

MCESC Business Advisory Council Main Meeting 9-18-2024

Who we are

Shannon Cox

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Bryan Stewart

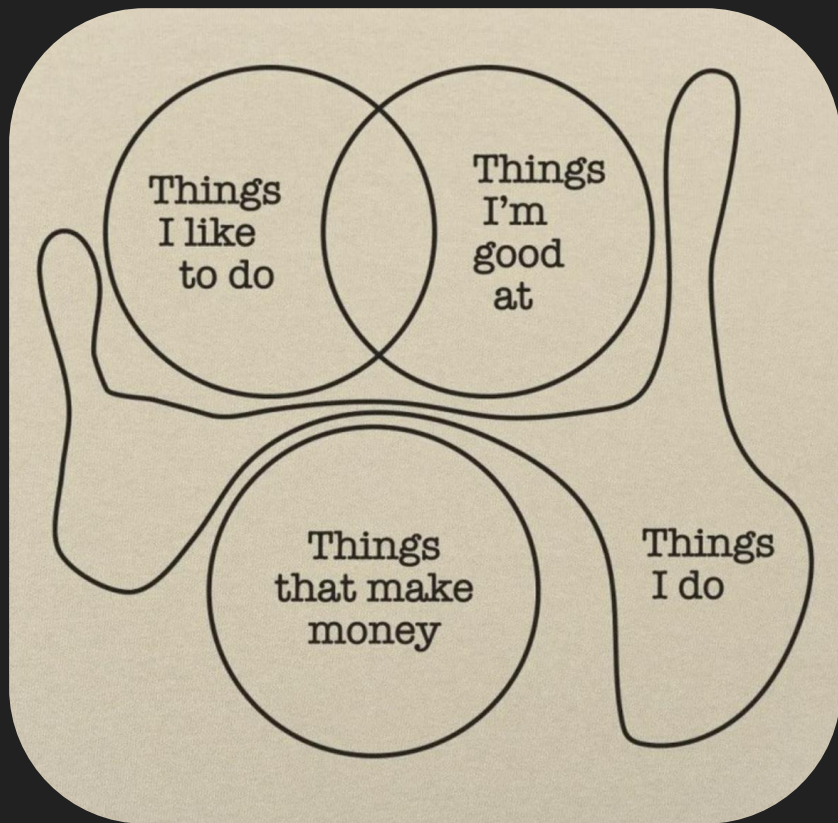
Workforce Director
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Agenda



- 1. Welcome**
- 2. Big Picture Update**
- 3. Sept. - Construction Appreciation Month**
- 4. Pathways to Prosperity Network Update**
- 5. 24 - 25 BAC Plan Review**
- 6. Feedback Activity**
- 7. 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





Learn to Earn Dayton

Ready to Learn. Explore. Earn.



Montgomery County's
{ Big Goal } 60%

We need 60% of working-age adults to have at least a 2-year college degree or a high quality post-secondary credential



K

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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

Ohio | Department of Education



Business Advisory Councils



careerconnections

K 1 2 3 4 5 6 7 8 9 10 11 12



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

Oct. 1st Career Champions Meeting Reminder



SITE VISIT MOVED TO Dec. 9th



Oct. 1st - New partner coming soon!



**CONSTRUCTION
APPRECIATION WEEK:
SEPTEMBER 16-20**



Here are all the districts signed up to participate at the 2024 Construction Career Expo!

**DPS (Dunbar, Thurgood,
Ponitz, Belmont, &
Stivers)
Franklin
Huber Heights
Kettering
Mad River**

**Miamisburg
New Lebanon
Northridge
Wayne Local**



Contact me for more information if you'd like to see this incredible day in action!

Here's all the districts signed up to participate for the She Dig event!

**DPS (Dunbar, Thurgood,
Ponitz, Belmont, & Stivers)
Mad River
Miamisburg
Warren County CC**



Contact me for more information if you'd like to see this incredible day in action!

Main takeaways for today's summer & fall update

- 1. Another Inside Dayton Cohort in the books!**
- 2. Multiple partners held great summer camps.**
- 3. Business & Management Pathway is underway**
- 4. Even more Career Navigators in the field**
- 5. BAC Subcommittee meetings have begun**
- 6. MFG Month sign ups are live!**



Big Picture Update



Big Picture Update

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**June 3rd, 2024 - Opening Session
at the Dayton Metro Library**



**INSIDE
DAYTON
PROGRAM**

Representing 90,000+ Students



Some of our speakers this year!



Project Teaser

Project 1: The Case for Dayton: Exploring How to Highlight Dayton to Young People

We're curious if Young Professionals – especially those preparing for higher education/careers/military service/etc – actually care about the metrics used in this study (employment and pay, housing affordability, cost of living and lifestyle)?

We know there are young professionals who return to Dayton for things like housing affordability and cost of living. **But, for those at the very beginning of their time as a young professional, what makes them choose to stay – or leave – the Dayton region?**

As an aside to this prompt, we'd love to gain some insight into their knowledge of those 'lifestyle' pieces. Do young people know about YP groups like South Dayton or Gen D? Do they know about rec leagues like Sportcial? How well – or not – are organizations and community leaders doing to educate our YP's on what's available to them here?



Project Teaser

Project 2: Balancing Tech and Mental Health: Exploring the Balance Between Healthy Tech Usage and Happiness

Children are increasingly accessing technology both in and out of classrooms. The impact this has on children's development and education is important for everyone –from caregivers to educators to policymakers—to understand. Recent evidence shows that for children with unrestricted access to technology the impacts can be detrimental.

In 2023, the OECD found that 45% of students surveyed across 85 countries felt nervous or anxious when their “phones were not near them” and students who spent over five hours on digital devices per day scored 49 points less in math. Over 65% of students with access to technology during class reported being distracted by it during lesson time. What should local schools do on this topic?



