

# "In-Demand" Careers

Preparing Today's High School Students for Tomorrow's Workforce

## The Economic Future of the U.S. Depends on Navigating Two Waves of Change:



### Skills In Demand

Job growth is concentrated in STEM and Healthcare, "**In-Demand**" sectors. Both fields share a foundation in science and math coursework.



### Demographic Change

Filling In-Demand jobs will depend on being able to attract historically underrepresented groups to STEM and Healthcare.

By 2029, job growth is predicted to **INCREASE...**

**+ 15.0%** in **Healthcare**, and **+ 7.9%** in **STEM**, but only **+ 2.1%** in **other** fields.<sup>1</sup>

From the Bureau of Labor Statistics 2019-2029 data.

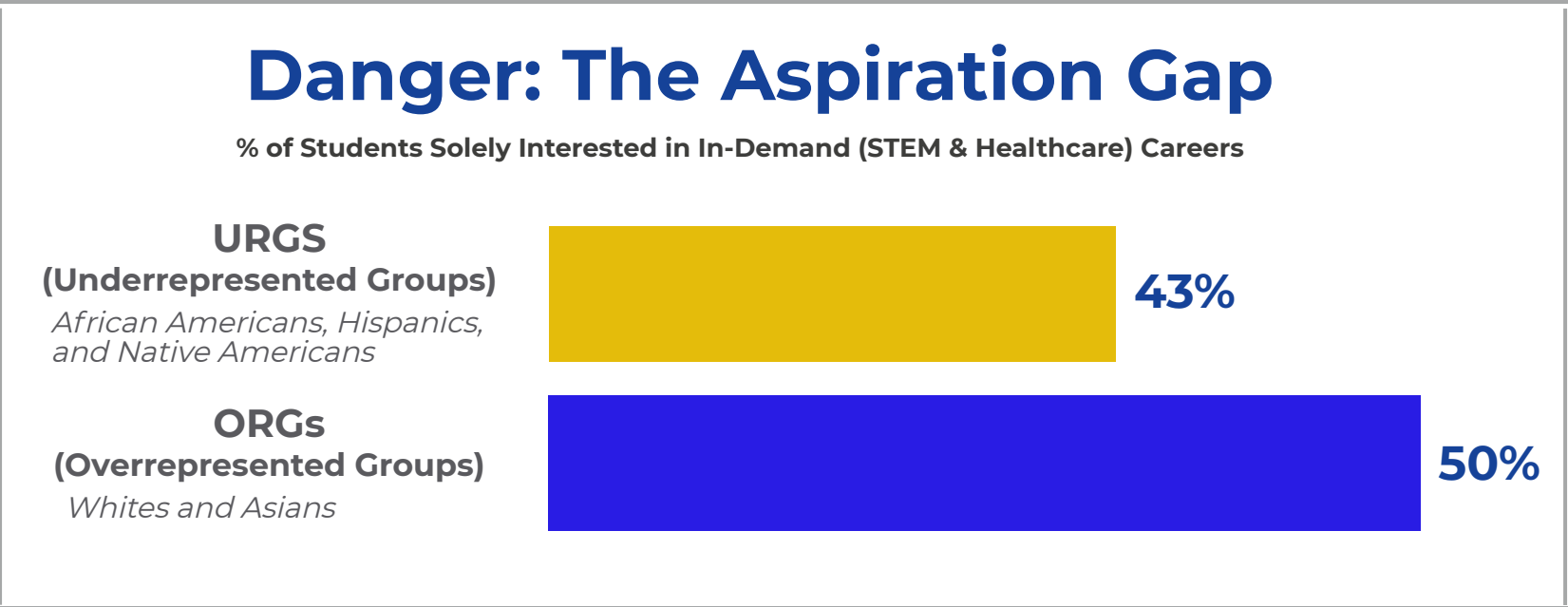
...and the workforce will grow more **DIVERSE.**

The U.S. workforce is predicted to be "**majority-minority**"<sup>2</sup> by **2039**

The **emerging U.S. workforce**<sup>3</sup> (ages 18-29) is predicted to be "majority-minority" by **2027**

So the U.S. Economy Depends on Preparing All Students for *In-Demand* careers.

However, students from historically **underrepresented groups (URGs)** are *less likely* to aspire to In-Demand careers than **ORG peers**.



