

MCESC Business Advisory Council Main Meeting

11-21-2024



Who we are

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Introductions!

Agenda

1. Welcome
2. Big Picture Update
3. Oct. - MFG Month
4. Nov. - Health Professions Month
5. Pathways to Prosperity Network Update
6. 24 - 25 BAC Plan Updates
7. Feedback Activity
8. Open Discussion



Montgomery County ESC Business Advisory Council

Ensuring our workforce can compete by enhancing partnerships between schools, higher education and employers

- Ensuring student success and career-readiness
- Helping existing and new businesses thrive
- Keeping talent in our region
- Making Montgomery County a great place to live and work





K

1

2

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10

11

12

CAREER AWARENESS

Elementary Grades (K-5)

CAREER EXPLORATION

Middle Grades (6-8)

CAREER PLANNING

High School (9-12)

Ensuring Students Success From Cradle to Career

Ready to Learn. Explore. Earn.

Age 5	3rd grade	8th grade	9th grade	12th grade	Post High School	Job & Career
Ready to learn when entering Kindergarten	Proficient in reading	Proficient in math	Ready to learn throughout high school	Ready to graduate from high school	Ready to learn in college or earn a credential*	Ready to earn with a college degree or a credential*
			<i>Power Indicators</i>			
Increase the percentage of students who 'Demonstrate Readiness' on Ohio's Kindergarten Readiness Assessment	Increase the percentage of students scoring at or above proficient on the 3rd-grade Ohio Reading Assessment	Increase the percentage of students scoring at or above proficient on the 8th-grade Ohio Math Assessment	Increase the percentage of students earning 5 credits their freshman year, with at least 1 in math and 1 in English	Increase the percentage of students graduating from high school within 4 years	Increase the percentage of students enrolling at a post-secondary institution any time during the first 2 years after HS	Increase the percentage of students graduating with a 2- or 4-year degree within 6 years



Department of
Education &
Workforce



Business Advisory
Councils

OHIO

The Buckeye State

careerconnections



Excellence in Coordinating Career
Development Experiences
Excellence in Developing Professional
Skills for the Future

2024



BUSINESS ADVISORY COUNCIL

**Excellence in Coordinating Career
Development Experiences**

**Excellence in Developing Professional
Skills for the Future**

Industry
Group
Collaboration

Elevating
Student Voice

Expanding
K-5
Engagement

Utilizing
Tools Like
YouScience

Sharing
Regional
Education
Data

Main takeaways for today's fall BAC update

1. **YouScience Report - Healthcare Spotlight**
2. Career Connections Monthly Surveys
3. 5G Pilot Program with the University of Dayton
4. Career Adventures Day with DML & DAAC
5. BAC Subcommittee meetings have begun
6. Bringing more employers into the fold

BAC YouScience Quarterly Report



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.

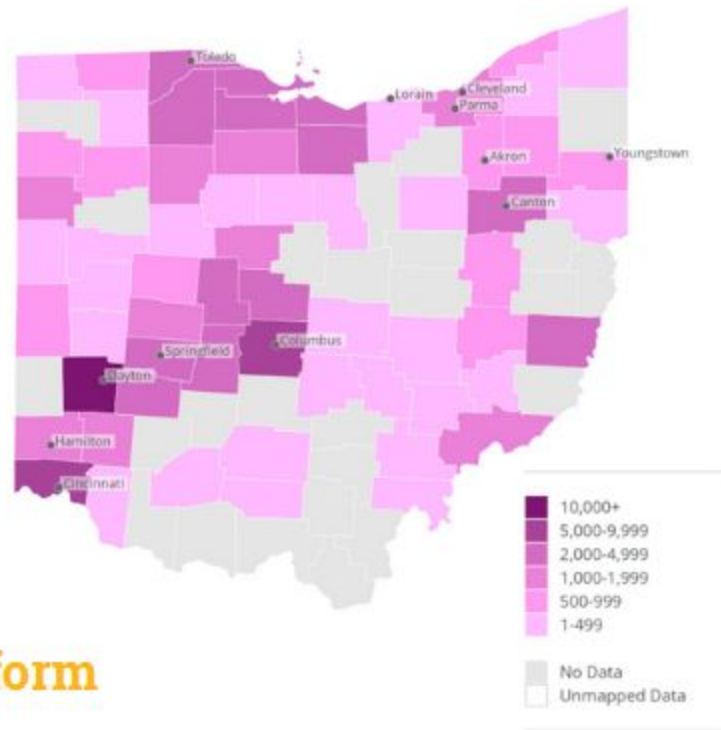
YouScience uses proprietary artificial intelligence to uncover student aptitudes, then connect these aptitudes to careers and educational pathways designed to help students discover their natural talents and connect them to personalized career and educational opportunities.

This overview shows the number of students who show a natural aptitude and interest in our targeted industry clusters. This data highlights our region's 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.

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 openings, education requirements, day-in-the-life insight, and more. Results include self-advocacy language to assist with resumes, application essays, and interviews.



1 Million students using the platform

100,000+ surveyed in Ohio

10,000+ surveyed in Montgomery County

March 24, 2023



Using YouScience for a middle school industry partner day

BAC YouScience Quarterly Report



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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 with an interest inventory.

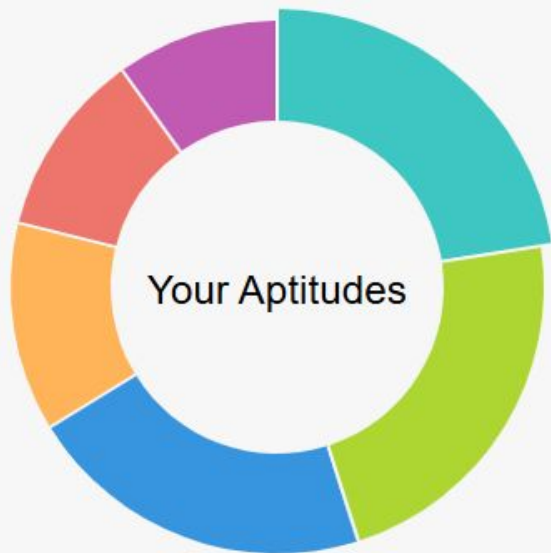
Interest-only assessments reinforce biases and fail to give students an accurate picture of what they can do or will find satisfying.

An aptitude-based assessment coupled with career matching, however, lets students self-discover their talents, gain self awareness, and find career opportunities that align with those talents. It 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 at and will find satisfying because mastering the skills needed will be natural rather than stressful.

Bryan, you crushed it!

You have some serious talent and awesome career opportunities!

Explore more of your talents







You are a **Sequential Thinker.**

- You can easily organize ideas and concepts in your head.
- You're good at fitting steps into a process, or activities into a schedule, so you excel as a planner.
- Developing systems that do not exist or making existing systems more efficient is where you will shine.

Explore

View Career Matches










Personal Approach

Balanced Focuser		Your Vocabulary You have a Masterful Vocabulary .
Extrovert		
Masterful Vocabulary		
Liaison		

[Explore](#)

How you contribute to a team

Learn how your work approach and interpersonal style work together.

	Introvert	Blended Energizer	Extrovert
Specialist			
Liaison			
Generalist			

Extroverted Liaisons enjoy representing a cause they care about while hearing others' opinions and perspectives. They make excellent campaigners and market researchers.



Need help?

Instructional Coordinator

Social and Community Service...

Preschool and Childcare Educatio...

Elementary and Secondary School...

Arbitrator/Mediator/C...

College or University Administrator

Education investment	6+
Projected openings	> 19K
Average salary	73k

Education investment	4+
Projected openings	> 16K
Average salary	79k

Education investment	4+
Projected openings	> 4.6K
Average salary	58k

Education investment	6+
Projected openings	> 20K
Average salary	107k

Education investment	4+
Projected openings	> 400
Average salary	99k

Education investment	6+
Projected openings	> 15K
Average salary	115k

Strong Overall Fit

● ● ● ● ● ●

Strong Overall Fit

● ● ● ● ● ●

Strong Overall Fit

● ● ● ● ● ●

Strong Overall Fit

● ● ● ● ● ●

Strong Overall Fit

● ● ● ● ● ●

Strong Overall Fit

● ● ● ● ● ●



Need help?

Meeting, Convention, and Event Planner

Advertising and Promotions Manager

Casting Director

Program Director

Fundraisers

Educational, Guidance, School, ...

Education investment	4+
Projected openings	> 15K
Average salary	59k

Education investment	4+
Projected openings	> 2.8K
Average salary	147k

Education investment	4+
Projected openings	> 16K
Average salary	111k

Education investment	4+
Projected openings	> 16K
Average salary	111k

Education investment	4+
Projected openings	> 9.9K
Average salary	67k

Education investment	6+
Projected openings	> 27K
Average salary	64k

Strong Aptitude Fit ■ ■ ■ ■ ■



Computer Science Professor

🎓 Education investment	7+
✂️ Projected openings	> 3.6K
💰 Average salary	99k

Strong Aptitude Fit ■ ■ ■ ■ ■



Health Specialties Professor

🎓 Education investment	7+
✂️ Projected openings	> 27K
💰 Average salary	128k

Strong Aptitude Fit ■ ■ ■ ■ ■



School Psychologist

🎓 Education investment	6+
✂️ Projected openings	> 4.1K
💰 Average salary	88k

Strong Aptitude Fit ■ ■ ■ ■ ■



Regulatory Affairs Specialists

🎓 Education investment	4+
✂️ Projected openings	> 31K
💰 Average salary	77k

Strong Aptitude Fit ■ ■ ■ ■ ■



Geography Professor

🎓 Education investment	7+
✂️ Projected openings	> 300
💰 Average salary	88k

Strong Aptitude Fit ■ ■ ■ ■ ■



Geographic Information System...

🎓 Education investment	4+
✂️ Projected openings	> 34K
💰 Average salary	105k

Strong Aptitude Fit ■ ■ ■ ■ ■



Environmental Science Professor

🎓 Education investment	7+
✂️ Projected openings	> 700
💰 Average salary	91k

Strong Aptitude Fit ■ ■ ■ ■ ■



Computer and Information System...

🎓 Education investment	4+
✂️ Projected openings	> 47K
💰 Average salary	174k

Strong Aptitude Fit ■ ■ ■ ■ ■



Computer Network Architect

🎓 Education investment	4+
✂️ Projected openings	> 10K
💰 Average salary	129k

Strong Aptitude Fit ■ ■ ■ ■ ■



Psychology Professor

🎓 Education investment	7+
✂️ Projected openings	> 4.3K
💰 Average salary	88k

Strong Aptitude Fit ■ ■ ■ ■ ■



Arbitrator/Mediator/C...

