

Innovation Webex:

Exploring Work-Based Learning
Strategies through the PTECH Model

Ben Carter

Director of Workforce and
Innovation



Indiana
DEPARTMENT OF
EDUCATION



@EducateIN

Working Together for Student Success

Agenda

- **Introduction**
- **Overview**
- **PTECH**
- **WBL Partnerships**
- **CELL**
- **Q & A**



Introduction

- Ben Carter, Director of Workforce and Innovation



Overview and Brief Synopsis of Grad Pathways

- **Monthly Innovation Webex**
 - Highlighting innovative public–private partnerships
 - Alignment to Graduation Pathways
 - Work Based Learning experiences such as apprenticeships, on-the-job training, and career preparation activities
- **January 2019**
 - Reaching Potential Through Manufacturing (RPM)
 - Richmond County School System (Augusta, GA)
 - Textron Specialized Vehicles (Augusta, GA)





1 Credits

Earn credits toward a diploma with designation.

- Core 40 - minimum 40 credits
- Academic Honors - minimum 47 credits
- Technical Honors - minimum 47 credits
- General





2 Learn & Demonstrate Employability Skills

Produce defined outcome(s) based on experience.

Defined Outcome Options

- Videos
- Papers
- Resume
- Dual Credit
- Certifications
- Portfolio
- Projects
- Slideshows
- Presentation
- Five Year Goal Plan
- Reflection of Experience
- Letters of Recommendation
- Letter of Employment Verification
- Postsecondary-related Experiences
- Co-Curricular Participation
- Extra-Curricular Participation
- Locally Defined Outcome





3 Postsecondary-Ready Competencies

Meet at least one of these competencies.

- **Honors Diploma**
academic or technical
- **SAT**
reading/writing = 480, math = 530
- **ACT**
english = 18, reading = 22, math = 22, science = 23 (2 out of 4 needed with at least one in English/Reading and one in Math/Science)
- **ASVAB**
minimum of 31
- **Industry Certification**
certification from approved DWD list
- **Apprenticeship**
federally recognized
- **CTE Concentrator**
C average or higher in at least 2 advanced HS courses in a state-approved CTE Pathway
- **AP/IB/Dual Credit/
Cambridge International/CLEP**
C average or higher in 3 courses (1 of the 3 courses must be in core content area or all three must be part of a CTE pathway)
- **Locally Created Pathway**
approved by SBOE



Exploring Work Based Learning Strategies through the P-Tech Model

Stephen T. Casa
Workplace Learning Coordinator
Ulster BOCES
scasa@ulsterboces.org

Steve Casa – Who is he?

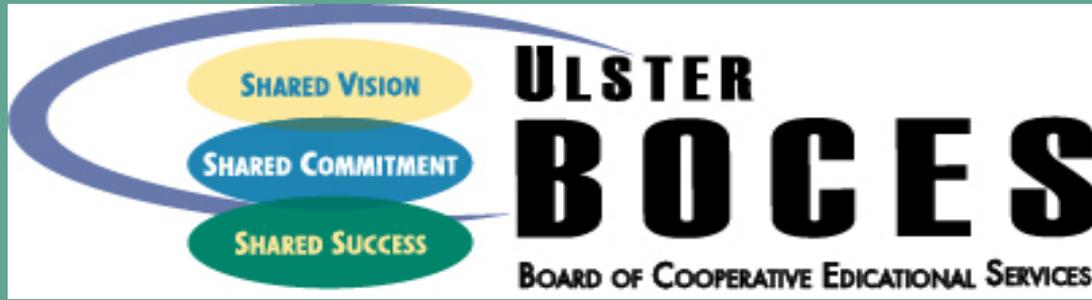
- Workplace Learning Coordinator at Ulster BOCES
- Educator since 1990
 - Business and Distributive Education - NYSED
 - Business Professor - State University of NY
- Worked in industry before and in the middle of education career
 - Harris/3M Document Products
 - Lehman Brothers
 - Gruntal & Co.
 - Advest, Inc.
- National Reform Strategist - Career Academies
 - National Academy Foundation
 - National Career Academy Coalition
- Education Reform and Work Based Learning Consultant
- NYS Certified Work Based Learning Coordinator



What is PTECH?

Pathways in **T**echnology **E**arly **C**ollege **H**igh **S**chool

- Six-year program
- Culminates with an Associate's degree from a local community college at no cost to the young scholar
- Focus on a program of study
- A six-year connection to your local business partner advisory committee



Hudson Valley Pathways Academy



Global Competencies

- Identify an issue, generate questions, and explain its significance.
- Use variety of languages, sources and media to identify and weigh relevant evidence.
- Analyze, integrate, and synthesize evidence to construct coherent responses.
- Develop argument based on compelling evidence and draws defensible conclusions.

Investigate the World

Students investigate the world beyond their immediate environment.