# Why do these historical patterns persist?

## AT A GLANCE



### STEM Encouragement

As STEM encouragement grows, aspirations for In-Demand careers increase. But some students have less encouragement than others.



### Impact on Aspirations

Yet even when encouragement is equal and high, URGs are less likely to aspire to In-Demand careers.



### Unequal Resources

Structural inequalities create challenges for closing the gap in career aspirations of URG and ORG peers.

## A CLOSER LOOK

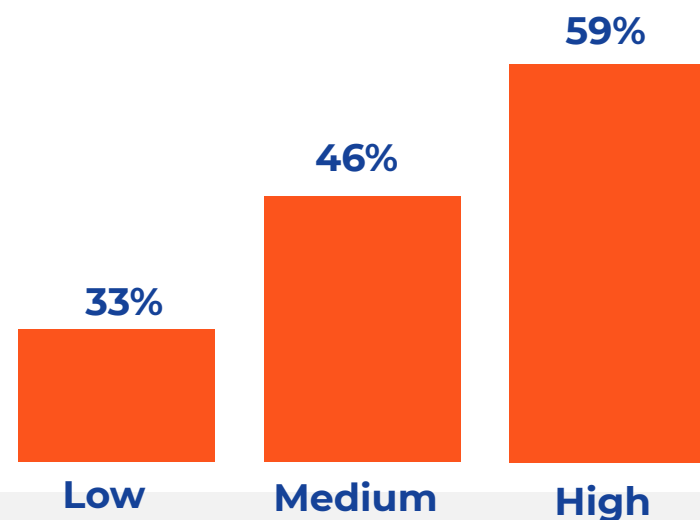
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## Encouragement of STEM Interest



Students Scoring High on Sources of STEM Encouragement<sup>4</sup> are More Likely to Aspire to In-Demand Careers

% Students Aspiring Solely to In-Demand Careers

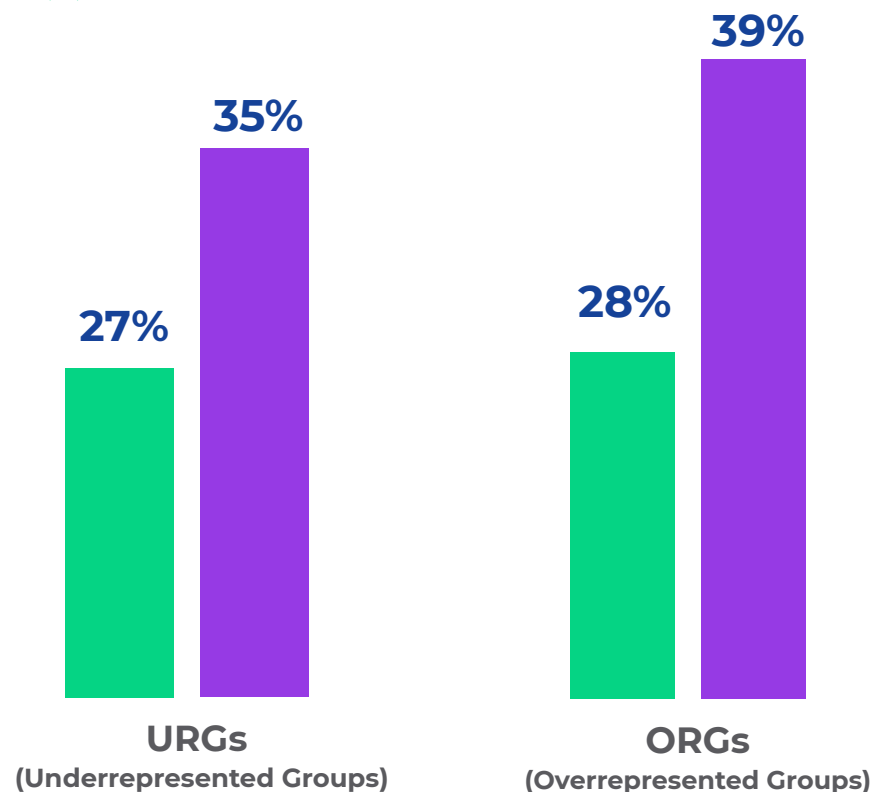


Yet High Sources of STEM Encouragement Are More Likely among Students with **Higher Parental STEM Capital** (a Parent with a STEM Degree/Job).

