

Introduction

This report offers an update of the YouScience data from our Business Advisory Council’s partner school districts, providing valuable insights into student aptitudes and career interests. Our goal is to present a clear regional picture of the emerging workforce pipeline across key in-demand sectors.

YouScience uses proprietary artificial intelligence to uncover student aptitudes, then connect these aptitudes to careers and educational pathways designed to help students discover their natural talents and connect them to personalized career and educational opportunities.

This overview shows the number of assessed students who show a natural aptitude and interest in our targeted industry clusters. This data highlights our region’s students’ awareness and exposure gaps, revealing areas of opportunity for improvement.

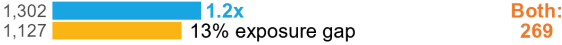
The BAC aims to inspire collaboration among industry, higher education, nonprofits, and K-12 schools to help close these gaps and better prepare students for future workforce needs in our region.

YouScience Results by Industry Sector

24-25 Students Assessed YTD (Grades 6-12)

# of Individual  
Students Assessed  
**6,792**

Agriculture, Food, & Natural Resources



Architecture & Construction



Arts, Audio/Video Technology, & Communications



Business Management & Administration



Education & Training



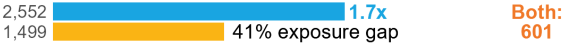
Finance



Government & Public Administration



Health Science



Hospitality & Tourism



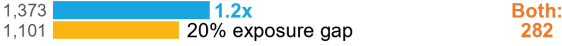
Human Services



Information Technology



Law, Public Safety, Corrections, & Security



Manufacturing



Marketing



Science, Technology, Engineering, & Mathematics



Transportation, Distribution, & Logistics



Aptitude Interest

# BAC YouScience Quarterly Report

Montgomery & Warren County Student Snapshot

## YouScience Results by Industry Sector

All Active Assessed Students Grades 6-12



# of Individual  
Students Assessed  
**12,721**

### Agriculture, Food, & Natural Resources

2,204  
2,093

1.1x

5% exposure gap

Both:  
448

### Architecture & Construction

2,214  
2,522

1.1x

Both:  
605

### Arts, Audio/Video Technology, & Communications

2,051  
4,926

2.4x

Both:  
927

### Business Management & Administration

3,185  
3,110

1.0x

2% exposure gap

Both:  
928

### Education & Training

1,611  
4,946

3.1x

Both:  
810

### Finance

2,208  
431

5.1x

80% exposure gap

Both:  
152

### Government & Public Administration

1,993  
546

3.7x

73% exposure gap

Both:  
122

### Health Science

4,605  
2,896

1.6x

37% exposure gap

Both:  
1,092

### Hospitality & Tourism

1,514  
523

2.9x

65% exposure gap

Both:  
129

### Human Services

2,109  
4,695

2.2x

Both:  
937

### Information Technology

3,486  
1,061

3.3x

70% exposure gap

Both:  
352

### Law, Public Safety, Corrections, & Security

2,665  
2,160

1.2x

19% exposure gap

Both:  
557

### Manufacturing

2,759  
1,414

2.0x

49% exposure gap

Both:  
492

### Marketing

1,417  
2,944

2.1x

Both:  
333

### Science, Technology, Engineering, & Mathematics

1,156  
2,552

2.2x

Both:  
434

