

# PY 18 BUSINESS EDUCATION PARTNERSHIP GRANT FINAL REPORT TO NWPA JOB CONNECT

#### December 2020

Prepared by Mary C. Bula
Director, Erie Together
Facilitator, Erie County Career Pathways Alliance

mary@erietogether.org

# **Table of Contents**

Erie Together – Background	3
BEP Science & Health Project Deliverables	3
Advisory Group Membership and Meetings	4
Process	4
Experiences and Informational Resources	5
Deployment of Experiences	6
APPENDIX A: Science & Health Advisory Group Invitation and Membership List	
APPENDIX B: Background/Overview Presentation for Advisory Group Kick-Off	
APPENDIX C: Advisory Group Meeting Agendas and Notes	
APPENDIX D: Science & Health Career Pathways Flyer and Career Exploration	
Experience Templates	

#### **Erie Together - Background**

Erie Together is a countywide collective impact movement to make the Erie region a place where everyone can learn, work and thrive. As this type of entity, Erie Together facilitates large-scale, cross-sector collaboration which breaks down silos, fosters new relationships and helps individuals and organizations work together effectively to achieve top community priorities.

In 2016, conversations about the importance of career pathways systems came to the forefront in Erie County, and Erie Together was asked to convene stakeholders and coordinate development of a local system. We began by forming a cross-sector Leadership Team and we named the group the "Erie County Career Pathways Alliance (ECCPA)". Our **mission** is to create a system that prepares students for post-secondary education and training, and future careers, and we are organizing our work around five career pathways encompassing 16 industry clusters.

The ECCPA has been together for four years, providing the vehicle for educators, employers, and workforce developers to communicate and build trust, better understand each other, and effectively collaborate to prepare the future workforce. The group is following a research-based "Pathways System Framework" developed by the National Center for College and Career Transitions (NC3T) to advance our work. An essential component of our structure is formation of "industry advisory groups" that align with the five pathways upon which we are focusing. This report reflects the work of one of those advisory groups – Science & Health – which received financial support from a 2018 Business/Education Partnership (BEP) grant secured in partnership with NWPA Job Connect.

#### **BEP Science & Health Project Deliverables**

Erie Together's expected outcomes for this project were identified as follows:

- 1. Establishment of a "Science and Health Advisory Group" within the Erie County Career Pathways Alliance (ECCPA).
- 2. Facilitation of six meetings of the Science and Health Advisory Group.
- 3. Development of age-appropriate work-based learning experiences aligned with PA Career Education & Work Standards and the Future Ready PA Index.
- 4. Documentation of work-based learning experiences.
- 5. Deployment of work-based learning experiences through business/education partnerships across Erie County.
- 6. Technical assistance to NWPA Job Connect in development of "NW PA Student in the Workplace Guide for Employers and Educators."

Erie Together successfully addressed each of these deliverables and could provide additional technical assistance to NWPA Job Connect on the workplace guide, if needed.

#### **Advisory Group Membership and Meetings**

The role of the Science & Health Advisory Group, as with all others that are part of the ECCPA, is to advise school districts, post-secondary providers and workforce developers on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, and connecting students in the workplace. The industry clusters that fall within the Science & Health Pathway and the advisory group's purview include: Agriculture, Food and Natural Resources; Health Sciences; and Scientific Research.

The invitation to participate in the Science & Health Advisory Group and the current membership list is included in APPENDIX A. The group met on the following dates, with the first four meetings taking place in-person, and the last two taking place virtually via Zoom due to the pandemic:

- 1. February 28, 2019 (Kick-off Meeting)
- 2. May 17, 2019
- 3. September 12, 2019
- 4. March 9, 2020
- 5. May 21, 2020
- 6. October 30, 2020

The group will continue to meet in 2021 to continue its work.

At the first advisory group meeting, Erie Together delivered an overview presentation, including background on Erie Together, the ECCPA, and the expectations of the Science & Health Advisory Group. That overview presentation can be found in APPENDIX B. The agendas and notes (when transcribed) for the remaining meetings can be found in APPENDIX C.

#### **Process**

These are the steps we have taken to successfully advance the advisory group's efforts:

- Ground the group in the PA <u>Career Education & Work Standards</u> and <u>Future Ready PA Index</u>
- 2. Discuss priority skills, and those that are often missing, in job candidates and employees
- 3. Identify, prioritize, and design age-appropriate career exploration experiences aligned with state standards
- 4. Create new opportunities for career-connected learning to better prepare students for future jobs

Steps 1 and 2 were completed early in the advisory group's evolution, whereas Steps 3 and 4 are ongoing.

#### **Experiences and Informational Resources**

One of the first resources the group released was a Science & Health Career Pathways Informational Flyer grounded in local data, highlighting select in-demand occupations, education levels required, average entry-level wages and other important employer and career-related information. This flyer is included in Appendix D, but can also be found here on our partner Career Street's website: <a href="http://bit.ly/SandHFlyer">http://bit.ly/SandHFlyer</a>

Additionally, the group has, and continues to identify priority career exploration experiences by grade span, starting with grades 9-11, then moving into grades 6-8. Once those grades are fully discussed, the group will consider opportunities for the lower grades. These grade spans align with Future Ready PA requirements, and the group is prioritizing and developing experiences that address these Career Education & Work Standards:

- Career Awareness and Preparation
- Career Acquisition
- Career Retention and Advancement
- Entrepreneurship

Here is the list of experiences the advisory group has prioritized for students in grades 9-11. Please note, while some of these experiences would be best done in person, many can also be done virtually:

- Classroom Speakers
- Employer Panels
- Career Fairs
- Soft Skills Training
- Job Application "Boot Camp"
- Mock Interviews
- Career/Lifestyle Budgeting
- Understanding Career Ladders
- Long-Term Career Planning
- Visit four "beehive" locations at local universities

The group is now in discussions regarding appropriate experiences for grades 6-8.

Once the group makes decisions about what experiences employers and educators are most willing to do together that they believe will be most beneficial for students, they create "Career Exploration Experience Templates" addressing the things that schools, students and employers should do to ensure the experience is high quality and can be deployed well. Several career exploration experience templates have been finalized, and others are under development. Finalized templates are included in APPENDIX D, and can also be found here: <a href="https://www.careerstreeterie.org/resources/experience-templates">https://www.careerstreeterie.org/resources/experience-templates</a>

Finally, in terms of experiences, we have created a virtual experience called "Career Pathways Information Sessions" for students in grades 8-12 and their parents/caregivers. The purpose is to help students learn about local career opportunities from the experts so the younger students can make good choices about their course of study in high school and the older students can

consider the most appropriate next steps for them after high school. We have encouraged parents to attend so they can help guide their students along the way.

We intend to do five of these virtual sessions in the 2020/21 school year, one for each of the five career pathways. For clarification, those pathways include: (1) Education & Industrial Technology; (2) Science & Health; (3) Business, Finance & Information Technology; (4) Arts & Communication; and (5) Human Services.

We have already held two of these hour-long information sessions, one of which was the Science & Health event which took place on December 15, 2020. Panelists included Ms. Sarah Bennett (clean water campaign manager at Penn Future), Dr. Dennis Dirkmaat (forensic anthropologist, and professor at Mercyhurst University), Ms. Lynn Rupp (physical therapist, vice president of operations at UPMC Hamot and president at Regional Health Services), and Dr. Melanie Titzel (senior administrator at LECOM Institute for Successful Aging). A representative from UPMC Hamot's nursing school was also present to answer questions. As part of the event, Janet Anderson (executive director, NWPA Job Connect) set the stage for the panel discussion, by sharing information on local occupations, employer needs, and in-demand skills. The script for the event can be found in APPENDIX D, and the video of the event, which has been made available to school districts across Erie County, can be found here: https://youtu.be/cg-t3nFo3gs

Students, parents and/or educators from four school districts and the Perseus House Charter School of Excellence attended this virtual event. Additionally, at the time of this writing which is one week after the event took place, the session video had been viewed 46 times.

#### **Deployment of Experiences**

Career Street (<a href="www.careerstreeterie.org">www.careerstreeterie.org</a>) is an Erie Together program that serves as the "implementation" arm for career exploration experiences stemming from the ECCPA and elsewhere in the community. Career Street is led by a director who is actively engaged in the ECCPA's work and includes a web-based tool that connects employers with educators to provide career exploration experiences for students.

Over this BEP grant period (February 2019-present), Career Street reports the following student experiences. Please note that these numbers reflect the number of students impacted by the experiences; they do not reflect <u>unique</u> student participants. In other words, one student may participate in more than one experience.

#### Agriculture, Food & Natural Resources:

Four Speaker in the Classroom experiences provided by OW Energy, LLC Total = 386 students in grades 6-8

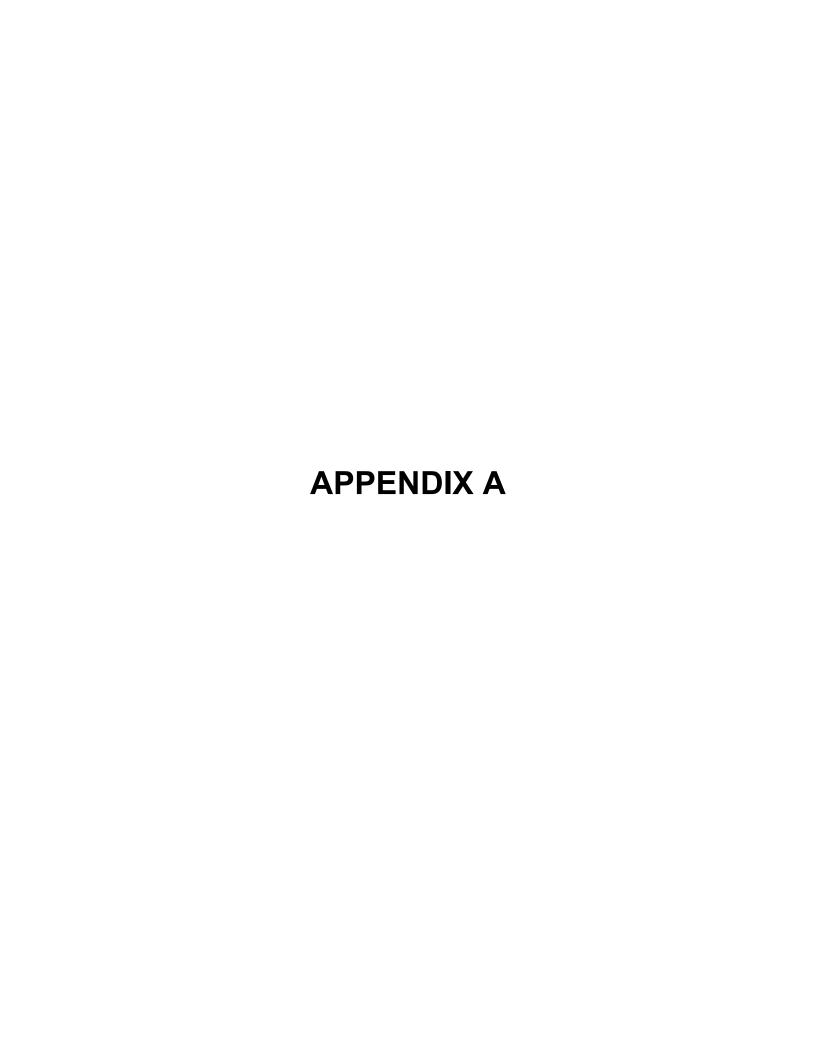
#### Health Science:

Thirteen experiences, including three classroom speaker experiences, two job shadows, one career fair, one virtual Career Café, one video experience and one career camp. Total = 644 students in grades 5, and 9-12.

