Where the Crosswalk Ends: Preparing Students for Postsecondary Success

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“It takes courage to grow up and become who you really are”

E.E. Cummings
The Red Wheelbarrow by William Carlos Williams

so much depends upon

a red wheel barrow

glazed with rain water

beside the white chickens.
There is a place where the sidewalk ends
And before the street begins,
And there the grass grows soft and white,
And there the sun burns crimson bright,
And there the moon-bird rests from his flight
To cool in the peppermint wind.
Where the Sidewalk Ends by Shel Silverstein

Let us leave this place where the smoke blows black
And the dark street winds and bends.
Past the pits where the asphalt flowers grow
We shall walk with a walk that is measured and slow,
And watch where the chalk-white arrows go
To the place where the sidewalk ends.

Yes we'll walk with a walk that is measured and slow,
And we'll go where the chalk-white arrows go,
For the children, they mark, and the children, they know
The place where the sidewalk ends.
KNOW BEFORE YOU GO

THE TYPICAL SEQUENCE

INSTITUTION | EDUCATION / TRAINING | CAREER PATHWAY

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Which did you choose first?

A. College I wanted to attend
B. Subject I wanted to major in
C. Career I wanted to have
KNOW BEFORE YOU GO

A BETTER SEQUENCE

CAREER PATHWAY  EDUCATION / TRAINING  INSTITUTION

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For every 1 job requiring a Master’s Degree or better

There are 2 jobs requiring a Bachelor’s Degree

And 7 jobs requiring a 1-yr certificate or 2-yr degree
How are middle school students in your district introduced to careers now?

- Guest Speakers / Career Days
- Online Research / Career Textbooks, Workbooks or Assessments
- Other / I'm not sure
- Dedicated career exploration elective course(s) with hands-on job skill experience
- Right now there are no significant career exploration opportunities in my district's middle schools
HOW DO WE GET THERE?

Implementing quality career experiences earlier

EARLY CAREER EXPERIENCES + IMPROVE STUDENT ENGAGEMENT + WITH RELEVANCY & CONTEXT

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By 8th grade, almost 50% of students have lost interest or deemed STEM irrelevant to their education or future plans.
"STEM Education needs to be a priority long before a child reaches high school"
“Research has identified middle school as a time when students can benefit the most from career exploration, a process of building self-awareness, learning about potential careers, and developing a plan for reaching future goals.”
To help them stay engaged and plan for their futures, middle schoolers need educational experiences that match their stage of intellectual and social-emotional development.
Middle-grade students want to explore topics they find interesting and relevant, including careers, and they want to do so in active, hands-on ways.
ACTIVITY: DESIGN A MIDDLE SCHOOL LAB

You will need:

• Your Middle School Lab Design Worksheet
• Your Paxton/Patterson IIU List with Industry Sectors
• The internet

Directions:
1. Look up the pathways offered in your high school district on your phone or laptop & fill in the HS column on worksheet
2. Use the P/P IIU List to select corresponding curriculum for each represented industry sector and write them in the INSTRUCTIONAL UNIT column
3. Complete math problems at bottom
4. Turn in completed worksheet for a gift basket RAFFLE ticket!
STUDENT ENGAGEMENT GAP

Student engagement rates

76% Elementary
44% High School

“We must first ask why so many young people fall by the wayside... too many can’t see a clear, transparent connection between their program of study and tangible opportunities in the labor market.”

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THE BAG GAME

RULES

1. DIVIDE INTO EVEN TEAMS
2. STAND IN A SINGLE FILE LINE
3. PULL ITEM OUT OF BAG AT FRONT OF LINE AND PASS BACK WITH LEFT HAND ONLY TO PERSON BEHIND YOU TO DROP ITEM IN BAG AT BACK OF LINE
4. IF ANYONE DROPS AN ITEM, YOU MUST PASS IT BACK UP TO THE FRONT WITH YOUR RIGHT HAND ONLY AND TRY AGAIN

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THE BAG GAME

PART TWO

1. GET TOGETHER AS A TEAM AND WRITE DOWN AS MANY ITEMS AS YOU CAN REMEMBER

2. YOU GET 1 POINT FOR EVERY ITEM YOU RECALL CORRECTLY

3. THE MOST POINTS WIN!

4. EVERYONE ON THE WINNING TEAM GETS AN EXTRA RAFFLE TICKET
CROSSWALKS & BENEFITS OF DISTRICT-WIDE IMPLEMENTATIONS
MIDDLE SCHOOL TO HIGH SCHOOL

Middle School STEM LABS → High School PATHWAYS

Alternative Energy → Engineering Pathway
- Wind turbines
- Mathematics
- Calculating voltage output
- Solar panels
- Photovoltaic processes
- Hydrogen fuel cell cars
- Alternative energy sources
- Solar cookers

Audio Communications → Digital Audio Productions & Video Productions Pathways
- Sound waves
- Sound transmission
- Analog vs. digital
- Radio broadcasting
- News broadcasting
- Commercials
- Digital editing
- Sound effects
- Recording
- Production
- Podcasts