🎓 Education investment	4+
✂️ Projected openings	> 400
💰 Average salary	99k

Strong Aptitude Fit ■ ■ ■ ■ ■



Nursing Instructor/Professor

🎓 Education investment	7+
✂️ Projected openings	> 8.8K
💰 Average salary	84k

Strong Interest Fit ♥♥♥♥♥



Casting Director

Education investment	4+
Projected openings	> 16K
Average salary	111k

Strong Interest Fit ♥♥♥♥♥



Program Director

Education investment	4+
Projected openings	> 16K
Average salary	111k

Strong Interest Fit ♥♥♥♥♥



Radio and Television Announcer

Education investment	4+
Projected openings	> 2.1K
Average salary	57k

Strong Interest Fit ♥♥♥♥♥



Advertising and Promotions Manager

Education investment	4+
Projected openings	> 2.8K
Average salary	147k

Strong Interest Fit ♥♥♥♥♥



Public Relations Specialist

Education investment	4+
Projected openings	> 26K
Average salary	79k

Strong Interest Fit ♥♥♥♥♥



Music Directors and Composers

Education investment	4+
Projected openings	> 5.1K
Average salary	95k

Strong Interest Fit ♥♥♥♥♥



Agent or Business Manager for Actors...

Education investment	4+
Projected openings	> 2.1K
Average salary	120k

Strong Interest Fit ♥♥♥♥♥



Advertising Sales Agent

Education investment	NONE
Projected openings	> 11K
Average salary	73k

Strong Interest Fit ♥♥♥♥♥



Fundraisers

Education investment	4+
Projected openings	> 9.9K
Average salary	67k

Strong Interest Fit ♥♥♥♥♥



Social and Community Service...

Education investment	4+
Projected openings	> 16K
Average salary	79k

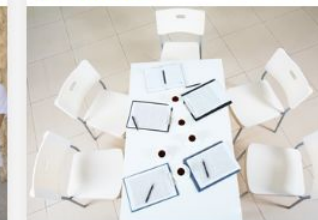
Strong Interest Fit ♥♥♥♥♥



Producers and Directors

Education investment	4+
Projected openings	> 16K
Average salary	111k

Strong Interest Fit ♥♥♥♥♥



Meeting, Convention, and Event Planner

Education investment	4+
Projected openings	> 15K
Average salary	59k

Need h

Strong Aptitude Fit



Computer & Information Systems Manager

🎓 Education investment 4+

✂️ Projected openings > 47K

💰 Average salary 174k

Aptitudes That Match You for This Career



Idea Generation



Work Approach

Introduction to this career

A Day in the Life

Computer and Information Systems Managers, often called information technology managers (IT managers or IT project managers), plan, coordinate, and direct computer-related activities in an organization.

As an IT Manager you help determine the information technology goals of an organization and are responsible for implementing the appropriate computer systems to meet those goals.

Core Tasks 1 of 3

- Provide users with technical support for computer problems.
- Prepare and review operational reports or project progress reports.
- Evaluate data processing proposals to assess project feasibility and requirements.
- Review project plans to plan and coordinate project activity.
- Recruit, hire, train and supervise staff, or participate in staffing decisions.
- Develop and interpret organizational goals, policies, and procedures.

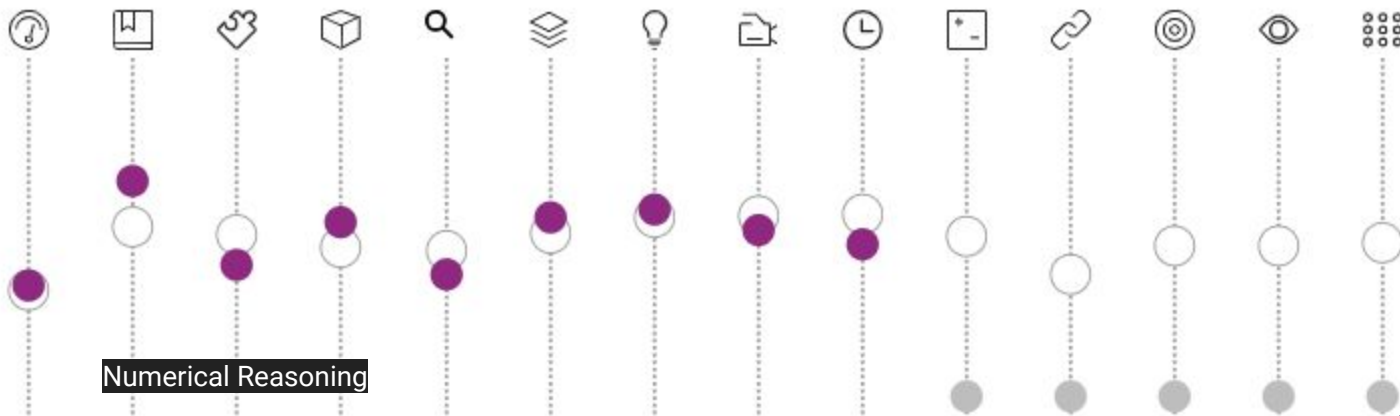
Computer & Information Systems Manager

How This Career Fits You

This graph shows how good of a fit you are on an aptitude by aptitude basis. You'll want your aptitude score to match up with the ideal fit, otherwise it might be too challenging or not stimulating enough for you.

● Your Aptitudes ○ Aptitude Rankings for This Career

[Learn More](#)



Numerical Reasoning

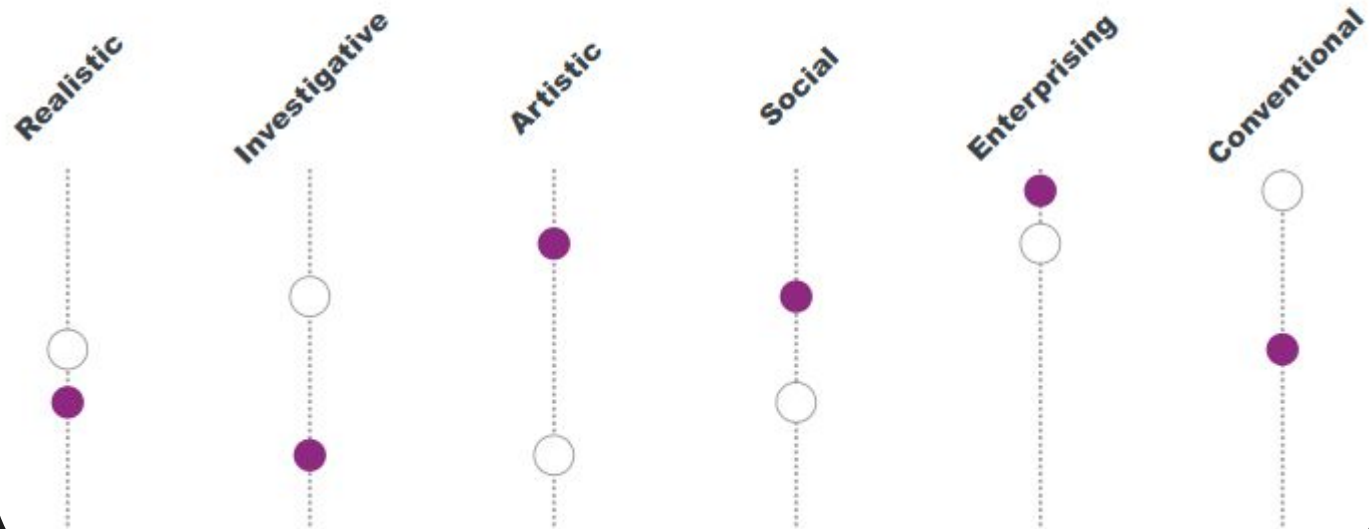
Your ability in seeing numerical relationships is a strength with this career.

Computer & Information Systems Manager

How Your Interests Match This Career

Your interest in a career can help you decide which careers seem like a better fit for you when the abilities are similar

● Your Interests ○ Interest Rankings for This Career



The higher your interest in Investigative work, the more likely you are to enjoy work that allows you to explore ideas, conduct research, and gain knowledge to solve problems.

The higher your interest in Conventional work, the more likely you are to enjoy work with clearly defined rules and processes.

Sequential Reasoning

You get how it all fits together.

The way you mentally organize, we call you a "Sequential Thinker"

What is Sequential Reasoning?

Sequential Reasoning is a problem solving ability that allows you to mentally arrange information in logical linear order. It helps you create a sequential, linear, and systematic planning approach that allows you to make accurate logical deductions and find it easy to explain to others how the pieces of a plan fit together. Simply stated, this is your knack for organizing things in your head - ideas, information, systems - and it determines whether you'll thrive doing a lot of logical organizing, or a little. There's a long road that starts with planning and ends with doing: find the spot where you're most effective.

Your results show

- ♥ You see the big picture.
- ♥ You can easily organize ideas and concepts in your head, even without instructions to help.
- ♥ You're good at fitting steps into a process, or activities into a schedule, so you shine as a planner.
- ♥ Others rely on you to explain how systems work.

How does this impact my daily life?

[Work](#) [School](#) [Social](#)

- ♥ Developing systems that do not exist or making existing systems more efficient is where you will shine.
- ♥ Look for ways to feed your aptitude for creating processes, working out logistics, and dealing with complex schedules.
- ♥ Making and giving presentations will come naturally to you.

Things you may find...

[Easy for you](#) [Difficult for you](#)

- ♥ Playing games or working on projects with multiple simultaneous steps
- ♥ Organizing ideas for writing papers, essays, reports, etc.
- ♥ Editing, writing, explaining papers, documents, articles, and reports
- ♥ Knowing where new information fits into a system
- ♥ Adjusting plans to fit new developments or changing goals
- ♥ Creating PowerPoint type presentations
- ♥ Giving easily comprehensible instructions
- ♥ Planning or organizing events or projects

Things you may find...

[Easy for you](#) [Difficult for you](#)

- ♥ Quickly communicating the details of your ideas and plans
- ♥ Remembering to spell out how you arrived at successive steps
- ♥ Being patient while others work through steps
- ♥ Anticipating/allowing time for questions during presentations

Tips for Success

- ♥ Make sure you have visible plans, schedules, and explanations for the others on your team. They're not mind-readers.
- ♥ Take time to share your thought process with others on your team. That will build their confidence in the logic of your plan.
- ♥ You'll enjoy creating order out of chaos. Jump in and save the day.
- ♥ Your gift at organizing thoughts should help you in writing clear, logical communications. Look for chances to contribute this way.

Career Connections Months of Action - Healthcare Career Spotlight

Our Business Advisory Council leverages a regional approach to support industry-specific outreach through our Career Connections Months of Action. November marks Health Professions Month in our region, where we focus on raising awareness about in-demand healthcare careers.

The following chart highlights selected healthcare occupations, chosen in collaboration with GDAHA, Premier Health, Kettering Health Network, and Sinclair College's Health Science programs. While there is an abundance of data on this sector, this chart offers a unique look at our region's emerging talent pipeline. Building on the momentum of national and state-sponsored career connections efforts like MFG Month and National Health Professions Month, we continue to engage partners to help districts participate effectively. Through this coordinated effort, we aim to align students into local opportunities in healthcare.

