

**Tomorrow's workers  
... They are right here**



**Montgomery County ESC  
Business Advisory Council  
2022-2023 Joint Statement of Work**

# Montgomery County ESC Business Advisory Council

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

### The Business Advisory Council is:

- 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

It's 2023 and we're celebrating the continued progress of our Business Advisory Council. We're focused on serving our schools and our community in designing creative and innovative workforce development strategies. We're also proud to accept our four-star rating from the Ohio Department of Education. We not only received the highest rating possible for our work over the last school year, but we also received awards for excellence in developing professional skills for the future and in building partnerships. Awards and recognition help legitimize our ambitious goals and raise awareness about our initiatives but we are not done! We are committed to continuing to expand opportunities for students in our region. We're particularly focused on better-connecting students to industry-relevant exposure with an emphasis on expanding these opportunities at an early age.

### VISION

All MCECSC BAC member districts' students are career-focused and have the preparation they need to succeed on the job and in life.

### MISSION

We will promote substantive and effective collaboration between educators and industry to prepare students to compete in a global economy.

### VALUES We believe in:

- 1. Integrity** — Our workforce must embrace personal and civic responsibility and hold strong ethical standards.
- 2. Equity** — All students' educational needs and aspirations must be respected. Every career choice has value.
- 3. Innovation** — The job market and employers' needs are ever-changing. Innovation is a constant and requires life-long skill development.
- 4. Diversification** — Montgomery County's economy is diverse by design, and every industry sector is counting on access to talented employees. Young people need to have access to diverse educational options that prepare them to succeed in our local economy.
- 5. Collaboration** — Industry leaders and educators must work together to create a cohesive and sustainable system that builds a highly skilled and adaptable workforce.
- 6. Communication** — Clear and proactive feedback is a prerequisite for successful partnerships.



# How we work together

The Plan was established at this level, and continues to be reviewed and updated based on feedback, and then re-submitted to the Ohio Department of Education and the Governor's office as per ORC mandate.

Members of the Steering Committee are comprised of P2P Institute Attendees, Co-Chairs and 6 Sub-Committee Leaders.

Co-Chairs host the Annual BAC Dinner and facilitate three other MCECSC BAC At-Large Quarterly Meetings. Additionally, the Steering Committee convenes at least two times per year.

Each of the BAC member organizations is expected to have representation on at least one BAC subcommittee.

Each of the 6 subcommittees is responsible for carrying out the specific BAC Goals. The "Plan" established includes the strategies, actions and those responsible associated with each of the 6 Goals. (See *Plan*, pages 12-18.)

Each subcommittee meets regularly. Updates are documented for use at MCECSC BAC quarterly meetings.



# CAREER READINESS PROGRESSION

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

## CAREER AWARENESS

Elementary Grades (K-5)



- **Career Awareness Programming**
  - [A-Z Curriculum](#)
  - Career Speakers
  - Aligned Events

K-8

## CAREER EXPLORATION

Middle Grades (6-8)



- **Career Exploration Course Offerings**
- **Industry Site Visits\***
- **Pathways Fair**

6-8



- **YouScience\***
  - **Student Snapshot\***
    - ↳ Identifies Career Pathway
  - **Job Shadowing Experiences\***  
(aligned to YouScience results)
- \*Can and should be repeated*

8-9

## CAREER PLANNING

High School (9-12)



- **Employability Skills Course**
- **Individualized College and Career Plan**
  - ↳ Identifies /confirms Career Pathway
- **Job Shadowing Experiences**

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- **Essential Career Pathways Course(s)**
  - ↳ Identifies /confirms Career Pathway
- **Digital & Financial Literacy Courses**
- **Job Shadowing Experiences**

10



- **TechPrep/CCP Courses Digital & Financial Literacy Courses**  
(Aligned Pathway)
- **Industrial Credential Curriculum**  
*Sinclair, Graduation Alliance and other identified partners will provide Industry-specific Pathway sheet and Industry Credential Curriculum*
- **Hiring Fairs**
- **Assessment for Industry-recognized Credential**  
*Take at completion of Industry Credential Curriculum*
- **Continued College and Career Advising**

11



**SUMMER Industry experience/ Internship**

3



- **TechPrep/CCP Courses**  
(Aligned Pathway)  
*Sinclair and other higher ed partners will provide Industry-specific Pathway sheet*
- **Industrial Credential Courses**  
*Sinclair, Graduation Alliance and other identified partners will provide Industry Credential Curriculum*
- **College & Career Signing Day**
- **Industry-recognized Credential Assessment**  
*Take at completion of Industry Credential Curriculum*

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**Post-secondary Work/ Training**  
  
Internship, Course-aligned practicum, Apprenticeship, Job or Military

## Pathways to Prosperity Network Update

On behalf of the Business Advisory Council, in the fall of 2018, the Montgomery County ESC joined the Pathways to Prosperity Network in support of implementing the council's goals. Pathways to Prosperity is an initiative of Jobs for the Future at the Harvard Graduate School of Education. Pathways to Prosperity's data-driven work is focused on creating meaningful career pathways for students who are eager to complete high school and earn a high-value credential or degree.

In October 2022, a working group attended the 2022 Fall Pathways to Prosperity Institute. Our group consisted of superintendents and staff from Sinclair College and Learn to Earn Dayton, as well as industry leaders and economic development professionals from the Dayton Development Coalition. After the conclusion of the Fall Institute, we then convened our Pathways to Prosperity support staff to meet in person with our Steering Committee members. This meeting served as an opportunity to better connect our BAC committee co-chairs and update our regional partners. Notably, our Pathways team has assisted us in supporting our monthly Greater Dayton Area Hospital Association Education Subcommittee and hosting Pathway Implementation Labs with local industry groups. These industry-led labs have been instrumental in the recent progress our BAC has made.



# Pathway Implementation Labs

Our Business Advisory Council has focused on engaging our local business community in our pathway-strengthening efforts. Throughout 2022 and into 2023, we have been hosting strategic retreats called Implementation Labs to further leverage our pathway models. In these retreats, we continue to unearth how we can collaborate deeper across industry and education. We are not just focused on the short term. We are specifically exploring what we can do in the long term to connect more students into our workforce pipeline.

Over the summer we hosted a retreat at the Dayton Arcade where we convened partners to discuss computer science-related careers. In November 2022, we brought together our major healthcare employers to explore ways we can better engage our local hospital networks in supporting career connections in K-12. In February 2023, we engaged our advanced manufacturing community to discover ways we can better leverage our progress in exposing students to careers in advanced manufacturing. For a closer examination of these model pathways, please see the index of this report.

# Tackling the Hardest Challenges Facing our BAC

We continue to build on the last couple of years of momentum embracing national and state-sponsored Career Connections Weeks of Action. Utilizing local and national resources, we produce content recommendations and a calendar with a general timeline of when districts could participate in these initiatives. We are continuing to lean into this regional approach to exposing students to careers. This is a living document so it will change as the year progresses but we are excited to leverage a regional strategy linked to proven annual efforts like MFG Month and National Health Professions Week. In 2023, we are focusing on how to engage alumni and recent grads to serve as near-peer voices in our week of action efforts. In 2023, we intend to conduct outreach and engage these alumni to help facilitate and lead our career connections weeks of action.

Some of our region's Coordinated Career Connections Weeks of Action include:

- Construction Appreciation Week** September
- Manufacturing Month** October
- Health Professions Week** November
- Computer Science Education Week** December
- In-Demand Jobs Week** May

The collage features four detailed posters, each representing a different career pathway. Each poster is structured similarly, starting with an overview of the pathway's purpose and then providing a table of academic requirements. The 'Academic Coursework' tables are organized by grade level (e.g., Grade 8-9, Grade 10-11, Grade 12) and list specific courses and credit requirements. Below these tables, each poster includes a 'College and Career Preparation' section, which lists various activities, internships, and resources available to students in that pathway. The posters are visually appealing with clear headings and organized content.

## BUSINESS ADVISORY COUNCIL DATES

### BAC Main Meetings 2022/2023

September 29 8:30 am-10:00 am

November 16 8:30 am-10:00 am

February 22 5:00 pm-8:00 pm (Annual Dinner)

