

INTRODUCTION

The world is changing. Automation is making it harder for people without complex skills to find well-paying jobs. And those same skills are becoming increasingly necessary for civic engagement and family life, as well. We must produce "future ready" graduates to employ our people and have healthy families and communities.

Changing education in the ways we've tried in the past won't be enough. We must transform our high schools for the future of work. We must give teachers the tools they need, and we must make diplomas meaningful again.

We can start by offering incentives to design schools of the future, creating an "innovation" status that allows our high schools to try new things and innovate, and using pilot programs to seed innovation.

That's why Business Forward has partnered with XQ, the nation's leading organization dedicated to reimagining high schools across America so every student succeeds—no matter their race, gender, or zip code. XQ wants to see that change underway in every high school and in every community—all 14,000+ school districts—and offers free, open-source tools that every community can use to reimagine its high schools.

XQ launched in 2015 as an open call to the nation to rethink and redesign the American high school, inspiring more than 10,000 people to join locally-led teams to propose innovative, student-centered school designs. From these, 19 Super Schools are now turning their visions into reality.

47%
OF AMERICAN JOBS
WILL BE IMPACTED
BY AUTOMATION.1

OF JOBS CREATED
DURING THE ECONOMIC
RECOVERY WENT
TO WORKERS WITH
POSTSECONDARY
EDUCATION OR TRAINING.²

7296

OF AMERICANS SAY
EDUCATION SHOULD BE
A TOP PRIORITY FOR
POLITICAL LEADERS.³

To view facts about high school and the future of work in your state, visit:

WWW.XQSUPERSCHOOL.ORG/FUTURE

- 1. Carl Benedikt Frey and Michael A. Osborne, "The future of employment: How susceptible are jobs to computerization?" Technological Forecasting & Social Change, 2017, vol. 114, https://www.sciencedirect.com/science/article/pii/S0040162516302244
- 2. Anthony P. Carnevale and others, "America's Divided Recovery," Georgetown University Center on Education and the Workforce, 2016, https://cew.georgetown.edu/cew-reports/americas-divided-recovery/
- 3. Pew Research Center, "Economic Issues Decline Among Public's Policy Priorities," 2018, http://www.people-press.org/2018/01/25/economic-issues-decline-among-publics-policy-priorities/

EXECUTIVE SUMMARY

WORK IS CHANGING.

By 2030, workplace demand for technological skills will increase by 60%, for creativity by 40%, for entrepreneurship by 33%, and for adaptability by 24%.⁴

The average young American will have at least 11 different jobs between the ages of 18 and 50.5

WORKERS MUST CHANGE.

2/3 of jobs are filled by workers with some college education⁶

Academic knowledge

- + life skills
- + character

STATES MUST ACT.

Empower local communities to transform high schools

Make diplomas meaningful

Get teachers the tools they need

THE "ASK"

Innovation status = freedom to redesign schools

Grants, prizes = incentive for communities to get started

Pilot programs = identify what works, share best practices

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^{4.} Jacques Bughin and others, "Skill Shift: Automation and the Future of the Workforce," McKinsey Global Institute, May 2018, https://www.mckinsey.com/featured-insights/future-of-organizations-and-work/skill-shift-automation-and-the-future-of-the-workforce

^{5.} U.S. Bureau of Labor Statistics, "Number of Jobs, Labor Market Experience, and Earnings Growth Among Americans at 50: Results from a Longitudinal Survey," 2017, https://www.bls.gov/news.release/nlsoy.nr0.htm

^{6.} Anthony P. Carnevale and others, "Recovery: Projections of Jobs and Education Requirements Through 2020," Georgetown University Center on Education and the Workforce, 2013, https://cew.georgetown.edu/cew-reports/recovery-job-growth-and-education-requirements-through-2020/

HOW WORK IS CHANGING

CHANGE WILL BE CONSTANT.

THE AVERAGE
AMERICAN WILL HAVE
AT LEAST

DIFFERENT JOBS
BETWEEN THE
AGES OF 18-50⁷

JOBS WILL DEMAND MORE COMPLEX SKILLS.

BY 2030, WORKPLACE DEMAND WILL INCREASE BY

60%
FOR TECHNOLOGICAL SKILLS

40%
FOR CREATIVITY

33%
FOR ENTREPRENEURSHIP

24%
FOR ADAPTABILITY 8

MORE YOUNG PEOPLE WILL BE "CONTINGENT" WORKERS.

THEY WILL WORK
WITHOUT BENEFITS,
AND OFTEN REMOTELY,
WITH EMPLOYERS
SCALING THEIR TEAMS
UP OR DOWN TO ADAPT
TO EVER-CHANGING
CONDITIONS.

THE PACE OF CHANGE COULD GET FASTER.