Project Teaser

Project 3: The Future of AI: Applications for High School and Workforce Development

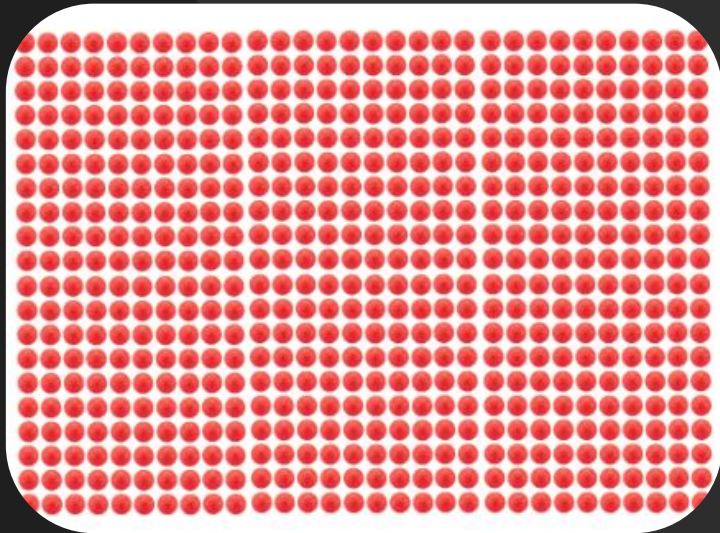
Examine the truths and misconceptions surrounding the development of AI large language learning models. Look into how the advancement of AI will impact the workforce (20% of knowledge-based careers are at high risk for impact/disruption).

Explore AI Tools from Magic School & futuretools.io and understand how different AIs are better for different things. Look at issues of equity and accessibility surrounding AI (Racism in AI). Collate research and propose how AI can be used in conjunction with the future of the workforce instead of against it.



Project Teaser

Project 4: 600 Employers:
Engaging Local
Companies & Exposing
Youth to Careers



Over 600 local employers are active in schools. They volunteer, speak with students, provide work-based learning opportunities, and much more. This project is open-ended. As students, what ideas do you have to better expose young people to careers and opportunities at these 600 employers?

Who are We?



Lorelai Wells
Brookville



Nivea Jackson
Huber Heights



Charlotte Spaulding
Oakwood



Kyalonda Mupenda
DPS- Belmont



Aitor Torres
DPS- Dunbar



Emily Kuzmin
Kettering



Jayla Andrews- Thornton
DPS- Stivers

6:21 / 1:06:09

MCESC Inside Dayton Program 2024 - Final Presentations

Montgomery County ESC
7 subscribers

Subscribed



6



Share

Download

Clip

Save



Link to presentation: https://youtu.be/gOehQG7DY-c?si=_hSKwegfx9wy_M50



Big Picture Update

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6. MFG Month sign ups are live!



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
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.



→ Big Picture Update

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More details and next steps to come!

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Expanding our Career Navigator efforts!

Pathways for Accelerated College and Career Experience Program



Big Picture Update

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6. MFG Month sign ups are live!

Has your district participated in a BAC meeting yet?



BAC Subcommittee Tracking

Districts Who Have Attended

Centerville
DPS
Huber Heights
Jefferson Township
Kettering
Mad River
Miami Valley CTC
Miamisburg
Montgomery County ESC
Northmont
Northridge
Oakwood
Valley View

Districts Who Have Not Attended

Brookville
Carlisle
Franklin
Kings
Lebanon
Little Miami
New Lebanon
Springboro
Trotwood-Madison
Vandalia Butler
WCCC
Warren County ESC
Wayne Local
West Carrollton

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of Education



**Business Advisory
Councils**

BAC Partner Tracking

Industry Partners Who Have Attended:

- Catapult Creative
- Danis Construction
- Dayton Area Chamber of Commerce
- Dayton International Airport
- DRMA
- GDAHA
- Kettering Health
- Matthew Sauer, Architect
- Midwest Microelectronics Association
- Minster Bank
- Parallax Research
- QQE
- Shook Construction
- Technology First
- The Heights Barbershop

Higher Ed & Non-Profit Partners:

- Clothes That Work
- Digital Transformation Center
- Junior Achievement
- Learn To Earn Dayton
- Sinclair College
- Urban League

Ohio | Department
of Education



**Business Advisory
Councils**

Upcoming BAC Meetings

Sept. 19th: Construction Career Expo in Miamisburg

Sept. 20th: SHE Dig Event - 9:00 am

Sept. 27th: Ohio Tech Day - <https://www.ohiotechday.org/>

Oct. 1st: Career Champions & Counselors Academy Meeting

Oct. 4th: BAC Warren Subcommittee - 9:00 - 10:30 am

Oct. 8th: BAC Student Engagement Subcommittee - 9:00 - 10:30 am

Oct. 9th: BAC Policy & Advocacy - 1:00 - 2:00 pm

Oct. 10th: Sinclair Built Environments Program Open House

Oct. 11th: 2024 SOCHE Career Services Conference - 8:45 am to 2 p.m

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2024 Manufacturing Month

2024 Manufacturing Month School Registration



Link to sign up: <https://form.jotform.com/242394308650962>



Have you made plans for October?





Just because September is more than halfway over doesn't mean you can't host skilled trades events!

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

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Please Contact:

Deb Rhodes -

Construction Builders Association
drhodes@agcofdayton.com

Nick Smiley -

ABC - T.O.O.L.S. Program &
Construction Workforce
nick@ovabc.org



Previous Cohort



**Visionary Leaders Providing
Exemplary Service**



**Montgomery County Student
Advisory Delegation**

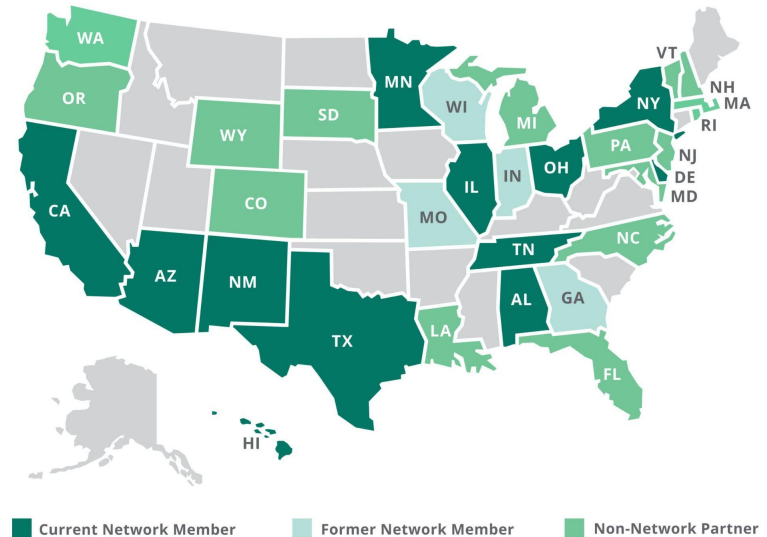


Pathways to Prosperity Partnership

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.