May 3 8:30 am-10:00 am

## WORKING GROUP MEETINGS

### Educator Engagement

October 28 10:30 am-12:00 pm

November 2 10:30 am-12:00 pm

February 15 10:30 am-12:00 pm

March 13 10:30 am-12:00 pm

### Industry Engagement

September 27 10:00 am-12:00 pm

November 2 10:00 am-12:00 pm

February 6 10:00 am-12:00 pm

May 17 10:00 am-12:00 pm

### Parent & Community Engagement

September 14 8:30 am-10:00 am

October 11 8:30 am-10:00 am

January 11 8:30 am-10:00 am

April 18 8:30 am-10:00 am

### Policy & Advocacy

October 20 8:30 am-10:00 am

February 8 8:30 am-10:00 am

March 22 8:30 am-10:00 am

April 20 8:30 am-10:00 am

### Student Engagement

September 19 9:00 am-10:30 am

November 10 9:00 am-10:30 am

December 7 9:00 am-10:30 am

January 18 9:00 am-10:30 am

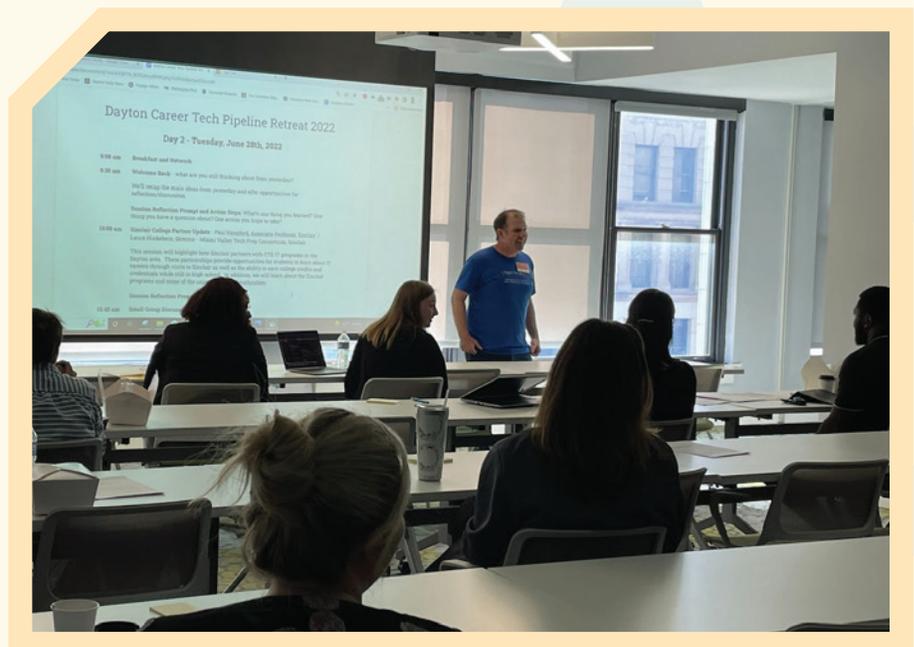
### Warren County Working Group

October 7 9:00 am-10:30 am

December 2 9:00 am-10:30 am

February 3 9:00 am-10:30 am

March 15 9:00 am-10:30 am



## The Way Forward

Building on our BAC plan each year, we're continuing to ask who else needs to be at the table. We're leaning into student feedback and exploring how we can activate our students in creative new ways. Our region's young people are often misunderstood. We're interested in including them in this plan's execution and design efforts. We firmly believe exposing students to potential careers where they can find both meaning and purpose will strengthen their interest in school and anchor them to long-term success later in their lives. We're already scheduling dozens of employer engagement events and we can't wait to see the success of this outreach!

### *Inside Dayton Summer Internship Program:*

This summer, we will convene our third cohort of students in a five-week, paid summer leadership program. In this summer's program, students will meet with elected leaders, industry professionals, community members, and more to learn about the future of our region and the jobs of tomorrow. Please stay tuned for more information on where to direct your students to participate in this opportunity.



### *A quick note on our new Warren County Working Group.*

The working group was formed at the beginning of the 2021-2022 school year and since its inception, we have seen remarkable progress. Our Warren County districts have consistently contributed and invested in district-appropriate programming. We'd like to specifically call out the work of Warren County ESC Superintendent Tom Isaacs and Sinclair College's Chad Bridgman for their leadership in leading this working group. We formed this committee to specifically address the needs and opportunities of Warren County and they have done an excellent job of bringing the right programs, partners, and opportunities to this subcommittee.



651.32

970.30

856.49

120.09

306.98

385.75

762.77

993.28

970.30

# Objectives

## 1) 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.



### Accomplishments

- Partnering schools hosted **1,508 different career exploration experiences** for our region's students.
- We conducted outreach and hosted information sessions, resulting in **100% of our partner school districts administering aptitude and interest assessments** to their students.
- We continue to pioneer a regional approach to career exploration events, resulting in **17 of our partner school districts participating** in this new schedule of in-person and virtual events.
- In Nov. 2022, we held **2 days of Career Exploration Days of Action** at the Dayton Metro Library reaching over 1000+ middle school students from 4 different BAC member districts.

## 2) 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.



### Accomplishments

- We partnered with BAC members to administer an outreach campaign to provide parents and community members with resources to **help families understand educational and career opportunities**. 81% of our BAC districts participated.
- We partnered with school staff and explored new ways to **highlight in-person and online resources for families** to have meaningful conversations with their students about careers.

STUDENT ENGAGEMENT | PARENT AND COMMUNITY ENGAGEMENT



### 3) 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

- We have **hosted three Implementation Labs** to strengthen the worker pipeline of our tech, healthcare, and advanced manufacturing industries.

- Through partnerships with the Dayton Area Chamber of Commerce, SOCHE, and MCECSC, we have continued to promote a **one-stop portal for employers to get involved in our region's schools**.
- We continue to support **industry-led education subcommittees** to inform the BAC's future work and strengthen industry partnerships.

### 4) 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.



#### Accomplishments

- Through our Career Champions and Counselors Academy, **we have taken local educators to visit employers** including Gaming Research Integration for Learning Laboratory (GRILL), Production Control Units, and Sinclair College's Respiratory Therapy Program to learn about career opportunities in our region.

MENT | INDUSTRY ENGAGEMENT | EDUCATOR ENGAGEMENT | POLICY & ADVOCACY



#### 4) **Educator Engagement Accomplishments continued**

- We've hosted 4 Design Labs to **support districts in utilizing and augmenting existing resources** to create opportunities for students in four different in-demand industries.
- We successfully **completed our fourth pathway framework** highlighting ways students can get into teaching.

#### 5) **Policy and 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.

#### ★ **Accomplishments & Update**

- In Oct. 2022, **10 partners** from industry, the community, and K-12 and higher education attended the Pathways to Prosperity Fall Institute.
- This subcommittee continues to serve as a space for districts and major stakeholders to **identify policy priorities and their associated action steps**.
- In 2023, **we plan on hosting another Legislative Update** to highlight the progress we're making as a Business Advisory Council.

#### 6) **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.

#### ★ **Accomplishments**

- We have **held several informational meetings** regarding local workforce programs.
- In 2023, Warren County Career Center will host a series of professional development opportunities designed to **help districts expand their entrepreneurial student opportunities**.

## 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.

Strategy	Schools	Industry	Actions	Responsibility	Timeframe	Metric
1. Utilize social media to expand awareness of careers & educational opportunities	<b>Schools</b>		<ul style="list-style-type: none"> <li>Develop &amp; deploy social media engagement plan in conjunction with County Communications Collaborative and Think TV</li> <li>Plan to better leverage students in outreach efforts</li> <li>Identify opportunities to partner with local interactive media study programs</li> </ul>	<ul style="list-style-type: none"> <li>Student Engagement</li> <li>Parent &amp; Community Engagement</li> <li>Educator Engagement</li> <li>County Communications Collaborative</li> <li>All Districts</li> </ul>	Regularly present at County Communications Collaborative monthly meetings	<ul style="list-style-type: none"> <li>81% of districts utilizing social media for career awareness</li> </ul>
	<b>Industry</b>		<ul style="list-style-type: none"> <li>Provide info/photos/etc. for social media engagement</li> </ul>	Chamber/Industry Orgs/BBB/DDC	Present a mid-school year review to the BAC via email in Jan. 2023	<ul style="list-style-type: none"> <li>We are continuing to produce social media content for schools to share about career opportunities</li> </ul>
2. Increase the use of student aptitude and interest data	<b>Schools</b>		<ul style="list-style-type: none"> <li>Utilize YouScience/Naviance results in programmatic decision making and marketing opportunities</li> <li>Support member districts in understanding their aggregate and individual student assessment results</li> </ul>	MCESC/All Districts	2Q 2023	<ul style="list-style-type: none"> <li>100% of all districts using YouScience, Naviance, OMJ, or some other assessment tool</li> <li>Fully funded for member districts in 2022-2023 school year</li> <li># of districts making informed attendance recommendations for career exploration activities</li> </ul>
	<b>Industry</b>		<ul style="list-style-type: none"> <li>Explore additional funding opportunities for long-term use of software like YouScience</li> </ul>	DDC/Chamber/Trade Orgs		
3. Promote a student-facing information campaign with content that addresses in-demand industry sectors, college affordability, and post-secondary education	<b>Schools</b>		<ul style="list-style-type: none"> <li>Provide career exploration activity time (Power Lunch, Career Fair, guest speakers, etc)</li> <li>Leverage Inside Dayton Internship Program recommendations and work with the Montgomery County Student Advisory Delegation for future feedback and input</li> <li>Organize Five Career Connections Weeks of Action</li> </ul>	MCESC/All Districts	2Q 2023	<ul style="list-style-type: none"> <li>Host 1508 different activities across partner districts</li> <li>90% of districts participating in career connections weeks of action</li> <li>Facilitate more than 476 partnerships with companies</li> <li>Maintain a majority of businesses involved in the BAC to represent our region's in-demand sectors</li> </ul>
	<b>Industry</b>		<ul style="list-style-type: none"> <li>Resource career activities (provide speakers, open for tours, etc.)</li> </ul>	Trade Orgs/Businesses/MVHRA		
4. Create more career content for each of the local in-demand industry sectors	<b>Schools</b>		<ul style="list-style-type: none"> <li>Design a Socratic seminar activity where the student outcomes are industry-directed questions and then work with industry to produce videos responding to those questions</li> <li>Deploy content through classes and other communications channels</li> </ul>	MCESC/All Districts	1Q 2023	<ul style="list-style-type: none"> <li>Create 25 locally produced career-related videos</li> <li>81% of member districts share career videos and content</li> <li>Promote videos with 25 different careers</li> <li>Content will include at least 9 different in-demand sectors and prominently feature younger employees</li> </ul>
	<b>Industry</b>		<ul style="list-style-type: none"> <li>Identify companies and employers for student question response videos</li> </ul>	Trade Orgs/Businesses/MVHRA/Think TV/Higher Ed institutions		
5. Focus on K-5 career connections outreach	<b>Schools</b>		<ul style="list-style-type: none"> <li>Develop K-5 student outreach strategies on a school by school basis utilizing our A to Z videos plus other partner resources</li> <li>Each district will partner with industry to deploy an elementary school healthcare career awareness activity</li> <li>Explore new funding opportunities for additional career exploration curriculum and resources for K-5 outreach</li> </ul>	All Districts/MCESC/L2ED	2Q 2023	<ul style="list-style-type: none"> <li>74% of partner school districts utilize K-5 career connection activities</li> <li># of career connections content Bitly website link clicks - In Progress</li> </ul>
	<b>Industry</b>		<ul style="list-style-type: none"> <li>Provide necessary information for outreach communications</li> </ul>	Trade Orgs/Businesses		

