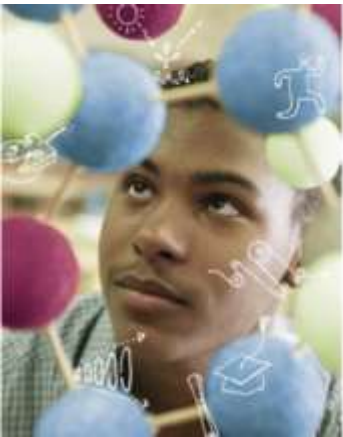


P-TECH : Educating the Future Workforce and Closing the Global Skills Gap

Agnes A. Africa
IBM Philippines, Inc.

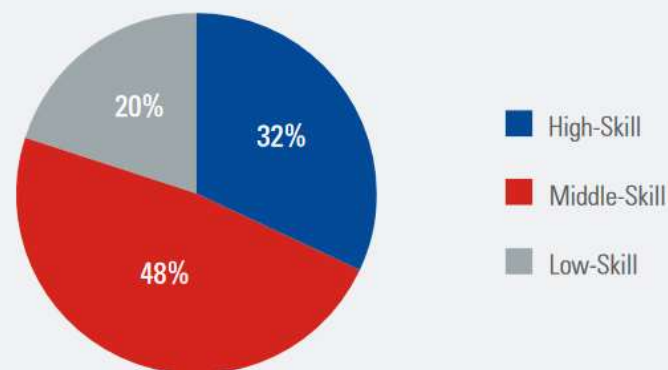


The Challenge

Demand for Middle-Skill Jobs Will Remain Strong

Between 2014-2024, 48 percent of job openings will be middle-skill.

Job Openings by Skill Level, United States, 2014-2024

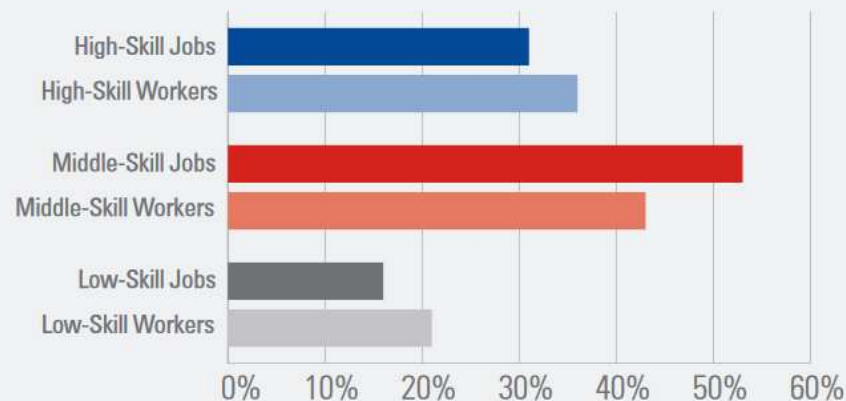


Source: NSC analysis of long-term occupational projections from state labor/employment agency.

A Middle-Skill Gap

Middle-skill jobs account for 53 percent of United States' labor market, but only 43 percent of the country's workers are trained to the middle-skill level.

Jobs and Workers by Skill Level, United States, 2015



Source: NSC analysis of Bureau of Labor Statistics Occupational Employment Statistics by State, May 2015 and American Community Survey data, 2015.

The Challenge



THE U.S. SKILLS GAP

NEARLY



jobs requiring only a high school diploma disappeared from the economy between 2008-2016

16M

“New Collar” jobs will be created by 2024

These jobs require more than a high school diploma, but not necessarily a four-year degree

ONLY



of community college students graduate after two years and only 21% after 3 years

The new middle is “New Collar”

“To create new collar jobs we will need new kinds of collaboration – involving federal and state governments, public school systems, community colleges and private business, across multiple industries. ...Together, we must work to reform education, policy and strategic approaches – in the U.S. and around the world – for today’s job opportunities that will build a future of growth and prosperity.