YouScience Results by Industry Sector

24-25 YTD (Grades 6-12)



of Students
Assessed
1877

Agriculture, Food, & Natural Resources



Both:
78

Architecture & Construction



Both:
58

Arts, Audio/Video Technology, & Communications



Both:
147

Business Management & Administration



Both:
185

Education & Training



Both:
73

Finance



Both:
16

Government & Public Administration



Both:
27

Health Science



Both:
113

Hospitality & Tourism



Both:
7

Human Services



Both:
240

Information Technology



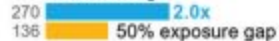
Both:
52

Law, Public Safety, Corrections, & Security



Both:
71

Manufacturing



Both:
28

Marketing



Both:
49

Science, Technology, Engineering, & Mathematics



Both:
67

Transportation, Distribution, & Logistics



Both:
71

Aptitude

Interest

Data pulled October 18, 2024

YouScience Results by Industry Sector All Active Students Grades 6-12



of Students
Assessed
9797

Agriculture, Food, & Natural Resources

1,665 1.0x
1,646 1% exposure gap

Both:
342

Architecture & Construction

1,346 1.3x
1,744 1.3x

Both:
341

Arts, Audio/Video Technology, & Communications

1,422
4,025 2.8x

Both:
653

Business Management & Administration

4,029 1.5x
2,703 33% exposure gap

Both:
1,259

Education & Training

934
3,737 4.0x

Both:
454

Finance

2,182 6.3x
348 84% exposure gap

Both:
161

Government & Public Administration

1,554 3.5x
444 71% exposure gap

Both:
104

Health Science

2,744 1.4x
2,022 26% exposure gap

Both:
595

Hospitality & Tourism

609 1.8x
331 46% exposure gap

Both:
43

Human Services

2,639
3,858 1.5x

Both:
1,192

Information Technology

2,327 3.0x
781 66% exposure gap

Both:
203

Law, Public Safety, Corrections, & Security

1,647 1.0x
1,572 5% exposure gap

Both:
329

Manufacturing

1,574 2.0x
797 49% exposure gap

Both:
218

Marketing

867
2,369 2.7x

Both:
222

Science, Technology, Engineering, & Mathematics

778
1,793 2.3x

Both:
265

Transportation, Distribution, & Logistics

3,069 2.5x
1,212 61% exposure gap

Both:
536

Aptitude

Interest

Data pulled October 18, 2024

YouScience Results by Industry Sector

All Active Students Grades 6-8



of Students
Assessed
1721

Agriculture, Food, & Natural Resources

408
269 34% exposure gap

1.5x

Both:
80

Architecture & Construction

267
349 1.3x

Both:
80

Arts, Audio/Video Technology, & Communications

173
809 4.7x

Both:
88

Business Management & Administration

633
452 29% exposure gap

1.4x

Both:
178

Education & Training

153
596 3.9x

Both:
69

Finance

515
76 85% exposure gap

6.8x

Both:
41

Government & Public Administration

278
73 74% exposure gap

3.8x

Both:
19

Health Science

583
288 51% exposure gap

2.0x

Both:
100

Hospitality & Tourism

137
64 53% exposure gap

2.1x

Both:
12

Human Services

338
602 1.8x

1.8x

Both:
139

Information Technology

342
170 50% exposure gap

2.0x

Both:
43

Law, Public Safety, Corrections, & Security

308
274 11% exposure gap

1.1x

Both:
74

Manufacturing

319
178 44% exposure gap

1.8x

Both:
48

Marketing

163
459 2.8x

2.8x

Both:
45

Science, Technology, Engineering, & Mathematics

150
292 1.9x

1.9x

Both:
47

Transportation, Distribution, & Logistics

395
211 47% exposure gap

1.9x

Both:
75

 Aptitude

 Interest

Data pulled October 18, 2024

YouScience Results by Industry Sector & Ethnicity

All Active Students Grades 6-12



of Students
Assessed
9797

Ethnicity: White

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



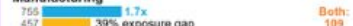
Information Technology



Law, Public Safety, Corrections, & Security



Manufacturing



Marketing



Science, Technology, Engineering, & Mathematics



Transportation, Distribution, & Logistics

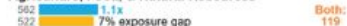


Aptitude

Interest

Ethnicity: Asian, Black, Hispanic, Native American

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



Data pulled October 18, 2024

2024 BLACK STUDENTS AND STEM REPORT

From classroom to career

How interventions in middle and high school can help Black students succeed in STEM careers





The need to inspire STEM participation earlier

Analysis shows that there is a startling discrepancy between the interest in STEM-related careers versus the obvious aptitude for it—thereby widening the talent shortage and weakening the economy. A lack of interest in middle and high school tends to translate into low participation in STEM-related coursework, internships, mentoring, exposure, and counseling. As a result, more Black students opt out of STEM opportunities as they pursue higher education and careers.

The failure to support and develop a diverse workforce in STEM careers from an early age perpetuates significant problems.

- 1. Innovation deficits:** without diversity in STEM, the development of new innovations, research, and technologies may not fully address or even recognize the needs of diverse populations, leading to biased outcomes and inequitable solutions.
- 2. Earnings disparities:** as employers in all industries place an increasingly higher economic value on individuals with STEM training, those underrepresented in STEM fields will experience even greater educational and economic inequalities, restricting access to high-paying, in-demand jobs, and limiting social mobility.

- 3. Economic disruptions:** STEM workers are critical for businesses to compete—failing to engage a broader segment of the population in STEM careers dramatically slows economic development and innovation and threatens the country's ability to compete globally.

“Black Girls Do STEM has prepared me for real life. It has introduced me to things I’m willing to try in the future. At my school, we have a lot of STEM-related classes, and I’m going to expand the knowledge I received from Black Girls Do STEM.”

—Jariyah, student

STEM CAREER FIELDS



Advanced Manufacturing



Architecture & Construction



Computers & Technology



Finance



Health Science



Advanced Manufacturing

Manufacturing has changed drastically over the years and is now referred to as Advanced Manufacturing due to technological advances. Traditional assembly lines are long gone but the stigma attached to manufacturing careers remains, despite many in-demand Advanced Manufacturing careers requiring engineering and computer skills. Advanced Manufacturing careers are STEM careers⁴ with tremendous economic opportunities.

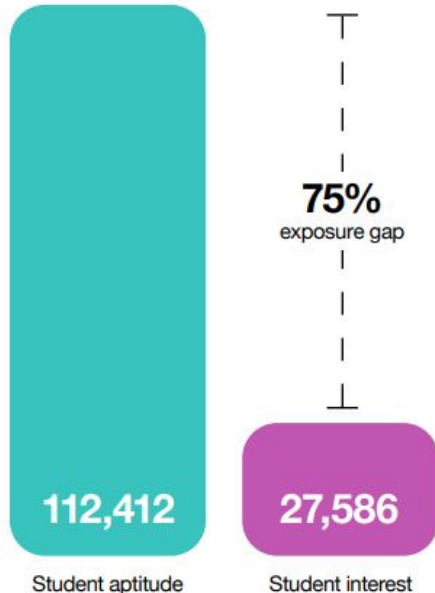
Example careers:

Industrial engineers, electrical engineers, mechatronics engineers, machinists, manufacturing technicians.

Black representation:

As of 2022, Black workers made up 10.8% of the manufacturing workforce.⁵ Within Advanced Manufacturing, automotive is the highest-paying industry for Black workers.

9.4% of workers in installation, maintenance, and repair occupations are Black despite representing 13% of the working U.S. population.⁶



YouScience Results by Industry Sector & Ethnicity

All Active Students Grades 6-12



of Students
Assessed
9797

Ethnicity: White

Agriculture, Food, & Natural Resources



Both:
180

Architecture & Construction



Both:
210

Arts, Audio/Video Technology, & Communications



Both:
393

Business Management & Administration



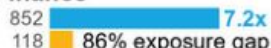
Both:
499

Education & Training



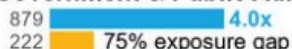
Both:
278

Finance



Both:
50

Government & Public Administration



Both:
63

Health Science



Both:
328

Ethnicity: Asian, Black, Hispanic, Native American

Agriculture, Food, & Natural Resources



Both:
119

Architecture & Construction



Both:
84

Arts, Audio/Video Technology, & Communications



Both:
158

Business Management & Administration



Both:
591

Education & Training



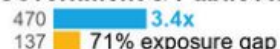
Both:
105

Finance



Both:
81

Government & Public Administration



Both:
27

Health Science



Both:
182

YouScience Results by Industry Sector & Ethnicity

All Active Students Grades 6-12



of Students
Assessed
9797

Ethnicity: White

Hospitality & Tourism



Both:
20

Human Services



Both:
579

Information Technology



Both:
113

Law, Public Safety, Corrections, & Security



Both:
163

Manufacturing



Both:
109

Marketing



Both:
115

Science, Technology, Engineering, & Mathematics



Both:
199

Transportation, Distribution, & Logistics



Both:
259

Ethnicity: Asian, Black, Hispanic, Native American

Hospitality & Tourism



Both:
16

Human Services



Both:
431

Information Technology



Both:
55

Law, Public Safety, Corrections, & Security



Both:
124

Manufacturing



Both:
86

Marketing



Both:
83

Science, Technology, Engineering, & Mathematics



Both:
32

Transportation, Distribution, & Logistics



Both:
197

Aptitude

Interest

2023 State of Computer Science Education

The rapid pace of technological advancement, as seen with the widespread integration of generative artificial intelligence (AI), underscores the need for foundational knowledge in computer science for all students. This report calls upon advocates to embrace the urgency of this matter and revamp school curricula to align with the demands of the 21st century, including requiring that all students learn computer science.

Currently, 57.5% of public high schools in the United States (U.S.) offer a foundational computer science class—an achievement marking the largest percentage growth in the last five years. Across the 35 states* where data is available, 5.8% of high school students are enrolled in foundational computer science. Even with growing access this growth, large disparities still exist, and we must continue to focus on eliminating participation gaps.

13,722

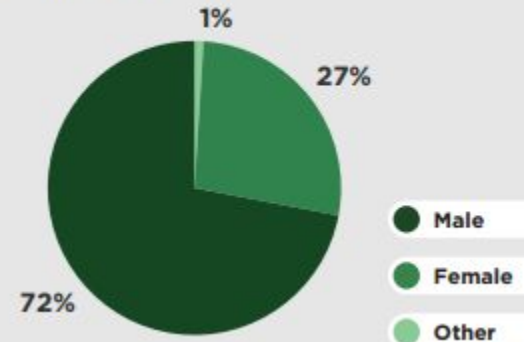
In 2023, OH averaged
13,722 open computing
jobs each month

\$96,393

These jobs have an average
salary of \$96,393

Participation in AP Computer Science Exams by Gender

Course enrollment data for all foundational computer science courses is not available from Ohio. Nationally, we know that participation in all foundational computer science is broader than AP participation.