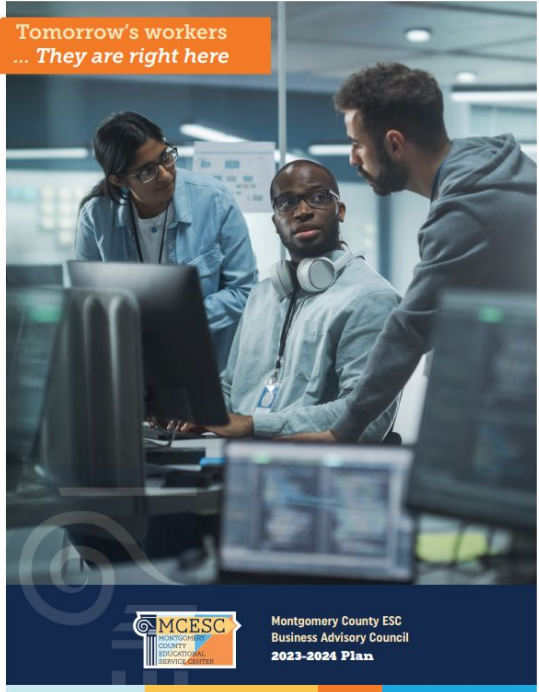


Tomorrow's workers
... They are right here



Montgomery County ESC
Business Advisory Council
2022-2023 Plan

Tomorrow's workers
... They are right here



Montgomery County ESC
Business Advisory Council
2023-2024 Plan

Reviewing our 2024-2025 BAC Plan



Montgomery
County
Educational
Service Center


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.



Outgoing Co-Chairs: Candice Sears & Adam Ciarlariello
Incoming Co-Chairs: Tommy Renfro & Nicole Will

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Strategy		Actions	Responsibility	Timeframe	Metric
1. Provide guidance and support for work-based learning	Schools	Determine and promote MCESC BAC operational definitions of Work-Based Learning	Educator Engagement and Industry Engagement Subcommittee	May 2024 focus on our established career pathways	<ul style="list-style-type: none"> 100% of BAC districts receiving support
		Provide and support the implementation of Work-Based Learning Resources (Guidance documents, OJM readiness seal, pre-apprenticeships, job shadowing, etc.)	Educator Engagement Team, with ODE Representative	May 2024 focus on established career pathways	<ul style="list-style-type: none"> 8 districts with established healthcare work-based learning opportunities
	Industry	Partner with schools to help plug identified gaps with industry-relevant opportunities (speakers, tours, lunches, projects, etc)	TBD as gaps are identified	May 2024 focus on established career pathways	<ul style="list-style-type: none"> Partner with 100% of districts in a one on one meeting to discuss industry-relevant opportunities - In Progress
2. Utilize data to drive decision and increase career readiness across the educational continuum	Schools	Share Learn to Earn Indicators, Career Readiness Survey Data, and Snapshot Data with Career Champions, Counselors, Building Admin, MVRCD, Teachers	MCESC/L2ED Staff & Educator Engagement Team	Annually	<ul style="list-style-type: none"> Meet with 10 districts - In Progress
		Meet with ten districts to review their career connections related data and brainstorm potential areas of collaboration			
3. Expand authentic experiences and activities connected to careers	Schools	Leverage and promote career activities and tasks that align with content standards (technical and employability skills)	All districts, MCESC staff	2023-2024 Academic Year	<ul style="list-style-type: none"> 100% of schools implementing K-12 Career Connections experiences Creation of (1) week of programming for each cluster - In Progress 3 Quarterly Meetings hosted, One Scheduled for March 11, 2024 Host 4 teacher industry experiences - In Progress
		Promote careers within 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 Experience			
	Industry	Attend focus groups to develop career activity ideas and identify career alignment with content standards Host Industry Tours and Experiences			
4. Create plug and play structural course alignment options for workforce sectors	Schools	Host Career Pathway Design Labs	MCESC & L2ED in coordination with the Educator Engagement Team	2023-2024 Academic Year	<ul style="list-style-type: none"> Aviation and Aerospace Implementation Lab hosted on Nov. 17th, 2023
	Industry	Partner with schools in the Career Pathway Design Lab process	Chamber, Trade Orgs & Key business leads in identified pathways	2023-2024 Academic Year	<ul style="list-style-type: none"> 39 industry, non-profit, and education partners participated in the Aerospace and Aviation Implementation Lab

Explore how we can design and highlight WBL toolkits

We're going to explore how we can better leverage YouScience data and aggregate College & Career Readiness data!

We're going to continue to push our five months of action.

More pathway design labs and efforts.

Explore best practices around teacher experience efforts.

Metrics

of curriculum changes

of students impacted by curriculum changes

of career-centered PDs offered

of educators impacted by PDs


On The Move with Mindy: Firebirds in the Field - Kettering Health




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.