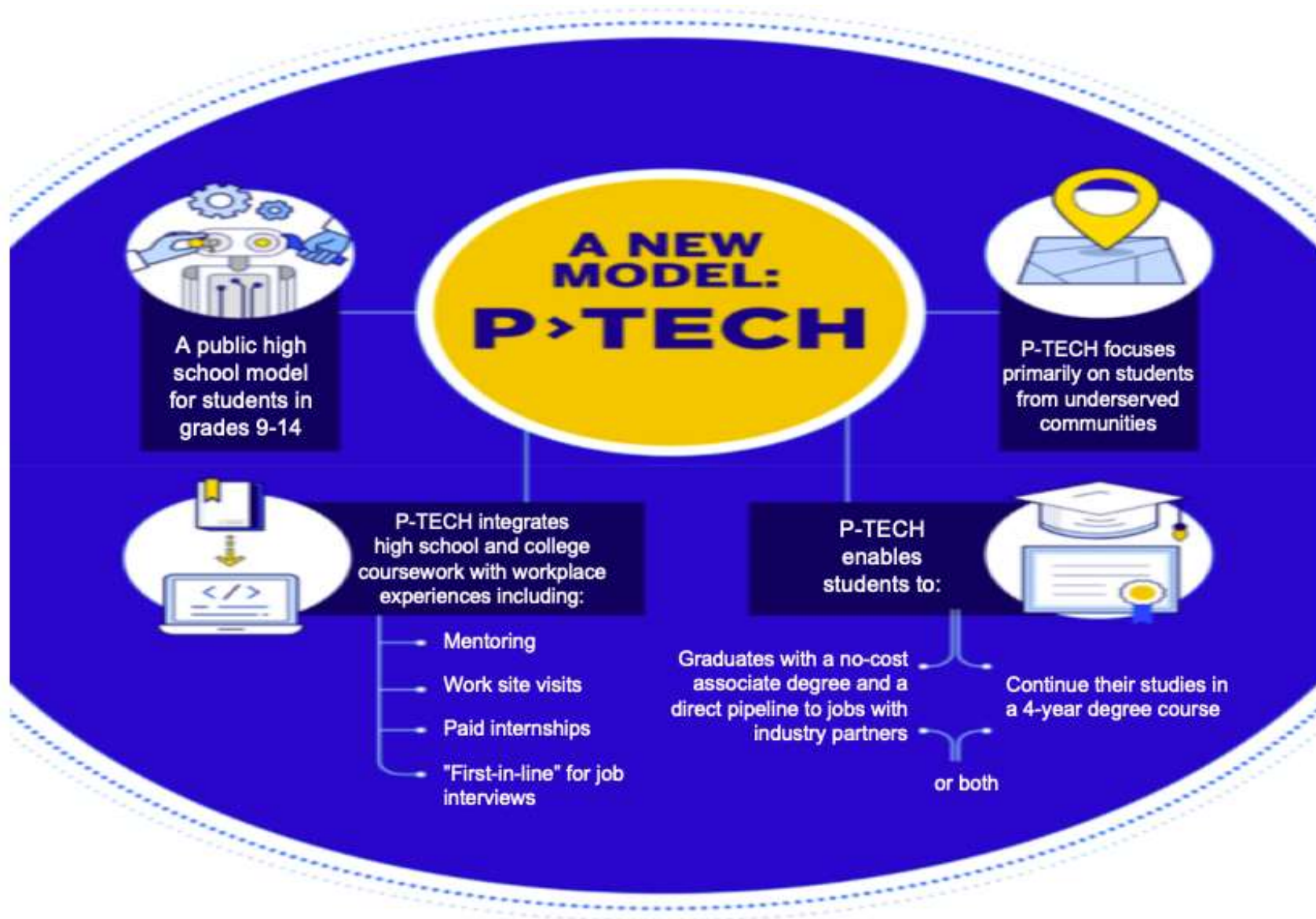
-Ginni Rometty, Chairman and CEO, IBM Corporation