### Transportation, Distribution, & Logistics

2,985  
1,339

2.2x

55% exposure gap

Both:  
567

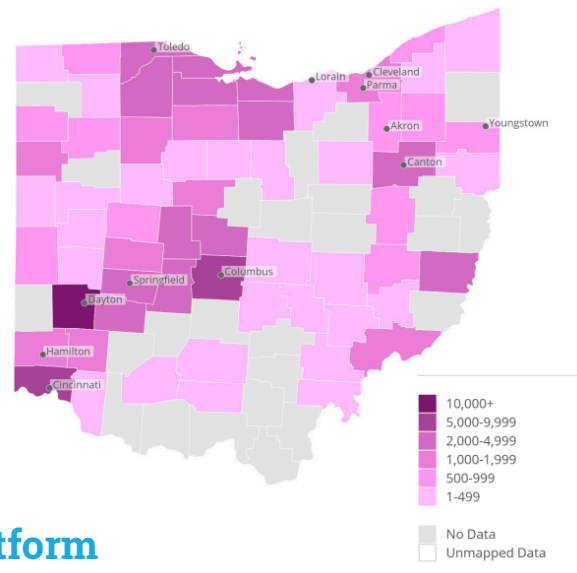
Aptitude

Interest

Data pulled May 28, 2025

## The Power of YouScience

YouScience matches students' aptitudes with 500+ careers, including their top 15-20 best fit careers. Career matches also include salary ranges, projected job openings, education requirements, day-in-the-life insight, and more. Results include language to assist with resumes, application essays, and interviews. This data helps make the case for private sector partners to get involved in K-12 career connections efforts.



**1 Million students using the platform**

**139,000+ surveyed in Ohio across 164 districts**

**12,500+ surveyed\* in Montgomery County** \*(BAC & Non-BAC)

# BAC YouScience Quarterly Report

Montgomery & Warren County Student Snapshot

## YouScience Results by Industry Sector

All Active Assessed Students Grades 6-8



# of Individual  
Students Assessed  
**3,796**

### Agriculture, Food, & Natural Resources

961 **1.6x**  
591 39% exposure gap

Both:  
**196**

### Architecture & Construction

684 **1.3x**  
887

Both:  
**212**

### Arts, Audio/Video Technology, & Communications

415 **4.3x**  
1,773

Both:  
**227**

### Business Management & Administration

716 **1.2x**  
876

Both:  
**182**

### Education & Training

491 **2.8x**  
1,377

Both:  
**219**

### Finance

881 **6.9x**  
128 85% exposure gap

Both:  
**47**

### Government & Public Administration

717 **5.1x**  
141 80% exposure gap

Both:  
**39**

### Health Science

1,693 **2.4x**  
709 58% exposure gap

Both:  
**326**

### Hospitality & Tourism

422 **2.9x**  
148 65% exposure gap

Both:  
**37**

### Human Services

545 **2.2x**  
1,218

Both:  
**198**

### Information Technology

782 **2.1x**  
373 52% exposure gap

Both:  
**103**

### Law, Public Safety, Corrections, & Security

766 **1.3x**  
568 26% exposure gap

Both:  
**151**

### Manufacturing

1,057 **2.1x**  
507 52% exposure gap

Both:  
**186**

### Marketing

426 **2.4x**  
1,004

Both:  
**124**

### Science, Technology, Engineering, & Mathematics

344 **2.1x**  
733

Both:  
**119**

### Transportation, Distribution, & Logistics

488 **1.4x**  
353 28% exposure gap

Both:  
**82**

Aptitude

Interest

Data pulled May 28, 2025

## Why Aptitudes Matter

Most career assessment tools rely solely on interest and personality surveys. YouScience combines psychometrically valid brain game-like exercises that uncover students' aptitudes along with an interest inventory.

Interest-only assessments reinforce biases and fail to give students an accurate picture of what they can do or will find satisfying.

An aptitude-based assessment coupled with career matching, lets students self-discover their talents, gain self awareness, and find career opportunities that align with those talents. This data strips away the biases and exposes students to careers they did not know about, did not think they could do, or perhaps, had never considered. It shows them careers they are wired to do well and will find satisfying because mastering the skills needed will be natural rather than stressful.

