XQ MODULE NO. 01 / DISCOVER



STUDENTS INTHE 21ST CENTURY

What do young people need to learn today in order to succeed in the future?



Today's global society demands new thinking skills and higher levels of educational achievement.

By understanding the skills young people need to succeed in the real world, we can start to design learning environments fit for the 21st century.

How can we help young people to be creative and selfreliant, discover what they love, master what they learn, and apply what they know to the challenges that matter to them?

THINGS TOTHINK ABOUT

Examine the high schools that already exist in the community you want to work in. How well are they serving young people, and what gaps do you see?

Who does not benefit from high school opportunities, and why?

How is the youth population in the community changing? How is it likely to change in the next several years?

What demands and opportunities will adolescents in the community will face in higher education, the workforce, and civic life?

LEARNING FOR THE FUTURE OF WORK

FACT: Student demographics and the workplace of the future are changing rapidly.

Agility and diversity are more important than ever.

It used to be common for Americans to graduate high school or college, get a job, and stay in one profession for life. Today, people are much more likely to change jobs every few years. In fact, most people will have had multiple careers by the time they reach age 40.

The nature of work is very different for young people today than it was for their parents and grandparents. In today's world of complex environmental, political, technological, and socioeconomic challenges, young people need to know how to think critically and solve problems creatively and collaboratively. Traditional subject areas like English, math, and science are still important-the challenge now is for students to learn more deeply across these areas and apply their knowledge to everyday life.

At XQ, we think of these as 21st-century skills, and we believe that developing them will demand a deeper, more expansive type of learning. Can you think of some 21st-century learning skills that are already being taught in the community you are designing a school for?

The face of the public school student is changing, too. This year, for the first time ever, more students of color than white students are enrolling in public schools. The young people of today will know a different kind of diversity than what we see now. But if you look at statistics on access and performance by race, it's obvious that minority students still aren't getting the same opportunities that their white counterparts are getting. We can and must address this immediately.

THINK ABOUT

How do schools and classrooms need to change in order to create a deeper learning environment where young people are encouraged to take risks and test their problem-solving and criticalthinking skills?

Jobs that were once performed by humans are guickly being replaced by machines or sent to lower-cost markets. So what does this mean for future workers and for employers? Here are some examples of the shift in requirements from the old paradigm to the new knowledge economy.

OLD PARADIGM Follows orders

What knowledge and skills do young people need to thrive in their jobs,

their communities, and the world? Take a deep dive into learning for

the 21st century with James W. Pellegrino and Margaret L. Hilton.

EDUCATION FOR

LIFE AND WORK

→ KNOWLEDGE ECONOMY Co-creates order

Follows orders	Co-creates order
Product driven	Customer driven
Climbs the corporate ladder	Seeks leadership opportunities
Boss creates directives and change takes time	Workforce respor quickly & strategi
Long, face-to-face meetings	Office? What office?
9–5	Flex time
Lifelong employment	Changes jobs oft
Resume	LinkedIn profile
Commutes to office	Works remotely
Completes given tasks	Pursues goals creatively
Domain specialization	Agility across dor
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5 FACTS ABOUT AMERICA'S STUDENTS

What does the modern American student look like? The Pew Research Center has a report full of interesting facts and helpful infographics.

EXPLORE

READ

GEARING UP FOR 2020

What will jobs look like in the year 2020? Anthony Carnevale and his team at the McCourt School of Public Policy share their jobs projections for 2020 and discuss the knowledge and skills young people will need to thrive in the job market.



What are employers looking for when they hire? Anthony Carnevale and Nicole Smith highlight in-demand employment skills shaped by 21st-century economies.

READ

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FACT: Post-secondary education is a must for career success.

Alerta State

(PD)

Every student needs to be ready for college, and not just on paper.

According to the U.S. Department of Education, approximately half of the students entering two-year colleges are not ready for college, even though their diplomas say they are. This points to a discrepancy between what students are doing in school (course completion, credit hours, and standard assessment scores) and what educators call actual college readiness.



MICHELE CAHILL, Distinguished Fellow in Education and Youth Development National Center for Civic Innovation

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THINK ABOUT

What does post-secondary learning look like to you? How can we help students prepare for the challenges they'll face in the 21st-century workplace?