**Good News:** For URGs and ORGs, Having Higher Parental STEM Capital Boosts STEM Encouragement

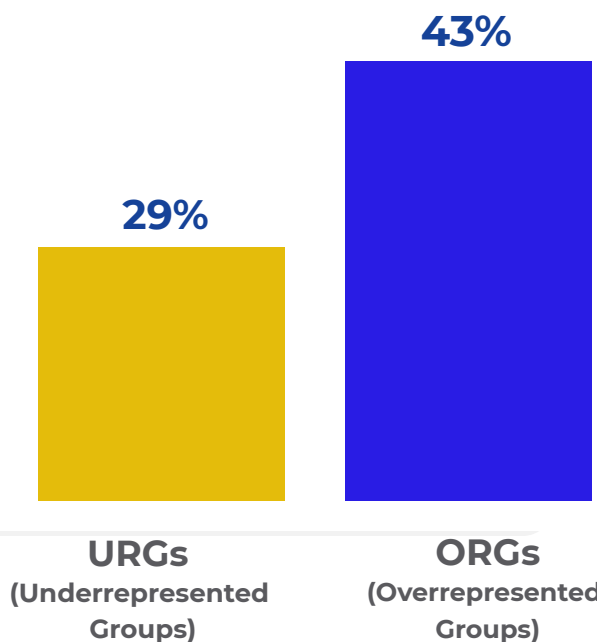
% of Students Scoring High on Sources of STEM Encouragement

Lower Parental STEM Capital Higher Parental STEM Capital



**Bad News:** URGs Are *Less Likely* than ORGs to Have Parents Holding a STEM Degree/Job

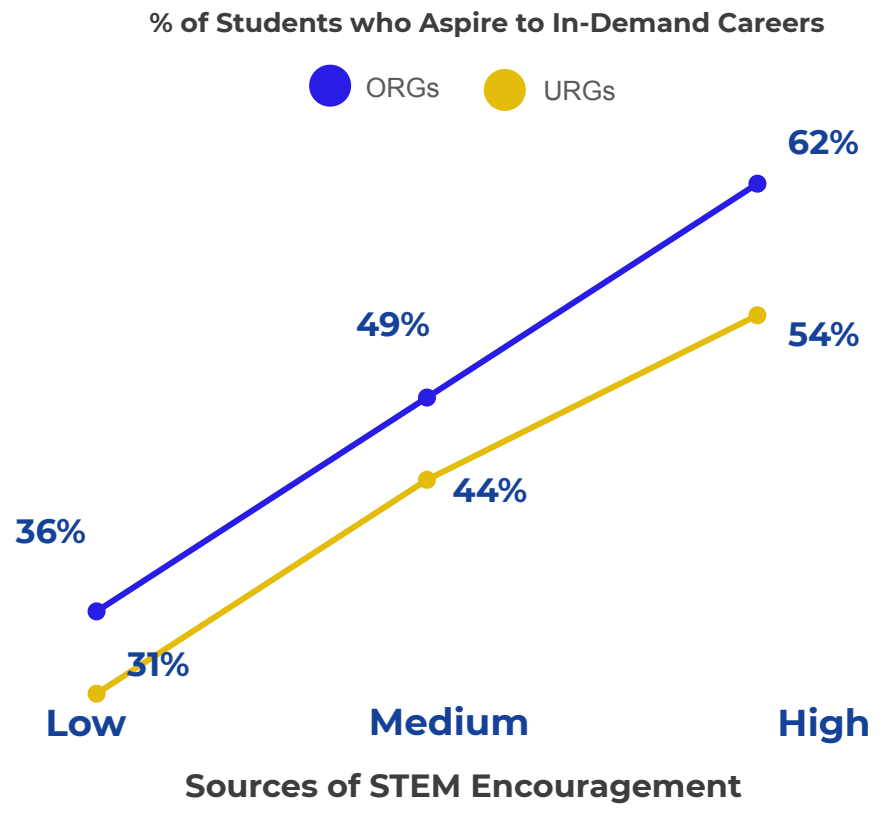
% of Students with Higher Parental STEM Capital