# BAC YouScience Quarterly Report

## Montgomery & Warren County Student Snapshot

### YouScience Results by Industry Sector & Ethnicity

All Active Assessed Students Grades 6-12



# of Individual  
Students Assessed  
**12,441**

White

#### Agriculture, Food, & Natural Resources

1,462 **1.0x**  
1,427 2% exposure gap

Both:  
298

#### Architecture & Construction

1,534 **1.1x**  
1,735

Both:  
434

#### Arts, Audio/Video Technology, & Communications

1,547 **1.9x**  
2,985

Both:  
669

#### Business Management & Administration

1,957 **1.1x**  
1,812 7% exposure gap

Both:  
503

#### Education & Training

1,050 **3.2x**  
3,374

Both:  
560

#### Finance

1,219 **6.1x**  
199 84% exposure gap

Both:  
58

#### Government & Public Administration

1,194 **3.5x**  
343 71% exposure gap

Both:  
69

#### Health Science

2,874 **1.4x**  
2,047 29% exposure gap

Both:  
729

#### Hospitality & Tourism

859 **2.7x**  
315 63% exposure gap

Both:  
78

#### Human Services

1,267 **2.5x**  
3,156

Both:  
602

#### Information Technology

2,736 **4.5x**  
604 78% exposure gap

Both:  
249

#### Law, Public Safety, Corrections, & Security

1,573 **1.1x**  
1,393 11% exposure gap

Both:  
327

#### Manufacturing

1,762 **1.9x**  
939 47% exposure gap

Both:  
303

#### Marketing

940 **1.8x**  
1,659

Both:  
196

#### Science, Technology, Engineering, & Mathematics

939 **1.8x**  
1,710

Both:  
348

#### Transportation, Distribution, & Logistics

1,696 **1.9x**  
910 46% exposure gap

Both:  
333

Asian, Black, Hispanic, Native American, Multiracial

#### Agriculture, Food, & Natural Resources

692 **1.1x**  
627 9% exposure gap

Both:  
138

#### Architecture & Construction

634 **1.1x**  
710

Both:  
156

#### Arts, Audio/Video Technology, & Communications

468 **3.8x**  
1,797

Both:  
237

#### Business Management & Administration

1,165 **1.1x**  
1,250

Both:  
411

#### Education & Training

519 **2.8x**  
1,467

Both:  
229

#### Finance

930 **4.2x**  
224 76% exposure gap

Both:  
91

#### Government & Public Administration

738 **3.8x**  
192 74% exposure gap

Both:  
51

#### Health Science

1,620 **2.1x**  
783 52% exposure gap

Both:  
334

#### Hospitality & Tourism

620 **3.1x**  
199 68% exposure gap

Both:  
49

#### Human Services

797 **1.8x**  
1,458

Both:  
322

#### Information Technology

682 **1.6x**  
433 37% exposure gap

Both:  
93

#### Law, Public Safety, Corrections, & Security

1,030 **1.4x**  
731 29% exposure gap

Both:  
215

#### Manufacturing

936 **2.2x**  
431 54% exposure gap

Both:  
174

#### Marketing

435 **2.8x**  
1,225

Both:  
132

#### Science, Technology, Engineering, & Mathematics

203 **3.9x**  
790

Both:  
82

#### Transportation, Distribution, & Logistics

1,244 **3.2x**  
393 68% exposure gap

Both:  
217

 Aptitude

 Interest

Data pulled May 28, 2025

## Career Connections Months of Action - Business & Management Careers Spotlight

In September 2024, our region came together to prioritize careers in the Business and Management pathway through a partnership with local industry groups and Jobs for the Future. We extend our sincere thanks to our higher education partners—Sinclair College, Wright State University, the University of Dayton—and other local stakeholders who played a vital role in shaping this important career pathway for our students.

The following chart highlights selected business and management occupations, chosen in collaboration with partners from the Dayton Development Coalition, Dayton Area Chamber of Commerce, and Jobs for the Future. While there is an abundance of data on this sector, this chart offers a unique look at our region's talent pipeline.