Outgoing Co-Chairs: Katie Kerry & Stacie Moore

Incoming Co-Chairs: Carrie Kabanov & Stephanie Hinds

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Co-Chairs: Carrie & Stephanie

Strategy		Actions	Responsibility	Timeframe	Metric
1. Utilize social media to expand awareness of careers & educational opportunities	Schools	<ul style="list-style-type: none"> Develop & deploy social media engagement plan in conjunction with County Communications Collaborative and Think TV as well as their aggregate College & Career Readiness Data Plan to better leverage students in outreach efforts Identify opportunities to partner with local interactive media study programs 	<ul style="list-style-type: none"> Student Engagement Parent & Community Engagement Educator Engagement County Communications Collaborative All Districts 	Regularly present at County Communications Collaborative monthly meetings	<ul style="list-style-type: none"> 94% of districts utilizing social media for career awareness
	Industry	<ul style="list-style-type: none"> Provide info/photos/etc. for social media engagement 	Chamber/Industry Orgs/ BBB/DDC	Present a midschool year review to the BAC via email in Jan. 2024	<ul style="list-style-type: none"> 11 social media posts were created for the Career Connections content calendar
2. Increase the use of student aptitude and interest data	Schools	<ul style="list-style-type: none"> Utilize YouScience/Naviance results in programmatic decision making and marketing opportunities Support member districts in understanding their aggregate and individual student assessment results 	MCESC/All Districts	Q2 2024	<ul style="list-style-type: none"> 95% of districts utilize an interest and/or aptitude tool YouScience is fully funded for member districts in the 2023-2024 school year 95% of districts making informed attendance recommendations for career exploration activities
	Industry	<ul style="list-style-type: none"> Explore additional funding opportunities for long-term use of software like YouScience 	DDC/Chamber/ Trade Orgs		
3. Promote student-facing information campaign with content that addresses in-demand industry sectors, college affordability, and post-secondary education	Schools	<ul style="list-style-type: none"> Provide career exploration activity time (Power Lunch, Career Fair, guest speakers, etc) Leverage Inside Dayton Internship Program recommendations and work with the Montgomery County Student Advisory Delegation for future feedback and input Organize five Career Connections Weeks of Action 	MCESC/All Districts	Q2 2024	<ul style="list-style-type: none"> 1,860 career activities were hosted across partner districts 78% of districts currently participating in Career Connections Weeks of Action 625 unique partnerships with companies 60% of engaged businesses represent our region's in-demand sectors
	Industry	<ul style="list-style-type: none"> Resource career activities (provide speakers, open for tours, etc.) 	Trade Orgs/Businesses/ MVHRA		
4. Create more career content for each of the local in-demand industry sectors	Schools	<ul style="list-style-type: none"> Implement a Socratic seminar activity where the student outcomes are industry-directed questions and then work with industry to produce videos responding to those questions Deploy content through classes and other communications channels 	MCESC/All Districts	Q2 2024	<ul style="list-style-type: none"> Create 10 locally produced career-related videos - In Progress 81% of member districts share career videos and content - In Progress Promote videos with 25 different careers - In Progress 2 in-demand sectors represented in produced videos with a goal of 9 videos produced before the end of the year
	Industry	<ul style="list-style-type: none"> Identify companies and employers for student question response videos 	Trade Orgs/Businesses/ MVHRA/Think TV/ Higher Ed institutions		
5. Focus on K-5 career connections outreach	Schools	<ul style="list-style-type: none"> Develop K-5 student outreach strategies on a school by school basis utilizing our A to Z videos plus other partner resources Each district will partner with industry to deploy in-demand school in-demand career awareness activity Explore new funding opportunities for additional career awareness curriculum and resources for K-5 outreach 	All Districts/MCESC/L2ED	Q2 2024	<ul style="list-style-type: none"> 94% of partner school districts utilize K-5 career connections activities 303 Bitly website visits of shared career connections content
	Industry	<ul style="list-style-type: none"> Provide necessary information for outreach communications 	Trade Orgs/Businesses		

We meet on Oct. 8th for our first meeting of this year.



Strategy		Actions	Responsibility
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 	Student Engagement Parent & Community Engagement Educator Engagement County Communications Collaborative All districts
	Industry	<ul style="list-style-type: none"> - Provide info/photos/etc for social media engagement - Resource career activities (speakers, tours, WBL, etc) 	Chamber / Trade 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 	MCESC / All districts
	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 	Chamber / Trade 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 	All districts
	Industry	<ul style="list-style-type: none"> - Resource career activities (speakers, tours, in-class demonstrations, etc) 	Chamber / Trade Groups / DDC

Reviewed feedback from last Main BAC Meeting.

Leverage existing momentum.

Use the 10,000+ YouScience students data to drive programmatic decisions.

Elevate emerging best practices.


Potential Metrics:


- # of Career Connections activities
- # of students engaged in Career Connections Activities (by continuum group?)
- # of students completing YouScience (breakdown by top industry aptitudes?)
- # 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.


★ 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



Co-Chairs: Cassie Barlow & Amanda Byers

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.

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Co-Chairs: Cassie Barlow - Strategic Ohio Council for Higher Education & Amanda Byers (DACC)

Strategy		Actions	Responsibility	Time-frame	Metric
1. Spread the word on resources available to employers with the goal of assisting them in engaging with schools across the region	Schools	<ul style="list-style-type: none"> Develop instructions on a district-by-district basis for opportunities for employers to engage with students 	MCESC/All Districts	Q4 2024	<ul style="list-style-type: none"> 14% of districts have published employer engagement instructions on their website
	Industry	<ul style="list-style-type: none"> Utilize resources that house information on K-12 workforce pathways and how to connect with schools for career engagement Track companies engaging through outreach application form and notify relevant partners Continue to provide feedback on the resources available 	Trade Organizations/ SOCHE (e.g. SOCHE employer webpage; Technology First, Dayton Region Manufacturer's Association, Dayton Area Logistics Association; Dayton Area Chamber, etc)		<ul style="list-style-type: none"> 50 employers from regional Trade Associations complete outreach application to engage with school districts - In Progress
2. Develop partnerships that will provide opportunities for career connection	Schools	<ul style="list-style-type: none"> Develop and prepare career connection opportunities in order to connect with employers who are ready to engage 	MCESC/All Districts	Q4 2024	<ul style="list-style-type: none"> 625 industry partners supported 1,860 career activities across our partner districts
	Industry	<ul style="list-style-type: none"> Build workforce development sub-committees in each in-demand industry group to discuss and participate in career connection opportunities and participate in other MCESC BAC subcommittees Host work-based learning information sessions with companies that have well-established programs and companies that are interested in developing student-facing opportunities Utilize the career engagement form to partner with schools in the region Work with Trade Associations to engage with Schools and utilize a sustainable process to build workforce 	SOCHE/ Business/ Trade Organizations		<ul style="list-style-type: none"> Establish committees in all Trade Associations and host 3 work-based learning information sessions with trade association employers; Sign up 50 businesses through career engagement form - In Progress
3. Increase industry engagement in career connection opportunities	Schools	<ul style="list-style-type: none"> BAC districts will complete BAC Mid-Year Review survey and share elementary, middle, and high school career readiness efforts Each BAC district will share with Industry Engagement Subcommittee how they leverage OMJ Readiness Seal or other practices they employ to prepare students for WBL opportunities 	MCESC/All Districts	Q2 2024	<ul style="list-style-type: none"> 83% of BAC districts have created a plan for how their students will engage in career connection opportunities
	Industry	<ul style="list-style-type: none"> Analyze internal operations to determine areas within their organizations that can benefit from an intern Develop and deploy a promotional campaign plan to engage students in work-based learning opportunities 	SOCHE/ Business/ Trade Organizations		<ul style="list-style-type: none"> 1,904 students engaged in work-based learning opportunities