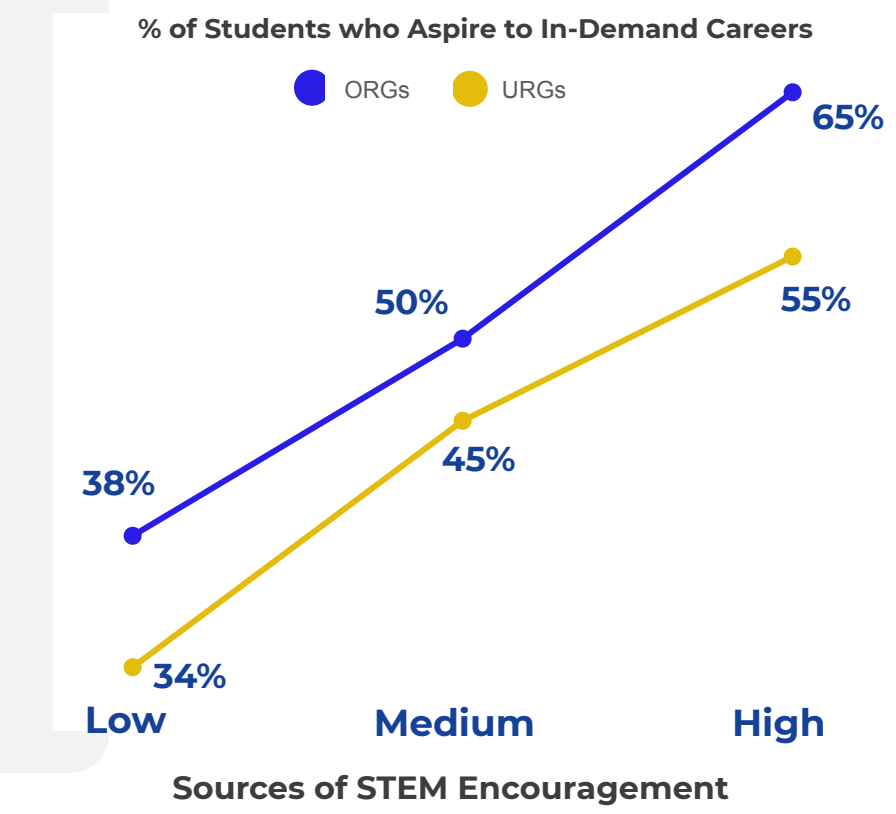
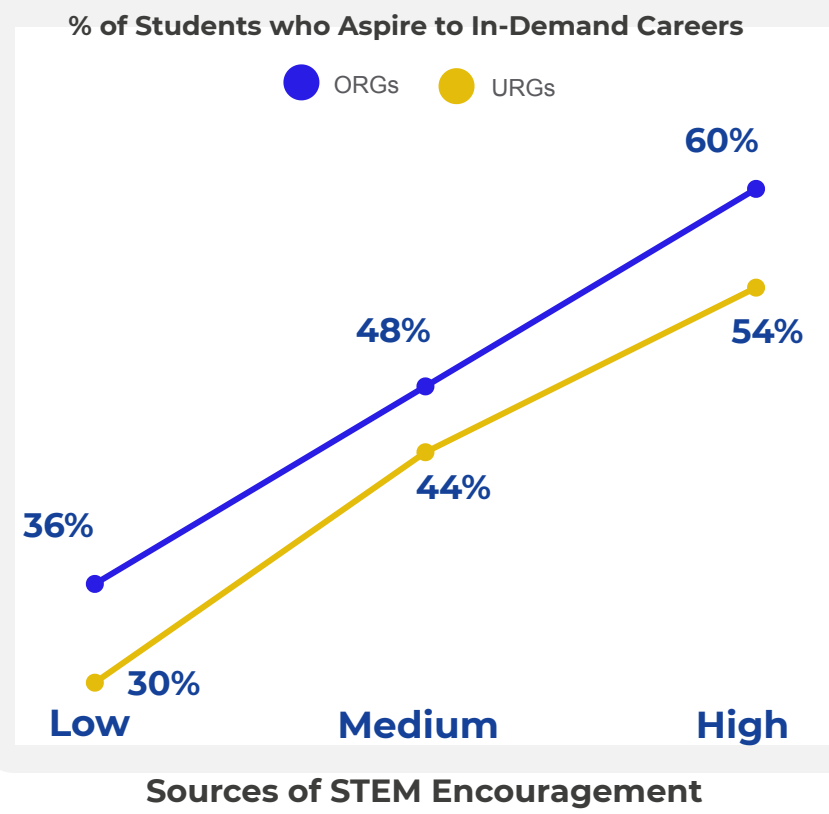
**Plus:** URGs Benefit *Less* from Equal STEM Encouragement