#### STEM:

Classroom speaker on wastewater treatment Total = 93 10<sup>th</sup> graders

TOTAL: 18 student experiences impacting 1,123 students in grades 5-12.



# Invitation sent via email from Mary Bula, Erie Together Director and ECCPA Facilitator

#### Hello!

I am writing today on behalf of the *Erie County Career Pathways Alliance (ECCPA)* to invite you to serve on the newly-forming **Science and Health Advisory Group**. The role of this group is to advise a collection of Erie County school districts, post-secondary providers and workforce developers on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the industry, and connecting students in the workplace. We believe that your expertise and input would be invaluable to this effort.

The first meeting of the advisory group will take place in late February, and the group will meet every other month to start. Please click <u>here</u> to indicate your willingness (or lack thereof) to serve, and I will follow-up with you with additional details regarding the first meeting.

The ECCPA, launched in 2016, is a partnership of education and business that is developing a countywide career pathways system for local youth. Its **Mission** is to prepare students for post-secondary education and training and future careers. Its **Vision** is a community where all students graduate high school on time, with the knowledge and skills necessary to succeed in life after high school and to thrive in their community. The ECCPA consists of a Leadership Team and various industry advisory groups, is facilitated by Erie Together, and is receiving technical assistance from the National Center for College and Career Transitions.

If you have any questions, please contact me at <a href="mary@erietogether.org">mary@erietogether.org</a>. We look forward to hearing from you, and hope you agree to participate. Thank you!

<u>First Name</u> <u>Last Name</u> <u>School District / Organization / Employer</u>

Janet Anderson NWPA Job Connect

Joseph Anthony Union City Area School District
Mary Barr Sarah A. Reed Children's Center
Sue Bogert Corry Area School District
Allen Bonace St. Marys Home of Erie
Christine Bowen Allegheny Health Network

Barbara Chaffee Tom Ridge Environmental Center
Amy Coleman Union City Area School District
Buckley Cook Harbor Creek School District

David DiGiacomo VA Medical Center

Christopher DiTullio Presbyterian Senior Care
Richard Emerick Fort LeBoeuf School District

Sarah Ewing Gannon University
Connie Faluszczak VA Medical Center
John Gennaro VA Medical Center

Mathew Greene PA Department of Conservation & Natural Resources

Michele Hartzell North East School District
Cara Horchen Fort LeBoeuf School District
Brody Howard Corry Higher Education Council
Aldo Jackson Northern PA Regional College

James Kifer EmergyCare

Melissa Kingen The Nutrition Group

Nicole Krzewinski UPMC Hamot Nicole Lehr Wegmans

Anne Leonard Northwest Tri-County Intermediate Unit #5

Eric Louis Girard School District
Pam Mackowski Erie's Public Schools

Ed McMahan Union City Area School District

Donna Miller Girard School District

Darcie Moseley Millcreek Township School District

Shane Murray Iroquois School District

Crystal Myers Millcreek Township School District

Denise Ohler Edinboro University

Nick Paolini Northwest Tri-County Intermediate Unit #5

Jennifer Pontzer Career Street

Richard Scaletta General McLane School District

Antonella Spinelli Girard School District

Debbie Swift Encompass ealth

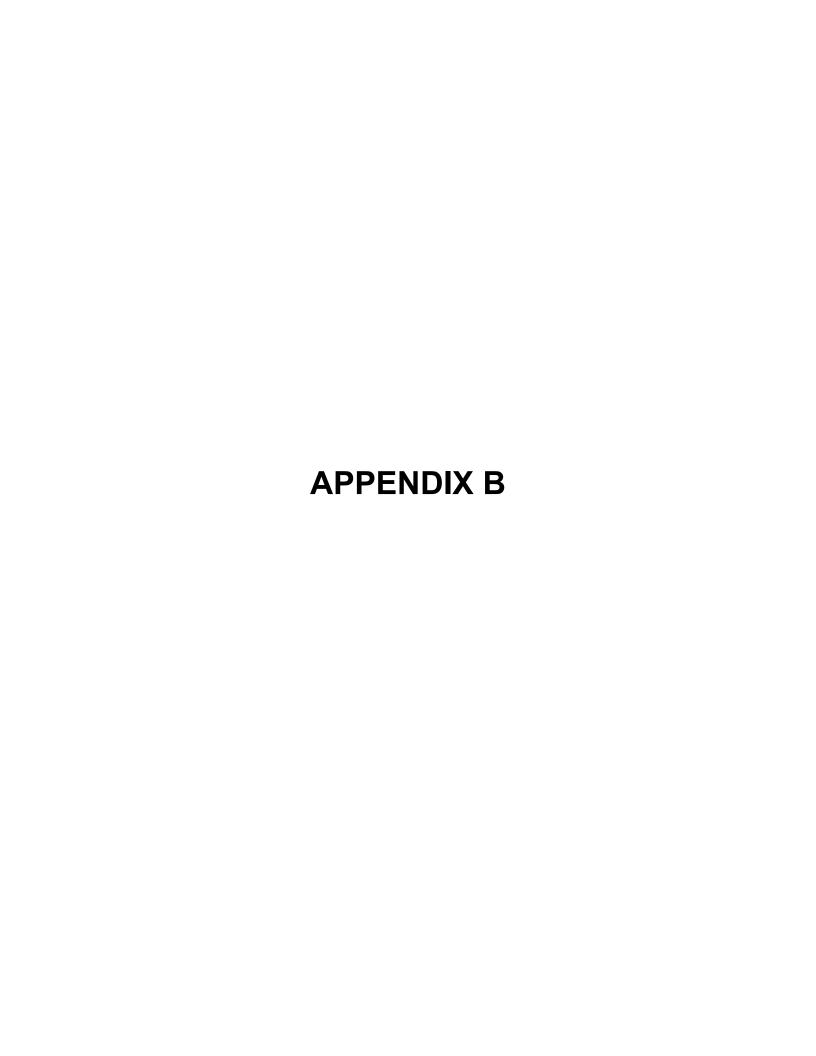
Susan Testa UPMC Hamot

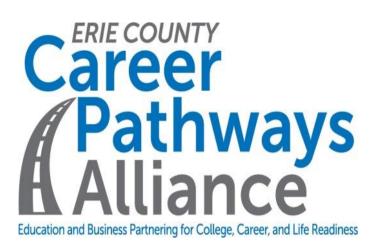
Melanie Titzel LECOM Institute for Successful Aging

Linda Vestrand Asbury Communities

Fred Walker Erie County Technical School

Benjamin Wilson NWPA CareerLink
Beth Zewe Edinboro University





SCIENCE & HEALTH ADVISORY GROUP

SCIENCE & PRESENTATION

KICKOFF PRE 28. 2019

KICKOFF PRE 28. 2019



# **AGENDA**

- A. Erie Together background
- B. Update on ECCPA's work to date
- C. Q & A
- D. Science & Health Advisory Group



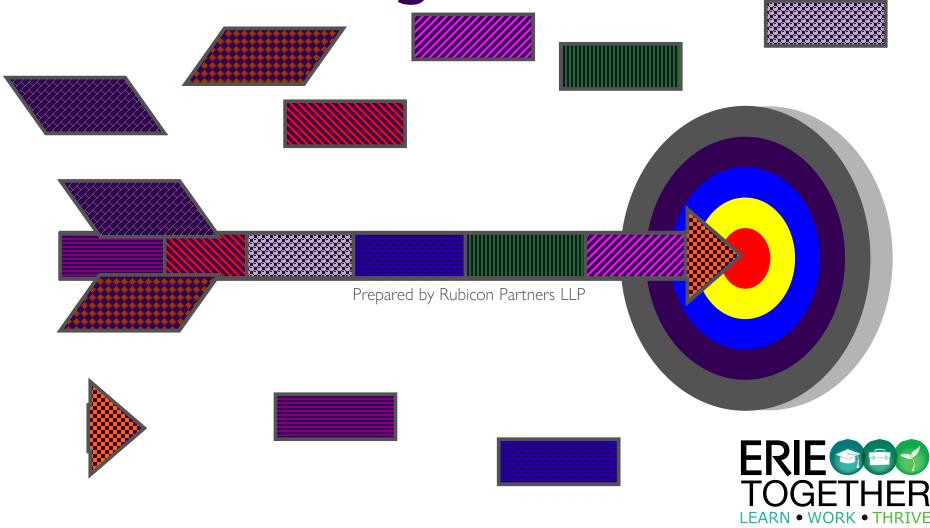
# ERIE TOGETHER (ET) ASPIRATION STATEMENT

Working together to make the Erie Region a community of opportunity where everyone can learn, work and thrive.