- Recognize and express their own perspective and identify influences on that perspective.
- Examine others' perspectives and identify what influenced them.
- Explain the impact of cultural interactions.
- Articulate how differential access to knowledge, technology, and resources affects quality of life and perspectives .

Recognize Perspectives

Students recognize their own and others' perspectives.

Understand the World through Disciplinary and Interdisciplinary Study

Take Action

Students translate their ideas into appropriate actions to improve conditions.

- Identify and create opportunities for personal or collaborative action to improve conditions.
- Assess options and plan actions based on evidence and potential for impact.
- Act, personally or collaboratively, in creative and ethical ways to contribute to improvement, and assess impact of actions taken.
- Reflect on capacity to advocate for and contribute to improvement.

Communicate Ideas

Students communicate their ideas effectively with diverse audiences.

- Recognize and express how diverse audiences perceive meaning and how that affects communication.
- Listen to and communicate effectively with diverse people.
- Select and use appropriate technology and media to communicate with diverse audiences.
- Reflect on how effective communication affects understanding and collaboration in an interdependent world.

at HVPA

Water in Our World: Young Scholars Symposium



PBL - Process Based Learning



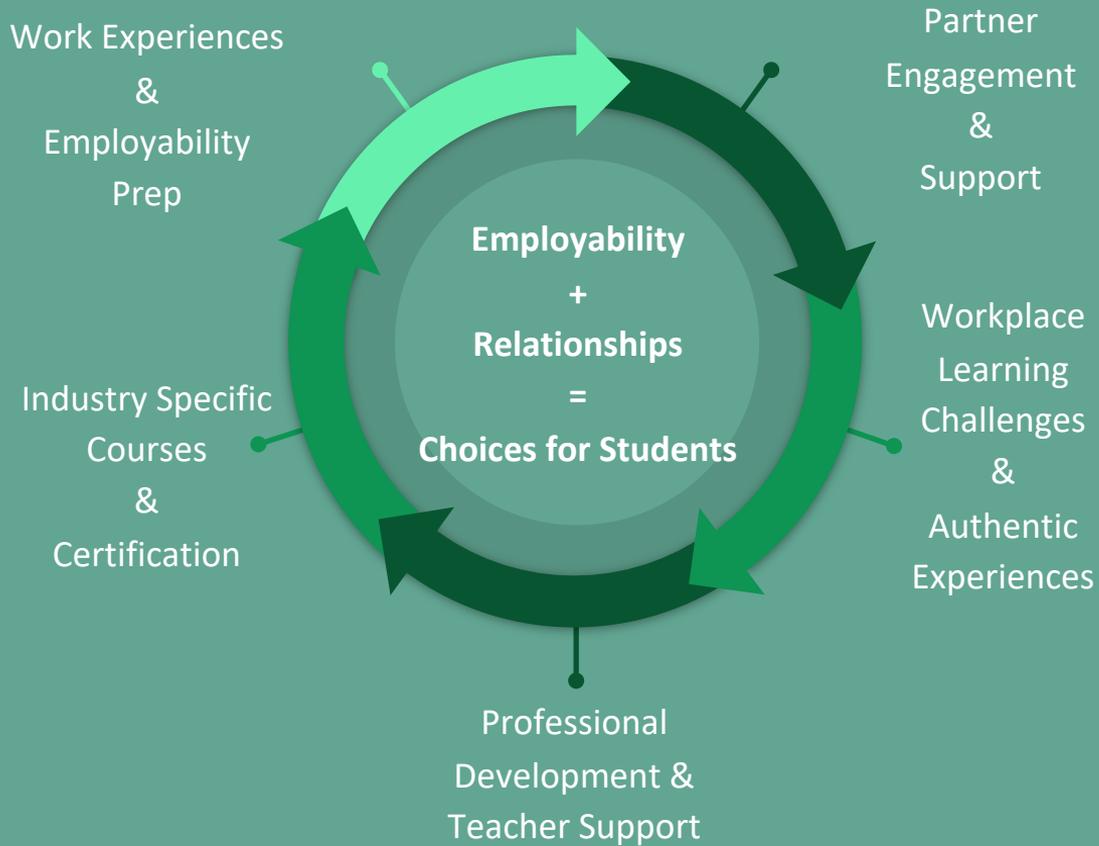
Standards Based Grading

Appropriately Targeted Feedback

Meaningful Student Reflection



Workplace Learning at HVPA



Guest Speakers



Extended Classroom



Work Based Learning: Learn by Doing



Workplace Learning
Challenges



Internships

Workplace Learning at HVPA

- A six-year continuum that scaffolds young scholars experiences by focusing on the needed skills that will make them successful for their 50+ years after high school
- The idea of Workplace Learning at HVPA is one of integration and inclusion.