YouScience Healthcare Career Results

All Active Students Grades 6-12



of Students
Assessed
9797

Dental Assistants



Both:
119

Healthcare Social Workers



Both:
60

Home Health Aides



Both:
92

Licensed Practical and Licensed Vocational Nurses



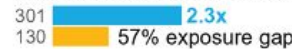
Both:
64

Medical Assistants



Both:
70

Medical and Clinical Laboratory Technicians



Both:
114

Nurse Practitioners



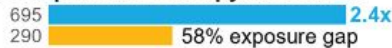
Both:
3

Nursing Assistants



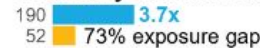
Both:
42

Occupational Therapy Assistants



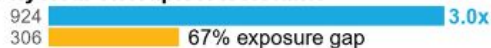
Both:
259

Pharmacy Technicians



Both:
36

Physical Therapist Assistants



Both:
283

Radiologic Technologists and Technicians



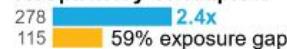
Both:
14

Registered Nurses



Both:
16

Respiratory Therapists



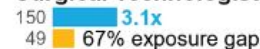
Both:
97

Substance Abuse and Behavioral Disorder Counselors



Both:
260

Surgical Technologists



Both:
30

Aptitude

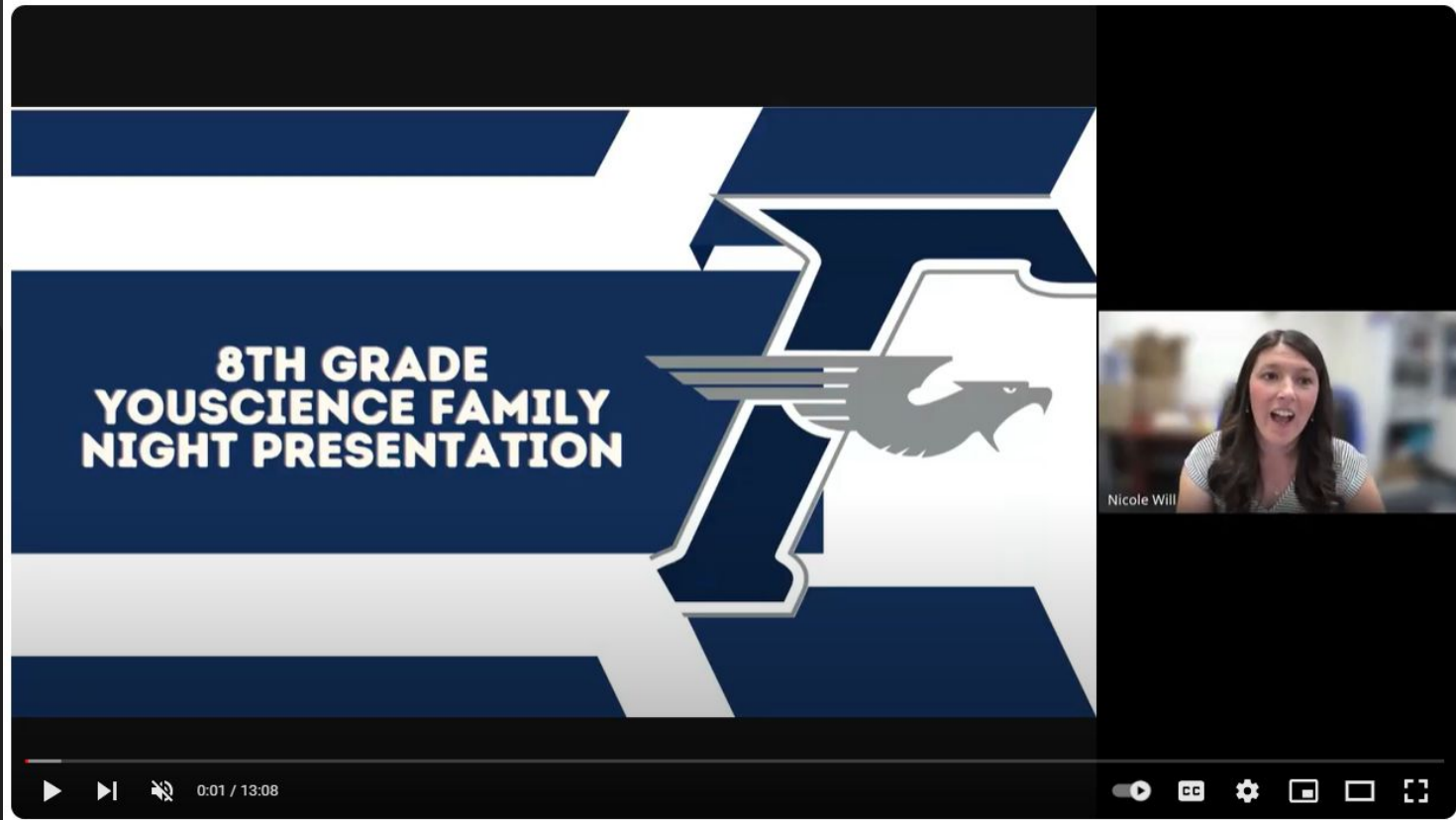
Interest



Data pulled October 18, 2024



Using YouScience for a middle school family night



YouScience Family Night Presentation

 **Nicole Will**
4 subscribers [Subscribe](#)

 1   Share  Download  Save 

Teaching parents about their young person's results









Automotive camp drives interest in the industry

Skills 2 Succeed 3 days ago

DAYTON, Ohio (WDTN) – Even before getting their licenses, students spent time this summer, taking part in Sinclair’s Automotive Summer Camp. The camp goes beyond driving, giving students a glimpse of potential future careers. “Basically, my whole life I’ve been into cars,” says 13-year-old Ayden Hockett who ...



SINCLAIR COLLEGE
5
AUTOMOTIVE SUMMER CAMP

AGES 12-15
JUNE 25, 26 & 27
9 AM - 12 PM MUST RSVP. LIMITED SPOTS AVAILABLE!

Students will learn technical skills around automotive technology!

ENGINE DISASSEMBLY		TIRE SERVICE	
OIL CHANGE SERVICE		RIDE ALONG	

IN EV & WITH ADVANCE DRIVER ASSIST

 **\$40 ELECTRONIC REGISTRATION • LIMITED SPOTS AVAILABLE • RESERVE YOUR SPOT TODAY!**
Please RSVP by May 31, 2024 • (937) 512-3242
SEE CAMPUS MAP ON REVERSE SIDE.

Recruiting for summer programs



Sinclair Built Environment (Construction) Open House

Oct. 10th 5:30 pm - 7:00 pm

- Architectural Technology
- Civil Engineering Technology
- Construction Management Technology
- HVAC-R
- Sustainability & Energy Management Technology

Our goal is to have a faculty and a student from each program available for discussion and perhaps a small hands-on activity. Then we'll have a panel discussion at 6:30 pm including some industry folks.



YouScience Major - 9 17 2024	Aptitude High Fit	Interest High Fit	Overall High Fit
Architectural Engineering Technologies/Technicians	201	18	61
Architectural History, Criticism, and Conservation	0	33	42
Architectural Sciences and Technology	29	20	33
Architecture	3	47	0
Civil Engineering	215	70	63
Civil Engineering Technologies/Technicians	37	0	12
Construction Engineering	145	12	24
Construction Engineering Technology/Technician	108	1	5
Construction Management	0	2	6
Construction Trades, General	87	416	571
Energy Systems Engineering	228	296	153
Energy Systems Maintenance and Repair Technologies/Technicians	70	22	124
Energy Systems Technologies/Technicians	623	17	245
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Tech	7	7	15
Heavy/Industrial Equipment Maintenance Technologies/Technicians	14	9	5
Mason/Masonry	48	78	101
Sustainability Studies	99	277	607

8,000+ students in system right now

BUILT ENVIRONMENT OPEN HOUSE

For students in grades 7-12 and their families

October 10th, 5:30-7:30 p.m.

Sinclair Community College: Built Environment Lab
33 Eaker St. in Dayton



Sinclair Community College and Montgomery County Educational Service Center are teaming up to host an exceptional event for all students in grades 7-12 and their families who have interests in the construction trades. There will be a panel presentation by the professionals in the field and students currently in the Built Environments program. Come learn about all of the opportunities in this growing space!



SINCLAIR
COLLEGE

Register
today!





Using YouScience to target for specific college pathways



Using YouScience to target for specific college pathways

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!

Main takeaways for today's fall BAC update

1. YouScience Report - Healthcare Spotlight
2. **Career Connections Monthly Surveys**
3. 5G Pilot Program with the University of Dayton
4. Career Adventures Day with DML & DAAC
5. BAC Subcommittee meetings have begun
6. Bringing more employers into the fold

Oct. 1st Career Champions & Counselors Academy Site Visit: Public Health





Oct. 2024 Career Connections Report

B *I* U ↻ ✕

Thank you for your ongoing efforts! This monthly form helps us gather updates on your district's activities in career connections. By submitting these updates each month, you're helping us prepare for a comprehensive Mid-Year Review in January, making the process smoother with a record of your district's achievements.

Additionally, your input allows us to effectively track and fulfill state requirements for career readiness. Congratulations on a successful Manufacturing Month—it's great to see so many schools actively participating!

Shout out to Brookville, Franklin, Kettering, Little Miami, Mad River, Miami Valley CTC, Miamisburg, MCESC, New Lebanon, Oakwood, Springboro, Valley View, and West Carrollton!



Dec. 9th Career Champions & Counselors Academy Meeting + Site Visit Reminder



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**5G Broadband Infrastructure
Credential program**

**30 students (plus 2 teachers),
across 6 school districts.**

As part of the program, students are diving deep into the history of wireless and cellular networks, learning about the evolution from 1G through 5G and beyond. They are gaining valuable insights into how data demand has shaped the development of cellular technology, positioning them to better understand the forces driving the future of communications and connectivity.



Julie Motz, School of Engineering, EMST Department,
University of Dayton

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2024 Career Adventures Days



Over the 3 days, we saw over 900 students from Weisenborn Middle School (Huber Heights), Mad River Middle School, Northridge Middle School, Brookville Middle School, Jefferson Twp Junior High, and DPS International School.





Miamisburg Middle School: Career Expedition Day

General Information

- Date: Monday, November 25, 2024
- Time: 9:30 am-1:30 pm
- Location: Camp Chautauqua
- Who: Miamisburg Middle School 7th Grade Students (350)




CSEdWeek 2024
December 9-15



Empower Students to unlock a career in computer science



Brought to you by:  **TechCorps**

With support from: **Hyland**

2024 #CSEdWeek Educator Registration

Thank you for your interest in being part of #CSEdWeek!

Are **you** ready to empower students to visualize and explore a career in computer science while elevating their problem-solving skills? Join TECH CORPS and Hyland in creating pathways for the next generation of innovators during Computer Science Education Week (#CSEdWeek) December 9-15, 2024.

TECH CORPS will equip you with new, exclusive career-exploration activities for grades 3-8 educators to use during CSEdWeek.

We believe that **every educator can be a computer science hero!**

No computer science background is necessary to implement the activities with your students.

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6. **Bringing more employers into the fold**

Employer Engagement Menu



CAREER AWARENESS

Field Trip Location

Grade 3+, 1.5 -2 hours/visit

Host students and/or counselors and teachers to tour your workplace and discuss career options, required education, a typical day, and more.

Classroom Speaker

Grades K-12, 30-90 minutes

Visit a school and talk with a class about what it means to work in your industry.

EXPLORATION

Job Shadow

Grades 6-8, 4-8 hours

Provide an opportunity for students to observe, discuss and participate in daily routines and activities for a particular job.

Power Lunches

Grades 6-8, 1-2 hours

Staff a table at a school during lunch hour to promote your industry and the current and next generation jobs in your career field.

Career Fair

Grades 6-12, 2-4 hours

Staff a booth to share advice on pursuing a career, skills and knowledge needed, and career roles and responsibilities.

PLANNING

Work-Based Learning

Grades 9-12, 4-8 weeks

Provide professional work experiences (an internship, pre-apprenticeship, or apprenticeship) that apply to classroom learning and builds skills.

Teacher Externship

Grades 9-12, 15-60 hours

Help teachers learn about careers for their students in your industry! Provide job shadowing, training, or similar experience that will help teachers bring workplace norms, tools and skills into the classroom.