Move in order Update language

Update language

Update language



Minutes from our Sept. 3rd, 2024 meeting.



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 	MCESC/All Districts	Q4 2025
	Industry	<ul style="list-style-type: none"> Work with trade associations to engage with schools to build career awareness capacity 	Industry Groups & Business Organizations/SO CHE	
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 	MCESC/All Districts	Q4 2025
	Industry	<ul style="list-style-type: none"> Engage industry partners to develop messaging and highlight success stories. 	Industry Groups & Business Organizations/SO CHE	
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 	MCESC/All Districts	Q4 2025
	Industry	<ul style="list-style-type: none"> Highlight industry partners who are strategically partnering with schools 	Industry Groups & Business Organizations/SO CHE	

Subcommittee Metrics

- # of students engaged in work-based learning
- % of students within the BAC that have been placed in work-based learning experiences
- # of industry partners supporting # of career activities across partner districts
- # of districts providing examples of WBL success stories
- % of students within the BAC that have been placed in work-based learning experiences
- # of business partners accepting students into work-based learning
- % 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.



Outgoing Co-Chairs: Tom Lasley

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

Policy and Advocacy

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

Co-Chairs:
Stephanie Keinath
& Rick Wegmann



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.

Strategy		Actions	Responsibility	Timeframe	Metric
1. Create a policy agenda to guide our efforts for the 2023-2024 school year	Schools	<ul style="list-style-type: none"> To support and reinforce the science of reading in all P-5 classrooms To support FAFSA completion as a mandatory requirement for graduation, with an opt-out option 	All districts	Create an initial agenda with key policy priorities for Q2 2024	<ul style="list-style-type: none"> Completed a 2023-2024 policy agenda
	Industry	<ul style="list-style-type: none"> To provide feedback on workforce needs and possible policy and legislative language changes Create a plan of action to educate local employers on these specific agenda items 	Chamber/Industry Orgs/ BBB/DDC		
2. Support policies that address our state's digital divide and online access issues	Schools	<ul style="list-style-type: none"> Partner with key stakeholders to eliminate digital divide and online access barriers, especially for students in economically challenged school environments 	All districts	Q2 2024	<ul style="list-style-type: none"> Ensure the coordination of regional partners around digital equity - Ongoing
	Industry	<ul style="list-style-type: none"> Maintain and enhance ongoing support for existing public/private partnerships 	Chamber/Industry Orgs/DDC		
3. Provide real-world and school-based examples or success stories for future policies and/or renewals	Schools	<ul style="list-style-type: none"> Document local best practice employers to feature high-quality work-based learning experiences 	All districts	Q2 2024	<ul style="list-style-type: none"> Document and share WBL opportunities in our region via qualitative and/or quantitative methods - Ongoing
	Industry	<ul style="list-style-type: none"> Identify pragmatic incentives and policies to increase employer participation in work-based learning opportunities 	Chamber/Industry Orgs/DDC		
4. Ensure stakeholder access to community workforce data	Schools	<ul style="list-style-type: none"> Define what datasets would help build capacity for schools to understand if equity or opportunity gaps exist Where equity gaps exist, define strategies to close those identified gaps 	All districts	Q2 2024	<ul style="list-style-type: none"> Implement and highlight strategies that enhance access to workforce data - Ongoing
	Industry	<ul style="list-style-type: none"> Explore, measure, and disaggregate college credit attainment, industry recognized credential attainment, and Ohio means jobs readiness seal attainment 	Chamber/Industry Orgs/DDC		

Policy Agenda Created

Updated language

Update and advance our efforts leveraging our policy agenda

Our first meeting will be held on Oct. 9th.





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.

Strategy		Actions	Responsibility
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 	All districts
	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 	Chamber / Industry Groups / 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. 	All districts
	Industry	<ul style="list-style-type: none"> Identify pragmatic incentives and policies to increase employers participation in work-based learning and career connections opportunities 	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 	All districts
	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 	Chamber / Industry Groups / DDC

Update and advance our efforts leveraging our policy agenda

Our first meeting will be held on Oct. 9th.

Industry Recognized Credentials

5,057
Number of Credentials Earned



Choose a Graduation Cohort:

Class of 2023

Choose a Credential Point Value:

- Select all
- 1
- 2
- 3
- 4
- 6
- 9
- 12

Choose a County:

Montgomery

Credentials Earned by Career Field



Credentials Earned by Graduation Cohort



Credentials Earned by Name



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.



Outgoing Co-Chairs: Jennifer Mills & Diane Farrell
Incoming Co-Chairs: Marita Abram Ed.D. & Lisa Rindler

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.