Workplace Learning at HVPA

- This integration and inclusion is global in nature with each member of the HVPA family fully engaged, throughout each day and throughout their entire HVPA experience.
- We look at Workplace Learning as the driver for the school and work together to integrate it daily.





Awareness:
Through projects
and classroom
experiences

Exploration:
Via research,
guest speakers,
field trips, etc.

Demonstration:
Via capstone and
internship
experiences

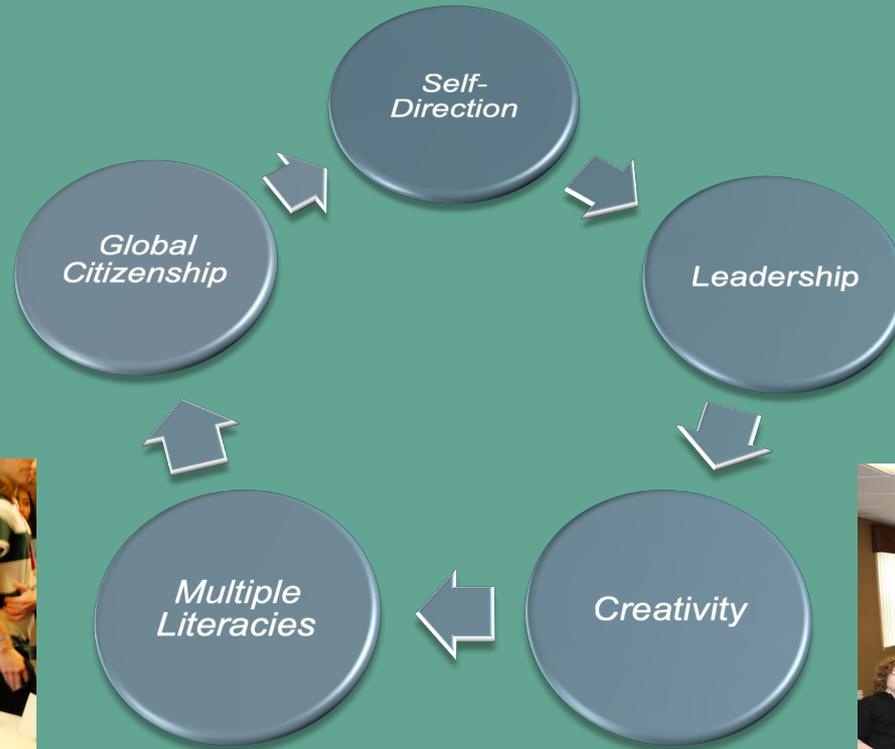
A Young Scholar with Choices

Preparation:
Through
integration with
business partners
in relevant
settings.

Employability:
Through
demonstration of
mastering
employability
skills.



HVPA Workplace Learning Standards



Workplace Learning Challenges

Opening Young Scholars Minds Through Partnerships with Business and Industry

WATER POWER Means WATER FORCE

Year	Flow (cfs)	Head (ft)	Power (kW)	Efficiency (%)	Cost (¢/kWh)
1950	1000	100	100	100	100
1960	1500	150	225	150	150
1970	2000	200	400	200	200
1980	2500	250	625	250	250
1990	3000	300	900	300	300
2000	3500	350	1225	350	350
2010	4000	400	1600	400	400
2020	4500	450	2025	450	450

Hydroelectric power generation

Power transmission cables

Pressure = Density \times Gravity \times Height

$$P = \rho \times g \times h$$

Force = Pressure \times Area

$$F = P \times A$$

FLUID VOLUME

INCREASING PRESSURE



What are they?

- Three - four week authentic experiences for Young Scholars
- Real challenges/problems that are being faced by industry partners
- Opportunities for Young Scholars to engage with adults
- Rigorous and relevant with realistic outcomes

Our Model

- A brief tour of the nuts and bolts of a Workplace Learning Challenge
 - [Workplace Learning Challenge Planning Framework](#)
 - [WPL Challenge Framework Template](#)
 - [WPL Challenge Project Management Template](#)
 - [Workplace Learning Standards](#)
 - [AMETEK Card](#)



Our Current Challenge

- Viking Industries Packaging Challenge
- Multi Chapter Challenge
- [Viking WPL Challenge Framework](#)
- [Challenge Document Created by Viking](#)



The Importance of Partner Engagement

In order to succeed, programs need strong and engaged business and industry partners at the table.