EXTRA CREDIT

Informational Interview

Grades 6-12, 30-90 minutes

Answer student questions in person, by phone, email, or in a group about your profession or specific topic.

Resume Assistance/ Mock Interview

Grades 6-12, 1-2 hours

Provide feedback to students on their resumes and interview skills.

Other ideas?

Let us know other ways you'd like to get involved.



daytonworkforce.com/contact/

Name _____ Company _____ Title _____

Email _____ Phone _____ I'd like to participate in the BAC Yes No



Pathways for Accelerated College and Career Experience Program





Expanding our Career Navigator efforts!



2024 Manufacturing Month

2024 Manufacturing Month School Registration

Health Professions Month

MFG Month tours: Carlisle HS, DPS Mound Street Academy, Fairmont HS, Kettering Middle School, MVCTC, Stebbins HS, Valley View Middle School, Waynesville, and West Carrollton HS.

clinical nurse
Danielle Reynolds

Nursing - Career Exploration with Dayton Children's

Dayton Children's Hospital
8.05K subscribers

449 views 2 years ago



Montgomery County Information Technology/Computer Science Pathway

Regional partners provide support for the preparation of students including advisors, higher education staff, and other staff. The pathway provides a structured approach to preparing students for careers and postsecondary success with a focus on the Information Technology and Computer Science fields. The pathway includes the following components: Academic Coursework, College and Career Preparation, and IT/Computer Science Technical Competencies.

Academic Coursework

The pathway is recommended for all students in the Information Science pathway.

Year	Summer	First	Second	Third	Fourth
Math	Math 1	Math 2	Math 3	Math 4	Math 5
Science	Science 1	Science 2	Science 3	Science 4	Science 5
English	English 1	English 2	English 3	English 4	English 5
History	History 1	History 2	History 3	History 4	History 5
Physical Science	Physical Science 1	Physical Science 2	Physical Science 3	Physical Science 4	Physical Science 5
Art	Art 1	Art 2	Art 3	Art 4	Art 5
Foreign Language	Foreign Language 1	Foreign Language 2	Foreign Language 3	Foreign Language 4	Foreign Language 5
Health	Health 1	Health 2	Health 3	Health 4	Health 5
Music	Music 1	Music 2	Music 3	Music 4	Music 5

College and Career Preparation

The pathway provides students with the necessary skills and knowledge to be successful in the workforce. It includes the following components: Career Planning, Job Search, and Postsecondary Success.

IT/Computer Science Technical Competencies

The pathway includes the following technical competencies: Computer Fundamentals, Programming, Data Management, and Network Administration.

Montgomery County Advanced Manufacturing Pathway

Regional partners provide support for the preparation of students including advisors, higher education staff, and other staff. The pathway provides a structured approach to preparing students for careers and postsecondary success with a focus on the Manufacturing field. The pathway includes the following components: Academic Coursework, College and Career Preparation, and Manufacturing Competencies.

Academic Coursework

The pathway is recommended for all students in the advanced manufacturing pathway.

Year	Summer	First	Second	Third	Fourth
Math	Math 1	Math 2	Math 3	Math 4	Math 5
Science	Science 1	Science 2	Science 3	Science 4	Science 5
English	English 1	English 2	English 3	English 4	English 5
History	History 1	History 2	History 3	History 4	History 5
Physical Science	Physical Science 1	Physical Science 2	Physical Science 3	Physical Science 4	Physical Science 5
Art	Art 1	Art 2	Art 3	Art 4	Art 5
Foreign Language	Foreign Language 1	Foreign Language 2	Foreign Language 3	Foreign Language 4	Foreign Language 5
Health	Health 1	Health 2	Health 3	Health 4	Health 5
Music	Music 1	Music 2	Music 3	Music 4	Music 5

College and Career Preparation

The pathway provides students with the necessary skills and knowledge to be successful in the workforce. It includes the following components: Career Planning, Job Search, and Postsecondary Success.

Manufacturing Competencies

The pathway includes the following manufacturing competencies: Manufacturing Fundamentals, Manufacturing Processes, Manufacturing Quality, and Manufacturing Safety.

We're continuing to work on our regional pathway models.



More details and next steps to come!

BAC Partner Tracking

Industry Partners Who Have Attended:

- Catapult Creative
- Danis Construction
- Dayton Area Chamber of Commerce
- Dayton International Airport
DRMA
- Deep Dive Consulting
- GDAHA
- Kettering Health
- Matthew Sauer, Architect
- Midwest Microelectronics Consortium
- Minster Bank
- Parallax Research
- Premier Health
- QQE
- Shook Construction
- Technology First
- The Heights Barbershop
- Wright Patt Credit Union

Higher Ed & Non-Profit Partners:

- Clothes That Work
- Dayton Art Institute
- Dayton Metro Library
- Digital Transformation Center
- Goodwill Easter Seals
- Junior Achievement
- Learn To Earn Dayton
- Sinclair College
- Urban League



**Business Advisory
Councils**



BAC Subcommittee Tracking

Districts Who Have Attended

Brookville
Carlisle
Centerville
DPS
Franklin
Huber Heights
Jefferson Township
Kettering
Kings
Lebanon
Little Miami
Mad River
Miami Valley CTC
Miamisburg
Montgomery County ESC
Northmont
Northridge
Oakwood
Springboro
Valley View
Warren County Career Center
WCESC
Wayne Local

Districts Who Have Not Attended

Trotwood-Madison
Vandalia Butler
West Carrollton



**Department of
Education &
Workforce**



**Business Advisory
Councils**

Upcoming BAC Meetings

Nov. 22nd - Miamisburg Future Career Day

Nov. 25th - Miamisburg Career Day at Camp Chautauqua 9:00 - 1:30 pm

Dec. 6th - BAC Warren County Subcommittee - 9:00 - 10:30 am

Dec. 9th - Career Champions & Counselors Academy Quarterly Main Meeting + Site Visit to Think Patented

Dec. 9th - 15th - Computer Science Education Week

Dec. 13th - Montgomery County Student Advisory Delegation

Dec. 17th - BAC Student Engagement Subcommittee Meeting - 9:00 - 10:30 am

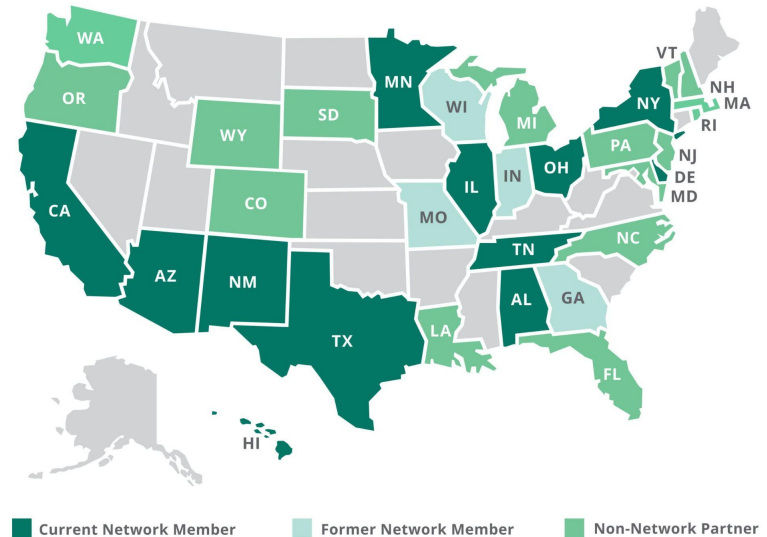




Pathways to Prosperity Partnership

Every young person has clear goals for college and career and the support to achieve them.

Every employer has a talent pipeline of young professionals with the skills needed to contribute to and lead the workforce.

Every regional and state economy is thriving and provides its citizens with opportunities for economic advancement.





Tomorrow's workers
... They are right here



Tomorrow's workers
... They are right here

Reviewing our 2024-2025 BAC Plan



Montgomery County ESC
Business Advisory Council
2022-2023 Plan



Montgomery County ESC
Business Advisory Council
2023-2024 Plan




OBJECTIVES & WORK GROUPS




OBJECTIVES

Educator Engagement

Educators are well-positioned to guide our students on a path toward career success if they have the training, curriculum tools and support from industry to increase their own awareness, knowledge and skills to support students' career planning.

 **Schools must** provide opportunities for educators to connect to careers and curriculum designed to give students experiences to help them design plans after high school.

 **Industry must** invest time and resources in our region's career connections work while acknowledging the challenges educators face.



Co-Chairs: Tommy Renfro & Nicole Will

Strategy		Actions	Responsibility	Timeframe
1. Provide guidance and support for work-based learning	Schools	<ul style="list-style-type: none"> Promote statewide operational definitions of work-based learning and tracking of industry recognized credentials Provide and support implementation of Work-Based Learning Resources (guidance documents, OMJ readiness seals, pre-apprenticeships, job, shadowing, etc) Design & pilot WBL toolkit 	<ul style="list-style-type: none"> Educator Engagement Subcommittee Industry Engagement Subcommittee 	June 2025
	Industry	<ul style="list-style-type: none"> Partner with schools to help plug identified gaps with industry-relevant opportunities (speakers, tours, lunches, projects, etc) 	<ul style="list-style-type: none"> Industry Groups 	
2. Utilize data to drive decision and increase career readiness across the educational continuum	Schools	<ul style="list-style-type: none"> Share Learn to Earn Indicators, Career Readiness Survey Data, and Snapshot Data with Career Champions, Counselors, Building Admin, MVRCD, Teachers 	<ul style="list-style-type: none"> MCESC L2ED 	June 2025
		<ul style="list-style-type: none"> Meet with ten districts to review their career connections related data and brainstorm potential areas of collaboration 	<ul style="list-style-type: none"> Educator Engagement Subcommittee 	
3. Expand authentic experiences and activities connected to careers	Schools	<ul style="list-style-type: none"> Learn and promote career activities and tasks that align with content standards (technical and employability skills) Promote careers with each Industry Cluster, by generating resources and activities for one week's worth of programming for each cluster Host quarterly Career Champions/Counselors Meetings with Industry Tours Host Teacher Industry Experiences Explore best practices on region's teacher experiences efforts 	<ul style="list-style-type: none"> All districts MCESC 	June 2025
	Industry	<ul style="list-style-type: none"> Attend focus groups to develop career activity ideas and identify career alignment with content standards Host Teacher Industry Tours and Experiences 	<ul style="list-style-type: none"> Local chambers of commerce Industry Groups 	
4. Create plug and play structural course alignment options for workforce sectors	Schools	<ul style="list-style-type: none"> Host Career Pathway Labs 	<ul style="list-style-type: none"> MCESC L2ED Educator Engagement Team 	June 2025
	Industry	<ul style="list-style-type: none"> Partner with schools in Career Pathway Lab Process 	<ul style="list-style-type: none"> Local Chambers of Commerce Industry Groups 	

Metrics

of BAC Pathways implemented in each BAC district

of students in each BAC Pathway in each school district

of career-centered professional development opportunities offered

of educators impacted by professional development opportunities




PAID OPPORTUNITY FOR TEACHERS!
OUR REGION IS SERIOUS ABOUT EXPANDING K-12 UNDERSTANDING OF ELECTRONIC MATERIALS, PACKAGING, AND SEMICONDUCTORS!