# **HOW ET WORKS**

Alignment



# **ET OBJECTIVES**



More children become successful adults



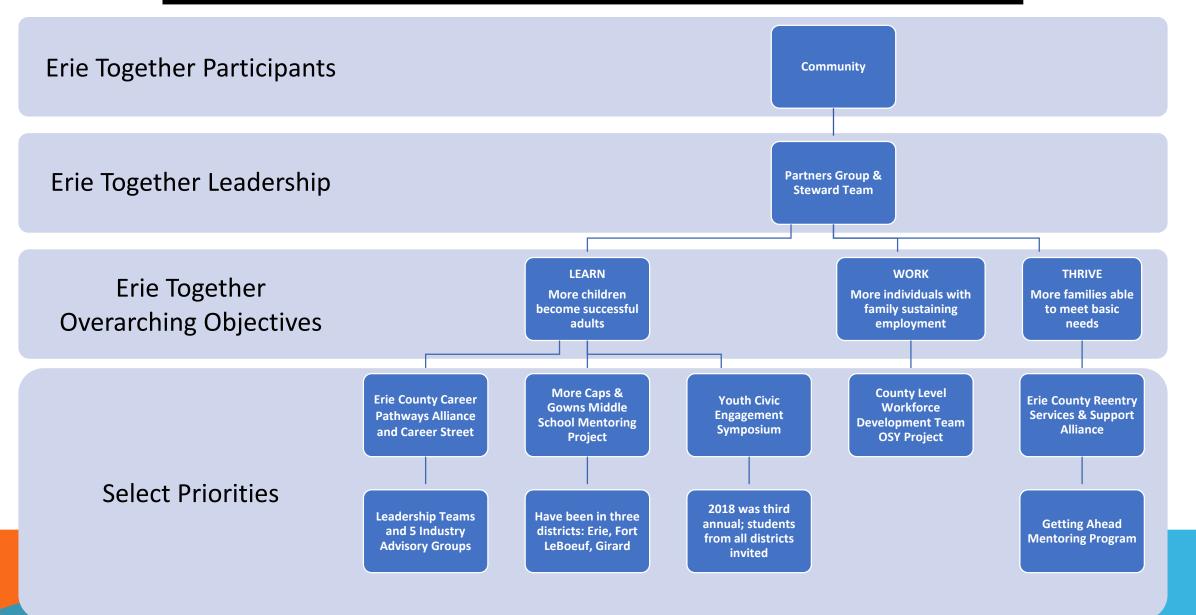
More Erie residents have family-sustaining employment



More Erie County families able to meet their basic needs



# ET STRUCTURE & PRIORITIES





# **BACKGROUND – FORMATION**

- In early 2016, meeting in Erie County to discuss career pathways. National Center for College & Career Transitions (NC3T) presented.
- Local districts expressed interest.
- Erie Together was asked to facilitate; NC3T offered technical assistance.





# **MISSION AND VISION**

- <u>Mission</u>: To implement a countywide career pathways system that successfully prepares Erie County students for postsecondary education and training and future careers.
- Vision: A community where all students graduate high school on time, with the knowledge and skills necessary to succeed in life after high school and to thrive in their community.





# **STRUCTURE**

## **Schools**

10 of 13 districts

All three CTCs

Post-Secondaries



## **Industry Advisory Groups**

Engineering & Industrial Technology

#### Science & Health

Business, Finance & Information Technology

**Arts & Communication** 

**Human Services** 

## **Others**

**Career Street** 

Erie Regional Manufacturer Partnership

Workforce Dev. Board

IU #5

**ERCGP** 





## **ECCPA "BIG PICTURE" GOALS**

- Effective career pathways implementation within school districts with robust, relevant core and elective courses and co-curricular activities.
- Informed students and families, leading to better career choices based on student interests, aptitudes and earning potential, etc.
- Streamlined ways for business and industry to advise districts to help prepare students for future careers.
- Greater connections between school districts and post-secondary institutions to continue career pathways beyond high school.
- A better prepared local workforce and stronger local economy.





# **ECCPA PROGRESS**

- Developed definition of "college, career and life readiness" "College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.
- Inventoried all pathways-related activity in each district; information sharing
- Gained commitment from districts to organize and communicate around five state-designated career pathways





# **ECCPA PROGRESS**

- Developed course catalog for use by all districts
- Launched Engineering & Industrial Advisory Group
  - Identified and crafted five priority career exploration experiences for grades 9-11;
     moving into lower grades now
  - Laid groundwork for plastics-related pre-apprentice program funded by PA
     Department of L & I which will launch in June
- Creating stronger, mutually beneficial stakeholder relationships
- Professional development for teachers



#### Science and Health (SH) Pathway

This Pathway is designed to cultivate students' interests in the life, physical and behavioral sciences. In addition, it involves and planning, managing and producing of therapeutic services, diagnostic services, health information and biochemistry research and development. Many of the careers involved with the food, fiber, environmental and natural resource systems fall under this pathway.

Are you interested in	Can you	Do you enjoy
Health care environment     Science and medicine     Medial research     Food production     Environment and conservation     Pharmacy     Animals     Physical therapy     Sports and fitness     Information systems     Radiology	Pay attention to detail Use a computer and technology Work in a lab setting or medical facility Apply scientific theory to real life problems Work outdoors around animals and plants Collect and analyze data from experiments Work with people in need Work with science and math theories	Diagnosing and caring for sick animals Working outdoors with wildlife Working on cutting edge scientific research Working on a team Medical lab research Making a contribution to society Working with numbers Developing conclusions from a database

If you answered "yes" to many of these questions, you might consider a future in one of the sample occupations listed below.

#### SAMPLE CAREERS

Entry	Technical/Skilled	Professional (4+ college)
<ul> <li>Hospital worker</li> </ul>	<ul> <li>Certified nursing assistant</li> </ul>	<ul> <li>Athletic trainer</li> </ul>
<ul> <li>Patient care technician</li> </ul>	<ul> <li>Dental hygienist</li> </ul>	<ul> <li>Speech/Language pathologist</li> </ul>
<ul> <li>Dialysis technician</li> </ul>	<ul> <li>Emergency medial technician</li> </ul>	Dietican
<ul> <li>EEG technician</li> </ul>	<ul> <li>Licensed practice nurse</li> </ul>	<ul> <li>Physician assistant</li> </ul>
<ul> <li>Home health aide</li> </ul>	<ul> <li>Medical lab technician</li> </ul>	<ul> <li>Medical examiner</li> </ul>
<ul> <li>Nurses aide, orderlies</li> </ul>	<ul> <li>Personal trainer</li> </ul>	<ul> <li>Pharmacist</li> </ul>
<ul> <li>Pharmacy technician</li> </ul>	<ul> <li>Radiological technician</li> </ul>	Physician
<ul> <li>Physical therapy aide</li> </ul>	<ul> <li>Respiratory therapist</li> </ul>	<ul> <li>Registered nurse</li> </ul>
<ul> <li>Animal caretaker</li> </ul>	<ul> <li>Dental lab technician</li> </ul>	<ul> <li>Marine biologist</li> </ul>
Breeder	<ul> <li>Fish and game worker</li> </ul>	<ul> <li>Soil conversationalist</li> </ul>
<ul> <li>Extension service worker</li> </ul>	<ul> <li>Forest conversationalist</li> </ul>	<ul> <li>Veterinarian</li> </ul>
<ul> <li>Wildlife reserve worker</li> </ul>	<ul> <li>GPS technician</li> </ul>	Chemist
Optician	Surveyor	<ul> <li>Environmental scientist</li> </ul>
Data Entry	<ul> <li>Veterinary Technician</li> </ul>	<ul> <li>Zoologist</li> </ul>
Farmer	•	<ul> <li>Nuclear engineer</li> </ul>

With special thanks to Mike Thompson, PDE Educational Consultant

### 4-YEAR Planner for Science and Health (SH) Pathway

	Grade 9:	Grade 10:	Grade 11:	Grade 12:
English	Accelerated Eng 9	Accelerated Eng 10	Accelerated Eng 11	Accelerated Fing 12
Lugara	English 9	English 10	English 11	English 12
	Basic English 9	Basic English 10	Basic English 11	Basic English 12
	LS English 9	LS English 10	LS English 11	LS English 12
	-	AP Seminar	AP Seminar	AP Seminar
			AP Lang and Composition	AP Lang and Composition
			AP Literature and Comp	AP Literature and Comp
Science	Accelerated Phys Sci	Accelerated Biology I	Chemistry	Chemistry
	Physical Science	Biology I	Environmental Problems	Chemistry II
			Ecology & the Environment	Environmental Problems
			Physics AP Environmental Sci	Ecology & the Environment Physics
			AF Environmental Sci	AP Environmental Sci
				Ar Environmental Sci
Social	Accelerated Am Hist.	Accelerated US History	Accelerated Civics	Accelerated World Cultures
Studies	American History	Since 1945	Civies	World Cultures
	LS American History	US History Since 1945	AP US History	AP US History
		LS US Hist Since 1945	AP European History	AP European History
			AP Gov and Politics	AP Gov and Politics
			LS Civies	LS World Cultures
Math	Geometry	Algebra II	Tria/Pre-Calculus	AP Calculus
	Algebra I	Geometry	Algebra II	Trig/Pre-Calculus
	Algebra IA	Algebra IB	Geometry Statistics	Algebra II
	LS Algebra IA	LS Algebra IB	Statistics	Geometry Statistics
120	Intro to Computer	Career Exploration	Health	SCHEDUCS
Required Elective	Applications	Carder Exploration	ricaith	
Physical	Physical Education 9	Physical Education 10	Physical Education 11	
Education	Physical Education 9	Filysical Education 10	Physical Education 11	
	dans Vision (Orbert	landar on and the	e Course Offerings for more	1
	Spanish I	Creative Productions	Creative Productions	Spanish I, II, III, IV
	German I	Spanish I, II	Spanish I, II, III	German I, II, III, IV
	Computer Programming I	German I, II	German I, II, III	You Invited Who?
	Business Concepts Keyboarding I	Marketing Basic Foods	Marketing Basic Foods	You've Been Canned
	Resig Foods	You Insited Who?	You Invited Who?	Chopped I Cooking Quick & on Budget
	Family Ties I	You've Been Canned	You've Been Canned	Family Ties I. II
	Concert Band	Chopped I	Chopped I	ASL
	Chorus	Cooking Quick & on Budget	Cooking Quick & on Budget	Law I, II
	Art I Commics I	Family Ties I, II ASL	Family Ties I, II	Agriscience Applications Large Animal Science
	ASL.	Law	Law L II	Small Animal Science
	Intro to Tech Ed	Agriscience Applications	Agriscience Applications	Environmental and Natural
	AG SAET	Large Animal Science	Large Animal Science	Resources
		Small Animal Science	Small Animal Science	Agricultural and Mechanical
		Environmental and Natural Resources	Environmental and Natural Resources	Engineering Horticulture
		Agricultural and Mechanical	Agricultural and Mechanical	Landscape and Oreenhouse
		Engineering	Engineering	AO Leadenhip I, II, III
		Horticulture	Horticulture	AO SAE I, II, III, IV
		Landscape and Greenhouse	Landscape and Greenhouse	Current Events
		AG Leadership I	AG Leadership I, II	Physical Education 12
		AG SAEI, II	AO SAE I, II, III	Agricultural Advanced Studies Teacher Practicum
ĺ				Sociology

With special thanks to Mike Thompson, PDE Educational Consultant



# **ANTICIPATED IMPACTS ON DISTRICTS**

- Curriculum decisions and course offerings
- Industry credentials in the schools
- Opportunities for additional work-based learning experiences
- Fill gaps in student career/college portfolios
- Professional development for teachers
- Better decisions by districts to help businesses