## Parent & 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 the careers available locally.

Strategy	Actions	Responsibility	Timeframe	Metric
1. Complete an asset map of our region's summer and after-school programs	<ul style="list-style-type: none"> <li>Review what summer and afterschool opportunities exist locally and whether they include career connections activities</li> <li>Interview regional leaders on potential opportunities to bridge community programs with K-12 partners</li> </ul>	<ul style="list-style-type: none"> <li>Student Engagement</li> <li>Parent &amp; Community Engagement</li> <li>Educator Engagement</li> <li>County Communications Collaborative</li> <li>All Districts</li> </ul>	1Q 2023	<ul style="list-style-type: none"> <li>Complete asset map - Finished</li> </ul>
	<ul style="list-style-type: none"> <li>Review completed asset map</li> </ul>	Chamber/Industry Orgs/ BBB/DDC	1Q 2023	
2. Utilize social media to expand awareness of careers & educational opportunities	<ul style="list-style-type: none"> <li>Develop &amp; deploy social media engagement plan in conjunction with County Communications Collaborative and Think TV</li> </ul>	<ul style="list-style-type: none"> <li>Student Engagement</li> <li>Parent &amp; Community Engagement</li> <li>Educator Engagement</li> <li>County Communications Collaborative</li> <li>All Districts</li> </ul>	Regularly present at County Communications Collaborative monthly meetings	<ul style="list-style-type: none"> <li>81% of member districts share career connections content</li> </ul>
	<ul style="list-style-type: none"> <li>Provide info/photos/etc. for social media engagement</li> </ul>	Chamber/Industry Orgs/ BBB/DDC	Present a mid-school year review to the BAC via email in Jan. 2023	
3. Promote parent-facing information campaign that addresses in-demand industry sectors, college affordability, and options for education beyond HS	<ul style="list-style-type: none"> <li>Deploy content through official school communications channels, other social media campaigns, and community specific groups</li> <li>Create a shareable Google Sheet career connections content calendar</li> </ul>	MCESC/All Districts	1Q 2023	<ul style="list-style-type: none"> <li>81% of districts utilizing career connections content</li> <li>74% of districts are conducting K-5 career connection outreach</li> </ul>
	<ul style="list-style-type: none"> <li>Provide videos, events, and other resources</li> </ul>	Trade Orgs/Businesses/ MVHRA/Think TV/Higher Ed institutions		

**Parent & Community Engagement continued**

4. Focus on K-5 career connections outreach	<b>Schools</b>	<ul style="list-style-type: none"> <li>Develop K-5 parent outreach strategies on a school by school basis using events like "Dress for Success" utilizing age-appropriate career exploration curriculum</li> <li>Create parent-facing communications highlighting next steps for after outreach activities provided by BAC member districts</li> </ul>	L2ED/MCESC	2Q 2022	<ul style="list-style-type: none"> <li>74% of districts are conducting K-5 career connection outreach</li> </ul>
	<b>Industry</b>	<ul style="list-style-type: none"> <li>Provide necessary information for outreach communications</li> <li>Provide examples of hands-on, age-appropriate K-5 career exploration activities provided by BAC member districts</li> </ul>	Trade Orgs/Businesses/MVHRA/Think TV/Higher Ed institutions		
5. Organize outreach to alumni and recently graduated seniors	<b>Schools</b>	<ul style="list-style-type: none"> <li>Conduct outreach and highlight alumni via digital and physical marketing like posters and social media</li> <li>Focus on outreach to grandparents during career connections weeks of action</li> </ul>	MCESC/All Districts	2Q 2022	<ul style="list-style-type: none"> <li>57% of districts are actively highlighting alumni and recent graduates</li> </ul>
	<b>Industry</b>	<ul style="list-style-type: none"> <li>Provide necessary information for outreach material</li> </ul>	Trade Orgs/Businesses/MVHRA/Think TV/ Higher Ed institutions		

## 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 schedules 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 in school.

Strategy	Actions	Responsibility	Timeframe	Metric
1. Continue adoption and deployment of the Engage platform to educate students, parents, and industry and promote occupational opportunities	<b>Schools</b> <ul style="list-style-type: none"> <li>Deploy the Engage platform through posts on school websites that include materials and important links to standardize messaging for both students, parents, and employers</li> </ul>	MCESC/All Districts	4Q 2023	<ul style="list-style-type: none"> <li>50% of schools link to Engage on their websites by May 30, 2023 - In Progress (34%)</li> <li>Sign up 75 more businesses on Engage - In Progress</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>Utilize Engage platform which houses information on K-12 workforce pathways as well as how to connect with schools for career engagement</li> <li>Continue to provide feedback on the Engage platform</li> </ul>	SOCHE/ Business/ Trade Organizations		
2. Promote and continue to build additional job descriptions with student qualifications and desired learning outcomes in key industries	<b>Schools</b> <ul style="list-style-type: none"> <li>Ensure job descriptions and Career Connections Framework are reflected in coursework</li> <li>Advertise job descriptions and Career Connections Frameworks to students participating in career engagement</li> </ul>	MCESC/All Districts	4Q 2023	<ul style="list-style-type: none"> <li>50% of schools utilize Engage and Career Connections Framework by May 30, 2023 - In Progress</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>Utilize job descriptions in career engagement opportunities</li> <li>Give feedback and suggest new job descriptions</li> </ul>	SOCHE/ Business/ Trade Organizations		
3. Establish partnerships which will provide opportunities to engage students	<b>Schools</b> <ul style="list-style-type: none"> <li>Partner with SOCHE for assistance with student career engagement with industry</li> <li>Identify companies in close proximity to each school for partnership in career engagement</li> </ul>	MCESC/All Districts	2Q 2023	<ul style="list-style-type: none"> <li>50% engage with industry for career engagement - In Progress</li> <li>High schools are continuing to share list of companies they are partnered with</li> <li>Establish committees in 5 Trade Associations - In Progress</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>Build workforce development sub-committees in your Industry group to discuss and participate in career engagement</li> <li>Utilize the career engagement form on Engage to partner with schools in the region</li> <li>Work with Trade Associations to engage with schools and utilize a sustainable process to build workforce</li> </ul>	SOCHE/ Business/ Trade Organizations		
4. Increase the # of students who participate in career engagement opportunities	<b>Schools</b> <ul style="list-style-type: none"> <li>Utilize Transeo to track career engagement of students</li> <li>Every school develops a list of students prepared for career engagement</li> <li>Students complete resume in order to prepare for career engagement opportunities</li> </ul>	MCESC/All Districts	2Q 2023	<ul style="list-style-type: none"> <li>Collect baseline data on industry opportunities with Transeo - In Progress</li> <li>We are currently developing and publishing a deployment campaign</li> <li>We are currently developing and deploying a promotion campaign</li> <li>We are in progress to reach 1,200 students this school year</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>Analyze operations to determine areas in organization that can benefit from an intern</li> <li>Engage students in career engagement opportunities</li> </ul>	SOCHE/ Business/ Trade Organizations		

## Policy and 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.



**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 2022-2023 school year	<b>Schools</b> <ul style="list-style-type: none"> <li>To provide on the ground observations as it pertains to workforce development policy for schools</li> </ul>	All districts	Create an initial agenda with key policy priorities for Q2 2023	<ul style="list-style-type: none"> <li>Creation of a policy agenda - In Progress</li> <li>Identification of 2 to 3 key policy priorities - In Progress</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>To provide feedback on workforce needs and possible policy and legislative language changes</li> </ul>	Chamber/Industry Orgs/ BBB/DDC		
2. Examine and recommend changes to policies to address our state's digital divide and online access issues	<b>Schools</b> <ul style="list-style-type: none"> <li>Remediate barriers to credential and degree completion with local, state, and federal resources available</li> </ul>	All districts	2Q 2023	<ul style="list-style-type: none"> <li>Successfully map online learning access and barrier to virtual learning in our region - In Progress</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>Highlight possible public/private partnerships</li> </ul>	Chamber/Industry Orgs/ BBB/DDC		
3. Explore policies specifically aimed at offering more work-based learning opportunities for K-12 students	<b>Schools</b> <ul style="list-style-type: none"> <li>Partner with employers to create high quality work-based learning experiences</li> </ul>	All districts	2Q 2023	<ul style="list-style-type: none"> <li>Define draft incentives/policies - In Progress</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>Identify pragmatic incentives and policies to increase employer participation in work-based learning opportunities</li> </ul>	Chamber/Industry Orgs/ BBB/DDC		
4. Improve tracking and access to community workforce data	<b>Schools</b> <ul style="list-style-type: none"> <li>Define what datasets would help build capacity for schools to understand if equity or opportunity gaps exist</li> <li>Where equity gaps exist, define strategies to close those identified gaps</li> </ul>	All districts	2Q 2023	<ul style="list-style-type: none"> <li>Define strategies to identify important workforce data - In Progress</li> <li>Provide access to relevant data - In Progress</li> </ul>
	<b>Industry</b> <ul style="list-style-type: none"> <li>Explore, measure, and disaggregate college credit attainment, industry recognized credential attainment, and Ohio means jobs readiness seal attainment</li> </ul>	Chamber/Industry Orgs/ BBB/DDC		