OF AMERICANS HAVE
JOBS WHERE AT LEAST
SOME TASKS CAN
BE AUTOMATED 9

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- 7. U.S. Bureau of Labor Statistics, "Number of Jobs, Labor Market Experience, and Earnings Growth Among Americans at 50: Results from a Longitudinal Survey," 2017, https://www.bls.gov/news.release/nlsoy.nr0.htm
- 8. Jacques Bughin and others, "Skill Shift: Automation and the Future of the Workforce," McKinsey Global Institute, May 2018, https://www.mckinsey.com/featured-insights/future-of-organizations-and-work/skill-shift-automation-and-the-future-of-the-workforce
- 9. Carl Benedikt Frey and Michael A. Osborne, "The future of employment: How susceptible are jobs to computerization?" Technological Forecasting & Social Change, 2017, vol. 114, https://www.sciencedirect.com/science/article/pii/S0040162516302244





WHAT TOMORROW'S WORKERS WILL NEED

Solid knowledge, fundamental skills. Reading, writing, numeracy and technological literacy will be ever more important to the continuous learning that will be required of virtually everybody.

Life skills. As more tasks are automated, the "essentially human" parts of work grow more important. Skills like empathy, problem-solving, and strategic decision-making are more valuable than ever, especially since so much work is done in teams.

Character. In a world where lifelong learning is required, tenacity, self-regulation, agency, growth mindset, empathy, and curiosity will grow more important. A related set of "global competencies" help workers succeed in our increasingly global economy.

4 out of 5 CEOs say that skills gaps in creativity and problem-solving make hiring difficult.¹⁰

A STRONG
FOUNDATION
OF ACADEMIC
KNOWLEDGE

THE SKILLS
NECESSARY TO
APPLY THAT
KNOWLEDGE TO
NON-ROUTINE
PROBLEMS AS
THEY ARISE

A SET OF
COMPETENCIES
THAT ALLOW
THEM TO WORK
WELL AND
ETHICALLY WITH
OTHERS

A GREAT DEAL OF FLEXIBILITY AND ADAPTABILITY

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10. Business Roundtable, "BRT 2016 Education & Workforce Survey: Survey Results and Analysis," June 2017, https://www.businessroundtable.org/resources/2016-brt-education-and-workforce-survey





EMPOWER LOCAL COMMUNITIES

Real progress occurs when local communities are empowered to design their own solutions. State leaders can encourage local innovators to take advantage of each community's unique assets while drawing inspiration from research-based design principles and the best examples of what's possible.

OFFER INCENTIVES TO DESIGN SCHOOLS OF THE FUTURE

Use competitive grants or prizes for communities that submit the best proposals to redesign an existing high school or launch a new school based on an innovative design. Target a portion of grant funds to districts with high concentrations of poverty or students of color.

CREATE AN INNOVATION STATUS FOR TRADITIONAL SCHOOLS

Give traditional districts and schools the flexibility for ambitious innovation based on an approved design. Allow schools to allocate their budgets, make staffing decisions, and use time in different ways to implement innovative programs. State leaders must ensure that flexibility is coupled with responsible oversight and accountability.

USE PILOT PROGRAMS TO SEED INNOVATION

Test specific new approaches to high school education, such as competency-based learning, across a group of school districts. Pilots can identify common challenges, successful strategies, and conditions for success across differing communities. Create mechanisms for sharing lessons learned by developing professional learning communities across program participants.

MAKE DIPLOMAS MEANINGFUL

MODERNIZE CAREER TRAINING

Students who participate in high-quality career and technical education (CTE) are more likely to graduate, earn industry credentials, enroll in college, and have higher rates of employment and higher earnings. States should redesign CTE programs to prepare students for good jobs in growing fields, based on labor market data.

DEVELOP A PROFILE OF A GRADUATE

Define the broader set of skills and competencies students will need for success after high school, such as self-discipline, initiative, resilience, creativity, and problem-solving.

ALIGN COURSE REQUIREMENTS WITH COLLEGE READINESS

Only half of America's high school graduates complete the courses necessary to be prepared for college. Align high school coursework requirements with the specific set of courses required to apply to your state's public university system.

MAKE RIGOROUS COURSES AVAILABLE TO EVERY STUDENT

Nationwide, only 60 percent of high schools offer physics, 73 percent offer chemistry and 80 percent offer Algebra II. Students of color have even less access to such courses. Require districts to offer a rigorous high school curriculum, expand access to the courses students need, provide alternatives for students to take courses outside their schools.

REDEFINE "COURSE" TO BREAK FREE FROM SEAT TIME

Help students to develop practical, concrete skills in real world settings. Award credit for learning—demonstrated learning—no matter where or when the learning takes place.

CHALLENGE STUDENTS TO TAKE COLLEGE-LEVEL COURSES

Dual enrollment programs and Advanced Placement courses enable students earn college credits in high school, helping students develop skills, gain knowledge, and build confidence. They also reduce the time and cost for college.