OBJECTIVES

Student Engagement

For students to be well-equipped to make a career plan, they must be aware of the diverse career opportunities that exist locally and beyond and understand what it takes to prepare for these careers.

 **Schools must** offer opportunities for career experiences for students both inside and outside of school and assist students in making appropriate plans for after high school.

 **Industry must** provide career experiences that help students explore their career opportunities and help advise schools and students on how to move effectively toward careers.



Co-Chairs: Kelsey Turner & Stephanie Hinds



Strategy		Actions	Responsibility	Time-frame
1. Expand opportunities for building career awareness with student input	Schools	<ul style="list-style-type: none"> Utilize feedback from students (Inside Dayton, Student Advisory Delegation, Chief Science Officers) to inform communication & activities Deploy social media to promote educational and career opportunities utilizing existing networks including the County Communication Collaborative Organize five Career Connections Months of Action 	<ul style="list-style-type: none"> Student Engagement Parent & Community Engagement Educator Engagement County Communications Collaborative All districts 	June 2025
	Industry	<ul style="list-style-type: none"> Provide info/photos/etc for social media engagement Resource career activities (speakers, tours, WBL, etc) 	<ul style="list-style-type: none"> Local chambers of commerce Industry Groups DDC 	
2. Promote the intentional and strategic use of student aptitude and interest data	Schools	<ul style="list-style-type: none"> Utilize YouScience results in programmatic decision making and marketing opportunities Support districts in understanding their aggregate and individual student assessment results 	<ul style="list-style-type: none"> MCESC All Districts 	January 2025
	Industry	<ul style="list-style-type: none"> Develop and expand career connections opportunities based on industry-specific aptitude and interest data Explore additional funding opportunities for long-term use of software like YouScience 	<ul style="list-style-type: none"> Local chambers of commerce Industry Groups DDC 	
3. Implement more robust K-5 career awareness outreach	Schools	<ul style="list-style-type: none"> Promote and expand best practices of career awareness programs and activities 	<ul style="list-style-type: none"> MCESC/All Districts 	June 2025
	Industry	<ul style="list-style-type: none"> Resource career activities (speakers, tours, in-class demonstrations, etc) 	<ul style="list-style-type: none"> Local chambers of commerce/ Industry Groups/DDC 	

Metrics

of Career Connections activities offered by each district per year

of students engaged in Career Connections Activities

of students completing YouScience

of students enrolling in post-high school training/education


of students completing degrees/credentials in top industries




OBJECTIVES

Industry Engagement

For efficient and productive career experiences (i.e. internships, job shadowing, apprenticeships) to be feasible, we need a one-stop shop for industry and schools to connect.

 **Schools must** provide flexibility in scheduling to allow students to participate in career experiences.

 **Industry must** engage in meaningful partnerships and invest in opportunities for students to have career experiences while they are still in school.

Co-Chairs: Cassie Barlow & Amanda Byers

★ Accomplishments

- 39 industry, non-profit, and education partners participated in the Aerospace and Aviation Implementation Lab to strengthen the worker pipeline of our local K-12 and higher education ecosystem.
- 625 industry partners providing direct support to district career connections activities.
- 1,904 students engaged in work-based learning opportunities





Strategy		Actions	Responsibility	Timeframe
1. Develop partnerships to provide increased opportunities for career activities	Schools	<ul style="list-style-type: none"> Organize Industry-specific College & Career Fairs & other career connection activities 	<ul style="list-style-type: none"> MCESC All Districts 	June 2025
	Industry	<ul style="list-style-type: none"> Work with trade associations to engage with schools to build career awareness capacity 	<ul style="list-style-type: none"> Industry Groups & Business Organizations SOCHE 	
2. Raise awareness about the value of work-based-learning (WBL) for both students and industry	Schools	<ul style="list-style-type: none"> Engage students and recent graduates to develop messaging on why WBL matters. Define examples of quality work-based learning amongst BAC districts 	<ul style="list-style-type: none"> MCESC All Districts 	June 2025
	Industry	<ul style="list-style-type: none"> Engage industry partners to develop messaging and highlight success stories. 	<ul style="list-style-type: none"> Industry Groups & Business Organizations SOCHE 	
3. Increase WBL opportunities within key industry sectors	Schools	<ul style="list-style-type: none"> Develop instructions on a district-by-district basis for opportunities for students to engage with WBL opportunities 	<ul style="list-style-type: none"> MCESC All Districts 	June 2025
	Industry	<ul style="list-style-type: none"> Highlight industry partners who are strategically partnering with schools 	<ul style="list-style-type: none"> Industry Groups & Business Organizations SOCHE 	

Metrics

of industry partners supporting career activities across partner districts

of students engaged in work-based learning

% of students within the BAC that have been placed in work-based learning experiences

of business partners accepting students into work-based learning opportunities

% of students who have earned an in-demand industry-recognized credential

OBJECTIVES

Policy & Advocacy

A statewide approach is critical in addressing the needs of an ever changing workforce landscape.



Schools must inform policymakers on the needs and challenges of K-12 partners.



Industry must Inform policymakers on the specific needs of our future workforce.



This year's Co-Chairs: Richard Wegmann & Stephanie Keinath



Accomplishments

- 10 partners from education, industry, and the community attended the Pathways to Prosperity Fall Institute in October 2023.
- 3-pronged policy focus developed in support of and aligned workforce agenda that meets the needs of the current regional workforce demands.
- Pushing for FAFSA as a graduation requirement with an opt out provision
- Ensure that every higher education institution that prepares teachers grounds their reading instruction practices on the science of reading



Strategy		Actions	Responsibility	Timeframe
1. Advocate for policies that support the work of all BACs	Schools	<ul style="list-style-type: none"> • Provide feedback on barriers to implementation of career connections work 	<ul style="list-style-type: none"> • All districts 	June 2025
	Industry	<ul style="list-style-type: none"> • Provide feedback on workforce needs and possible policy and legislative changes • Help educate local employers on policies that work to support the future workforce 	<ul style="list-style-type: none"> • Chamber • Industry Groups • BBB • DDC 	
2. Provide real-world and school-based examples of success stories to support policies	Schools	<ul style="list-style-type: none"> • Document local best practices to feature high-quality work-based learning and career connections experiences 	<ul style="list-style-type: none"> • All districts 	June 2025
	Industry	<ul style="list-style-type: none"> • Identify pragmatic incentives and policies to increase employers participation in work-based learning and career connections opportunities 	<ul style="list-style-type: none"> • Chamber • Industry Groups • DDC 	
3. Ensure stakeholder access to community workforce data	Schools	<ul style="list-style-type: none"> • Define what data is available and can be used to support continued advancement of opportunities for students 	<ul style="list-style-type: none"> • All districts 	June 2025
	Industry	<ul style="list-style-type: none"> • Explore available data and help identify strategies to close gaps in awareness and access to opportunities for students 	<ul style="list-style-type: none"> • Chamber • Industry Groups • DDC 	

Metrics

Creation of policy agenda

of Legislative Briefings



We're working
with other regions to
unlock opportunities for
students, families,
and employers in
southwest Ohio.

Business Advisory Council Policy Agenda

The Montgomery County Business Advisory Council has established an ambitious policy agenda to align its workforce requirements with the programs and practices that need to be in place to meet the current regional workforce demands and to ensure that the Dayton area has the workforce that is necessary for next generation jobs.

Goal: Ensure that Montgomery County increases reading proficiency rates for ALL students

Policy Focus: Science of Reading

Strategy 1: Monitor the work of all area higher education institutions to ensure that their reading curricula align with the reading standards promulgated by the Ohio Department of Higher Education.

Strategy 2: Monitor the teacher preparation programs that provide the majority of teachers to Montgomery County schools to ensure that teacher candidates have a firm grounding on the Science of Reading...and that they are achieving "A" ratings from the National Council on Teacher Quality: <https://www.nctq.org/review/standardScores/Reading-Foundations#state-OH>

Strategy 3: Monitor the passage rates of area higher education institutions relative to the elementary reading licensure test.

Strategy 4: Monitor, in collaboration with the Montgomery County Educational Service Center, the work of area schools to select, secure, and use a high quality reading curriculum.

Goal: Work with the Montgomery County Educational Service Center to ensure that workforce pathways to help students achieve their career goals are in place.

Policy Focus: Career Pathways

Strategy 1: Work with Montgomery County Educational Service Center to fully implement the career pathways that have been designed for selected in-demand career areas (e.g., Advanced Manufacturing, IT/CS, Health and education).

Strategy 2: Work with the Dayton Public Schools, Kettering City Schools and Waynesville Local Schools to fully implement the PACCE program.

Strategy 3: Work with area legislators on the passage of legislation that will help strengthen the delivery chains associated with creating the region's next generation workforce (e.g., HB 312 and HB 71).

Goal: Work with all area school districts and educational stakeholder groups to address student attendance and chronic absenteeism rates.

Policy Focus: Student attendance program incentives

Strategy 1: Work with Learn to Earn Dayton and the Montgomery County Educational Service Center to sustain the county-wide school attendance campaign.

Strategy 2: Work with area legislators and stakeholders to identify how best to support efforts to encourage student attendance through either legislation (e.g., HB 348) or the use of social media.

OBJECTIVES

Parent and Community Engagement

Our region is rich in career and educational opportunities, but our parents and community need to better understand how they can be advocates for students' success.



Schools must share with parents and the community what is already occurring to help prepare students for their futures. They must highlight the diversity of industries that can lead to successful careers.



Industry must collaborate with schools to create opportunities for industry exposure that elevates the community's understanding of locally available careers.



Incoming Co-Chairs: Marita Abram Ed.D. & Lisa Rindler

Strategy		Actions	Responsibility	Timeframe
1. Leverage all available career connections content to ensure BAC districts have access to the full portfolio of resources	Schools	<ul style="list-style-type: none"> Develop a plan for storing, organizing, and ensuring access to career connections content available to caregivers Design a content calendar to align with local and state career connections initiatives and events Explore potential partnership with parent & caregiver groups 	<ul style="list-style-type: none"> All Districts MCESC County Communications Collaborative 	June 2025
	Industry	<ul style="list-style-type: none"> Provide career connections content and list of non-profit partners to engage 	<ul style="list-style-type: none"> Industry Groups Think TV Local chambers of commerce DDC 	June 2025
2. Utilize social media and other communication sources as well as events to promote career connections with parents and community	Schools	<ul style="list-style-type: none"> Focus efforts on our Career Connections Months of Action Deploy content each month in concert with external industry and non-profit partners expanding parents understanding of upcoming events Promote and support the STEM Future Fair Map out caregiver facing social media groups for BAC geography 	<ul style="list-style-type: none"> All Districts MCESC County Communications Collaborative DD STEM 	June 2025
	Industry	<ul style="list-style-type: none"> Provide industry data, success stories, and photos, to support communications teams with parent and community outreach Leverage traditional media partners to share career connections successes and messaging 	<ul style="list-style-type: none"> Industry Groups Think TV Local chambers of commerce DDC 	June 2025
3. Research and promote best practices for engaging families and community in career connections work	Schools	<ul style="list-style-type: none"> Align Career Navigators & College Access work to the overall BAC goals Utilize parent connections to increase participation of industry partners in districts 	<ul style="list-style-type: none"> All Districts MCESC Higher Ed Partners 	June 2025
	Industry	<ul style="list-style-type: none"> Provide videos, events, and other resources 	<ul style="list-style-type: none"> Industry Groups Think TV Local chambers of commerce DDC 	June 2025
4. Expand partnerships with community organizations to further embed career connections in the community	Schools	<ul style="list-style-type: none"> Focus on K-5 career connections outreach and PTO groups Organize outreach to alumni and recently graduated seniors Engage in outreach to community/non-profit organizations including the Summer & Afterschool Collaborative 	<ul style="list-style-type: none"> All Districts MCES Higher Ed Partners 	June 2025
	Industry	<ul style="list-style-type: none"> Provide necessary information for outreach communications 	<ul style="list-style-type: none"> Industry Groups Think TV Local chambers of commerce DDC 	June 2025

Metrics

% of districts sharing career connections content targeting families/caregivers

% of partner districts highlighting to caregivers ongoing K-5 career connections outreach

% of partner districts highlighting alumni and recent graduates

of community partners engaged in career connection activities

OBJECTIVES

Warren County Working Group

This special committee serves as a resource for Warren County member districts to apply the larger efforts of our BAC to their localized framework.



