, Republic Airways, and IndyGo Transportation. The students were asked to solve big picture questions, such as how Earth will sustain its growing population.

Industry-linked mentorship program

PPHS has established a mentorship program that pairs students with a mentor from a local business or organization to help guide students as they navigate the polytechnic curriculum. Students have daily access to mentors to help with project work, core academic skills, and critical 21st Century Skills. Mentors advise on fields of study, understand the opportunities and challenges ahead, and support the student’s transition from high school to post-secondary education or the workforce. PPHS’s mentorship program provides academic, social, and emotional support to help students stay engaged at school. Students benefit from an additional positive adult role model relationship that spans school, life, and work.

Success beyond high school

PPHS feels it is essential to provide students with access to a guide who can help the students understand what path they want to pursue and give them the tools and assistance to get there. The PPHS staffing model includes a career and college coordinator who works directly with students to

prepare them for all of the non-academic factors that lead to success beyond high school. This includes designing and overseeing programming and resources such as trips to Purdue University's West Lafayette campus, soft-skill development, mentorship program, paid internships, and job shadow opportunities. PPHS coordinates directly with Purdue University Office of Admissions to support students and parents and help navigate college application process, financing, and FAFSA.

Graduates of the high school program who meet admission criteria for the Purdue Polytechnic Institute will be admitted directly to the college, getting a jump-start toward building successful futures. Additionally, PPHS is currently in the process of negotiating similar arrangements for direct admission to half of the Colleges at Purdue.

"The secret to PPHS's success has been its willingness to shed old educational traditions and simply remain student-focused," said Head of School Scott Bess during a video interview. "High school should be about something," said Bess. "It should be about exploring and the passion of that."

Additional Links

<https://pphs.purdue.edu/>

<https://xqsuperschool.org/xq-schools/purdue>

<https://www.youtube.com/watch?v=TXI7zxqPJjk>

<http://www.insideindianabusiness.com/clip/14292413/purdue-polytechnic-hs-moving-into-circle-center>

<https://www.jconline.com/story/news/2018/06/27/second-location-approved-purdue-polytechnic-high-school/734552002/>

ABOUT APLU

The Association of Public and Land-grant Universities (APLU) is North America's oldest higher education association. APLU is a research, policy, and advocacy organization dedicated to strengthening and advancing the work of public universities in the U.S., Canada, and Mexico. The association's membership consists of public research universities, land-grant institutions, state university systems, and affiliated organizations.

APLU's mission is to: expand access and improve student success to deliver the innovative workforce of tomorrow; advance and promote research and discovery to improve society, foster economic growth, and address global challenges; and build healthy, prosperous, equitable, and vibrant communities locally and globally.

Based in Washington, DC, the association's work is furthered by an active and effective advocacy arm that works with Congress and the administration as well as the media to advance federal policies that strengthen public universities and benefit the students they serve.

ABOUT THE IEP UNIVERSITIES PROGRAM

APLU and its **Commission on Economic and Community Engagement (CECE)** established the Innovation and Economic Prosperity (IEP) Universities Program to help higher education institutions codify, elevate, and advance their campus enterprise supporting economic and community development.

The **IEP designation program** recognizes institutions that have demonstrated a meaningful, ongoing and substantial commitment to economic and community development, growth, and economic opportunity.

The **IEP awards program** recognize exemplary and innovative projects in university-based economic and community engagement:

- **Talent** and workforce development
- **Innovation**, entrepreneurship, and tech-based economic development
- **Place** development through public service, outreach, and community engagement

Learn more at: www.APLU.org/IEP