# SCIENCE AND HEALTH ADVISORY GROUP

- Includes life, physical and behavioral sciences; therapeutic services; diagnostic services; health information and biochemistry research and development; and careers in food, fiber, environmental and natural resource systems.
- Career cluster areas:
  - Health Science
  - Agriculture, Food, and Natural Resources
  - Science, Technology, and Math





# SCIENCE AND HEALTH ADVISORY GROUP

- Role: advise collective school districts (and others) on:
  - Expected skills and knowledge in the industry
  - Employment trends
  - Making programmatic improvements to meet workforce needs
  - Building relationships within the business community
  - Connecting students in the workplace
- Anticipated meeting schedule: every other month, with next meeting planned for April





# Agenda for Next Science and Health Advisory Group Meeting

- Review of PA Career Education & Work Standards and Future Ready PA Index (see handouts emailed to group)
- Facilitated discussion re: employer perspective on characteristics/traits/skills that job candidates and employees are missing
- Employer guidance on how individuals successfully secure jobs within their particular industry





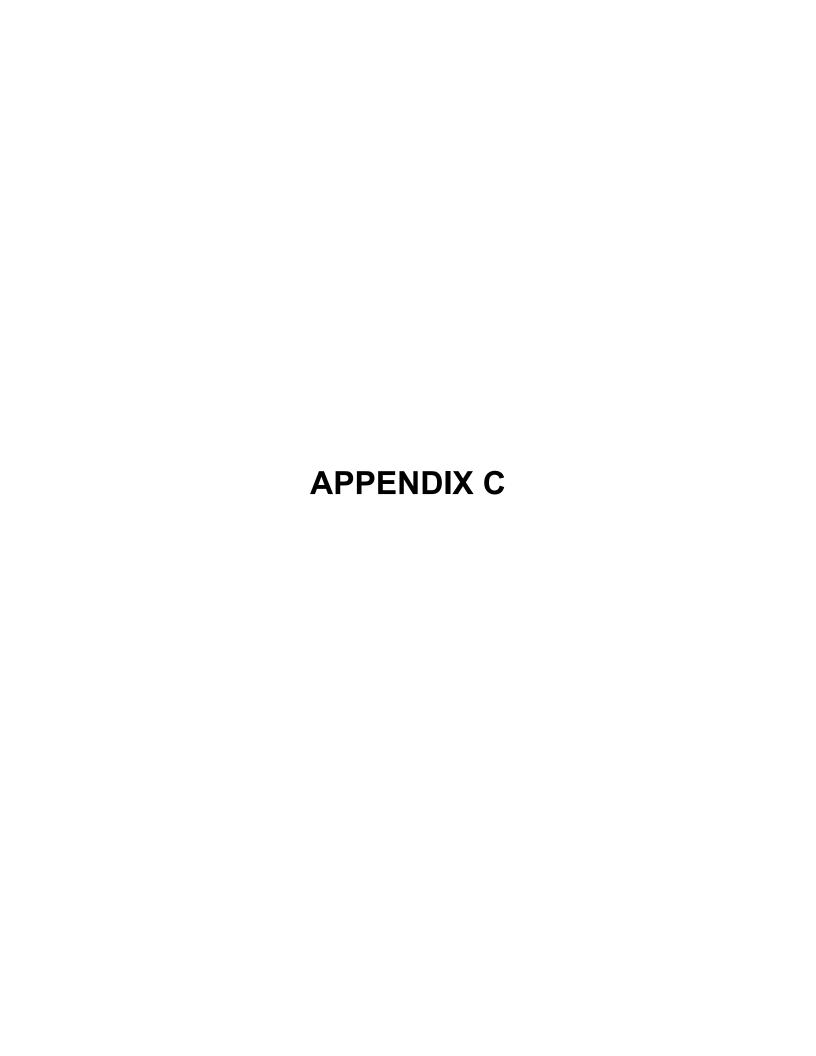
# **Future Planning**

- Who is missing?
- Next meeting.
- Questions / comments before proceeding?
- Other?





THANK YOU!





"College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.

#### SCIENCE AND HEALTH ADVISORY GROUP May 17, 2019, 9:30 am Manufacturer & Business Association

#### **AGENDA**

**Role of Advisory Group**: To advise a collection of Erie County school districts (and other education/workforce development stakeholders) on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the business community, and connecting students in the workplace.

- A. Welcome and Introductions
- B. Review and input on DRAFT Science & Health Pathway Flyer
- C. Review of Career Education & Work (CEW) Standards & Future Ready PA Requirements
  - Career Awareness and Preparation
  - Career Acquisition
  - Career Retention and Advancement
  - Entrepreneurship
- D. Facilitated Discussion
  - Employer input priority skills
  - Employer input skills candidates are missing
  - Employer guidance on how people successfully secure jobs within their industry (time permitting)
- E. Planning for next meeting and adjournment



"College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.

#### SCIENCE AND HEALTH ADVISORY GROUP May 17, 2019, 9:30 am Manufacturer & Business Association

#### **NOTES**

<u>Role of Advisory Group</u>: To advise a collection of Erie County school districts (and other education/workforce development stakeholders) on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the business community, and connecting students in the workplace.

- A. Review of Career Education & Work (CEW) Standards & Future Ready PA Requirements priority skills and skills candidates and/or employees are most frequently missing:
  - Career Awareness and Preparation

Priority Skills	Skills Most Frequently Missing
Speaking and Listening	Speaking and Listening

#### Career Acquisition

Priority Skills	Skills Most Frequently Missing
Job application	Job application
Resume	
Commitment	Commitment
Communication	Communication
Dependability	Dependability
Personal Initiative	Personal Initiative
Team Building	

#### • Career Retention and Advancement

Priority Skills	Skills Most Frequently Missing
Evaluate personal attributes and work habits	Evaluate personal attributes and work habits
Active listening techniques	Active listening techniques
Conflict resolution	Conflict resolution
Constructive criticism	Constructive criticism
Problem solving	Problem solving
Time management	Time management

#### • Entrepreneurship

Priority Skills	Skills Most Frequently Missing
Analyze risk and rewards	Analyze risk and rewards

Employer guidance on things important to successfully secure jobs within their industry (Note: all these responses came from representatives in the Health Sciences cluster)

Ask at least on well thought out question	Flexible availability
Return calls and emails	No transportation barriers
Proper age	Right skillset, or willingness to be trained
Proper education	Ability to commit: follow through in regard to
	patient/resident care
Proper license or certificate	Good communication skills
Clean appearance	Flexibility
Be on time for interview/strong interview skills	Accountability
Have done some research on organization	Fully completed application
Demonstrated interest and some knowledge of	Clean background
the agency	
Excellent performance-based interviews with	Understanding of what the profession truly
demonstrated examples	involves
Submit required documents with application	Commitment to the career track: obtain
	necessary training
Organization skills	Driver's license
Have necessary soft skills, including time	Empathy
management and ethics	
Dependability	Ability to apply on website
Well spoken	TB test

(Note: all these responses came from representatives in the Agriculture, Food & Natural Resource cluster)

Hard work ethic	Communication skills
Willingness to learn	Able to work as a team
Dependability	Math and reading skills
Clean background check	Leadership skills
Mechanical and physical ability	Commitment
Good customer service	Positive energy

**Parking Lot:** Re: health sciences careers, we must understand the requirements re: background checks (Act 33 & 34 and FBI Fingerprint) and the "Qualifying List" done by license and specific to the type of organization. We must also understand drug test requirements. Also the List of Excluded Individuals (federal fraud). Some also require lifting and flexibility test, driving record, etc. Usually not credit check. US Citizen or eligibility to work in US requirements. Gannon has compiled much of this information and can provide it for our understanding.



"College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.

### SCIENCE AND HEALTH ADVISORY GROUP September 12, 2019, 9:30 am Manufacturer & Business Association

### **AGENDA**

<u>Role of Advisory Group</u>: To advise a collection of Erie County school districts (and other education/workforce development stakeholders) on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the business community, and connecting students in the workplace.

- A. Welcome and Introductions
- B. Final Science & Health Pathway Flier
- C. Review notes from May 2019 Meeting
  - Employer input priority skills
  - Employer input skills candidates are missing
  - Employer guidance on how people successfully secure jobs within their industry
- D. Facilitated discussion: priority experiences for students in Grades 9-11
  - Career awareness and preparation
  - Career acquisition
  - Career retention and advancement
  - Entrepreneurship
- E. Planning for next meeting and adjournment



### SCIENCE AND HEALTH ADVISORY GROUP September 12, 2019, 9:30 am Manufacturer & Business Association

#### **MEETING NOTES**

- Erie Together launched the Erie County Career Pathways Alliance's Science and Health Advisory Group in February 2019. The advisory group met for the third time on Thursday, September 12.
- At the meeting, the group participated in a facilitated discussion to identify and prioritize career exploration experiences for students in grades 9-11 that are aligned with PA state standards in each of these areas:
  - Career awareness and preparation
  - Career acquisition
  - Career retention and advancement
  - Entrepreneurship
- For career awareness and preparation, the following three opportunities received the most overall interest:
  - Classroom speakers/presentations
  - Employer panels
  - Career Fairs
- For career acquisition, the following three received the most overall interest:
  - Soft skills training
  - Job application "boot camp" (professional dress, writing, etc.)
  - Mock interviews
- For career retention and advancement, the following three received the most overall interest:
  - Career and lifestyle budgeting
  - Identify and explain career ladders
  - Longer-term career planning and employment forecasting (greater than five vears)
- For entrepreneurship, the option that received the most overall interest was for students to visit the four "beehive" locations at the four Erie County universities



"College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.

### SCIENCE AND HEALTH ADVISORY GROUP March 9. 2020 1:00 pm Manufacturer & Business Association

#### **AGENDA**

<u>Role of Advisory Group</u>: To advise a collection of Erie County school districts (and other education/workforce development stakeholders) on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the business community, and connecting students in the workplace.