## 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.

Strategy	Actions	Responsibility	Timeframe	Metric
1. Align existing programs and resources to meaningfully meet the ODE career connections requirements	Determine and Promote MCEC BAC Operational Definitions of Work-Based Learning	Educator Engagement Team, with ODE Representative	May 2023 focus on CS, Healthcare, and Adv Manufacturing	<ul style="list-style-type: none"> <li>Measured by awareness of School Career Connections Survey - In Progress</li> </ul>
	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 2023 focus on CS, Healthcare, and Adv Manufacturing	<ul style="list-style-type: none"> <li># of districts receiving support - Currently Assessing</li> </ul>
	Share examples of Career Connections at Career Champions meetings	MCEC Staff	Ongoing Qrtly Meetings	<ul style="list-style-type: none"> <li>One Career Connection highlighted at each meeting - In Progress</li> </ul>
	Utilize an adaptable career connections planning tool for districts that identifies requirements by band, aligns available resources, and identifies gaps	Educator Engagement Team	2022-2023 focus on CS, Healthcare, and Adv Manufacturing	<ul style="list-style-type: none"> <li>Create a guide highlighting BAC member districts' utilization of these tools - In Progress</li> </ul>
	Partner with schools to help plug identified gaps with industry-relevant opportunities (speakers, tours, lunches, projects, etc)	TBD as gaps are identified	2022-2023 focus on CS, Healthcare, and Adv Manufacturing	<ul style="list-style-type: none"> <li>Partner with 100% of districts in a one on one meeting to discuss industry-relevant opportunities - In Progress</li> </ul>
	Share Learn to Earn Indicators, Career Readiness Survey Data, and Snapshot Data with Career Champions, Counselors, Building Admin, MVRCD, Teachers	MCEC/L2ED Staff & Educator Engagement Team	Annually	<ul style="list-style-type: none"> <li>Host professional learning around state's new data portal - In Progress</li> </ul>
Meet with five districts to review their career connections related data and brainstorm potential areas of collaboration	<ul style="list-style-type: none"> <li>Meet with 5 districts - In Progress</li> </ul>			
Explore new ways to leverage statewide data portal	<ul style="list-style-type: none"> <li>75% of districts reporting use of data walks - In Progress</li> </ul>			
2. Utilize data to drive decision and increase career readiness across the educational continuum				

**Educator Engagement continued**

<b>Strategy</b>	<b>Actions</b>	<b>Responsibility</b>	<b>Timeframe</b>	<b>Metric</b>
<b>3. Expand authentic experiences and activities connected to careers</b>	Leverage and promote career activities and tasks that align with content standards (technical and employability skills)	All districts, MCEC staff	2022-2023 academic year	<ul style="list-style-type: none"> <li>• 1,508 career connection experiences</li> <li>• Track # of schools implementing K-5 career connections - In Progress</li> </ul>
	Promote careers within each Industry Cluster, by generating resources and activities for one week's worth of programming for each cluster	All districts, MCEC staff	2022-2023 academic year	<ul style="list-style-type: none"> <li>• Creation of (1) week of programming for each cluster - In Progress</li> </ul>
	Host quarterly Career Champions/Counselors Meetings with Industry Tours	All districts, MCEC staff	2022-2023 academic year	<ul style="list-style-type: none"> <li>• Host 4 quarterly meetings - In Progress</li> </ul>
	Host Teacher Industry Experience	All districts, MCEC staff	2022-2023 academic year	<ul style="list-style-type: none"> <li>• Host 4 teacher industry experiences - In Progress</li> </ul>
	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	2022-2023 academic year	<ul style="list-style-type: none"> <li>• Track # of focus groups - In Progress</li> </ul>
<b>4. Create plug and play structural course alignment options for workforce sectors</b>	Host Career Pathway Design Labs	MCEC & L2ED in coordination with the Educator Engagement Team	2022-2023 academic year	<ul style="list-style-type: none"> <li>• 4 Career Pathway Design Labs held</li> <li>• Track # of pre-apprenticeships/ apprenticeships - In Progress</li> </ul>
	Partner with schools in the Career Pathway Design Lab process	Chamber, Trade Orgs & Key business leads in identified pathways	2022-2023 academic year	<ul style="list-style-type: none"> <li>• Name of partners participating - In Progress</li> </ul>



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Regional pathway models support the alignment of stakeholders including employers, higher education, K-12, and workforce, to ensure pathways prepare young people for careers with family-supporting wages and build a robust talent pipeline for employers. Pathway models demonstrate a vision from 8th grade to career including high school coursework, college and career preparation activities, potential postsecondary programs, and in-demand jobs in the regional labor market. This is a living document that will need to be updated regularly to reflect current education programs and workforce needs.

## Academic Coursework

This general coursework is recommended for all students in the IT/computer science pathway.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12	
<b>Career Focused Courses</b>	Information Technology Networking Programming	Foundational IT/Comp Sci or CCP Course such as: ⊕ CIS 1107–Introduction to Operating Systems ⊕ BIS 1120–Introduction to Software Applications ⊕ BIS 1105–IT Fundamentals	Strategic CCP Course such as: ⊕ CIS 1130–Network Fundamentals ⊕ CIS 1111–Introduction to Problem Solving and Computer Programming	Strategic CCP Course such as: ⊕ CIS 1140–Information Systems Analysis and Design ⊕ CIS 2165–Database Management	<p>⊕ <b>Note:</b> College Credit Plus courses apply to both high school and postsecondary requirements, saving students time and money. Students who complete the following six courses can earn the IT Fundamentals Certificate at Sinclair Community College: BIS 1120, CIS 1107, CIS 1111, CIS 1130, CIS 1140, CIS 2165</p>
<b>English</b>	Grade 8 English	English I English II	English III	English IV ⊕ ENG 1101–English Composition I	
<b>Math</b>	Algebra I	Geometry ⊕ MAT 1470–College Algebra	Algebra II	Trigonometry/Calculus	
<b>History</b>	Social Studies	World History	US History	US Government	
<b>Science</b>	Physical Science	Biology	Chemistry	Physics	

## College and Career Preparation

These additional activities support students in preparing for both college and career. Work-based learning enables students to apply their academic learning in a real-world setting. Advising supports students in making decisions that align best with their strengths and future goals. Competencies describe the technical skills students need for a successful career in information technology and computer science.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12
<b>Work-Based Learning</b>	<b>Career Exploration:</b> • Career Adventures Course—IT • Work-Site Tours • Power Lunches • Pathway Fairs	<b>Career Planning:</b> • Job Shadow • HR Interview • Virtual Pathway Mentor • Resume Prep	<b>Career Planning:</b> • Internship • Career Fair • Mock Interview	<b>Career Planning:</b> • Internship • Career Fair • Mock Interview • Exposure to Related Software Languages
<b>Advising</b>	• YouScience	• Individualized College and Career Plan (ICCP) • Confirmation of Pathway • Identification of Credentials and College Options • Revisit ICCP	• Financial Literacy Course • College Application Prep Work • Industry Recognized Credential Examination	• Free Application for Federal Student Aid (FAFSA) • Complete Ohio Means Jobs (OMJ) Readiness Seal • College and Career Signing Day
<b>Competencies</b>	• Employability Skills Course	• User and Customer Support • Principles of IT Systems and Concepts • Principles of Data and Documentation • Logic and Fundamentals of Computer Languages • Principles of Software • Word Processing, Spreadsheet, and Presentation Software	• Security, Compliance, and Risk Management • Routing and Network Configurations • Servers and Storage • Fundamentals of Cloud Computing and Virtualization	• Individualized Specialization

## IT/Computer Science Technical Competencies

### User and Customer Support

Use understanding of the range of services and customer-focused approaches used to provide assistance and technical support in order to help users solve problems and implement solutions related to IT.

### Principles of IT Systems and Concepts

Use understanding of fundamental IT concepts, systems, platforms, and tools to understand the common roles and career trajectories of IT professionals.

### Principles of Data and Documentation

Use understanding of numerical sequencing, information flow, data, and record keeping in order to understand the role of technology in converting data into organized content and maintaining accurate records.

### Logic and Fundamentals of Computer Languages

Use understanding of how computer languages communicate to build basic mobile and web applications.

### Principles of Software

Use understanding of designing, writing, testing, and maintaining source code of computer program to manage, maintain, and edit software.

### Word Processing, Spreadsheet, and Presentation Software

Use understanding of Microsoft Office and Google Suite to create written documents, organize data, and develop visual presentations.

### Security, Compliance, and Risk Management

Use understanding of malware, firewall, IDS, and legal or regulatory requirements to recognize basic threats to networked computers and ensure procedures are in place for compliance.

### Routing and Network Configurations

Use understanding of common networking protocols to explain the purpose of routing, monitoring, and network configurations.