When STEM Encouragement is Equal, URGs Aspire to In-Demand Careers at Lower Rates Than ORGs



This Aspiration Gap Persists Whether Students Have... **Lower Parental STEM Capital...** ...or **Higher Parental STEM Capital**



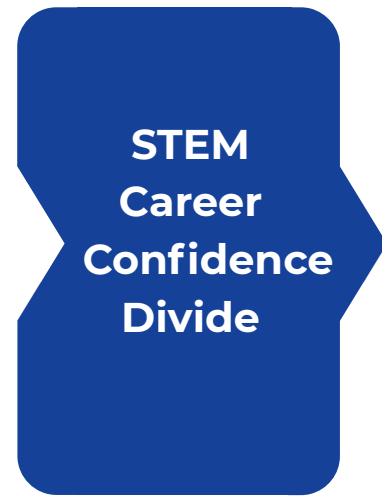
More Sources of STEM Encouragement are *Always* Better, But Even When All Things Seem Equal, the Impact is Not.



Even Among Students Best Positioned to Aspire to In-Demand Careers...

- High Sources of STEM Encouragement
- Higher Parental STEM Capital

...Inequality is a Reality



URG Aspirants are **More** Confident Than URG Non-Aspirants They Could Succeed in a STEM Career...

% Completely Confident Could Succeed in a STEM Career

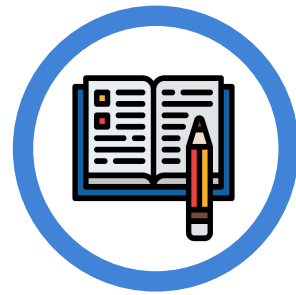


...But URG and ORG Aspirants are **Equally** Confident They Could Succeed in a STEM Career

% Completely Confident Could Succeed in a STEM Career



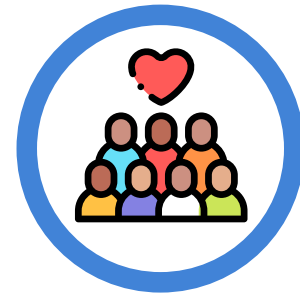
### URG Aspirants: Disadvantaged in 3 Ways