- A. Welcome and Introductions
- B. Erie County Technical School discussion regarding new programming
  - Introductory comments
  - Planning for new programming healthcare focus
    - i. ECTS timeline, etc.
    - ii. PDE Approved Programs (CIP) and fastest growing Erie County. Occupations data (see table and data source)
    - iii. Facilitated conversation:
      - 1. Are there any high demand occupations within your missing from this list?
      - 2. Select all high demand occupations within your company (only one person per each company should respond)
- C. Review of career exploration experiences developed since last meeting; next steps
- D. Facilitated discussion: priority experiences for students in Grades 6-8 (time permitting)
  - Career awareness and preparation
  - Career acquisition
  - Career retention and advancement
  - Entrepreneurship
- E. Planning for next meeting and Adjournment



Advisory groups are identifying and prioritizing experiences; six finalized and six drafted to date:

# Engineering & Industrial Technology Advisory Group

Employer Panels
Job Shadowing
Internships

Real-World Job Description Review

Mock Interviews

Plant Tours (in-person and virtual)

Career Café

Entrepreneurship Day

STEAM workshops

# Science and Health Advisory Group

Classroom Speakers
Employer Panels
Job/Career Fairs

Soft Skills Training

Job Application "Boot Camp"

**Mock Interviews** 

Career and Lifestyle Budgeting

Identify and Explain Career Ladders

Longer-Term Career Planning and Employment Forecasting (>5 years)



"College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.

# SCIENCE AND HEALTH ADVISORY GROUP March 9. 2020 1:00 pm Manufacturer & Business Association

#### **MEETING NOTES**

<u>Role of Advisory Group</u>: To advise a collection of Erie County school districts (and other education/workforce development stakeholders) on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the business community, and connecting students in the workplace.

#### A. Welcome and Introductions

Mary Bula, facilitator, welcomed the group at 1:00 pm, and the 29 members in attendance introduced themselves.

### B. Erie County Technical School – discussion regarding new programming

- Introductory comments
- Planning for new programming healthcare focus
  - i. ECTS timeline, etc.
  - ii. PDE Approved Programs (CIP) and fastest growing Erie County. Occupations data (see table and data source)
  - iii. Facilitated conversation:
    - 1. Are there any high demand occupations within your missing from this list?
    - 2. Select all high demand occupations within your company (only one person per each company should respond)

Please see attached document for results of this facilitated discussion.

#### C. Review of career exploration experiences developed since last meeting; next steps

Mary Bula shared with the group the age-appropriate career exploration experiences that had been created with their input, and noted that these have been placed on Career Street for deployment. To review the experience templates, visit the Resource Document page of Career Street here: <a href="https://www.careerstreeterie.org/resources/experience-templates">https://www.careerstreeterie.org/resources/experience-templates</a>



# D. Facilitated discussion: priority experiences for students in Grades 6-8 in the area of Career Awareness and Preparation

The group reviewed the Career Education & Work (CEW) Standards and were asked to identify and prioritize career exploration experiences that align with these standards and that they believed would be most impactful. Here are the results of that discussion, with the ideas that generated greatest consensus highlighted in yellow:

- Nontraditional careers Panel of alumni in nontraditional careers
- Junior Achievement
- Career day at university(ies) career team staff, employees, teachers, students
- Meet with professionals to describe typical day: group
- Shadow a professional in a career pathway of interest that has been identified as a result of interest/aptitude test
- Reviewing career pathways options, requirements, and education needed that have been identified as a result of an interest/aptitude test
- Staff Development (Teacher PD) meet with employers and identify unmet needs. Discuss what students and staff can do now, at this age level.
- Panel presentation, panel speakers, panel discussion
- Participate in STEAM fairs
- Invite to explorer program at hospital
- Video Conferencing, virtual tours
- Explain my life success by going to ECTS
- Filmed career commercials
- Career Link tour, virtual or in person
- Present HPO to 6<sup>th</sup> grade parents and students, 8<sup>th</sup> grade as well
- Volunteer in group event with retired independent professionals
- Employer Q/A sessions, building tours, sit down with school groups to discuss opportunities and career aspirations
- Career field trips
- Confer with parents, guardians, counselors, etc.
- Meaningfully incentivized Prepare/design a competition while students learn as much as possible about a career field or interest
- Student ambassadors that could talk to/work with 6-8 grade students
- ECTS invites 8<sup>th</sup> grade students to open house
- Career exploration summer camp
- In class speakers

### E. Planning for next meeting and Adjournment

There being no further business, the meeting was adjourned at 2:30 pm.

# PDE Approved Classification of Instructional Programs (CIP) Codes for Health/Human Services Annual Openings for Associated Standard Occupational Classification Codes (SOC) Codes

	Annual Openings for Associated Standard Occupational Classification Co		Codes	ı	T
		Erie			NA I- O
		County		4	March 9
		Annual	<b>.</b> .	*Indicates	Feedback
		Opening	State	State In-	from
		2019-	Annual	Demand	Employers -
	1 (000 00 100 1)	2024	Openings	Occupation	# of votes
	logy (CIP 26.1201)	1 -		Г	
11-9121	Natural Sciences Managers	2	200		
19-1021	Biochemists & Biophysicists	N/A	120		
19-1022	Microbiologists	N/A	110		
	Biological Scientists, All Other (Bioinformatics scientists, molecular and cellular				
19-1029	biologists, geneticists	2	80		1
19-4021	Biological Technicians	3	471	*	
Homeland	Security, Law Enforcement, Firefighting and Related Protective Services (CIP 43.	.9999)			
29-2041	Emergency Medical Technicians & Paramedics	34 **	913	*	2
33-1099	First-Line Supervisors, Protective Service Workers, All Other	N/A	250		
33-2011	Firefighters	9	370		1
33-3051	Police & Sheriff's Patrol Officers	47	1910	*	
33-3052	Transit & Railroad Police	N/A	10		
33-9011	Animal Control Workers	N/A	30		
33-9032	Security Guards	180 **	6604	*	2
33-9091	Crossing Guards	N/A	1192	*	
33-9092	Lifeguards, Ski Patrol & Other Recreational Protective Service Workers	57	1318	*	2
33-9093	Transportation Security Screeners	N/A	130		
33-9099	Protective Service Workers, All Other (Retail loss prevention specialists)	28	760		1
Dental Ass	sisting/Assistant (CIP 51.0601				
31-9091	Dental Assistants	31	1426	*	
Medical/Clinical Assistant (CIP 51.0801)					
31-9092	Medical Assistants	79	3733	*	2

Veterinary	y/Animal Health Technology/Technician and Veterinary Assistant (CIF	<sup>2</sup> 51.0808)				
29-2056	Veterinary Technologists & Technicians	9	445	*		
31-9096	Veterinary Assistants	11	450	*		
						_
	edical Assisting Service, Other (CIP 51.0899)	-1	240			_
29-2099	Health Technologists & Technicians, All Other	7	310		2	4
29-9099	Healthcare Practitioners & Technical Workers, All Other	N/A	60		1	_
31-1011	Home Health Aides	184	7201	*		
						(see
						additiona
24.4044	No. of the Association of the Control of the Contro	404	0070	<b>.</b>		votes
31-1014	Nursing Assistants	184	9979		7	below)
31-9097	Phlebotomists	20	602		1	_
31-9099	Healthcare Support Workers, All Other	7	240		1	_
39-9021	Personal Care Aides	725	15355	*	5	_
	Respiratory Tech				2	
	Pharmacy Tech				2	
	y Medical Technology/Technician (EMT Paramedic) (CIP 51.0904)			ī		
29-2041	Emergency Medical Technicians & Paramedics	34	913	*		_
Rehabilita	ation Aide (CIP 51.2604)					_
31-2012	Occupational Therapy Aides	N/A	90		2	7
31-2022	Physical Therapist Aides	21	355		2	
	RNT (Nurses Aide)				3	
	<b>1</b>	•				7
Nurse/Nu	rsing Assistant/Aide and Patient Care Assistant (CIP 51.3902)					
31-1014	Nursing Assistants	184	9979	*	5	
	re Technology (CIP 51.9999)			I		_
29-2099	Health Technologists & Technicians, All Other	7	310			_
29-9099	Healthcare Practitioners & Technical Workers, All Other	N/A	60			
31-9099	Healthcare Support Workers, All Other	7	240			

Sources: Fastest Growing Occupations Erie County, PA, 2019; 2019 PA In-Demand Occupations List; O\*NET Online
\*\*From Fastest Growing Occupations Erie County, PA 2018-2024

Parking Lo	t Feedback from Employers:		
	Mental Health Aides/Technicians		2
	Unit Secretary		2
	Ask UPMC Health Plan (Boo Hagerty) about their needs.		



"College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.

### SCIENCE AND HEALTH ADVISORY GROUP May 21, 2020 ZOOM

### **AGENDA**

<u>Role of Advisory Group</u>: To advise a collection of Erie County school districts (and other education/workforce development stakeholders) on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the business community, and connecting students in the workplace.

- A. Welcome and Introductions
- B. Prior identified priority: filmed career commercials (Career Awareness & Preparation)
  - Further discussion: Career Street You Tube elements to cover in "commercial"?
  - Volunteers to participate?
- C. Review of draft career exploration experience (Career Ladders) developed since last meeting next steps
  - Review current ladders
  - What's needed to turn these into valuable resources for students and teachers?
  - What other ladders should be created to feature locally?
- D. Update on Erie County Technical School planned new programming
- E. Facilitated discussion: priority experiences for students in Grades 6-8 for Career Acquisition (time permitting)
- F. Planning for next meeting and Adjournment



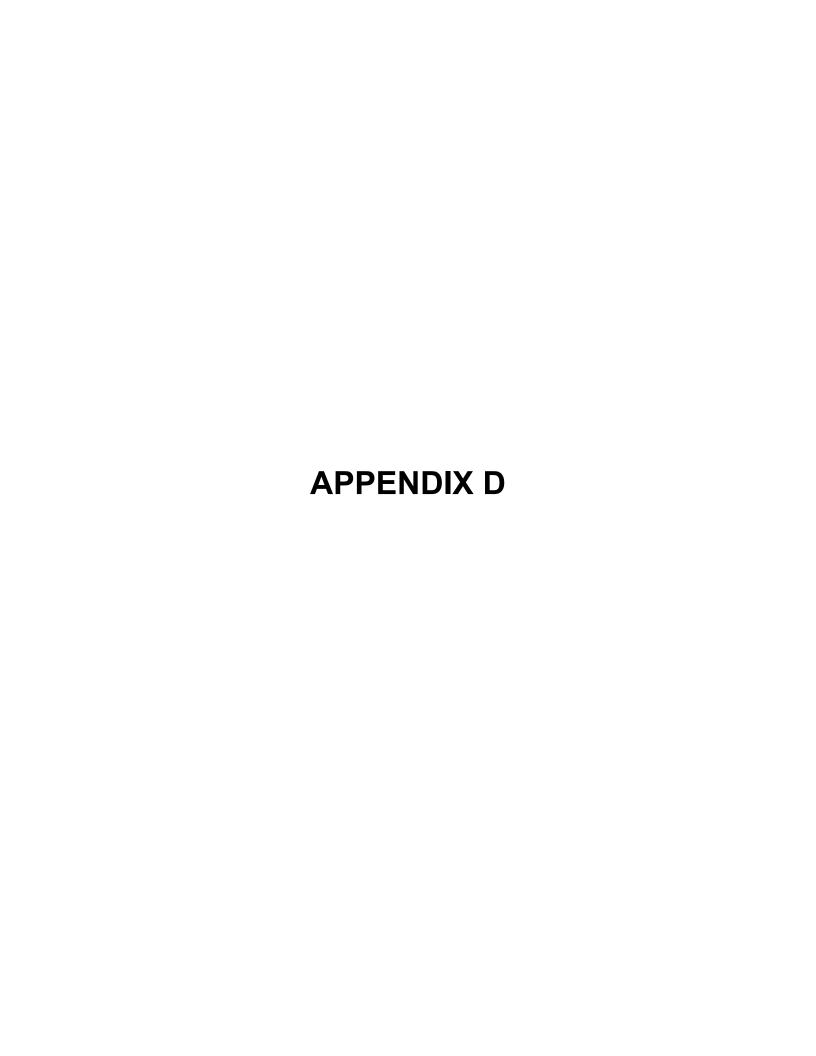
"College, Career and Life Readiness" means that individuals possess the knowledge and skills necessary to succeed in life after high school and to thrive in their community.