Completely
change

Strategy		Actions	Responsibility	Timeframe	Metric
1. Provide guidance and support for work-based learning	Schools	Determine and promote MCECSC BAC operational definitions of Work-Based Learning	Educator Engagement and Industry Engagement Subcommittee	May 2024 focus on our established career pathways	<ul style="list-style-type: none"> 100% of BAC districts receiving support
		Provide and support the implementation of Work-Based Learning Resources (Guidance documents, OMJ readiness seal, pre-apprenticeships, job shadowing, etc.)	Educator Engagement Team, with ODE Representative	May 2024 focus on established career pathways	<ul style="list-style-type: none"> 8 districts with established healthcare work-based learning opportunities
	Industry	Partner with schools to help plug identified gaps with industry-relevant opportunities (speakers, tours, lunches, projects, etc)	TBD as gaps are identified	May 2024 focus on established career pathways	<ul style="list-style-type: none"> Partner with 100% of districts in a one on one meeting to discuss industry-relevant opportunities - In Progress
2. Utilize data to drive decision and increase career readiness across the educational continuum	Schools	Share Learn to Earn Indicators, Career Readiness Survey Data, and Snapshot Data with Career Champions, Counselors, Building Admin, MVRCD, Teachers	MCECSC/L2ED Staff & Educator Engagement Team	Annually	<ul style="list-style-type: none"> Meet with 10 districts - In Progress
		Meet with ten districts to review their career connections related data and brainstorm potential areas of collaboration			
3. Expand authentic experiences and activities connected to careers	Schools	Leverage and promote career activities and tasks that align with content standards (technical and employability skills)	All districts, MCECSC staff	2023-2024 Academic Year	<ul style="list-style-type: none"> 100% of schools implementing K-12 Career Connections experiences
		Promote careers within each Industry Cluster, by generating resources and activities for one week's worth of programming for each cluster			<ul style="list-style-type: none"> Creation of (1) week of programming for each cluster - In Progress
		Host quarterly Career Champions/Counselors Meetings with Industry Tours			<ul style="list-style-type: none"> 3 Quarterly Meetings hosted, One Scheduled for March 11, 2024
		Host Teacher Industry Experience			<ul style="list-style-type: none"> Host 4 teacher industry experiences - In Progress
	Industry	Attend focus groups to develop career activity ideas and identify career alignment with content standards Host Industry Tours and Experiences	Chamber & Trade Orgs to identify key employers to participate	2023-2024 Academic Year	<ul style="list-style-type: none"> Track # of focus groups - In Progress
4. Create plug and play structural course alignment options for workforce sectors	Schools	Host Career Pathway Design Labs	MCECSC & L2ED in coordination with the Educator Engagement Team	2023-2024 Academic Year	<ul style="list-style-type: none"> Aviation and Aerospace Implementation Lab hosted on Nov. 17th, 2023
	Industry	Partner with schools in the Career Pathway Design Lab process	Chamber, Trade Orgs & Key business leads in identified pathways	2023-2024 Academic Year	<ul style="list-style-type: none"> Education partners participated in the Aerospace and Aviation

Change
language



billy

Minutes from
our Sept. 11th,
2024 meeting.



Strategy		Actions	Responsibility
1. Leverage all available career connections content to ensure caregivers & community partners have access to the full portfolio	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 	All Districts / MCESC / County Communicatio Collaborative
	Industry	<ul style="list-style-type: none"> Provide career connections content and list of non-profit partners to engage 	Trade Organizations, Think TV Chamber, DDC
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 	All Districts / MCESC / County Communicatio Collaborative / DO STEM
	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 	Trade Organizations, Think TV Chamber, DDC
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 	All Districts / MCES / Higher Ed Partners
	Industry	<ul style="list-style-type: none"> Provide videos, events, and other resources 	Trade Organizations, Think TV Chamber, DDC
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 	All Districts / MCES / Higher Ed Partners
	Industry	<ul style="list-style-type: none"> Provide necessary information for outreach communications 	Trade Organizations, Think TV Chamber, DDC

Co-Chairs:
Marita & Lisa

Subcommittee 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 connections 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.



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



Warren County
Educational Service Center

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



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?

What are you focusing on this school year?

ACTION ITEM #1

Manufacturing Day

DRMA is the local organizer for MFG Day, a nationwide event where students tour manufacturing facilities teaching them about careers in the industry. We're the most successful MFG Day in the nation. !



2024 Manufacturing Month

2024 Manufacturing Month School Registration

Make sure to sign up to participate in MFG Month with DRMA! <https://form.jotform.com/242394308650962>

ACTION ITEM #2

Please support
the BAC by
serving on a
subcommittee!



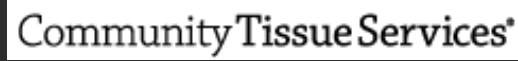


ACTION ITEM #3

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!



Oct. 1st

Next Career Champions meeting is coming up!



VISIT ON OCT. 1ST

SITE VISIT MOVED TO Dec. 9th



Oct. 1st - New partner coming soon!


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 header of the MCESC Business Advisory Council Career Connections Calendar. The header includes the MCESC logo (Montgomery County Educational Service Center) and the Business Advisory Council logo. Below the header is a legend with color-coded boxes for various meeting types: 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).