### Servers and Storage

Use understanding of data backup systems to store and recover information.

### Fundamentals of Cloud Computing and Virtualization

Use understanding of the features, benefits, and concepts of virtualization to differentiate among types of cloud services.

## Selected Postsecondary Options

The selected postsecondary credentials in IT/computer science are based on program options and transfer agreements at Sinclair Community College. Some education paths have credentials that easily stack or build from the previous credential, while others are not as easily stackable. Stackable credentials can help an individual progress in their career pathway or move up a career ladder to different or higher paying jobs. Within the fields of IT and computer science, a particular education credential can prepare students for a variety of occupations.

	 Potential Initial Credential	 Stackable Credentials	 Typical Occupational Outcome	
Computer Information Technology	<ul style="list-style-type: none"> <li>• CompTIA A+</li> <li>• CompTIA IT Fundamentals+</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Computer Information Systems—User Support Associate of Applied Science</b> Students eligible to take the following certification exams: A+, Network+, Security+, MCSA Exam TestOut Client Pro</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Information Systems Bachelor of Science</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Network Support Specialist</li> <li>• Computer User Support Specialist</li> </ul>
	<ul style="list-style-type: none"> <li>• CompTIA IT Fundamentals+</li> <li>• CompTIA A+</li> <li>• CCENT</li> <li>• Network+</li> <li>• MTA</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Computer Information Systems—Network Engineering Associate of Applied Science</b> Students eligible to take the following certification exams: CCNA, Security+, A+, MCSA Exam TestOut Server Pro 2016: Install and Storage* *This credential is connected to an optional elective course, students need to take that specific elective in order to take the certification exam.</li> </ul>		<ul style="list-style-type: none"> <li>• Network Administrator</li> <li>• Network Security Analyst</li> <li>• Network Engineer</li> </ul>
	<ul style="list-style-type: none"> <li>• CompTIA IT Fundamentals+</li> <li>• MTA</li> <li>• CompTIA A+</li> <li>• OCAJ</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Computer Information Systems—Software Development Associate of Applied Science</b> Students eligible to take the Network+ certification exam</li> </ul>		<ul style="list-style-type: none"> <li>• Software Developer</li> <li>• Web Developer</li> <li>• Help Desk Analyst</li> <li>• Network Administrator</li> <li>• User Support Specialist</li> <li>• Network Security Analyst</li> <li>• Network Engineer</li> </ul>
Cybersecurity: Prevention and Investigation Technology	<ul style="list-style-type: none"> <li>• CompTIA IT Fundamentals+</li> <li>• CompTIA A+</li> <li>• MTA</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Computer Information Systems—Secure System Administration Associate of Applied Science</b> Students eligible to take the following certification exams: Network+, Linux+, Security+, MCSA Exam TestOut Server Pro 2016: Install and Storage, MCSA Exam TestOut Server Pro 2016: Networking, MCSA Exam TestOut Server Pro: Identify, Securing Windows Network Environment 2016 Exam</li> </ul>	<ul style="list-style-type: none"> <li>• Information Technology and Cybersecurity Bachelor of Science</li> </ul>	<ul style="list-style-type: none"> <li>• Cybersecurity Analyst/Technician</li> <li>• Cyber Crime Analyst/Investigator</li> <li>• Incident Analyst/Responder</li> <li>• IT Auditor</li> </ul>
	<ul style="list-style-type: none"> <li>• CompTIA IT Fundamentals+</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Cyber Investigation Technology Associate of Applied Science</b> Students eligible to take the following certification exams: Network+, Linux+, Security+, MCSA Exam TestOut Server Pro 2016: Install and Storage, Securing Windows Network Environment 2016 Exam</li> </ul>		<ul style="list-style-type: none"> <li>• Intelligence Analyst</li> <li>• IT Specialist</li> <li>• Systems Administrator</li> <li>• Network Engineer</li> <li>• Information System Security Manager</li> <li>• Cyber Security Incident Response Specialist</li> <li>• Private Investigator</li> </ul>
Guided Transfer	<ul style="list-style-type: none"> <li>• CompTIA IT Fundamentals+</li> <li>• CompTIA A+</li> <li>• CompTIA Security+</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Science Associate of Science</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Science Bachelor of Science</li> </ul>	<ul style="list-style-type: none"> <li>• Software Developer</li> <li>• Software Engineer</li> <li>• Data Engineer</li> </ul>

## Selected Occupations, Wages, and Job Growth

The IT and computer science careers listed below are projected to grow in the region. The living wage (\$23.16/hour) is from the MIT Living Wage Calculator for one adult and one child in Montgomery County in 2021. Note that all occupations included have median hourly earnings above a living wage, but that some jobs have a large pay range; this means that employees who have less experience, credentials, and skills can be paid significantly less than the median wage, which can be seen in the “entry level wages” column. The last column shows national data on how many workers in these positions have a bachelor’s degree or higher, indicating that for some positions, a four-year degree is an important credential.

Typical Job	Alternate Job Titles	Pays Living Wage (\$23.16)			Expected Growth (2020–2025)		Typical Work Experience Required	Workers with a Bachelor’s or Higher*
		Median Hourly Earnings	Entry Level Wages	Positions (2020)	Positions	Percent		
Software Developers	<ul style="list-style-type: none"> <li>• Application Developers</li> <li>• Systems Engineer</li> </ul>	\$44.13	\$26.68	5,561	646	12%	None	85%
Computer Systems Analysts	<ul style="list-style-type: none"> <li>• Information Technology Analyst</li> </ul>	\$42.09	\$26.36	1,740	127	7%	None	73%
Computer and Information Systems Managers	<ul style="list-style-type: none"> <li>• Application Development</li> <li>• Director IT Director</li> </ul>	\$63.86	\$41.01	943	92	10%	5+ Years	73%
Computer User Support Specialists	<ul style="list-style-type: none"> <li>• Desktop Support Technician</li> <li>• Help Desk Analyst</li> </ul>	\$25.39	\$15.82	2,129	71	3%	None	48%
Information Security Analysts	<ul style="list-style-type: none"> <li>• Information Security Officer</li> <li>• Network Security Analyst</li> </ul>	\$47.61	\$27.32	373	65	17%	Less Than 5 Years	67%
Network and Computer Systems Administrators	<ul style="list-style-type: none"> <li>• Network Administrator</li> <li>• Systems Administrator</li> </ul>	\$37.41	\$23.56	955	27	3%	None	54%
Computer Network Architects	<ul style="list-style-type: none"> <li>• Network Analyst</li> <li>• Network and Security Engineer</li> </ul>	\$43.36	\$28.72	293	23	8%	5+ Years	57%
Web Developers	<ul style="list-style-type: none"> <li>• Web Designer</li> <li>• Webmaster</li> </ul>	\$38.45	\$21.03	750	6	1%	None	68%

# Montgomery County Health Science Pathway

Regional pathway models support the alignment of stakeholders including employers, higher education, K-12, and workforce, to ensure pathways prepare young people for careers with family-supporting wages and build a robust talent pipeline for employers. Pathway models demonstrate a vision from 8th grade to career including high school coursework, college and career preparation activities, potential postsecondary programs, and in-demand jobs in the regional labor market. This is a living document that will need to be updated regularly to reflect current education programs and workforce needs.

## Academic Coursework

This general coursework is recommended for all students in the health science pathway.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12	
Career Focused Courses	Health Science and Technology	Foundational Health Science or CCP Course such as: + ALH 1101–Introduction to Healthcare Delivery	Strategic CCP Course such as: + HIM 1101–Medical Terminology	Strategic CCP Course such as: + PSY 1100–General Psychology	+ College Credit Plus (CCP) courses apply to a broad range of postsecondary programs in health science. The credits apply to both high school and postsecondary requirements, saving students time and money.
English	Grade 8 English	English I, English II + ENG 1101–English Composition	English III + COM 2206–Interpersonal Communication	English IV + COM 2206–Interpersonal Communication	
Math	Grade 8 Math or Algebra I	Algebra I, Geometry + MAT 1470–College Algebra	Algebra II	Trigonometry/Calculus + MAT 1470–College Algebra	
History	Social Studies	World History	US History	US Government	
Science	Physical Science	Biology + BIO 1107–Human Biology	Chemistry	Physics + BIO 1141–Principles of Anatomy & Physiology I	

## College and Career Preparation

These additional activities support students in preparing for both college and career. Work-based learning enables students to apply their academic learning in a real-world setting. Advising supports students in making decisions that align best with their strengths and future goals. Competencies describe the technical skills students need for a successful career in the health sciences.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12
Work-Based Learning	Career Exploration: • Career Adventures Course—Healthcare • Work-Site Tours • Power Lunches • Pathway Fairs	Career Planning: • Job Shadow • HR Interview • Virtual Pathway Mentor • Resume Prep	Career Planning: • Internship • Career Fair • Mock Interview	Career Planning: • Internship • Career Fair • Mock Interview
Advising	• YouScience	• Individualized College and Career Plan (ICCP) • Confirmation of Pathway • Identification of Credentials and College Options • Revisit ICCP	• Financial Literacy Course • College Application Prep Work • Industry Recognized Credential Examination	• Free Application for Federal Student Aid (FAFSA) • Complete Ohio Means Jobs (OMJ) Readiness Seal • College and Career Signing Day
Competencies	• Employability Skills	• Computer Applications, Records, and Data Recording • Professional Working Environments • Healthcare Rules and Regulations • Healthcare Industry Ethics • Healthcare Confidentiality	• Medical Terminology • Customer Service and Patient Focus • Healthcare Safety Systems and Environment • Healthcare Professional Licensure • Healthcare Sanitation	• Individualized Specialization

## Health Science Technical Competencies

### Computer Applications, Records, and Data Recording

Use understanding of keyboarding, data entry, and word processing to accurately record information on health technology systems.