### SCIENCE AND HEALTH ADVISORY GROUP October 30, 2020 1:00 pm ZOOM

### **AGENDA**

**Role of Advisory Group**: To advise a collection of Erie County school districts (and other education/workforce development stakeholders) on expected skills and knowledge in the industry, employment trends, making programmatic improvements to meet workforce needs, building relationships within the business community, and connecting students in the workplace.

- A. Welcome and Introductions
- B. Facilitated discussion: priority experiences for students in Grades 6-8 for Career Acquisition
- C. Other business?
  - Update on filmed career commercials on Career Street's YouTube channel; additional volunteers?
  - Review of latest drafts of career ladders next steps?
  - Update on Erie County Technical School's new planned programming?
  - Other?
- D. Planning for next meeting and adjournment



# Science & Health

# **PATHWAY**

**Career Cluster Areas** 

Agriculture, Food & Natural Resources Health Science Scientific Research/Engineering Do you enjoy science courses like biology, chemistry, physics or psychology? Are you interested in cutting-edge technology, researching and solving complex problems, diagnosing and healing people, or working with plants, animals or other natural resources? If you answered "yes" to any of these questions, this pathway may be for you!

For additional information related to these Career Clusters, visit https://www.pacareerzone.org/clusters

# **Erie County**

In-Demand Occupations & Average Entry-Level Wages\* (2018-2024)

# Associate Degree

_	
<b>Dental Hygienist</b>	Physical/Occupational
\$47,200	Therapy Assistant
Radiologic Technologist	\$37,700/\$37,300
\$35,500	Veterinary Technician **
	\$21,799

Graduate Degree

Nurse Practitioner/
Physician Asst.
\$49,000/\$70,600
Speech-Language
Pathologist
\$58,600
Speech-Language
\$58,600
Physician
Starting salary varies by
specialty
Physical/Occupational
Therapist
\$67,000/\$57,500



### Certificate

Phlebotomist	Dental/Nursing Assistant \$23,100/\$21,800
\$23,500	\$23,100/\$21,800
lling and Posting	EMT/Paramedic***
Clerks	\$30,316/\$38,896

# High School

Home Health Aide	Medical Records & Health
\$20,200	Information Technologies
Personal Care Attendant	
	Medical Secretary
	\$24,100

# Bachelor Degree

\$24,400

Registered Nurse (BSN)	Medical and Health
\$44,000	Services Manager
Lab Technician**	\$47,800
\$33,759	Respiratory Therapist
	\$39,800

- \* Entry level wages as reported in 2019
- \*\* Not listed as a high demand job in Erie.
- \*\*\*Entry level wages shown reflect one local employer.

For a list of Top 50 Erie County employers, visit: http://bit.ly/Top50Emp







# Science and Health (SH) Pathway

This Pathway is designed to cultivate students' interests in the life, physical and behavioral sciences. In addition, it involves and planning, managing and producing of therapeutic services, diagnostic services, health information and biochemistry research and development. Many of the careers involved with the food, fiber, environmental and natural resource systems fall under this pathway.

Are you interested in	Can you	Do you enjoy
Health care environment Science and medicine Medical research Food production Environment and conservation Pharmacy Animals Physical therapy Sports and fitness Information systems Radiology	Pay attention to detail Use a computer and technology Work in a lab setting or medical facility Apply scientific theory to real life problems Work outdoors around animals and plants Collect and analyze data from experiments Work with people in need Work with science and math theories	Caring for sick animals  Working outdoors with wildlife  Working on cutting edge scientific research  Working on a team  Medical lab research  Making a contribution to society  Working with numbers  Developing conclusions from a  database

If you answered "yes" to many of these questions, you might consider a future in one of the sample occupations listed below.

# **Sample Careers**

Entry	Skilled	Professional (4+ college)
Patient care technician	Certified nursing assistant	Athletic trainer
	_	
Dialysis technician	Dental hygienist	Speech/Language pathologist
EEG technician	Emergency medical technician	Dietician
Home health aide	Licensed practice nurse	Physician assistant
Nurses aide, orderlies	Medical lab technician	Medical examiner
Pharmacy technician	Personal trainer	Pharmacist
Physical therapy aide	Radiological technician	Physician
Animal caretaker	Respiratory therapist	Registered nurse
Breeder	Dental lab technician	Marine biologist
Extension service worker	Fish and game worker	Soil conservationist
Wildlife reserve worker	Forest conservationist	Veterinarian
Optician	GPS technician	Chemist
Data Entry	Surveyor	Environmental scientist
Farmer	Veterinary Technician	Zoologist
		Nuclear engineer





# **CLASSROOM SPEAKERS**

CEW Standard	13.1.11.A, B, D; 13.2.11.C
Recommended length:	30-45 minutes per presentation
Recommended frequency:	One speaker per unit, theme, or quarter
Targeted student age group:	9-12 graders
Logistics (Schools):	<ul> <li>Schools should:</li> <li>Utilize Career Street to identify and secure employers willing to provide guest speakers to the classroom</li> <li>Attempt to secure speakers with varying levels of education during the course of the school year.</li> <li>Find a suitable time and location to host speaker</li> <li>Clarify with speaker any technology/audiovisual needs</li> <li>Clarify with the speaker in advance what topics they should include in their presentation; ensure the guest speaker connects to subject matter and/or lesson plan</li> <li>Properly introduce the speaker and his/her company</li> <li>Ensure students are attentive and prepared to ask questions of the speaker</li> <li>Ensure students complete an artifact</li> <li>Ensure teacher remains in the room during presentation to introduce the speaker, facilitate discussion and help moderate Q and A.</li> <li>Ensure appropriate Clearance policies are followed, if</li> </ul>
	applicable.
Student Preparation/Follow-Up:	Before and/or during the experience, students should:  Research the company/industry/position which the planned class speaker will be representing  Prepare three questions, in advance, for the speaker; consider additional questions of interest during presentation  Remain respectful during the presentation  After, students should:  Prepare a Thank You note for the speaker  Complete student artifact

### **Employer Preparation/Remarks** Speaker should: Touch base with teachers in advance of presentation to identify what topics should be covered and how long the presentation should be. Follow appropriate Clearance policies, if applicable. Introduce yourself and your company. Explain company mission and vision. Talk about the industry in which your company fits. Explain what the company does. Wear uniform (if applicable); Hard hat? Hair net? Safety glasses, etc. Could be passed around classroom. Bring products made by your company, if possible. Explain your position at the company. Address remaining topics desired by teacher. Could include the following, among others: How you got your position; make connections between high school classes and what is expected on the job Extracurricular activities that could help if interested in a job like yours The amount and type of education/training beyond high school required Earning potential of various careers within the industry Career ladders (job advancement opportunities) within your company Incorporate hands-on activity if possible and appropriate





### **EMPLOYER PANELS**

0514/01   1	10.1.1.1.1. B. B. E. II. 10.0.11. E. 10.0.11. B.	
CEW Standards	13.1.11 A, B, D, F, H; 13.2.11 E; 13.3.11 D	
Recommended length:	60 minutes	
Recommended frequency:	Five times per year; one for each career pathway	
Recommended # of panelists:	Three on each panel	
-		
Recommended student age group:	9-11 graders; students <b>interested</b> in the pathway	
3 3 1	, , ,	
Recommended Student		
Preparation/Follow-Up (in addition		
to evidence/artifacts teachers	Revisit personal "Academic Career Plan"	
require):		
	Prior to panels taking place, preparation may include:	
	<ul> <li>In-class review of five state-designated career pathways;</li> </ul>	
	Review labor market information related to each	
	pathway (Ask WDB/CareerLink to present to class);	
	Research local industry and the services they offer	
	related to career pathway of interest using online and	
	print resources, etc.;	
	•	
	Write report	
	Write down questions of interest for panel; be prepared to ask	
	at least one question at session and take notes on answers	
	Complete a "Student Evaluation" after the panel	
	Write thank you notes to panelists	
Employer Preparation/Remarks:	Approach this as a recruitment tool	
	Incorporate visual or hands-on activity into presentation	
	Types of jobs available; focus more on jobs you want to fill	
	Skill sets commonly required to perform well on job	
	How to prepare for available jobs? (high school courses and	
	related activity, post-secondary education?)	
	Earning potential	

Employer Panels 2

Logistics:	Skilled, knowledgeable panel moderator (teacher); prompt	
	conversation, questions from students	
	Make it a mix of presentation, hands on, interactivity (students	
	develop questions in advance to ask; incorporate presenter	
	products and hands on activity when possible)	
	Ensure adequate email dialogue between teacher and panelists	
	prior to event so all goes well the day of the panel	
	Ensure appropriate Clearance policies are followed, if applicable.	





# **JOB / CAREER FAIR**

CEW Standard:	13.1.11.A; 13.2.11.A, C; 13.3.11.E		
Recommended length:  Recommended frequency:	2-3 hours Annually		
Targeted student age group:	9-12 graders		
Logistics (Schools):	Schools should:  Identify start and end time, and location for event.  Utilize Career Street and other means to identify and recruit local employers across multiple industries; align recruitment with students' areas of interest if possible.  Prepare list of companies who are attending and distribute to students in advance.  Ensure appropriate Clearance policies are followed, if applicable.  Ensure businesses understand whether it's a job fair, career fair, or both  Promote heavily to 9-12 graders for attendance.  Provide refreshments: coffee, water, bagels, etc.  Determine what resources employers should bring and communicate that to employers in advance: applications, informational materials, etc.  Plan and deploy student artifact (i.e. reflection, etc.)  Hold a small celebration after event; give out awards to students who made the most contacts, scheduled a follow-up interview, etc.		
Student Preparation/Follow-Up:	Before/during event:  Go over list of companies in attendance and identify ones of greatest interest.  Prepare at least three questions to pose to each company.  Wear appropriate clothing to event (business casual or suit).  Prepare a resume and bring copies, if seeking employment.		