Building a Broad Based Coalition of Partners

- Identify a Champion or Champions
- Identify strategic leaders and decision makers
- Develop a core group of partners that will become the individual programs/clusters Advisory Board
- Recruit other partners that will fill out the Network of Support based on need



The Importance of Partner Engagement

Develop Board Structure

Steering Committee/Executive Board

- Umbrella board that focus on strategic planning
- Focusses on big picture items and setting policy

Advisory Board

- Should be made up of 80-85% business partners and have a significant number of industry specific members
- Focus on operationalizing Steering Committee/Executive Board plans
- Works directly with students and school staff
- Represents the program in the community

Greater Network of Support

- Identify other partners who can support the cause by providing workplace learning challenges, mentoring, internships, teacher externships, site visits, guest speakers, etc.
- These would be individuals and companies that cannot make the larger commitment to the Advisory Board

The Importance of Partner Engagement

Create Succession and Sustainability Plan

- Identify and engage other individuals from existing partner organizations to create institutional buy in
- Start 501c3 or work with Community Foundation to develop autonomy, fund development, and scholarship opportunities
- Identify grants and specific funding streams to maintain program momentum such as: Carl Perkins Act, private and corporate foundation grants, etc.



How can you integrate Workplace Learning Challenges into your curriculum?

- Lets discuss how you can make this happen in your community

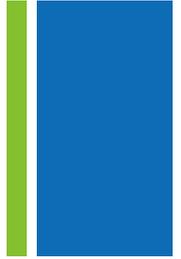




CENTER OF EXCELLENCE
IN LEADERSHIP OF LEARNING

Created in 2001

- Provides leadership that is both cutting-edge and action-oriented
- Serves as the leading catalyst for dynamic, innovative education change to dramatically impact student achievement
- Unites schools, communities, universities, and industry to form collaborations for statewide educational and economic improvement
- Believes in positive, sustainable change that is student-driven and ongoing, supportive relationships



Prepare – Achieve - Transform



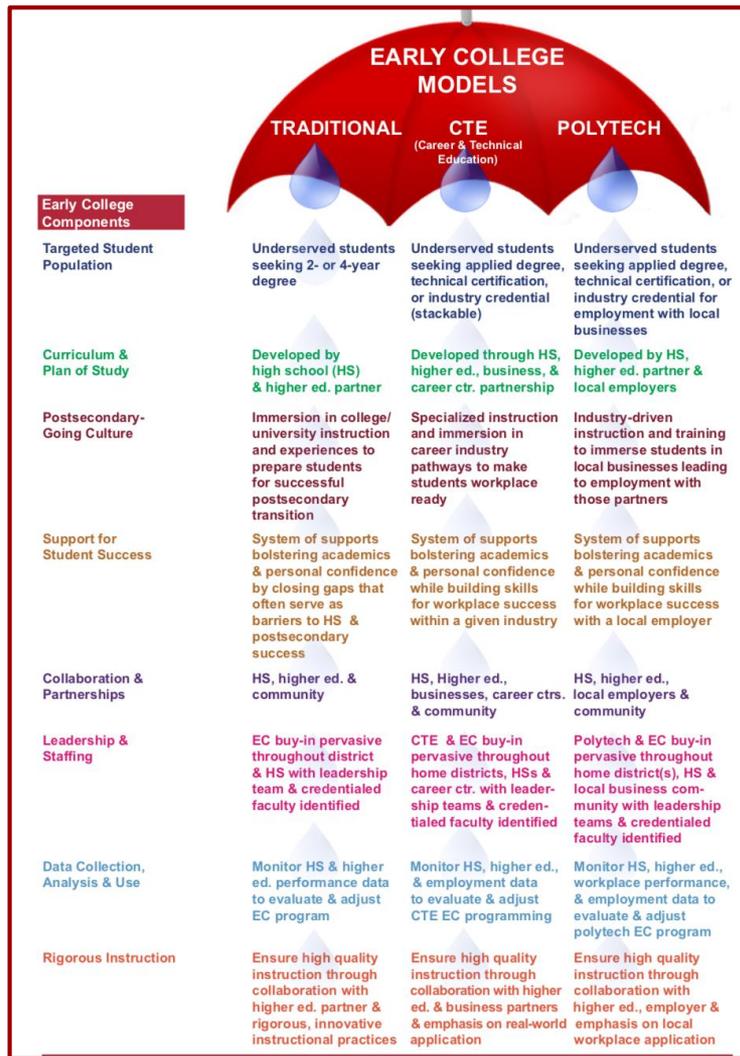


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PTECH is Early College



EARLY COLLEGE
HIGH SCHOOL



+ What CELL Does at the State Level



1. Endorses Early College High Schools
2. Partners with Indiana Department of Education and Indiana Commission for Higher Education to develop PTECH resources (ex. rubric)
3. Promotes the model to various local, regional, and state organizations



CENTER OF EXCELLENCE
IN LEADERSHIP OF LEARNING



+ What CELL Does for Schools...

1. Organizes study visits to PTECH schools
2. Convenes the Indiana PTECH Network
3. Provides PTECH resources



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+ Get Connected!

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Executive Director of CELL	Janet Boyle	boylej@uindy.edu	317-791-5990
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EWIN Coordinator	Pam Warner	warnerp@uindy.edu	317-791-5927



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