- Not “blue collar” or “white collar”
 - Technology industry alone has more than 500,000 open jobs in the United States
 - **SKILLS** are critical to filling these open position, but not necessarily a four year degree
-

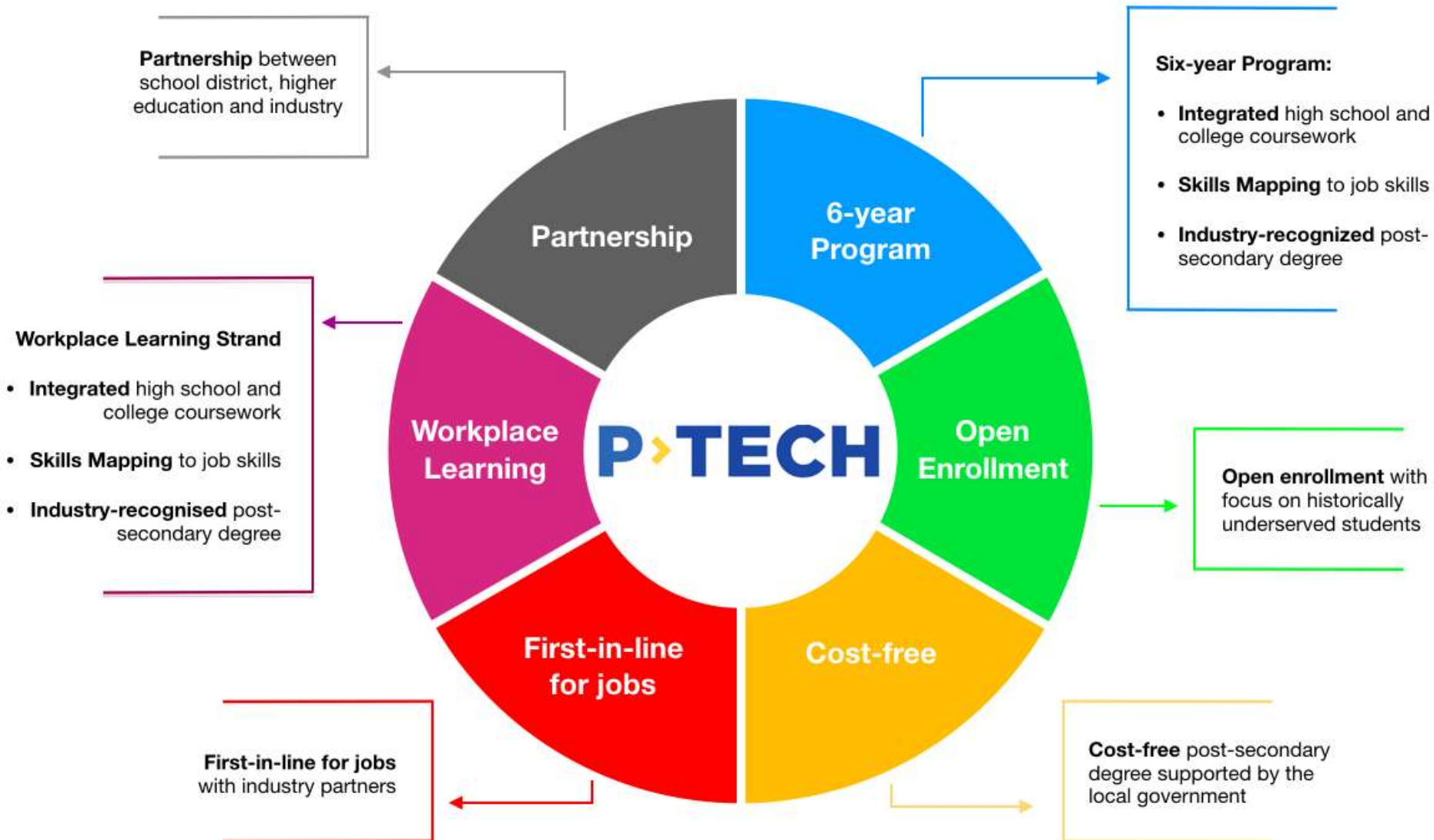
A new model for education: P-TECH 9-14

- **Focus:** A new grade 9-14 public school model focused on STEM fields and Career and Technical Education
- **Mission:** Enable students to master the skills that they need either to graduate with a no-cost Associates in Applied Science degree that will enable them to secure an entry-level position in a growing STEM industry, or to continue and complete study in a four-year higher education institution.
- **Challenges faced:**
 - skills gaps
 - lack of relevant technical and soft skills preparation
 - lack of industry-academe collaboration to educational programs