### YouScience Business & Management Career Results

All Active Assessed Students Grades 6-12



# of Individual  
Students Assessed  
**12,721**

#### Accountants and Auditors

(257 Annual Openings)

204 **3.5x**  
58 **72% exposure gap**

Both:  
35

#### Bookkeeping, Accounting, and Auditing Clerks

(321 Annual Openings)

43 **1.1x**  
38 **12% exposure gap**

Both:  
15

#### Compliance Officers

(42 Annual Openings)

951 **1.6x**  
578 **39% exposure gap**

Both:  
332

#### Customer Service Representatives

(693 Annual Openings)

3,693 **3.1x**  
1,194 **68% exposure gap**

Both:  
1,166

#### General and Operations Managers

(370 Annual Openings)

358 **1.0x**  
344 **4% exposure gap**

Both:  
251

#### Human Resources Managers and Specialists

(225 Annual Openings)

1,171 **1.2x**  
955 **18% exposure gap**

Both:  
747

#### Logisticians

(142 Annual Openings)

375 **1.3x**  
287 **23% exposure gap**

Both:  
120

#### Management Analysts

(270 Annual Openings)

215 **1.7x**  
130 **40% exposure gap**

Both:  
77

#### Market Research Analysts and Marketing Specialists

(211 Annual Openings)

441 **1.4x**  
615 **1.4x**

Both:  
291

#### Marketing Managers

(48 Annual Openings)

70 **6.6x**  
462 **6.6x**

Both:  
55

#### Operations Research Analysts

(54 Annual Openings)

36 **2.3x**  
82 **2.3x**

Both:  
19

#### Project Management Specialists and Business Operations Specialists, All Other

(464 Annual Openings)

1,148 **1.0x**  
1,159 **1.0x**

Both:  
727

#### Sales Managers

(51 Annual Openings)

71 **2.9x**  
206 **2.9x**

Both:  
51

#### Sales Representatives, Wholesale and Manufacturing

(338 Annual Openings)

3,332 **1.6x**  
2,088 **37% exposure gap**

Both:  
1,914

#### Shipping, Receiving, and Inventory Clerks

(227 Annual Openings)

684 **5.4x**  
127 **81% exposure gap**

Both:  
96

#### Training and Development Managers and Specialists

(84 Annual Openings)

138 **11.9x**  
1,636 **11.9x**

Both:  
124

 Aptitude  Interest

Data pulled May 28, 2025

Annual Openings are from ODJFS's 2020-2030 Occupational Employment Projections for Dayton MSA

# BAC YouScience Quarterly Report

Montgomery & Warren County Student Snapshot



## How We're Leveraging the Data

Our Business Advisory Council collaborates with K-12 schools, higher education, and industry partners to effectively activate students for career connection opportunities. Here are three key ways we're leveraging YouScience student data:

**Career Exploration Events:** Hosting events like **Kettering City Schools' YouScience Night**, where families can review students' assessment results and participate in hands-on activities with local employers. This approach helps students and families directly connect with career tech pathways and career opportunities suited to their aptitudes.

**Targeted Recruitment for Summer and Afterschool Programs:** Using YouScience data to micro-target students with specific aptitudes for programs like **Sinclair College's Automotive Summer Camp**. By sending personalized emails through districts, our BAC ensures that students who are well-suited for these opportunities are informed and encouraged to participate.

**Program Alignment with Student Strengths:** Collaborating with departments like Sinclair's **Built Environment Programs** to engage students with relevant aptitudes. By inviting families to events like the October Family Open House, students can explore educational pathways aligned with their unique strengths and potential career interests.

## Action Steps

Help our Business Advisory Council close the exposure gap and reveal opportunities. As adults, we take for granted our understanding of the world, careers, and opportunities. Students in high school are learning what is possible – or haven't yet learned. One of the fundamental premises of education is to help all students expand their view of what is possible.

- Join our region's Business Advisory Council and support our local strategies connecting students to careers.
- Explore providing work-based learning opportunities to local students through partners like SOCHE and YouthWorks.
- Help strengthen our local industry group K-12 efforts by partnering with GDAHA, DRMA, Technology First, DACC, DDC, and more!

## Timeline For Upcoming Reports

Each quarter, we'll release reports with updated student totals and insights on trends from local YouScience assessments, spotlighting a different industry sector each time. Look for our next report in September 2025.

**Questions? Contact [bryan.stewart@mcesc.org](mailto:bryan.stewart@mcesc.org).**