Co-Chairs: Tom Isaacs & Chad Bridgman



Accomplishments

- 3 informational meetings regarding local workforce opportunities were held.
- 6 employers from 4 in-demand sectors participated in a panel sharing insights into their profession and ideas for future workforce development.
- Convened a major employer spotlight to discuss significant investment by Honda and LG and upcoming workforce implications.

Warren County Business Advisory Council



Meeting Details:

Friday, October 4, 2024
9:00 a.m.

Warren County ESC Conference Center
1879 Deerfield Road, Lebanon

Agenda

Chad Hilliker, Superintendent and
Donna Lauver, Workforce Innovation Network Executive Lead
from Hamilton County ESC
will provide information and discussion regarding Linked Up Connect

Linked Up Connect is a career exploration hub integrated into your school's Learning Management System. Students can complete the Junior Achievement Career Interest Inventory to find opportunities that match their interests and location, ranging from informational interviews to internships. Parents must provide permission for participation, ensuring transparency. Educators can also use the system to connect with local businesses for externships, speakers, mentors, and field trips. Businesses can easily register and are onboarded by the Workforce Innovation Network (WIN) team, offering a secure way to support the future workforce.

October 4: Joined by Chad Hilliker and Donna Lauver from Hamilton County ESC

December 6: Joined by Dr. Joseph Tadlock, who serves as Director of Research and Accountability for the Southern Regional Education Board

2 more meetings in 2025:
Feb. 7th & April 4th





December 6: Joined by Dr. Joseph Tadlock, who serves as Director of Research and Accountability for the Southern Regional Education Board

2 more meetings in 2025:
Feb. 7th & April 4th



Warren County
Educational Service Center

Main takeaways for this year's plan!

- 1. Expand capacity with career navigators**
- 2. Expand work based learning and credential attainment**
- 3. Leverage student data more effectively**
- 4. Partner with our in-demand sectors**

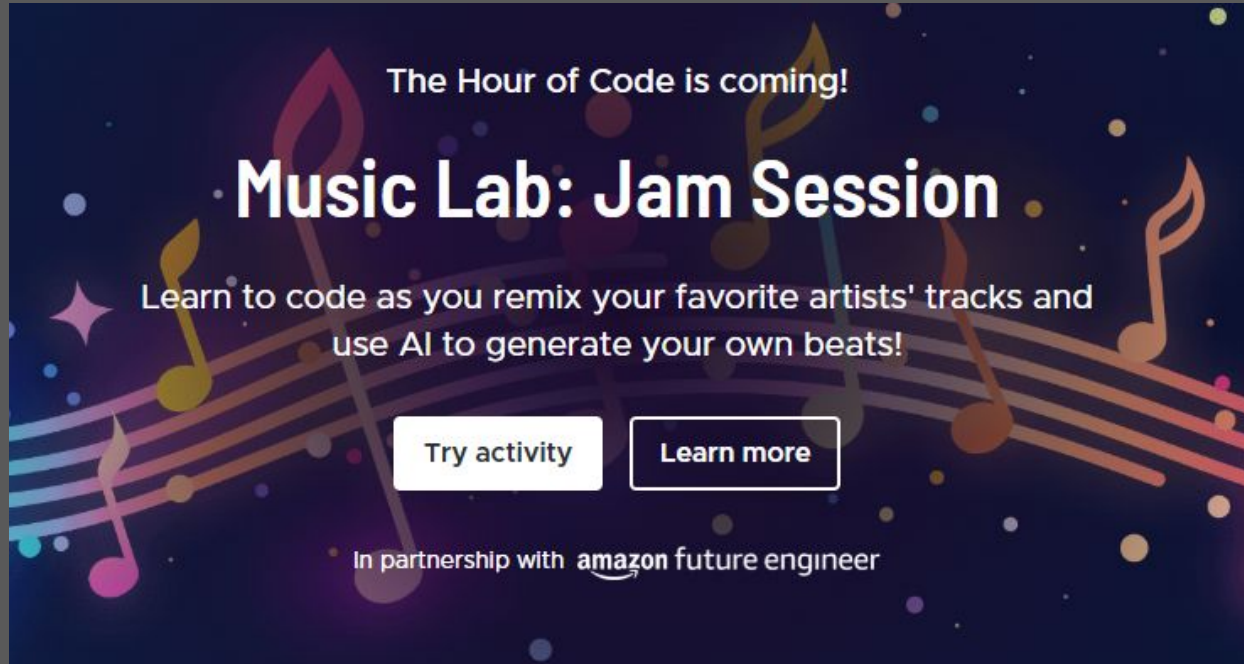


General Discussion

Biggest questions? Does any area stand out to you?

Potential Action Items / Major Takeaways?

ACTION ITEM #1




The Hour of Code is coming!

Music Lab: Jam Session

Learn to code as you remix your favorite artists' tracks and use AI to generate your own beats!

[Try activity](#) [Learn more](#)

In partnership with  amazon future engineer

Make a plan for Computer Science Education Month!

ACTION ITEM #2

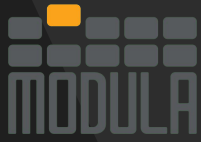
Please support
the BAC by
serving on a
subcommittee!





ACTION ITEM #3

Ensure your district is attending our Career Champions program and/or ensure you're sharing out resources we can highlight in our upcoming meetings!

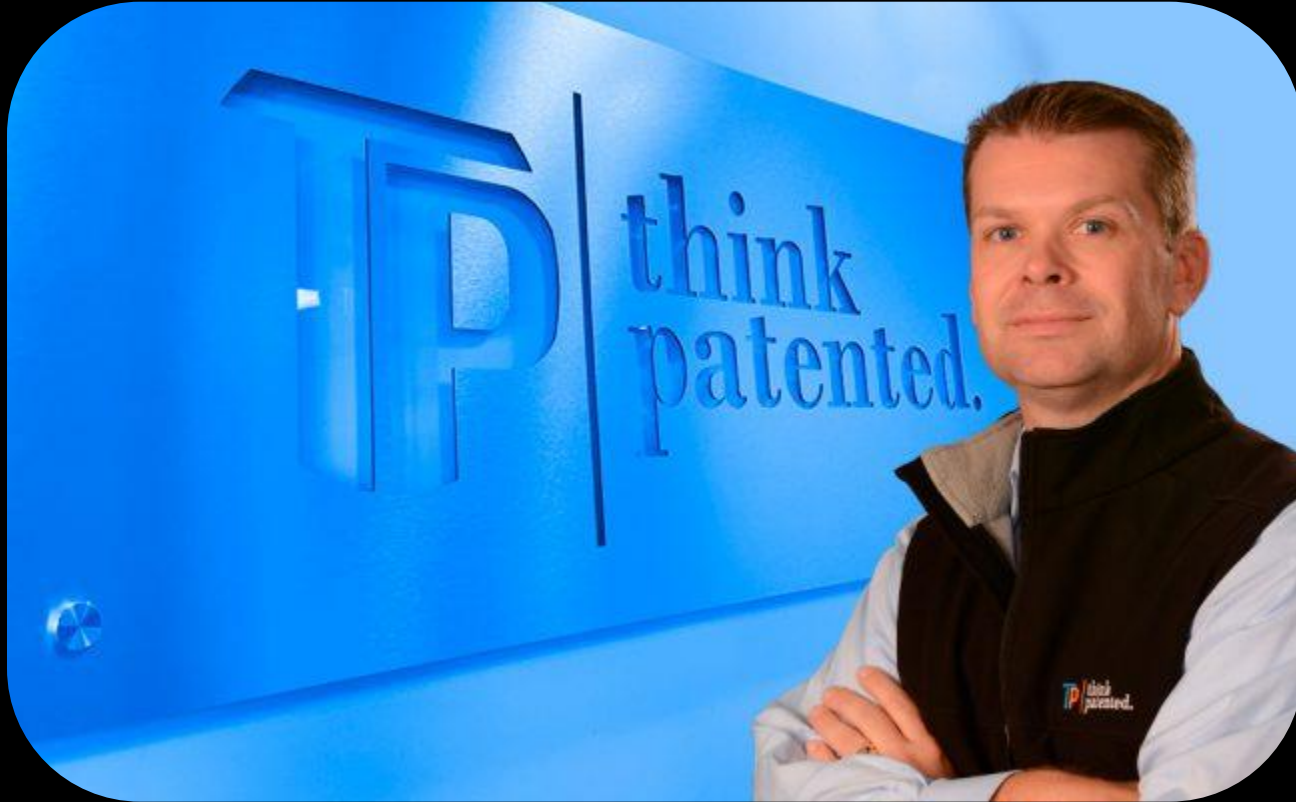


Thank you to all the local businesses who have hosted our counselors over the years!



Dec. 9th

Next Career Champions meeting is coming up!



ACTION ITEM #4

Commit to working with
SOCHE to help employ local
students!



ACTION ITEM #5

Help us compile our Career Connections Master Calendar for this school year.



The screenshot shows the top portion of a document titled "Career Connections Calendar". On the left, there are logos for "MCESC" (Montgomery County Educational Service Center) and the "BUSINESS ADVISORY COUNCIL". The title "Career Connections Calendar" is prominently displayed in white text on a dark blue background. Below the title is a legend with eight categories, each represented by a colored square: BAC Main Meetings (orange), Educator Engagement (light blue), Industry Engagement (yellow), Parent & Community Engagement (green), Policy & Advocacy (red), Student Engagement (dark blue), Warren County BAC Mini-Group (purple), Career Champions Meetings (dark purple), and GDAHA Education (grey). The main text below the legend explains the calendar's purpose and lists the types of events included.

MCESC **BUSINESS ADVISORY COUNCIL** **Career Connections Calendar**

■ BAC Main Meetings ■ Educator Engagement ■ Industry Engagement ■ Parent & Community Engagement
■ Policy & Advocacy ■ Student Engagement ■ Warren County BAC Mini-Group
■ Career Champions Meetings ■ GDAHA Education

This calendar aims to help partners keep track of our region's Business Advisory Council's affiliated events, meetings, initiatives, and career connection weeks of action. We've also inserted some suggested language around when we recommend district leadership step back and reevaluate their career connections work.