The Educational Policy Improvement Center conducted a study of 38 diverse public high schools, and concluded that these seven key ingredients drive high schools towards success:

- 1. A college-going culture with an emphasis on the value and attainability of post-secondary education
- 2. A core academic program that yields college readiness by the end of senior year
- 3. The instruction and application of selfmanagement skills and good academic behaviors
- 4. Access to resources that prepare students for the path to college and career
- A progressively challenging curriculum for each successive year of high school, including assignments and grading policies that prepare students for college expectations
- 6. Efforts to make senior year meaningful and challenging
- 7. Connections to post-secondary programs and institutions, like entry-level online coursework and summer college classes designed to catch students up to college levels in math and science

THE READINESS GAP

Why do so many students enter college without the preparation they need to do college-level work? The National Center for Public Policy and Higher Education shares their research in this report.

WHAT CAN STATES DO TO SOLVE THIS GAP?

How does the federal government think about readiness? The U.S. Department of Education reenvisions what states—and the rest of us—can do to get students college- and career-ready.

READ 🕨

DO STUDENTS FEEL PREPARED FOR COLLEGE?

What makes students feel prepared for post-high school life? Watch this video from Achieve to find out.

READ

OPPORTUNITIES FOR DISABLED YOUTH

Brooke Haycock wrote this Education Trust blog post about how we can make sure that students with disabilities are not left behind.

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FACT: Race, ethnicity, and socioeconomic status still influence success.







Opportunity is still far from equal.

Our society looks to the public education system to be the great equalizer—but is it?

Economic disparities in our country are only getting worse, and this inevitably widens opportunity gaps in education and—consequently—in earnings and career advancement. While wealthier families can sign their kids up for private schools, creative afterschool programs, and study-abroad placements, most low-income families simply don't have the time or financial resources to offer their kids opportunities to acquire skills and knowledge beyond what's available through school. Despite the considerable gains our country has made in recent years, the education system is still disproportionately underserving black and Latino students, as well as young people of all races who live in poverty. This is why we need public schools to rise to the occasion.

In addition to the disparities within schools, an estimated 13% of Americans aged 16–24 are neither enrolled in school nor employed—that's over 5.5 million people. These young people are twice as likely to live in poverty. To improve their chance of success, they need opportunities to envision better futures for themselves. That's where schools and other institutions come in: to help them develop the skills and perseverance they need to claim the lives they deserve. Many people in education refer to these young people as *opportunity youth* to highlight the potential they have to contribute to their communities and the economy.

At XQ, we strongly believe that intelligence itself is colorblind. It's up to each and every school to develop greater equalizing opportunities so every student has the chance to thrive.

THINK ABOUT

How do we strengthen connections among teachers, peers, and the rest of the community so that young people have the confidence and resources to push themselves to achieve academically?

What does access to education look like in your school or district? Look it up here and map it against the national average. http://ocrdata.ed.gov/

"Today, more than ever, an advanced education beyond high school is a prerequisite for success. America was once the most highly educated country in the world. A generation ago, we led all nations in college completion, but today 10 countries have surpassed us. It's not that their students are smarter than ours. It's that these countries are being smarter about how to educate their students. And the countries that out-educate us today will out-compete us tomorrow."

BARACK OBAMA

College- and Career-Ready Standards and Assessments, U.S. Department of Education (2010)

RESTORING OPPORTUNITY

Greg Duncan and Richard Murnane's infographic visually explains the crisis of inequality in the American education system and highlights promising programs that are making a difference today.

EXPLORE >

ZEROING IN ON PLACE AND RACE How can we do more for young people w

How can we do more for young people who are not working or in school? Student Status Confirmation Reports provide up-to-date data on the more than 5.5 million disconnected young people living in cities across the United States.

READ 🕨

THE STATE OF EDUCATION: AFRICAN AMERICAN AND LATINO STUDENTS

How well are our schools serving Latino and African American students today? The Education Trust highlights the most important trends impacting these student communities.

AFRICAN AMERICAN

LATINO/LATINA

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LEARNING INNOVATIONS THAT PROMOTE EQUITY

Do learning innovations inadvertently increase the gap between struggling and achieving students? In this report, RAND Education and Jobs for the Future explore how to apply competency-based education with a focus on increasing equity for all students.