SUPPORT STUDENTS

Some students need extra support to meet college- and career- ready expectations. And all students will need better personalized guidance to understand diploma requirements, to explore postsecondary college and career opportunities, and to plan for a successful future.

ALIGN ACCOUNTABILITY

Existing accountability systems, preoccupied with time-based credits and testing, will have to be brought into line with both the broadened goals of high school and additional forms of measurement.

ENSURE EQUITY

Analyze access to courses, quality teachers, and extracurricular opportunities to make sure that all groups of students are getting their fair share. Act when the data show inequities.

GET TEACHERS THE TOOLS THEY NEED

INCREASE ACCESS TO HIGH-QUALITY LEARNING TOOLS AND RESOURCES

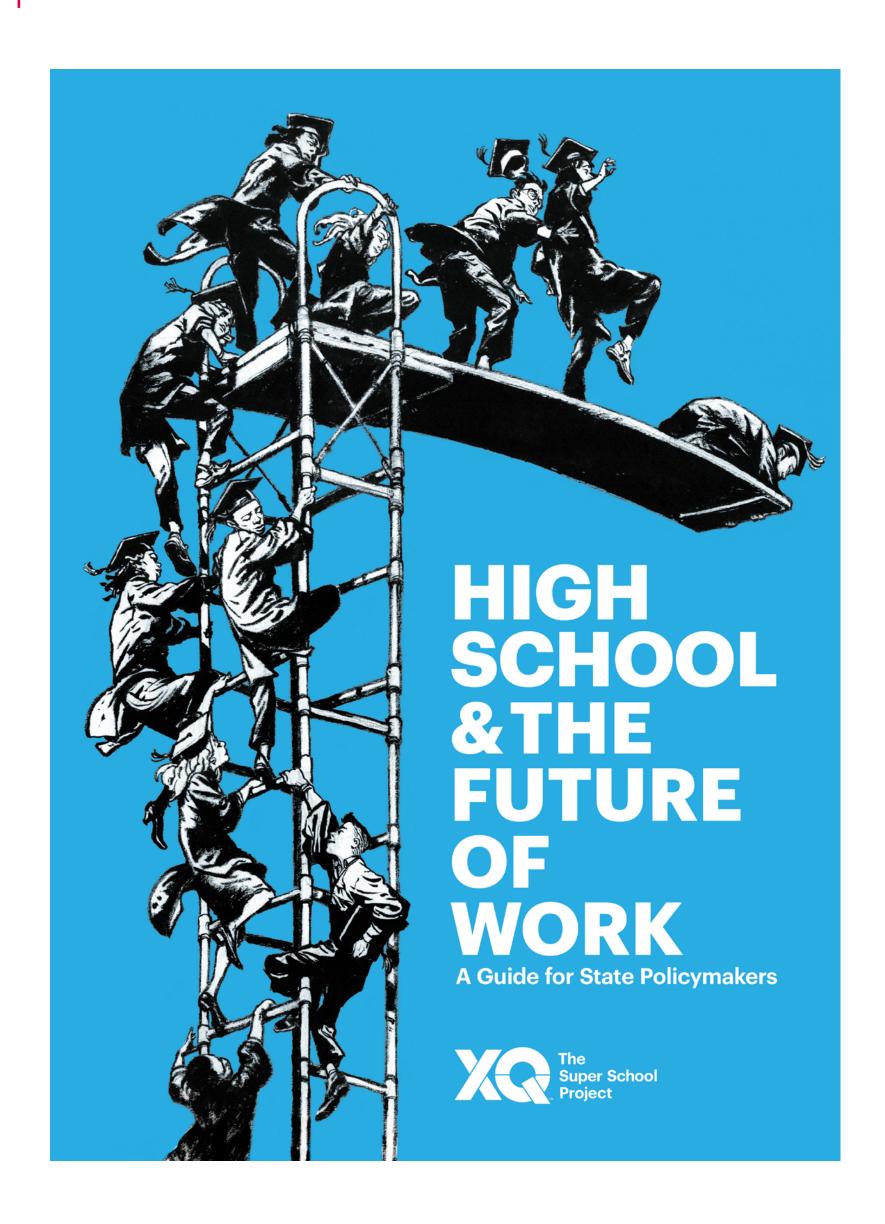
MOBILIZE EXPERTISE AND SPUR **INVESTMENT** TO CREATE **NEW SOLUTIONS**

HELP **EDUCATORS NAVIGATE** THE MARKET

PERSONALIZE PROFESSIONAL LEARNING

UPGRADE EDUCATOR PREPARATION AND CERTIFICATION

ABOUT XQ



XQ is the nation's leading organization dedicated to reimagining high schools across America so every student succeeds—no matter their race, gender, or zip code. XQ wants to see that change underway in every high school and in every community—all 14,000+ school districts—and offers free, open-source tools that every community can use to reimagine its high schools.

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