Academic Vulnerability

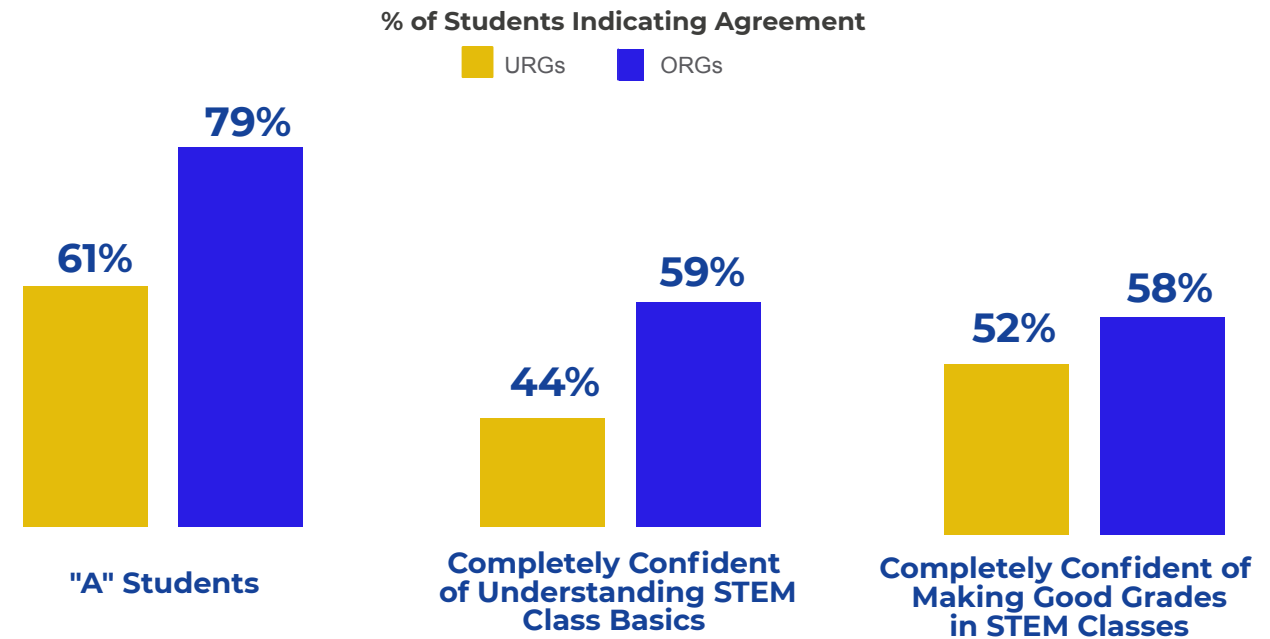


School-Level Resources



Community-Level Resources

### URGs Show Greater Academic Vulnerability



### Preventing or Mitigating the Gaps in Academic Vulnerabilities Is Important Because...

...URG Aspirants Face Structural Inequalities



At the School Level

- lower median household incomes.
- lower per pupil total current spending.
- higher percentage of families in poverty.
- greater rates of free/reduced lunch.



At the Community Level

- fewer high school graduates.
- fewer adults with bachelor's degrees.
- underrepresentation of ORGs.

Inequality in Available Resources at the School, District, and Community Levels May Depress the Aspiration Rates of Students in Underrepresented Groups.

As the Demographics of the U.S. Workforce Change, What Will Help All Students Be Ready and Eager to Fill the In-Demand Jobs of the Future?

Sources:

<sup>1</sup> See Bureau of Labor Statistics, Updated September 2020. BLS.gov/emp/tables/emp-by-major-occupational-group; Bureau of Labor Statistics (BLS), US Department of Labor, The Bureau of Labor, Occupational Outlook Handbook (OOH), "BLS Occupational Employment Projections 2019-2029", Sept. 19, 2020, retrieved from: <https://www.bls.gov/news.release/ecopro.nr0.htm>; Bureau of Labor Statistics (BLS), US Department of Labor, The Bureau of Labor, Employment Tables, "Table 1.11 Employment in STEM Occupations", 2019, retrieved from: <https://www.bls.gov/emp/tables/stem-employment.htm>; Bureau of Labor Statistics (BLS), US Department of Labor, The Bureau of Labor, Occupational Outlook Handbook (OOH), "Healthcare Occupations", 2019, retrieved from: <https://www.bls.gov/ooh/healthcare/home.htm>.  
<sup>2</sup> <https://www.cnn.com/2008/US/08/13/census.minorities/> The concept "Majority-Minority" is based on the proportion of non-Hispanic Whites in a specified group. For example, when less than 50% of the workforce is non-Hispanic Whites, the workforce is considered "Majority-Minority." For more information see [https://en.wikipedia.org/wiki/Majority\\_minority\\_in\\_the\\_United\\_States](https://en.wikipedia.org/wiki/Majority_minority_in_the_United_States)  
<sup>3</sup> <https://www.brookings.edu/blog/the-avenue/2018/03/14/the-us-will-become-minority-white-in-2045-census-projects/>  
<sup>4</sup> This analysis includes the following self-reported sources by students as "Positive Influences on STEM Interest": Teachers, Parents, Other Adults, Friends, Pastimes, School Activities, Natural Talents, and Out-of-School Activities (OST). 0-1 sources are referred to as "Low" STEM Encouragement. 2-4 sources are referred to as "Medium" STEM Encouragement. 5 or more sources are referred to as "High" STEM Encouragement.

Icons from FlatIcon by Freepik, iconixar, and Icon Pond.

This infographic summarizes findings from the Career Interest Survey sponsored by the Research Consortium on Career Pathways and 21st Century Skills, and other sources as noted. The Student Research Foundation surveyed classrooms nationwide during Fall 2018. Student percentages are based on replies of the 35,410 high school students who responded to the Student Survey. **To learn more visit [www.StudentResearchFoundation.org](http://www.StudentResearchFoundation.org).**

Research Consortium on Career Pathways & 21<sup>st</sup> Century Skills