Computer Aided Drafting & Design → Engineering & Graphic Design Pathways
# HIGH SCHOOL PATHWAYS

## ENGINEERING & DESIGN SECTOR

### ENGINEERING PATHWAY (152)

<table>
<thead>
<tr>
<th>Courses</th>
<th>CHS</th>
<th>EMHS</th>
<th>RHS</th>
<th>VPHS</th>
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## HEALTH SCIENCE & MEDICAL TECHNOLOGY SECTOR

### PATIENT CARE PATHWAY (198)

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<thead>
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<th>Courses</th>
<th>CHS</th>
<th>EMHS</th>
<th>OHS</th>
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<td>Foundations in Health Science</td>
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<td>SAC, CCC, OCC</td>
<td>CPR</td>
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<tr>
<td>Medical Core</td>
<td>O806</td>
<td>02</td>
<td>G</td>
<td></td>
<td>SAC, CCC, OCC</td>
<td>CPR</td>
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<td>Body Systems &amp; Disorders</td>
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<td>03</td>
<td>G</td>
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<td>CPR</td>
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<td>03</td>
<td>G</td>
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<td>CPR</td>
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<td>03</td>
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<td>CPR</td>
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</table>
What does Project-Based Learning (PBL) have to do with Equity?

Project-based learning transforms students by inspiring them to think differently about themselves as learners, collaborators, and leaders.

Of American Workers do freelance or project-based work.

LINKED LEARNING SIGNATURE ELEMENT: EQUITY & ACCESS

P/P ALIGNMENT: Accessible for English language learners, kinesthetic learners and students with IEPs. Equal access to technologies in classroom. No prerequisites.

Bob Lenz, Dir Buck Institute for Education
WHERE TO START

DIY
BUILDING A COURSE ON YOUR OWN
• WRITE YOUR CURRICULUM
• DESIGN ACTIVITIES
• BUILD IN CAREER CONNECTIONS
• DESIGN FOR SUSTAINABILITY

TURNKEY
ADOPTING PAXTON/PATTERSON
• READY TO GO CURRICULUM
• ACTIVITIES & MATERIALS INCLUDED
  • 65% Hands-on PBL activities
  • Learning systems include ALL tools, training devices, consumables, software
• ROBUST CAREER PREP INCLUDED
  • Activities built around real job skills
  • Details on career growth, salaries, titles, education, local training in every unit
• UNIQUE ROTATIONAL MODEL SAVES MONEY

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SCALING STRATEGIES FOR SUCCESS

CLASSROOM DESIGN: ROTATIONAL MODEL SAVES MONEY
WHERE THE CROSSWALK ENDS

What skills do students need to be successful when they leave and how do we help build them?

STUDENTS TAKING INITIATIVE FOR THEIR OWN PATH

COLLABORATION ADAPTABILITY

CRITICAL THINKING & CREATIVE PROBLEM SOLVING

LINKED LEARNING SIGNATURE ELEMENT: STUDENT AGENCY

P/P ALIGNMENT: Students may select instructional unit preferences, self-guided, self-paced, argumentative writing, ownership of creative thinking with open-ended design briefs, built-in entrepreneurship
Linked Learning pathways prepare students for college, career, and life by integrating four core components:

- Rigorous Academics
- Career Technical Training
- Work-based Learning
- Comprehensive Support Services
PAXTON/PATTERSON DETAILS & LINKED LEARNING ALIGNMENT
PROGRAM DETAILS: RIGOROUS ACADEMICS

LINKED LEARNING SIGNATURE ELEMENT: INTERDISCIPLINARY LEARNING

P/P ALIGNMENT: Cross-curricular math, science & critical writing skill development + technical skills for broad scope of careers

- Variety of math & science applications built into instructional units
- Real-world applications

- Narrative & Argumentative Writing in each unit
PBL IN THE CLASSROOM

EQUITY

• Shows promise as a strategy for closing the achievement gap
• Serves diverse learners
• Effective model for whole-school reform

21ST CENTURY COMPETENCIES

• Students demonstrate better problem-solving skills
• Improved critical thinking
• Improve their ability to work collaboratively and solve conflicts

ACADEMIC ACHIEVEMENT

PBL has been shown to be more effective than traditional methods for teaching math, economics, language, science & other disciplines

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PROGRAM DETAILS: FEASABILITY

EASY TO IMPLEMENT  PATHWAY FRIENDLY  SUSTAINABLE PROGRAMS

LINKED LEARNING SIGNATURE ELEMENT:
**PREPARATION FOR COLLEGE AND CAREER**

P/P ALIGNMENT: Job skills + in-depth career information woven throughout curriculum & focused on in every segment

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PROGRAM DETAILS: INSTRUCTIONAL DESIGN

CONCEPTUAL UNDERSTANDING → SKILL-BUILDING THROUGH ACTIVITIES → PROBLEM-SOLVING WITH DESIGN BRIEFS

LINKED LEARNING SIGNATURE ELEMENT: RIGOR

P/P ALIGNMENT: NAF approved, UC A-G approved, Common Career Technical Core Framework & Standards, 11 elements of high-quality CTE; engaging courses activate critical and creative thinking

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LINKED LEARNING SIGNATURE ELEMENT:
**AUTHENTIC ASSESSMENT**

P/P ALIGNMENT: Evidence submission combined with graded and ungraded knowledge checks demonstrate concept mastery.
PROGRAM DETAILS: WORK BASED LEARNING

CAREER AWARENESS

CAREER EXPLORATION

CAREER PREPARATION

LINKED LEARNING SIGNATURE ELEMENT:
INTEGRATED WORK-BASED LEARNING

P/P ALIGNMENT: Awareness, exploration & practical experiences linking classroom learning to workplace applications in all areas

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Our courses satisfy most of the areas within the first three segments.