### Professional Working Environments

Use understanding of the importance of a sequence of tasks, cross-functional working environments, and professional communication to successfully work as part of a team.

### Healthcare Rules and Regulations

Use understanding of basic laws and regulations (Patient Bill of Rights, CLIA, EMTALA, OSHA, etc.) to meet accreditation standards and obey the law.

### Healthcare Industry Ethics

Use understanding of confidentiality, morality, and legal concepts to evaluate and apply the merits, risks, and social concerns to workplace decisions.

### Healthcare Confidentiality

Use understanding of HIPAA in order to adhere to legal requirements and maintain confidentiality.

### Medical Terminology

Use understanding of basic medical terminology, including abbreviations, acronyms, and diagnostic terms, to communicate effectively with healthcare personnel and patients.

### Customer Service and Patient Focus

Use understanding of communication, active listening, and conflict resolution to identify and meet the needs of a patient or customer.

### Healthcare Safety Systems and Environment

Use understanding of health and safety procedures and protocols to ensure a safe, secure, and healthy work environment.

### Health Professional Licensure

Use understanding of appropriate industry education requirements, licensure, and certification to ensure adherence to regulations that guide service delivery.

### Healthcare Sanitation

Use understanding of health cleanliness regulations and sanitation procedures to ensure that healthcare facilities and tools meet standards for cleanliness.

## Selected Postsecondary Options

The selected postsecondary credentials in health science are based on program options and transfer agreements at Sinclair Community College. Some education paths have credentials that easily stack or build from the previous credential, while others are not as easily stackable. Stackable credentials can help an individual progress in their career pathway or move up a career ladder to different or higher paying jobs.

	 Potential Initial Credential	 Stackable Credentials	 Typical Occupational Outcome	
Allied Health	Radiographer	Associate of Applied Science in Radiologic Technology—students eligible to take the ARRT exam	Advanced Imaging Certifications e.g.: Computed Tomography (CT), Magnetic Resonance Imaging (MRI), and Mammography Bachelor of Radiation Science Technology Bachelor of Science in Healthcare Administration	Radiologic Technician
	State Tested Nurse Aide (STNA)	Associate of Applied Science in Respiratory Care	Bachelor of Science in Respiratory Care Bachelor of Health Sciences Bachelor of Science in Healthcare Administration	Respiratory Therapist
	Certified Dental Assistant	Associate of Applied Science in Dental Hygiene—students eligible to take state board exams and apply for state licensing	Expanded Function Dental Auxiliary (EFDA) Continuing Education Programs e.g.: Local Anesthesia and Nitrous Oxide for Dental Hygiene	Dental Hygienist
Nursing	State Tested Nurse Aide (STNA) Licensed Practical Nurse (LPN)	Associate of Applied Science (AAS) in Nursing—students eligible to take RN exam	Bachelor of Science in Nursing (BSN) Master of Science in Nursing (MSN)	Nurse
Guided Transfer (pre-med, pre-dentistry, or other advanced degree track)	State Tested Nurse Aide (STNA)	Associate of Science in Pre-Professional Studies	Bachelor of Science Doctoral Degree	Physician (Doctor or Dentist)

## Selected Occupations, Wages, and Job Growth

The health science careers listed below are projected to grow in the region. The living wage (\$23.16/hour) is from the MIT Living Wage Calculator for one adult and one child in Montgomery County in 2021. Note that some jobs in the table do not pay a living wage and do not easily stack to further credentials, making economic advancement difficult.

Typical Job	Pays Living Wage (\$23.16)	Median Hourly Earnings	Preferred Education	Stackable Credential	Positions (2020)	Expected Growth (2020–2030)	
						Positions	Percent
Home Health and Personal Care Aides	No	\$11.33	Short-Term Home Health Aide Certificate	Not typically stackable	3,458	860	25%
Medical Assistants		\$16.53	Medical Assistant Technology (AAS)		1,701	432	25%
Emergency Medical Technicians and Paramedics		\$16.53	Emergency Medical Services (AAS)		502	159	32%
Phlebotomists		\$16.85	Short-Term Phlebotomy Certificate		742	144	19%
Medical and Health Services Managers	Yes	\$47.22	Health Information Management/ Administration (BS)	Health Administration (MS)	808	116	14%
Respiratory Therapists		\$28.60	Respiratory Care (AAS)	Respiratory Care (BS)	584	71	12%
Radiologic Technicians		\$28.24	Radiographic Technology (AAS)	Radiation Science Technology (BS)	626	43	7%
Diagnostics Medical Sonographers		\$35.77	Diagnostic Medical Sonography (AAS)	Diagnostic Medical Sonography (BS)	284	39	14%
Dental Hygienists		\$34.00	Dental Hygiene (AAS)	Expanded Function Dental Auxiliary (EFDA) License	644	20	3%
Registered Nurses	Yes	\$32.61	Nursing (BS)	Nursing (MS)	10,190	611	6%
Nurse Practitioners		\$51.02	Nursing (MS)	Terminal degree for this occupation	672	174	26%
Physicians	Yes	\$101.08	Doctor of Medicine (MD)	Terminal degree for this occupation	1,220	141	12%

This document was developed by JFF, Learn to Earn Dayton, and the Montgomery County ESC. Special thanks to the Greater Dayton Area Hospital Association (GDAHA) Education Subcommittee and Sinclair Community College for your feedback and contributions.

# Montgomery County Advanced Manufacturing Pathway

Regional pathway models support the alignment of stakeholders including employers, higher education, K–12, and workforce, to ensure pathways prepare young people for careers with family-supporting wages and build a robust talent pipeline for employers. Pathway models demonstrate a vision from 8th grade to career including high school coursework, college and career preparation activities, potential postsecondary programs, and in-demand jobs in the regional labor market. This is a living document that will need to be updated regularly to reflect current education programs and workforce needs.

## Academic Coursework

This general coursework is recommended for all students in the advanced manufacturing pathway.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12	
Career Focused Courses		<b>Foundational Advanced Manufacturing or CCP Course such as:</b> + MET 1131–Personal Computer Applications for Engineering Technology + CAM 1109–Fundamentals of Tooling and Machining	<b>Strategic CCP Course such as:</b> + EET 1120–Introduction to DC and AC Circuits + EGR 1106–Basic Mechanical and Technical Skills	<b>Strategic CCP Course such as:</b> + COM 2211–Effective Public Speaking	+ College Credit Plus (CCP) courses apply to a broad range of postsecondary programs in advanced manufacturing. The credits apply to both high school and postsecondary requirements, saving students time and money.
English	Grade 8 English	English I English II	English III	English IV + ENG 1101–English Composition I	
Math	Grade 8 Math or Algebra I	Algebra I Geometry	Algebra II	Trigonometry/Calculus + MAT 1470–College Algebra	
History	Social Studies	World History	US History	US Government	
Science	Physical Science	Biology	Chemistry	Physics	

## College and Career Preparation

These additional activities support students in preparing for both college and career. Work-based learning enables students to apply their academic learning in a real-world setting. Advising supports students in making decisions that align best with their strengths and future goals. Competencies describe the technical skills students need for a successful career in advanced manufacturing.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12
Work-Based Learning	<b>Career Exploration:</b> • Workforce Sector Course—Advanced Manufacturing • Work-Site Tours • Power Lunches • Pathway Fairs	<b>Career Planning:</b> • Job Shadow • HR Interview • Virtual Pathway Mentor • Resume Prep	<b>Career Planning:</b> • Internship • Career Fair • Mock Interview	<b>Career Planning:</b> • Internship • Career Fair • Mock Interview
Advising	• YouScience	• Individualized College and Career Plan (ICCP) • Confirmation of Pathway • Identification of Credentials and College Options • Revisit ICCP	• Financial Literacy Course • College Application Prep Work • Industry Recognized Credential Examination	• Free Application for Federal Student Aid (FAFSA) • Complete Ohio Means Jobs (OMJ) Readiness Seal • College and Career Signing Day
Competencies	• Employability Skills	• Equipment Safety • Manufacturing Environment • Personal Health and Safety • Spatial Reasoning • Process, Design, and Development • Installation	• Customer Focus • Quality Assurance and Continuous Improvement • Digital Manufacturing • Supply Chain Logistics	• Individualized Specialization

## Manufacturing Competencies

### Equipment Safety

Students can use their understanding of equipment usage, practices, and procedure to maintain a healthy, safe, and secure work environment.

### Manufacturing Environment

Students can use their understanding of workstations, tools, and equipment operations to safely navigate a manufacturing environment.

### Personal Health and Safety

Students can use their understanding of personal safety and environmental regulations to comply with local, federal, and company health/safety demands.

### Spatial Reasoning

Students can use their understanding of objects in relation to one another to understand three-dimensional imaging.

### Process, Design, and Development

Students can use their understanding of technical drawings and schematics to complete the design and development process.

### Installation

Students can use their understanding of tools to assemble and disassemble simple tools.

### Customer Focus

Students can use their understanding of communication and project management to understand client needs and complete projects accordingly.

### Quality Assurance and Continuous Improvement

Students can use their understanding of product and process to meet quality systems requirements as defined by customer specifications.