	<ul> <li>Set personal goal(s) for day, i.e. talk to at least number of companies; gather business cards, and applications and/or informational materials from number of companies of interest.</li> <li>After, students should:         <ul> <li>Complete refection and/or other artifact.</li> <li>Prepare and send hand-written Thank You notes to employers.</li> </ul> </li> </ul>	
Employer Preparation/Remarks	<ul> <li>Follow appropriate Clearance policies, if applicable.</li> <li>Create an interesting display and/or welcoming space at the fair.</li> <li>Be prepared to explain their industry and company.</li> <li>Be prepared to discuss job opportunities within company, and skills/education needed (in high school and beyond) to perform various jobs.</li> <li>Focus on entry level experiences and/or jobs that lead to more advanced careers.</li> <li>Talk about career ladders (advancement opportunities) within companies.</li> <li>Provide business cards, relevant job description(s) and job applications to interested students.</li> <li>Communicate benefits of working at the company.</li> </ul>	





# **Mock Interview**

CEW Standard	13.2.11.A, C and E		
Recommended length:	30-45 minutes (for a student to complete two interviews)		
Recommended frequency:	Once a year with a student completing two interviews		
Recommended # of interviewers:	Enough so students can do two interviews in one session, if this is organized as a mock interview "event" with multiple students and interviewers.		
Targeted student age group:	Grades 9-12		
School's Preparation of Students:	Help students think through:  What job they would be interviewing for (if applicable)  What they would wear to an interview How they would prepare/research for the interview What they would bring to the interview  Help students understand these appropriate behaviors for during the interview: Introduce yourself: handshake, eye contact, full name Smile and have a friendly presence Speak clearly to the interviewer(s) Answer questions in a positive light Be persuasive: highlight your best qualities Display confidence in yourself Avoid using words: um, like, ah, yeah, na, Make eye contact Sit up straight without crossing arms or legs May cross legs at ankles  Provide possible question list to students to practice (see employer section below)		
Recommended Student Preparation/Follow- Up (in addition to evidence/artifacts teachers require):	Before Interview:  • Understand the attire/dress expectation prior to interview  • Model appropriate grooming for job  • Practice answers to possible interview questions		

	T
	<ul> <li>Practice appropriate verbal and non-verbal communication skills (handshake, eye-contact, etc.)</li> <li>Arrive 15 minutes early to interview (if applicable)</li> <li>Be kind to every person you meet before, during and after</li> <li>Bring all needed materials (ex. resume, reference list, etc.)</li> <li>Understand the Interviewers' goals (hire the most qualified or best fit person for the job)</li> </ul>
	At End of Interview:
Employer Sample Questions:	<ul> <li>Why do you want to work in this company/industry?</li> <li>What are your career goals in the next five years?</li> <li>What are your three greatest strengths?</li> <li>What is your biggest weakness?</li> <li>Identify two positive things a teacher (or boss) would say about you.</li> <li>Describe a difficult situation and how you overcame it.</li> <li>Give an example of how you worked on a team.</li> <li>Everyone makes mistakes. Describe a situation where you needed to work through a mistake in a positive manner.</li> <li>Give an example of something you've done to improve yourself.</li> <li>What motivates you to do a good job?</li> <li>Why should I hire you over someone similarly or more qualified?</li> </ul>
Logistics:	<ul> <li>Ensure appropriate Clearance policies are followed, if applicable.</li> <li>Schools should use Career Street to identify employer participants</li> <li>Schools should give instructions to students and employers prior to the "events" so they know how the experience should flow.</li> <li>Interviewers should "evaluate" students' interview strengths and areas for improvement (see below sample)</li> <li>Students should do a mock interview reflection after the interviews (see below sample)</li> </ul>

# **INTERVIEWER EVALUATION SHEET**

Interviewers: Identify "strengths" and at least one "needs work"

Student Name					
Interview Skills	Strength	Needs Work		Strength	Needs Work
Appropriate Introduction (First & Last Name)			ALLOWS		
Sit Up Straight (Avoid crossing arms/legs)					
Sit Calmly/Avoid Fidgeting			<b>=</b>		
Use Clear Speech (avoid um, ah, like,)			SECOND INTERVIEW IF TIME		
Make Eye Contact			RN N		
Smile/Friendly Presence					
Persuasive & Truthful Answers			JI QNO		
Answer Questions in Positive Light			SECC		
Appropriate Handshake					
Display Confidence					

(1st Interview)	(2 <sup>nd</sup> Interview)
Evaluator: Identify student's bigges	t strength:
<b>Evaluator Initials (1st Interview):</b>	Evaluator Initials (2 <sup>nd</sup> Interview):

# **Student Mock Interview Reflection**

Student Name:	
nalyze your Interview. Number, from 1 to 10, yo	our interview strengt
aryze your interview. Number, nom 1 to 10, yo	our interview strengt
> 10 = your strength	
> 1 = your weakness area	
, _ , , , , , , , , , , , , , , , , , ,	
SELF-EVALUATION: COMPLETE AFTER	MOCK INTERVIEW
Interview Topic	Number
Appropriate Introduction (First & Last Name)	
Sit Up Straight (Avoid crossing arms/legs)	
Sit Calmly/Avoid Fidgeting	
Use Clear Speech (avoid um, ah, like,)	
Make Eye Contact	
Smile/Friendly Presence	
Persuasive & Truthful Answers	
Answer Questions in Positive Light	
Appropriate Handshake	
Display Confidence	
escribe how you will improve your interview sk ur weakness areas? (3-4 sentences)	ills. How can you pra



# PHLEBOTOMIST SAMPLE CAREER LADDER

Position	Education/Training	Salary
Pathologist	Advanced education and	\$57,230-
	training. Ph. D., M.D.	195,000+
Lab Manager	Bachelor's degree**	\$93,072-
		\$130,000+**
Medical and Clinical Laboratory Technician	Vocational schools and	\$31,169*
	possibly a Bachelor's degree	
Phlebotomist	Post-secondary nondegree	\$25,292*
	award*	



### **Job Descriptions**

#### • Phlebotomist

 Draw blood for tests, transfusions, donations, or research. May explain the procedure to patients and assist in the recovery of patients with adverse reactions.

#### Medical and Clinical Laboratory Technician

 Perform routine medical laboratory tests for the diagnosis, treatment, and prevention of disease. May work under the supervision of a medical technologist.

### Lab Manager\*\*

 Oversee testing, clinical trials, medical device development. Provide results to physicians for making treatment decisions. Seeing overall quality standards are met.

#### Pathologist

 Diagnose disease using specimens and laboratory techniques. Study nature, cause, and development of diseases.

**Source:** PA career zone (<u>www.pacareerzone.com</u>)

<sup>\*</sup> Education and/or salary data from Erie County Data Center: Erie County Occupations by Growth, 2019 Update

<sup>\*\*</sup> From <a href="https://www.topmastersinhealthcare.com/job-profiles/diagnostics-laboratory-manager/">https://www.topmastersinhealthcare.com/job-profiles/diagnostics-laboratory-manager/</a>



# PERSONAL CARE AIDE SAMPLE CAREER LADDER

Position	Education/Training	Average Entry- Level Wages
Nurse Practitioner	Graduate degree	\$66,866
Registered Nurse (RN)	Bachelor degree	\$42,969
Licensed Practical Nurse (LPN)	High school diploma with post- secondary or on-the-job training, or associate degree	\$32,305
Certified Nurse Assistant (CNA)	Dependent on position, usually requires high school diploma and completion of a certificate program	\$22,133
Personal Care Aide	High school diploma or equivalent	\$19,752



#### • Personal Care Aide

Assist the elderly, convalescents, or persons with disabilities with daily living activities at the person's home or in a care facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals. May provide assistance at non-residential care facilities. May advise families, the elderly, convalescents, and persons with disabilities regarding such things as nutrition, cleanliness, and household activities.

#### Certified Nurse Assistant (CNA)

 Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens. May transfer or transport patients. Includes nursing care attendants, nursing aides, and nursing attendants.

#### Licensed Practical Nurse (LPN)

 Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.

### • Registered Nurse (RN)

 Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.

#### • Nurse Practitioner

 Diagnose and treat acute, episodic, or chronic illness, independently or as part of a healthcare team. May focus on health promotion and disease prevention. May order, perform, or interpret diagnostic tests such as lab work and x rays. May prescribe medication. Must be registered nurses who have specialized graduate education.

**Sources:** PA Career Zone (<a href="www.pacareerzone.org">www.pacareerzone.org</a>) and Erie County Data Center: Erie County Occupations by Growth, 2019 Update





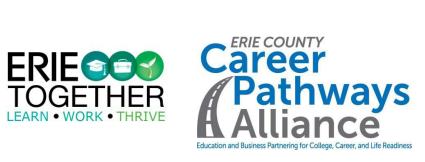
# **JOB SHADOW**

CEW Standard	13.1.11.A, B, C, D, E, F; 13.2.11.C; 13.3.11.G		
CETT Standard	13.1.11.1, 0, 0, 0, 1, 1, 13.2.11.0, 13.3.11.0		
Recommended length:	Full day or half day – dependent on the employer; must be at least three hours.		
Recommended	Dependent on student demand and employer availability; each student, however,		
frequency:	should have a minimum of three separate experiences		
Targeted	9-12 graders		
student age			
group:			
Logistics	See pages 1-7 of PDE Work-Based Learning Toolkit that can be found at		
(Schools):	http://static.pdesas.org/content/documents/Toolkit_WorkBased_Learning_2017.pdf		
	for details on how to implement a job shadow program		
	Utilize Career Street to identify companies, and employees within them, to serve as		
	hosts.		
	Use Career Street to clarify details, including start and end time, location, available		
	dates, provision for lunch, etc.		
	Vet the employer; make sure the company is not within a private home and make		
	sure there is more than one employee/adult there. Ensure the employer has		
	required Clearances (see Employer section below.)		
	Define and communicate to employer expectations for the experiences. Could		
	include the following:		
	Company insurance coverage to allow for student presence		
	Company tour		
	Student provided a job description for host		
	Student observe daily activity		
	Student given hands on activity		
	Set aside time for student Q & A during the day		
	Define how students should communicate with their hosts. (email or phone)		
	Set a standard of business casual attire and have students confirm with their host if		
	they should dress more/less formally.		
	Create and distribute permission forms to inform parents of job shadow dates and		
	transportation needs.		
	Create and distribute student liability waiver.		
	Survey students on the experience after completed.		
	Plan for and collect student artifact.		
	Survey employer on the experience after completed.		
	Promote success of the job shadows, when possible.		