You'll find our six BAC working group meetings, including our newly formed Warren County Working Group. You'll also see we have included our Career Champions Quarterly Meetings. Coordinating with national and statewide partners, we've included six different national career connections weeks of action as well as our Greater Dayton Area Hospital Association Education Subcommittee Meetings.

Please feel free to reach out to our Workforce Director, Bryan Stewart if you have any questions.
Email him at: bryan.stewart@mcesc.org

ACTION ITEM #6

Make sure you're on our BAC mailing list!

Check with Bryan!

Search your inbox for "Business Advisory Council Wrap-Up"...

August 2024 MCESC Business Advisory Council **Wrap-Up** External



Bryan Stewart <bryan.stewart@mcesc.org>

to Shannon, bcc: Abby, bcc: Adam, bcc: Adam, bcc: Adriane, bcc: Alannah, bcc: Allyson, bcc: Amanda, bcc: Amanda, bcc:

Greetings, members of our Business Advisory Council!

August is **wrapping up** and we wanted to provide an overview of our region's Business Advisory Council celebrate Skilled Trades Appreciation Month across our 23 partner school districts!

Highlights:



1. We lead the state of Ohio in YouScience implementation.

[Check out this new student-facing video](#) that explains YouScience. Montgomery County ESC will be c

Montgomery County Information Technology/Computer Science Pathway

Regional workforce needs support the expansion of advanced manufacturing operations, higher education, K-12 schools, and other organizations. The pathway provides students with the skills and knowledge to enter the workforce in a variety of roles. The pathway includes the following courses and competencies:

- Computer Science I
- Computer Science II
- Computer Science III
- Computer Science IV
- Computer Science V
- Computer Science VI
- Computer Science VII
- Computer Science VIII
- Computer Science IX
- Computer Science X

College and Career Preparation

This additional workforce support is provided to students in the pathway. The pathway includes the following courses and competencies:

- College and Career Preparation I
- College and Career Preparation II
- College and Career Preparation III
- College and Career Preparation IV
- College and Career Preparation V
- College and Career Preparation VI
- College and Career Preparation VII
- College and Career Preparation VIII
- College and Career Preparation IX
- College and Career Preparation X

IT/Computer Science Technical Competencies

Students in the pathway will develop the following technical competencies:

- Computer Science I
- Computer Science II
- Computer Science III
- Computer Science IV
- Computer Science V
- Computer Science VI
- Computer Science VII
- Computer Science VIII
- Computer Science IX
- Computer Science X

Selected Postsecondary Options

Option	Requirements	Notes
Option 1
Option 2
Option 3
Option 4
Option 5
Option 6
Option 7
Option 8
Option 9
Option 10

Selected Occupations, Wages, and Job Growth

Occupation	Median Hourly Wage	Annual Growth Rate	Job Outlook
Software Developer	\$44.17	12.0%	Very Good
Software Engineer	\$42.36	12.0%	Very Good
Computer Systems Analyst	\$40.85	12.0%	Very Good
Information Systems Manager	\$40.85	12.0%	Very Good
Computer Programmer	\$38.12	12.0%	Very Good
Database Administrator	\$38.12	12.0%	Very Good
Systems Administrator	\$38.12	12.0%	Very Good
Network Administrator	\$38.12	12.0%	Very Good
IT Support Specialist	\$38.12	12.0%	Very Good
IT Help Desk Technician	\$38.12	12.0%	Very Good
IT Project Manager	\$38.12	12.0%	Very Good
IT Business Analyst	\$38.12	12.0%	Very Good
IT Security Specialist	\$38.12	12.0%	Very Good
IT Compliance Specialist	\$38.12	12.0%	Very Good
IT Risk Management Specialist	\$38.12	12.0%	Very Good
IT Governance Specialist	\$38.12	12.0%	Very Good
IT Audit Specialist	\$38.12	12.0%	Very Good
IT Consulting Specialist	\$38.12	12.0%	Very Good
IT Training Specialist	\$38.12	12.0%	Very Good
IT Quality Assurance Specialist	\$38.12	12.0%	Very Good
IT User Acceptance Testing Specialist	\$38.12	12.0%	Very Good
IT Performance Testing Specialist	\$38.12	12.0%	Very Good
IT Security Testing Specialist	\$38.12	12.0%	Very Good
IT Vulnerability Assessment Specialist	\$38.12	12.0%	Very Good
IT Incident Response Specialist	\$38.12	12.0%	Very Good
IT Forensic Analyst	\$38.12	12.0%	Very Good
IT Digital Forensics Specialist	\$38.12	12.0%	Very Good
IT Malware Analyst	\$38.12	12.0%	Very Good
IT Reverse Engineering Specialist	\$38.12	12.0%	Very Good
IT Cryptography Specialist	\$38.12	12.0%	Very Good
IT Network Security Specialist	\$38.12	12.0%	Very Good
IT Wireless Security Specialist	\$38.12	12.0%	Very Good
IT Cloud Security Specialist	\$38.12	12.0%	Very Good
IT Data Security Specialist	\$38.12	12.0%	Very Good
IT Application Security Specialist	\$38.12	12.0%	Very Good
IT DevSecOps Specialist	\$38.12	12.0%	Very Good
IT SaaS Security Specialist	\$38.12	12.0%	Very Good
IT IoT Security Specialist	\$38.12	12.0%	Very Good
IT AI Security Specialist	\$38.12	12.0%	Very Good
IT Blockchain Security Specialist	\$38.12	12.0%	Very Good
IT Quantum Security Specialist	\$38.12	12.0%	Very Good
IT Space Security Specialist	\$38.12	12.0%	Very Good
IT Maritime Security Specialist	\$38.12	12.0%	Very Good
IT Energy Security Specialist	\$38.12	12.0%	Very Good
IT Transportation Security Specialist	\$38.12	12.0%	Very Good
IT Infrastructure Security Specialist	\$38.12	12.0%	Very Good
IT Environmental Security Specialist	\$38.12	12.0%	Very Good
IT Health Security Specialist	\$38.12	12.0%	Very Good
IT Financial Security Specialist	\$38.12	12.0%	Very Good
IT Government Security Specialist	\$38.12	12.0%	Very Good
IT Defense Security Specialist	\$38.12	12.0%	Very Good
IT Intelligence Security Specialist	\$38.12	12.0%	Very Good
IT Information Security Specialist	\$38.12	12.0%	Very Good
IT Cyber Security Specialist	\$38.12	12.0%	Very Good
IT Digital Security Specialist	\$38.12	12.0%	Very Good
IT Network Security Specialist	\$38.12	12.0%	Very Good
IT System Security Specialist	\$38.12	12.0%	Very Good
IT Application Security Specialist	\$38.12	12.0%	Very Good
IT Infrastructure Security Specialist	\$38.12	12.0%	Very Good
IT Operational Security Specialist	\$38.12	12.0%	Very Good
IT Physical Security Specialist	\$38.12	12.0%	Very Good
IT Personnel Security Specialist	\$38.12	12.0%	Very Good
IT Information Security Specialist	\$38.12	12.0%	Very Good
IT Cyber Security Specialist	\$38.12	12.0%	Very Good
IT Digital Security Specialist	\$38.12	12.0%	Very Good
IT Network Security Specialist	\$38.12	12.0%	Very Good
IT System Security Specialist	\$38.12	12.0%	Very Good
IT Application Security Specialist	\$38.12	12.0%	Very Good
IT Infrastructure Security Specialist	\$38.12	12.0%	Very Good
IT Operational Security Specialist	\$38.12	12.0%	Very Good
IT Physical Security Specialist	\$38.12	12.0%	Very Good
IT Personnel Security Specialist	\$38.12	12.0%	Very Good

Montgomery County Advanced Manufacturing Pathway

Regional workforce needs support the expansion of advanced manufacturing operations, higher education, K-12 schools, and other organizations. The pathway provides students with the skills and knowledge to enter the workforce in a variety of roles. The pathway includes the following courses and competencies:

- Manufacturing I
- Manufacturing II
- Manufacturing III
- Manufacturing IV
- Manufacturing V
- Manufacturing VI
- Manufacturing VII
- Manufacturing VIII
- Manufacturing IX
- Manufacturing X

College and Career Preparation

This additional workforce support is provided to students in the pathway. The pathway includes the following courses and competencies:

- College and Career Preparation I
- College and Career Preparation II
- College and Career Preparation III
- College and Career Preparation IV
- College and Career Preparation V
- College and Career Preparation VI
- College and Career Preparation VII
- College and Career Preparation VIII
- College and Career Preparation IX
- College and Career Preparation X

Manufacturing Competencies

Students in the pathway will develop the following manufacturing competencies:

- Manufacturing I
- Manufacturing II
- Manufacturing III
- Manufacturing IV
- Manufacturing V
- Manufacturing VI
- Manufacturing VII
- Manufacturing VIII
- Manufacturing IX
- Manufacturing X

Selected Postsecondary Options

Option	Requirements	Notes
Option 1
Option 2
Option 3
Option 4
Option 5
Option 6
Option 7
Option 8
Option 9
Option 10

Selected Occupations, Wages, and Job Growth

Occupation	Median Hourly Wage	Annual Growth Rate	Job Outlook
Manufacturing Engineer	\$44.17	12.0%	Very Good
Manufacturing Technician	\$38.12	12.0%	Very Good
Quality Control Inspector	\$38.12	12.0%	Very Good
Production Worker	\$38.12	12.0%	Very Good
Machine Operator	\$38.12	12.0%	Very Good
Assembly Worker	\$38.12	12.0%	Very Good
Welder	\$38.12	12.0%	Very Good
Electrician	\$38.12	12.0%	Very Good
Plumber	\$38.12	12.0%	Very Good
Construction Worker	\$38.12	12.0%	Very Good
Truck Driver	\$38.12	12.0%	Very Good
Warehouse Worker	\$38.12	12.0%	Very Good
Inventory Control Specialist	\$38.12	12.0%	Very Good
Supply Chain Analyst	\$38.12	12.0%	Very Good
Logistics Coordinator	\$38.12	12.0%	Very Good
Production Supervisor	\$38.12	12.0%	Very Good
Quality Control Manager	\$38.12	12.0%	Very Good
Manufacturing Engineer	\$38.12	12.0%	Very Good
Manufacturing Technician	\$38.12	12.0%	Very Good
Quality Control Inspector	\$38.12	12.0%	Very Good
Production Worker	\$38.12	12.0%	Very Good
Machine Operator	\$38.12	12.0%	Very Good
Assembly Worker	\$38.12	12.0%	Very Good
Welder	\$38.12	12.0%	Very Good
Electrician	\$38.12	12.0%	Very Good
Plumber	\$38.12	12.0%	Very Good
Construction Worker	\$38.12	12.0%	Very Good
Truck Driver	\$38.12	12.0%	Very Good
Warehouse Worker	\$38.12	12.0%	Very Good
Inventory Control Specialist	\$38.12	12.0%	Very Good
Supply Chain Analyst	\$38.12	12.0%	Very Good
Logistics Coordinator	\$38.12	12.0%	Very Good
Production Supervisor	\$38.12	12.0%	Very Good
Quality Control Manager	\$38.12	12.0%	Very Good