### Digital Manufacturing

Students can use their understanding of digital manufacturing tools and computer-based programs to complete the development and design for implementation processes.

### Supply Chain Logistics

Students can use their understanding of materials, suppliers, and internal systems to plan and monitor movement and storage of materials and products.

## Selected Postsecondary Options

The selected postsecondary credentials in advanced manufacturing are based on program options and transfer agreements at Sinclair Community College, except for the welding program, offered through Hobart Institute. Some education paths have credentials that easily stack or build from the previous credential, while others are not as easily stackable. Stackable credentials can help an individual progress in their career pathway or move up a career ladder to different or higher paying jobs.

	 Initial Credentials	 Stackable Credentials	 Potential Occupational Outcome
Engineering Technology	<ul style="list-style-type: none"> <li><b>Industrial Engineering Technology Associate of Applied Science</b> Students eligible to take the following certification exam: Six Sigma Green Belt Certification</li> </ul>	<ul style="list-style-type: none"> <li><b>Bachelor of Science in Industrial Engineering Technology</b> (with additional transfer courses)</li> </ul>	<ul style="list-style-type: none"> <li>Engineering Technicians</li> <li>Quality Control Technicians</li> <li>Production Supervisors</li> <li>Continuous Improvement Specialists</li> </ul>
	<ul style="list-style-type: none"> <li><b>Mechanical Engineering Technology Associate of Applied Science</b> Students eligible to take the following certification exam: Certified SolidWorks Associate (CSWA) IRC</li> </ul>	<ul style="list-style-type: none"> <li><b>Bachelor of Science in Mechatronics Engineering</b></li> <li><b>Bachelor of Science in Mechanical and Manufacturing Engineering Technology</b></li> </ul>	<ul style="list-style-type: none"> <li>Mechanical Engineering Technicians</li> </ul>
	<ul style="list-style-type: none"> <li><b>Automation and Control Technology with Robotics</b> Students eligible to take the following certification exam: FANUC Handling Tool</li> </ul>		<ul style="list-style-type: none"> <li>Control System Technician and Designer</li> <li>Systems Engineering Technician</li> <li>Industrial Equipment Professional</li> </ul>
Welding (Hobart Institute)	<ul style="list-style-type: none"> <li><b>Pathway Welding Program</b> Students eligible to take four nationally recognized certifications: AWS® D1.1 Shielded Metal Arc Welding AWS® D1.1 Flux Cored Arc Welding AWS® D1.6 Gas Tungsten Arc AWS® D1.1 Gas Metal Arc Welding Pulsed Spray Transfer</li> </ul>	<ul style="list-style-type: none"> <li><b>Welder-Fabricator Pathway</b> Students eligible to take two additional nationally recognized certifications: AWS® D1.1 Gas Metal Arc Welding Pulsed Spray 3G AWS® D1.1 Flux Cored Arc Welding Self-shielded</li> </ul>	<ul style="list-style-type: none"> <li>Welder</li> </ul>
Computer Aided Manufacturing	<ul style="list-style-type: none"> <li><b>Computer Aided Manufacturing/CNC Technology Associate of Applied Science</b></li> </ul>		<ul style="list-style-type: none"> <li>Machinist/CNC Machinist</li> <li>Process Improvement Specialist</li> </ul>
Guided Transfer	<ul style="list-style-type: none"> <li><b>Engineering and Engineering Technology University Transfer Associate of Science</b></li> </ul>	Several options including, but not limited to: <ul style="list-style-type: none"> <li>Bachelor of Science in Civil Engineering</li> <li>Bachelor of Science in Electrical Engineering</li> <li>Bachelor of Science in Mechanical Engineering</li> <li>Bachelor of Science in Industrial Engineering</li> </ul>	<ul style="list-style-type: none"> <li>Engineer</li> </ul>

## Selected Occupations, Wages, and Job Growth

The advanced manufacturing careers listed below are projected to have job openings over the next five years in the region. The living wage (\$28.66/hour) is from the MIT Living Wage Calculator for one adult and one child in Montgomery County in 2022. Like all industries, many high-wage jobs in advanced manufacturing require a bachelor's degree or beyond. However, there are a few jobs below that don't require a four-year degree and pay over \$20/hour. In manufacturing, there are few defined career advancement opportunities, but one such opportunity is moving into a managerial/supervisory role. The last column in the table shows the occupation's risk of being affected by automation, a factor to consider as individuals plan for their careers.

Typical Job	Pays Living Wage (\$28.66)	Median Hourly Earnings	Entry Level Wages	Positions (2021)	Average Annual Openings	Expected Growth (2021–2026)	Typical Education Required	Higher-than-Average Risk of Automation
Electronics Engineers	Yes	\$53.67	\$42.73	1,388	87	-2%	Bachelor's degree	No
Software Developers and Software Quality Assurance Analysts and Testers	Yes	\$44.13	\$26.68	5,640	482	11%	Bachelor's degree	No
Mechanical Engineers	Yes	\$43.37	\$34.38	1,213	79	4%	Bachelor's degree	No
Industrial Engineers	Yes	\$38.47	\$31.96	1,114	85	8%	Bachelor's degree	No
Electrical and Electronics Repairers	Yes	\$31.38	\$28.24	78	7	6%	Postsecondary certificate	No
Supervisors/Managers	Yes	\$30.77	\$24.53	2,052	190	2%	High school diploma or equivalent	No
Machinist/CNC Machinist	No	\$23.20	\$17.88	2,050	206	4%	High school diploma or equivalent	Yes
Welders, Cutters, Solderers, and Brazers	No	\$20.89	\$17.72	663	82	8%	High school diploma or equivalent	Yes
Maintenance Repair Workers	No	\$19.80	\$16.09	3,277	320	0%	High school diploma or equivalent	Yes
Inspector/Quality Assurance Auditor	No	\$18.93	\$16.21	1,855	196	-6%	High school diploma or equivalent	Yes

Regional pathway models support the alignment of stakeholders including employers, higher education, K-12, and workforce, to ensure pathways prepare young people for careers with family-supporting wages and build a robust pipeline for employers. Pathway models demonstrate a vision from 8th grade to career including high school coursework, college and career preparation activities, potential postsecondary programs, and in-demand jobs in the regional labor market. This is a living document that will need to be updated regularly to reflect current education programs and workforce needs.

## Academic Coursework

This general coursework is recommended for all students in the Education pathway.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12	
Career Focused Courses		 Foundational Education or CCP Course such as: ECE 1101 - Introductory to Child Development	 ECE 2200 - Families, Communities, & Schools	 EDU 1100 - Introduction to Education	 College Credit Plus (CCP) courses apply to a broad range of postsecondary programs in education. The credits apply to both high school and postsecondary requirements, saving students time and money.
English	Grade 8 English	English II English III	 ENG 1101 - English Composition I	 ENG 1201 - English Composition II	
Math	Grade 8 Math/Algebra	Algebra I/Geometry	Algebra II	Trigonometry/Calculus	
History	Social Studies	 World History American History HIS 1101* - US History	World History Social Studies Elective**	US Government	
Science	Physical Science	Biology	Chemistry	Physics	

\*Miami University students replace with HIS 1112: Western Civilization \*\*Optional

## College and Career Preparation

These additional activities support students in preparing for both college and career. Work-based learning enables students to apply their academic learning in a real-world setting. Advising supports students in making decisions that align best with their strengths and future goals. Competencies describe the skills and knowledge students need for a successful career in education career fields.

	Grade 8	Grades 9 and 10	Grade 11	Grade 12
Work-Based Learning	<ul style="list-style-type: none"> <li>Job Shadow</li> <li>Peer Tutoring</li> </ul>	<ul style="list-style-type: none"> <li>Job Shadow</li> <li>Join Educator Rising/Participate in a Grow Your Own Program at your HS</li> <li>Summer work with childcare, tutoring, student programs, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Job Shadow</li> <li>Job Fair</li> <li>Mock Interview</li> <li>Participate in Educator Rising/Participate in a Grow Your Own Program at your HS</li> <li>Summer work with childcare, tutoring, student programs, coaching, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Job Shadow</li> <li>Job Fair</li> <li>Mock Interview</li> <li>Educator Rising</li> <li>Participate in a Grow Your Own Program at your HS</li> <li>Summer work with childcare, tutoring, student programs, coaching etc.</li> </ul>
Advising	<ul style="list-style-type: none"> <li>YouScience</li> </ul>	<ul style="list-style-type: none"> <li>Identification of Credential and College Options</li> <li>Financial Literacy Course</li> <li>Begin Ohio Means Jobs Readiness Seal</li> <li>College Application Prep Work</li> </ul>	<ul style="list-style-type: none"> <li>Financial Literacy Course</li> <li>Ohio Means Jobs Readiness Seal</li> <li>Identify content area and grade level of interest for teaching license</li> </ul>	<ul style="list-style-type: none"> <li>Complete FAFSA</li> <li>Complete College Application</li> <li>Complete Ohio Means Jobs Readiness Seal</li> <li>College and Career Signing Day</li> </ul>
Competencies	<ul style="list-style-type: none"> <li>Employability Skills</li> <li>CPR &amp; First Aid Certification</li> </ul>	<ul style="list-style-type: none"> <li>Written Communication</li> <li>Verbal Communication</li> <li>Organization</li> <li>Responsible Decision Making</li> <li>Social Awareness</li> <li>Relationship Skills</li> <li>Child Development</li> </ul>	<ul style="list-style-type: none"> <li>Ethics in Education</li> <li>Technology Competencies</li> </ul>	<ul style="list-style-type: none"> <li>Individual specialization in grades and subjects of interest</li> </ul>

## Educational Competencies

### Written Communications:

The ability to identify, clearly state, and convey a goal to the reader.