MCESC MONTGOMERY COUNTY EDUCATIONAL SERVICE CENTER **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



BAC Policy
Oct. 9th

BAC Policy
Nov 14th



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, II, III, IV
- Information Systems I, II, III, IV
- Math I, II, III, IV
- English I, II, III, IV
- Physical Science I, II, III, IV
- History I, II, III, IV
- Art I, II, III, IV
- Music I, II, III, IV
- Foreign Language I, II, III, IV
- Health I, II, III, IV
- Physical Education I, II, III, IV
- Career Development I, II, III, IV
- Personal Finance I, II, III, IV
- Legal Studies I, II, III, IV
- Government I, II, III, IV
- Philosophy I, II, III, IV
- Religion I, II, III, IV
- Spanish I, II, III, IV
- French I, II, III, IV
- Latin I, II, III, IV
- Classical Studies I, II, III, IV
- World Languages I, II, III, IV
- Global Studies I, II, III, IV
- International Studies I, II, III, IV
- Area Studies I, II, III, IV
- Interdisciplinary Studies I, II, III, IV
- Specialized Studies I, II, III, IV
- Advanced Studies I, II, III, IV
- Capstone I, II, III, IV
- Senior Project I, II, III, IV
- Senior Thesis I, II, III, IV
- Senior Research I, II, III, IV
- Senior Internship I, II, III, IV
- Senior Capstone I, II, III, IV
- Senior Portfolio I, II, III, IV
- Senior Reflection I, II, III, IV
- Senior Evaluation I, II, III, IV
- Senior Celebration I, II, III, IV
- Senior Commencement I, II, III, IV
- Senior Graduation I, II, III, IV
- Senior Reunion I, II, III, IV
- Senior Alumni I, II, III, IV
- Senior Legacy I, II, III, IV
- Senior Impact I, II, III, IV
- Senior Service I, II, III, IV
- Senior Leadership I, II, III, IV
- Senior Innovation I, II, III, IV
- Senior Creativity I, II, III, IV
- Senior Problem Solving I, II, III, IV
- Senior Critical Thinking I, II, III, IV
- Senior Communication I, II, III, IV
- Senior Collaboration I, II, III, IV
- Senior Teamwork I, II, III, IV
- Senior Diversity I, II, III, IV
- Senior Global Awareness I, II, III, IV
- Senior Cultural Understanding I, II, III, IV
- Senior Historical Perspective I, II, III, IV
- Senior Geographical Knowledge I, II, III, IV
- Senior Environmental Stewardship I, II, III, IV
- Senior Civic Engagement I, II, III, IV
- Senior Social Responsibility I, II, III, IV
- Senior Ethical Reasoning I, II, III, IV
- Senior Philosophical Inquiry I, II, III, IV
- Senior Artistic Expression I, II, III, IV
- Senior Musical Creativity I, II, III, IV
- Senior Physical Activity I, II, III, IV
- Senior Health Promotion I, II, III, IV
- Senior Personal Development I, II, III, IV
- Senior Career Readiness I, II, III, IV
- Senior Financial Literacy I, II, III, IV
- Senior Legal Awareness I, II, III, IV
- Senior Governmental Understanding I, II, III, IV
- Senior Philosophical Inquiry I, II, III, IV
- Senior Artistic Expression I, II, III, IV
- Senior Musical Creativity I, II, III, IV
- Senior Physical Activity I, II, III, IV
- Senior Health Promotion I, II, III, IV
- Senior Personal Development I, II, III, IV
- Senior Career Readiness I, II, III, IV
- Senior Financial Literacy I, II, III, IV
- Senior Legal Awareness I, II, III, IV
- Senior Governmental Understanding I, II, III, IV

College and Career Preparation

This section provides information on college and career preparation, including the importance of standardized testing, the role of the ACT and SAT, and the importance of college and career counseling.

Subject	ACT Score	SAT Score
Math	24	1050
English	24	1050
Science	24	1050
Writing	24	1050

IT/Computer Science Technical Competencies

This section lists the technical competencies required for students in the IT/Computer Science pathway, including skills in computer hardware, software, networking, and security.

Selected Postsecondary Options

Option	Description	Requirements
1. Associate Degree in Information Systems	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
2. Bachelor's Degree in Information Systems	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
3. Bachelor's Degree in Computer Science	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
4. Bachelor's Degree in Software Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
5. Bachelor's Degree in Cybersecurity	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
6. Bachelor's Degree in Data Science	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
7. Bachelor's Degree in Artificial Intelligence	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
8. Bachelor's Degree in Human-Computer Interaction	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
9. Bachelor's Degree in Information Systems Security	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
10. Bachelor's Degree in Information Systems Management	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.

Selected Occupations, Wages, and Job Growth

Occupation	Median Annual Wage	Job Growth (2018-2028)
Software Developer	\$106,210	25%
Software Engineer	\$104,830	25%
Information Systems Manager	\$103,560	15%
Computer Systems Administrator	\$75,360	15%
Network Administrator	\$72,360	15%
Database Administrator	\$71,360	15%
Systems Administrator	\$68,360	15%
IT Support Specialist	\$48,360	15%
IT Help Desk Technician	\$45,360	15%
IT Project Manager	\$85,360	15%
IT Business Analyst	\$82,360	15%
IT Consultant	\$95,360	15%
IT Trainer	\$55,360	15%
IT Quality Assurance Tester	\$52,360	15%
IT Security Analyst	\$88,360	15%
IT Compliance Analyst	\$78,360	15%
IT Risk Analyst	\$75,360	15%
IT Audit Manager	\$82,360	15%
IT Governance Analyst	\$78,360	15%
IT Policy Analyst	\$75,360	15%
IT Program Manager	\$92,360	15%
IT Product Manager	\$88,360	15%
IT Marketing Manager	\$85,360	15%
IT Sales Manager	\$82,360	15%
IT Customer Support Manager	\$78,360	15%
IT Operations Manager	\$75,360	15%
IT Infrastructure Manager	\$72,360	15%
IT Network Manager	\$68,360	15%
IT Security Manager	\$85,360	15%
IT Compliance Manager	\$78,360	15%
IT Risk Manager	\$75,360	15%
IT Audit Manager	\$82,360	15%
IT Governance Manager	\$78,360	15%
IT Policy Manager	\$75,360	15%
IT Program Manager	\$92,360	15%
IT Product Manager	\$88,360	15%
IT Marketing Manager	\$85,360	15%
IT Sales Manager	\$82,360	15%
IT Customer Support Manager	\$78,360	15%
IT Operations Manager	\$75,360	15%
IT Infrastructure Manager	\$72,360	15%
IT Network Manager	\$68,360	15%
IT Security Manager	\$85,360	15%
IT Compliance Manager	\$78,360	15%
IT Risk Manager	\$75,360	15%
IT Audit Manager	\$82,360	15%
IT Governance Manager	\$78,360	15%
IT Policy Manager	\$75,360	15%

Montgomery County Advanced Manufacturing Pathway

Regional workforce needs support the alignment of education including secondary, 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:

- Math I, II, III, IV
- Science I, II, III, IV
- English I, II, III, IV
- Physical Science I, II, III, IV
- History I, II, III, IV
- Art I, II, III, IV
- Music I, II, III, IV
- Foreign Language I, II, III, IV
- Health I, II, III, IV
- Physical Education I, II, III, IV
- Career Development I, II, III, IV
- Personal Finance I, II, III, IV
- Legal Studies I, II, III, IV
- Government I, II, III, IV
- Philosophy I, II, III, IV
- Religion I, II, III, IV
- Spanish I, II, III, IV
- French I, II, III, IV
- Latin I, II, III, IV
- Classical Studies I, II, III, IV
- World Languages I, II, III, IV
- Global Studies I, II, III, IV
- International Studies I, II, III, IV
- Area Studies I, II, III, IV
- Interdisciplinary Studies I, II, III, IV
- Specialized Studies I, II, III, IV
- Advanced Studies I, II, III, IV
- Capstone I, II, III, IV
- Senior Project I, II, III, IV
- Senior Thesis I, II, III, IV
- Senior Research I, II, III, IV
- Senior Internship I, II, III, IV
- Senior Capstone I, II, III, IV
- Senior Portfolio I, II, III, IV
- Senior Reflection I, II, III, IV
- Senior Evaluation I, II, III, IV
- Senior Celebration I, II, III, IV
- Senior Commencement I, II, III, IV
- Senior Graduation I, II, III, IV
- Senior Reunion I, II, III, IV
- Senior Alumni I, II, III, IV
- Senior Legacy I, II, III, IV
- Senior Impact I, II, III, IV
- Senior Service I, II, III, IV
- Senior Leadership I, II, III, IV
- Senior Innovation I, II, III, IV
- Senior Creativity I, II, III, IV
- Senior Problem Solving I, II, III, IV
- Senior Critical Thinking I, II, III, IV
- Senior Communication I, II, III, IV
- Senior Collaboration I, II, III, IV
- Senior Teamwork I, II, III, IV
- Senior Diversity I, II, III, IV
- Senior Global Awareness I, II, III, IV
- Senior Cultural Understanding I, II, III, IV
- Senior Historical Perspective I, II, III, IV
- Senior Geographical Knowledge I, II, III, IV
- Senior Environmental Stewardship I, II, III, IV
- Senior Civic Engagement I, II, III, IV
- Senior Social Responsibility I, II, III, IV
- Senior Ethical Reasoning I, II, III, IV
- Senior Philosophical Inquiry I, II, III, IV
- Senior Artistic Expression I, II, III, IV
- Senior Musical Creativity I, II, III, IV
- Senior Physical Activity I, II, III, IV
- Senior Health Promotion I, II, III, IV
- Senior Personal Development I, II, III, IV
- Senior Career Readiness I, II, III, IV
- Senior Financial Literacy I, II, III, IV
- Senior Legal Awareness I, II, III, IV
- Senior Governmental Understanding I, II, III, IV

College and Career Preparation

This section provides information on college and career preparation, including the importance of standardized testing, the role of the ACT and SAT, and the importance of college and career counseling.

Subject	ACT Score	SAT Score
Math	24	1050
English	24	1050
Science	24	1050
Writing	24	1050

Manufacturing Competencies

This section lists the manufacturing competencies required for students in the Advanced Manufacturing pathway, including skills in manufacturing processes, quality control, and safety.

Selected Postsecondary Options

Option	Description	Requirements
1. Associate Degree in Manufacturing Technology	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
2. Bachelor's Degree in Manufacturing Technology	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
3. Bachelor's Degree in Industrial Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
4. Bachelor's Degree in Mechanical Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
5. Bachelor's Degree in Electrical Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
6. Bachelor's Degree in Chemical Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
7. Bachelor's Degree in Materials Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
8. Bachelor's Degree in Manufacturing Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
9. Bachelor's Degree in Manufacturing Systems Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.
10. Bachelor's Degree in Manufacturing Process Engineering	Provides students with the skills and knowledge to enter the workforce in a variety of roles.	Completion of all required courses and a minimum GPA of 2.0.

Selected Occupations, Wages, and Job Growth

Occupation	Median Annual Wage	Job Growth (2018-2028)
Manufacturing Technician	\$28,360	15%
Manufacturing Production Worker	\$25,360	15%
Manufacturing Quality Control Inspector	\$32,360	15%
Manufacturing Equipment Operator	\$30,360	15%
Manufacturing Machine Operator	\$28,360	15%
Manufacturing Assembler	\$25,360	15%
Manufacturing Welder	\$35,360	15%
Manufacturing Electrician	\$45,360	15%
Manufacturing Millwright	\$38,360	15%
Manufacturing Tool and Die Maker	\$42,360	15%
Manufacturing Machinist	\$40,360	15%
Manufacturing Welding Inspector	\$38,360	15%
Manufacturing Quality Control Technician	\$35,360	15%
Manufacturing Production Supervisor	\$48,360	15%
Manufacturing Equipment Maintenance Technician	\$32,360	15%
Manufacturing Machine Maintenance Technician	\$30,360	15%
Manufacturing Assembler Supervisor	\$45,360	15%
Manufacturing Welder Supervisor	\$50,360	15%
Manufacturing Electrician Supervisor	\$55,360	15%
Manufacturing Millwright Supervisor	\$48,360	15%
Manufacturing Machinist Supervisor	\$45,360	15%
Manufacturing Welding Inspector Supervisor	\$42,360	15%
Manufacturing Quality Control Technician Supervisor	\$40,360	15%
Manufacturing Production Supervisor	\$48,360	15%
Manufacturing Equipment Maintenance Technician Supervisor	\$35,360	15%
Manufacturing Machine Maintenance Technician Supervisor	\$32,360	15%
Manufacturing Assembler Supervisor	\$45,360	15%
Manufacturing Welder Supervisor	\$50,360	15%
Manufacturing Electrician Supervisor	\$55,360	15%
Manufacturing Millwright Supervisor	\$48,360	15%
Manufacturing Machinist Supervisor	\$45,360	15%
Manufacturing Welding Inspector Supervisor	\$42,360	15%
Manufacturing Quality Control Technician Supervisor	\$40,360	15%