**Career Awareness**
- Learning ABOUT work
  - Build awareness of the variety of careers available and the role of post-secondary education; broaden student options.
  - Characteristics:
    - Usually groups of students
    - Builds students’ awareness of a variety of careers
    - Introduces students to business partners or from outside the school (in-person or virtual)
    - Allows students to begin identifying areas of career interest
    - Relates school to the world of work by connecting careers to education.
  - Experiences include:
    - Workplace tour
    - Guest speaker
    - Career fair
    - Visit parents at work

**Career Exploration**
- Learning ABOUT work
  - Explore career options and post-secondary requirements for purpose of motivation and to inform decision-making in high school and post-secondary.
  - Characteristics:
    - Usually individual students or small groups
    - Includes direct, interactions (in-person or virtual) with industry partners
    - Exposes students to the range of occupations within an industry
    - Provides clear connections to course work
    - Connects to students’ existing interests and strengths
    - Prepares students with the basic skills necessary for higher intensity work-based learning experiences such as internships.
  - Experiences include:
    - Informational interview
    - Job shadow
    - Virtual exchange with a partner

**Career Preparation**
- Learning THROUGH work
  - Apply learning through practical experience that develops knowledge and skills necessary for success in careers and post-secondary education.
  - Characteristics:
    - Usually individual students, can be small group for projects
    - Direct interaction with partners over time, primary direct benefit to student
    - Partner is able to assess student learning at site
    - Application of skills transferable to a variety of careers
    - Activities have consequences and value beyond success in the classroom.
    - Learning for student and benefit to partner are equally valued.
  - Experiences include:
    - Student-run enterprise with partner involvement
    - Virtual enterprise
    - Integrated Projects with partners
    - Service Projects
    - Internship

**Career Training**
- Learning FOR work
  - Train for employment and/or post-secondary education in a specific range of occupations.
  - Characteristics:
    - Interaction with partners over extended period of time
    - Depth of interaction with partner increases
    - Primary direct benefit to the employer
    - Develop mastery of occupation specific skills.
    - Complete certifications or other requirements of a specific range of occupations.
  - Experiences include:
    - Internship required for credential or entry to occupation
    - Apprenticeship
    - Clinical experience
    - On-the-job training
    - Work experience
    - Cooperative Education

Adapted from the Linked Learning Work-Based Learning Continuum developed by the Linked Learning Alliance, available at: http://www.LinkedLearning.org/linked-learning-in/continuum/work-based-learning/
**PROGRAM DETAILS: CAREERS**

**LINKED LEARNING SIGNATURE ELEMENT: RELEVANCE**

P/P ALIGNMENT: All content delivered within career context making it relevant to post-secondary applications. Relevant to individual student through discovery of interests and aptitudes.

<table>
<thead>
<tr>
<th>Career</th>
<th>Education Level</th>
<th>Average Salary</th>
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</thead>
<tbody>
<tr>
<td>Producer</td>
<td>Bachelor's Degree</td>
<td>$71,000</td>
</tr>
<tr>
<td>Fiber Optics Installer</td>
<td>Highschool/GED</td>
<td>$50,000</td>
</tr>
<tr>
<td>Construction Carpenter</td>
<td>Highschool/GED</td>
<td>$40,000</td>
</tr>
<tr>
<td>Healthcare Social Workers</td>
<td>Master's Degree</td>
<td>$50,000</td>
</tr>
<tr>
<td>Civil Drafter</td>
<td>Associate's Degree</td>
<td>$47,000</td>
</tr>
<tr>
<td>Graphic Designer</td>
<td>Bachelor's Degree</td>
<td>$35,000</td>
</tr>
<tr>
<td>Physical Therapist</td>
<td>Master's Degree</td>
<td>$79,000</td>
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<tr>
<td>Software Programmer</td>
<td>Bachelor's Degree</td>
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</tr>
<tr>
<td>Athletic Trainer</td>
<td>Bachelor's Degree</td>
<td>$40,000</td>
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</table>
PROGRAM DETAILS: AREAS OF INSTRUCTION

STEM
Grades 3-12
Elementary, middle and high school including capstone

HEALTHCARE
Grades 7-12+
17 Healthcare areas, 107 careers

CONSTRUCTION
Grades 7-12+
Dozens of in-demand, entry-level jobs

MIDDLE SCHOOL
College & Career Readiness
Grades 6 - 9

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Thank you!

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