# JOB SHADOWING (cont'd)

Student Preparation/Follow-Up:	Take (or review) Career Interest Inventory		
	Rank job shadowing preferences (identify 2-3 based on student		
	interests)		
	In advance of shadow day:		
	Reach out to employer to confirm details		
	<ul> <li>Go over experience expectations</li> </ul>		
	Research job shadow host company		
	Develop list of questions to ask		
	Think about career aspirations and be prepared to		
	answer relevant questions		
	Write thank you notes to hosts after the experience.		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Employer Preparation/Remarks:	Review "Job Shadowing Guide" under "Resources for		
. ,	Employers" at this link for helpful guidance:		
	https://www.education.pa.gov/K-		
	12/PACareerStandards/Partners/Pages/default.aspx#tab-1		
	Clearances: Employers participating in the program are required		
	to obtain school volunteer background clearances. School		
	volunteers are required to have a Pennsylvania State Police		
	criminal history check, child abuse history certification, and if the		
	mentor has resided in Pennsylvania for fewer than 10 years, a		
	federal criminal history check. If the child interacts with other		
	workers at the employer's job site, only the assigned employee		
	is required to have clearances as long as that employee remains		
	in the immediate vicinity of the student and is identified as the		
	responsible adult. (Page 2, PDE Work-Based Learning Toolkit)		
	Talk with the school district contact to determine if the above		
	policy is the district's policy, or if the district follows something		
	more restrictive. If they do, follow district policy.		
	Show students what you do, where you do it, how you do it		
	Provide orientation to the company and industry		
	Show students day in the life of host employee		
	Provide students with company tour; provide hands-on activity,		
	if possible.		
	Describe pathways to career(s):		
	<ul> <li>Make connections between high school classes and</li> </ul>		
	extracurriculars to what's expected on the job		
	<ul> <li>Explain amount and type of education/training beyond</li> </ul>		
	high school required		
	<ul> <li>Mention resources available to support education, if applicable</li> </ul>		
	<ul> <li>Focus on entry level experiences and/or jobs that lead to</li> </ul>		
	careers; discuss career ladders within company		
	Provide relevant job description(s)		
	Provide application materials for students to see or		
	utilize in the future		
	dunze in the rature		





# Career Café

13.1.5 A, B, C, D, E, F; 13.2.5 E		
13.1.3 A, b, C, D, L, 1, 13.2.3 L		
25-30 minutes (lunch period ideal)		
Five times per year; one for each career pathway		
One (or one plus support staff)		
5 <sup>th</sup> or 6 <sup>th</sup> graders		
Prior to speaker coming in, preparation may include:  In-class review of five state-designated career pathways  Review of personal interests and skill sets  Identification of career paths of interest  Preparation of questions of interest for speaker; be prepared to ask at least one and take notes on answers  Review background of speaker  After event:  Write reflection  Write thank you notes to speakers		
Approach this as informational; keep discussion basic.  Touch on things like:  What do you do in this job?  What are the strengths of a person in this career?  What kind of clubs and classes in middle/high school might help prepare for this career?  What kind of post-secondary education or training is needed?  What kind of skills are needed?  Incorporate hands on activity if possible  Incorporate visual or hands-on activity into presentation		

Career Café 2

Logistics:	Skilled, knowledgeable speaker able to prompt
	conversation, questions from students
	Make it a mix of presentation, hands on, interactivity
	Ensure adequate email dialogue between teacher and speaker prior to event so all goes well the day of the experience
	Ensure appropriate Clearance policies are followed, if applicable.



# Science & Health Career Pathways Informational Session December 15, 2020 6:30-7:30 p.m.

Thank you for agreeing to participate in this event, the second of five "Career Pathways Informational Sessions" for students in grades 8-12 and their parents/caregivers. Below is how we have structured the event, including a list of questions we would like you to be prepared to answer. Please email Mary Bula at <a href="mary@erietogether.org">mary@erietogether.org</a> if you have any questions or concerns, or want to make any changes to the list of questions, and, if you haven't done so already, please register for the event at <a href="https://bit.ly/3fYq000">https://bit.ly/3fYq000</a>

Panelists will include Ms. Sarah Bennett (Penn Future), Dr. Dennis Dirkmaat (Mercyhurst University and HD Forensics), Ms. Lynn Rupp (UPMC Hamot and Regional Health Services), and Dr. Melanie Titzel (LECOM Institute for Successful Aging). Janet Anderson (NWPA Job Connect) will be doing a "standalone" presentation to set the stage as the event begins.

The event structure will look like this:

- **6:20 pm**: Speakers will sign on to webinar
- **6:30-6:35** pm: Erie Together (Mary Bula, moderator) welcomes participants, gives background on the event, mentions Zoom "housekeeping" items, and begins to call on speakers to introduce themselves.
- **6:35-6:40**: Speaker introductions. Each speaker takes one minute to introduce him/herself. Introductions should include: Name, position, a little about your background, and a general description of what you do. Mary will call on each person to do his/her introduction. Janet Anderson will introduce herself last; and will roll right into her portion of the presentation.
- **6:40-6:50**: Janet will offer high level regional industry/job insights based on local/state data (either HPO or IDOL); talk about skills of interest across employers (employability skills); highlight jobs available here in Erie; offer general advice to 8-12 graders on what to do at this age to prepare for work, etc.
- 6:50-7:27: Mary asks each panelist questions to surface information about their job, employer, careers in their industry, education necessary for these careers, earning potential, etc. These questions will come from the list below and may also be supplemented with questions submitted during the event through the chat.
- 7:27-7:30: Mary thanks speakers, participants, and wraps up event.

Please be prepared to answer the following questions, which could be supplanted and/or added to by audience questions taken through the chat.

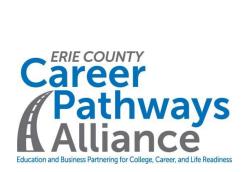
- <u>Sarah Bennett</u>: Question 1: You spent most of your career as an instructor at the university level, and ultimately rose to department chair of the biology department at Mercyhurst. Recently you left higher education to take on water quality conservation at Penn Future. What are your job responsibilities at Penn Future, and what made you decide to pursue this kind of role?
  - Question 2: For students who are interested in natural resources and their preservation, what kinds of job opportunities exist?
  - Question 3: There are so many kinds of sciences and lots of different careers that fall within them. What advice would you give students who have an interest in science about exploring different subject areas and refining their focus?
- <u>Dennis Dirkmaat</u>: Question 1: You are a forensic anthropologist. What does a
  forensic anthropologist do? How did you become interested in this field, and what do
  you like least, and most, about your career?
  - Question 2: You've worked all around the world. Can you tell us about a couple projects you've been engaged in that were particularly meaningful to you?
  - Question 3: What should a student do in high school or afterwards to prepare for a successful career in this field? What level of education is required?
- Lynn Rupp: Question 1: You have spent almost 30 years at UPMC Hamot, securing roles with increasing responsibility and becoming part of the management team as Vice President of Operations. You are also in charge of physician recruitment. What skills or personal attributes are keys to success at UPMC Hamot? Are there any restrictions that would keep someone from being considered for a hospital job?
  - Question 2: Generally speaking, what kinds of jobs are available within a hospital setting and what level of education is required? (Lynn, here's where we'd want you to hit entry-level with the lowest educational requirements all the way up to professional with four year and advanced degrees. The goal is to highlight a range of jobs maybe focus on those that are highest in demand...)
  - Question 3: What is the best way for students to learn about hospital career opportunities and consider their interest? Are there things they can do while they're still in high school?
- <u>Melanie Titzel</u>: Question 1: You are an administrator at LECOM Institute for Successful Aging. What is the Institute for Successful Aging, and what do your job duties entail?
  - Question 2: How are job opportunities in a senior living setting similar, or different, from those in a hospital setting? What jobs are in highest demand, and what kind of education is required for those jobs?
  - Question 3: What have you found to be the most fulfilling part of your career, and why would you recommend students considering careers in the senior care realm? Is

there anything students can do while they're still in high school to give them a leg up?

# **Question for all:**

• If you could leave students with one last piece of advice about pursuing opportunities in the Science & Health career pathway, what would that be?





# **Career Pathway Informational Session for Students and Families (Virtual)**

Recommended length:	60 minutes
Recommended frequency:	One per pathway annually
Recommended # of panelists:	Up to three employers on employer panel; also NWPA Job Connect, and possibly Erie County Data Center and/or other industry-related partners
Targeted student age group:	8-12 graders; students <b>interested</b> in the pathway, along with their parents/caregivers
Decommended Student	
Recommended Student Preparation/Follow-Up (in addition to evidence/artifacts teachers may want to collect):	<ul> <li>Revisit personal "Academic Career Plan" if in place.</li> <li>Review Erie County Career Pathways Alliance career pathways flyer related to the pathway.</li> <li>Develop up to three questions to pose at event; submit to jpontzer@careerstreeterie.org five days prior to the event.</li> <li>Register for the Zoom event five days prior to the event. (Required)</li> </ul>
Frankers Dromanation / Domanka	
Employer Preparation/Remarks:	<ul> <li>Approach this as a recruitment tool</li> <li>High level introduction to careers in pathway</li> <li>Types of jobs available; focus more on jobs you want to fill</li> <li>Skill sets commonly required to perform well on job</li> <li>How to prepare for available jobs? (high school courses and related activity, post-secondary education?)</li> <li>Earning potential</li> </ul>
Logistics (Schools):	District administration, Career Street Liaisons, teachers and other ECCPA participants should widely promote the opportunity to students in grades 8-12 and their families.

	<ul> <li>Information on the event, and informational flyers developed by ECCPA/Career Street can be sent home with students, placed on District websites, and promoted through social media and other means.</li> <li>Include registration information in promotion; registration for these events will be required.</li> </ul>
Event Agenda:	<ul> <li>Erie Together (moderator) introduces all presenters; provides Zoom "housekeeping" items (5 minutes)</li> <li>NWPA Job Connect offers regional industry/job insight based on high priority occupation data (5 minutes)</li> <li>Second Speaker (optional) Erie County Data Center offers Erie County perspective (5 minutes)</li> <li>Moderator asks each employer questions to surface information about their business, careers in their industry and education necessary for these careers (10 minutes each)</li> <li>Moderator asks questions posed by students and families prior to event and/or through chat (10-12 minutes)</li> <li>Moderator wraps up event (3-5 minutes)</li> </ul>