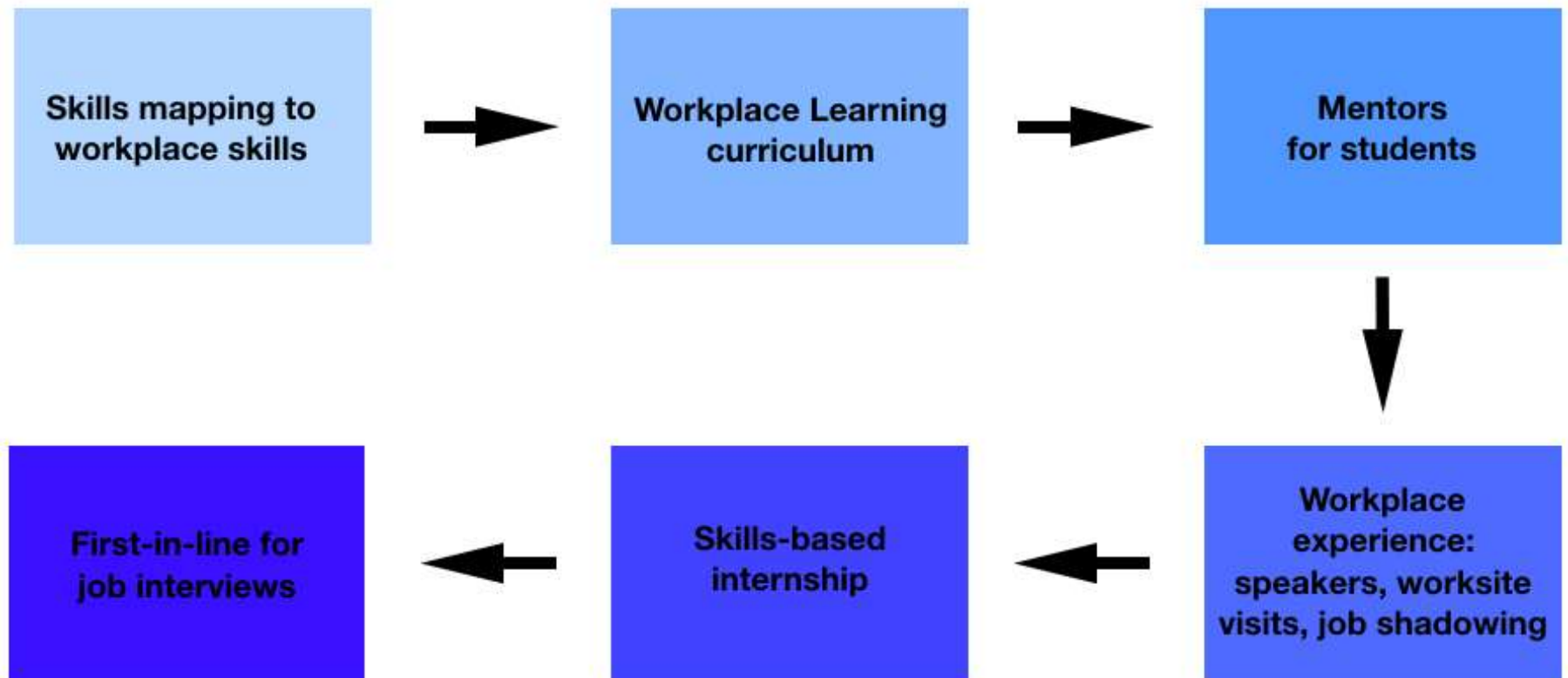
A new model for education: P-TECH 9-14



P-TECH key tenets



Key innovation: Industry partnership



Essential Professional Skills



COLLABORATION



COMMUNICATION



ANALYTICAL THINKING



SELF-MANAGEMENT



MOTIVATION



LEADERSHIP



RESPONSIBILITY



CURIOSITY

P-TECH works with the curriculum & infrastructure

- P-TECH is a **new model and way of teaching not a new curriculum.**
 - **Each partner provides its expertise:** academic expertise, industry and technology expertise.
 - Industry partners **don't provide/replace teachers.**
 - Industry partners do provide an “**Industry Liaison**” to ensure fulfillment of the industry partner's commitments.
 - Because it uses existing curriculum, human resources and infrastructure P-TECH is **scalable across an education system** not limited to one school or pilots.
-

Student Success

The first cohort of students from P-TECH Brooklyn had a graduation rate that is

4x

the on-time, national community college graduate rate

5x

times the rate for low-income students

Majority low-income black and Hispanic students



Most of the graduates have gone on to 4-year institutions

22

graduates are now working at IBM, and many are pursuing their bachelor's degrees at the same time



Associate Designer
Front-end Engineer
Cognitive Watson Tester
Cloud Systems Analyst

P-TECH's Rapid Growth

110 P-TECH schools around the globe – and growing



Philippines Pilot : Taguig City University

The Manila Times
Friday, January 20, 2018

IBM introduces P-TECH in PH

By [Name] | January 20, 2018