IT'S TIME TO RETHINK HGHSCHOOL

We need to go beyond traditional high school courses and foster deeper learning.

The principles behind deeper learning are deceptively simple and obvious spend time with students, treat them as individuals, invest in their success, and help them mature into responsible and concerned adults armed with knowledge.

Deeper learning involves:

- + Connecting as a community of learners
- + Empowering students to lead their own learning
- + Contextualizing learning and relating it to young people's lives
- + Reaching beyond school walls with partnerships and real world experiences
- + Inspiring and motivating students to customize their learning
- + Making good use of technology as a means, not an end
- Investing in and committing to deeper learning as an integral part of a school and its curriculum

INSPIRED

DEEPER LEARNING



How Eight Innovative Public Schools Are Transforming Education in the Twenty-First Century

EIGHT SCHOOLS ON DEEPER LEARNING

This review of a book by Monica Martinez and Dennis McGrath summarizes the key themes they found in eight public schools that are innovating for deeper learning.

Denver 8.7% Minneapolis 8.5% Chicago 6 5% Boston 10.4% San Washington DC 11.0% Jose 12.9% Charlotte 4.4% Atlanta 4.5% Salt Lake City 10.8% > 16.8% 12.9% - 16.8% 11.3% - 12.9% 9.9% - 11.3% 9.0% - 9.9% 8.1% - 9.0% 7.1% - 8.1% 6.1% - 7.1%

MAPPING MOBILITY

Raj Chetty uses maps to demonstrate visually how the places where children live affect their lifetime earnings and economic mobility.

READ

RESTORING **OPPORTUNIT**

The Crisis of Inequality and the **Challenge for American Education** EXPLORE >



RESTORING **OPPORTUNI**

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See how two approaches-at a high school in NYC and at an elementary school in Chicago-create stronger opportunities for students in these short videos from Restoring Opportunity.

NEW YORK

CHICAGO

COMMUNITIES IN CHOOL

In this compelling TEDx Talk, Dan Cardinali, president of Communities in Schools, makes a very passionate case for doing more to help negate poverty's effect on educational performance.

WATCH

GET INSPIRED



STEAM AT RISD

In this climate of economic uncertainty, America is once again turning to innovation as the way to ensure a prosperous future. Yet innovation remains tightly coupled with science, technology, engineering, and math—the STEM subjects. Art and design are poised to transform our economy in the 21st century just as science and technology did in the last century. RISD (Rhode Island School of Design) is adding art and design to the equation—to transform STEM into STEAM.

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TUNE IN TO THE FRONT LINES

In this recent two-part podcast by *This American Life*, we dive deep into the front lines of the opportunity gap in our schools today.

8 New Jobs People Will Have In 2025

New technologies will change the kinds of jobs people have in the coming years. Don't be surprised if one day you've taken on the position of microbial balancer, corporate disorganizer, or urban shepherd.

18 NOTES / 43 PIN / 243 PLUS / 3.1K TWEET / 10.1K LIKE / 1.6K SHARE

New technology will eradicate some jobs, change others, and create whole new categories of employment. Innovation causes a churn in the job market, and this time around the churn is particularly large—from cheap sensors (creating "<u>an Internet of things</u>") to 3-D printing (enabling more distributed manufacturing).

JOBS OF THE FUTURE

New technologies will change the kinds of jobs people have in the coming years. Don't be surprised if one day you've taken on the position of microbial balancer, corporate disorganizer, or urban shepherd. Here are eight new jobs people will have in 2025, from *Fast Company*.





THE POSSE FOUNDATION

Deborah Bial, a MacArthur Genius grantee, runs this organization designed to close the opportunity gap and help kids thrive after high school.

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ZEEMEE

Sometimes called "LinkedIn for students," ZeeMee is a technology platform that helps college applicants share their stories with admission reps.

THE WORLD OF DATA VISUALIZATION

How do you learn about the community you will serve and then share that knowledge in a persuasive, compelling way? One way is through data visualizations, like the collection here from the Urban Institute.

EXPLORE >

EXPLORE >

GET CREATIVE

INIMIERSE YOURSELF IN THE COMMUNITY.

with Keith Yamashita

WATCH >

KEITH YAMASHITA, Chairman and Founder, SYPartners