### Verbal Communication:

The ability to deliver and understand verbally transmitted information quickly and accurately.

### Organization:

The ability to manage many tasks: planning lessons, delivering instruction, scheduling, maintaining records, prioritization, and collaboration.

### Social Awareness:

The ability to understand and empathize with the perspectives of others, including those from diverse backgrounds, cultures, and contexts.

### Relationship Skills:

The ability to establish and maintain healthy and supportive relationships and to navigate settings with a broad spectrum of individuals and groups.

### Responsible Decision Making:

The ability to make caring and constructive choices about personal behavior and social interactions across various situations.

### Child Development:

Understand the sequence of physical, intellectual, language, and emotional changes that occur in a child from birth to young adulthood.

### Technology Competencies:

The ability to perform and adapt core technology functions necessary for the classroom and functions within an educational setting.

### Educational Professional Licensure:

Use understanding of appropriate education requirements, licensure, and certification to obtain appropriate credentials.

### Ethics in Education:

Understand the value of educational integrity and the responsibility inherent in the profession of teaching.

## Selected Postsecondary Options

The selected postsecondary credentials in the education pathway are based on transfer agreements at Sinclair Community College. Some education paths have credentials that easily stack or build from the previous credential, while others are not easily stackable. Credentials can help individuals document their progress in defined career pathways and help them measure their move up the career ladder into different or higher paying jobs.

Professional Role	 Initial Credential	 Stackable Credentials	 Typical Occupational Outcome
Educational Aide	Educational Aide Permit	<ul style="list-style-type: none"> <li>• Associates degree or 48 semester hours at an accredited college or university</li> <li>• ParaPro Exam</li> </ul>	Educational Aide with ESEA endorsement
Early Childhood Education	Child Development Associate Credential (CDA), Ohio Administrator Credential (OCCRA)	<ul style="list-style-type: none"> <li>• Associates degree, Associate of Arts (AA) or Bachelor of Arts (BA) in Early Childhood Education (Non-Licensure)</li> <li>• Pre-Kindergarten License, Pre-Kindergarten Special Needs, Teaching English to Speakers of Other Languages (TESOL), Adapted Physical Education, Bilingual, Computer/Technology, Computer Science, Drama/Theater</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-kindergarten Teacher</li> <li>• Lead Teacher at Childcare Center or Early Learning Center</li> <li>• Childcare Center Administrator</li> </ul>
Elementary Teacher	Teaching License	<ul style="list-style-type: none"> <li>• Bachelors Degree, Early Childhood Generalist License,</li> <li>• Primary (PK-5) License, Teaching English to Speakers of Other Languages (TESOL), Gifted Intervention Specialist, Drama/Theater, Computer Science, Computer/Technology, Bilingual, Adapted Physical Education</li> </ul>	Elementary Teacher
Middle Childhood Education	Teaching License	<ul style="list-style-type: none"> <li>• Bachelors Degree</li> <li>• Middle Childhood License, Middle Childhood Generalist Endorsements (LA, Math, Science, Social Studies), Teaching English to Speakers of Other Languages (TESOL), Gifted Intervention Specialist, Drama/Theater, Computer Science, Computer/Technology, Bilingual, Adapted Physical Education</li> </ul>	Grades 4-9 Teacher
Adolescent Young Adult Education (AYA)	Teaching License	<ul style="list-style-type: none"> <li>• Bachelors Degree</li> <li>• Adolescent Young Adult (AYA) License, AYA Subject Endorsements, Teaching English to Speakers of Other Languages (TESOL), Gifted Intervention Specialist, Drama/Theater, Computer Science, Computer/Technology, Career Based Intervention, Bilingual, Adapted Physical Education</li> </ul>	Grades 7-12 Teacher
Educational Leadership	Two years of successful teaching experience under a standard teaching license, Master's Degree, Approved Preparation Program, or Alternative pathway	<ul style="list-style-type: none"> <li>• Principal License</li> <li>• Administrative Specialist License</li> <li>• Superintendent License</li> </ul>	<ul style="list-style-type: none"> <li>• Assistant Principal</li> <li>• Principal</li> <li>• Dean of Students</li> <li>• Superintendent</li> <li>• Instructional Coordinator</li> </ul>

Additional information about supplemental licensures can be found at the Ohio Department of Education website:  
<https://education.ohio.gov/Topics/Teaching/Licensure/Supplemental-License/Supplemental-Teaching-License-for-Endorsement-Area>

## Selected Occupations, Wages, and Job Growth

The education careers listed below are projected to grow in the region. The living wage (\$32.08 per hour) is from the MIT Living Wage Calculator for one adult and one child in Montgomery County in 2022. Those pursuing a career in public sector education may choose to explore the additional career benefits unique to the field such as retirement, healthcare, and leave. Note that some jobs in the table do not pay a living wage; however, degree and credential pathways exist in all professions and the following information documents the earning potential for different roles within education.

Occupation	Job Summary	Entry-Level Education	2021 Median Pay	Median Hourly Earnings	Pays Living Wage (\$32.08)	Expected Growth 2020-2030
Teacher Assistants	Teacher assistants work with a licensed teacher to give students additional attention and instruction.	Some college, no degree	\$24,360	\$16	No	9%
Preschool Teachers	Preschool teachers educate and care for children younger than age 5 who have not yet entered kindergarten.	Associate's degree	\$30,210	\$20	No	18%
Elementary School Teachers	Kindergarten and elementary school teachers instruct young students in basic subjects in order to prepare them for future schooling.	Bachelor's degree	\$61,350	\$41	Yes	7%
Middle School Teachers	Middle school teachers educate students typically in sixth through eighth grades.	Bachelor's degree	\$61,320	\$41	Yes	7%
High School Teachers	High school teachers teach academic lessons and various skills that students will need to attend college and to enter the job market.	Bachelor's degree	\$61,280	\$41	Yes	8%
Career & Technical Education Teachers	Career and technical education teachers instruct students in various technical and vocational subjects, such as auto repair, healthcare, and culinary arts.	Bachelor's degree	\$61,160	\$41	Yes	5%
Special Education Teachers	Special education teachers work with students who have a wide range of learning, mental, emotional, and physical disabilities.	Bachelor's degree	\$61,820	\$42	Yes	8%
Elementary, Middle, & High School Principals	Elementary, middle, and high school principals oversee all school operations, including daily school activities.	Master's degree	\$98,490	\$56	Yes	8%
Instructional Coordinators	Instructional coordinators oversee school curricula and teaching standards. They develop instructional material, implement it, and assess its effectiveness.	Master's degree	\$63,740	\$43	Yes	10%
Librarians & Library Media Specialists	Librarians and library media specialists help people find information and conduct research for personal and professional use.	Master's degree	\$61,190	\$41	Yes	9%
School & Career Counselors and Advisors	School counselors help students develop academic and social skills. Career counselors and advisors help people choose a path to employment.	Master's degree	\$60,510	\$41	Yes	11%

Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Career and Technical Education Teachers, at <https://www.bls.gov/ooh/education-training-and-library/career-and-technical-education-teachers.htm> (visited August 18, 2022).

\*living wage calculation based on one adult and one child in Montgomery county in August of 2022 from the MIT Living Wage Calculator (<https://livingwage.mit.edu/counties/39113>)





## Montgomery County Business Advisory Council Participants

Thank you to the members of the Business Advisory Council. The group includes representatives from 25+ school districts, 7 in-demand industries, higher education, local government, local economic development organizations and other community partners.

**To join the Council or to learn more about how your school or business can participate, contact Bryan Stewart, Workforce Director at [Bryan.Stewart@MCEESC.org](mailto:Bryan.Stewart@MCEESC.org).**

All Service Plastic Molding	Little Miami Local School District
Associated Builders and Contractors, Ohio Valley	Loveland City Schools
Better Business Bureau	Mad River Local Schools
Brookville Local Schools	Miamisburg City Schools
CareSource	Miami Valley Apprenticeship Coordinators Group
Carlisle Local Schools	Miami Valley Career Technology Center
Centerville City Schools	Miami Valley HR Association
Construction Builders Association	Montgomery County
CRG, Inc.	Montgomery County Educational Service Center
Dayton Area Chamber of Commerce	New Lebanon Local Schools
Dayton Area Logistics Association	Northmont City Schools
Dayton Business Committee	Northridge Local Schools
Dayton Children's Hospital	Oakwood City Schools
Dayton Development Coalition	PSA Airlines
Dayton Metro Library	Rush Transportation & Logistics
Dayton Region Manufacturers Association	Shook Construction
Dayton Public Schools	Sinclair College
Expedient Technology Solutions	Southwestern Ohio Council for Higher Education
Franklin City Schools	Springboro Community City School District
Greater Dayton Area Hospital Association	Technology First
Hobart Institution of Welding Technology	Trotwood-Madison City Schools
Huber Heights City Schools	Valley View Local Schools
Jefferson Township Local Schools	Vandalia-Butler City Schools
Kettering City Schools	Warren County Career Center
Kettering Health Network	Warren County Educational Service Center
Kings Local Schools	Wayne Local Schools
Learn to Earn Dayton	West Carrollton City Schools
Lebanon City Schools	Wright-Patterson Air Force Base
Libra Industries	

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