Who can imagine that in the next few years, you can finish a degree just by concentrating on science, technology, engineering and mathematics (STEM)?

Through the Pathways in Technology Early College High School (P-TECH) study model, any student who will take the STEM strand can have a college degree beginning in grade 11.

The average cost of a data breach in the ASEAN region is **\$2.53 Million**

Market EDGE
PSE

Javon Fraser is COLLEGE & CAREER READY

IBM BETS BIG IN PH WORKFORCE, LAUNCHES 'PATHWAYS IN TECHNOLOGY' SCHOOL PROGRAM IN TAGUIG

Company	Price	Change
SMI	2,000	47.5
SMI	2,000	47.5
SMI	10,000	47.5
SMI	100	47.5

MANILA BULLETIN
The Nation's Leading Newspaper

NEWS | OPINIONS | BUSINESS | ENTERTAINMENT | SPORTS | LIFESTYLE | TECHNOLOGY

IBM launches program to prepare students for 'new collar jobs'

Published January 20, 2018, 10:00 PM

15 Shares

Share it!

IBM has launched its technology education program that would prepare Filipino students for 'new collar jobs' and making the Philippines the second country in ASEAN after Singapore and 10th globally, to replicate the P-TECH model (Pathways in Technology Early College High School).

ANDREA ESCALONA
CORPORATE CITIZENSHIP MANAGER, IBM PHILIPPINES

P-TECH

MOLDING AT-RISK TEENAGERS TO BECOME COLLEGE AND CAREER-READY

6:28 AM | NIACKO CLASH | AUSTRALIAN OPEN: NADAL CRUISES THROUGH T

Newsbytes PHILIPPINES

Taguig university picked as PH pilot site for IBM's tech education model

Building Whiter Sky 2018 Education

New IBM mentorship program readies students for a tech-powered future

Garth J. Wells

'New collar jobs': IBM launches tech education push in PH

IBM PHILIPPINES



Learn more about P-TECH

www.ibm.com/ptech

www.ptech.org

Thank you
