LINKED LEARNING
A Successful High School Design Approach

June 22, 2016
Webinar hosted by Barr Foundation
BARR FOUNDATION EDUCATION GOAL

Increase the number of youth who connect to secondary and post-secondary success
A successful approach to education based on the idea that students work harder and dream bigger if their education is relevant to them.

LINKED LEARNING
OBJECTIVES & AGENDA

• Understand the **Linked Learning** approach
  ✓ Its **four components**
  ✓ Significant **evaluation data**
• Hear **on-the-ground perspectives**
• Discuss your **questions**
• Learn your **interests**
PANELISTS

Paul Hirsch  
Principal  
STEM Academy of Hollywood

Gary Hoachlander  
President  
ConnectEd: The California Center for College and Career

Hilary McLean  
Executive Vice President  
Linked Learning Alliance
PANELISTS

Dr. John Snavely  
Superintendent  
Porterville Unified School District

Anne Stanton  
Executive Director,  
Future Ready Venture  
National Academy Foundation
LINKED LEARNING
OVERVIEW

Hilary McLean
Executive Vice President
Linked Learning Alliance
A *growing approach* in California, gaining interest beyond the state.
HIGH SCHOOLS ARE CHALLENGED

• Academic programs are not relevant to students
• Career-technical education lacks academic rigor

Too many students drop out of high school...
or graduate unprepared for college and career.
15 Industry-Sector Themes

Examples:
Arts, Media, and Entertainment
Health Science
Engineering and Architecture
Manufacturing and Product Design
THE LINKED LEARNING DIFFERENCE

• It’s about college and career
• The educational experience is powered by four core components
• It’s an approach, not a program
• It’s for all students
LINKED LEARNING ALLIANCE

- **54** education associations
- **30** business, industry, and trade organizations
- **6** state agencies
CALIFORNIA LINKED LEARNING DISTRICT INITIATIVE

Gary Hoachlander
President
ConnectEd
LINKED LEARNING WORKS IN PARTNERSHIP

• Districts, businesses, community organizations
• Local, state, and national organizations, e.g.:
  – Center for Powerful Public Schools
  – California Partnership Academies
  – ConnectEd: The California Center for College and Career
  – National Academy Foundation (NAF)
  – Many more
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CALIFORNIA LINKED LEARNING
DISTRICT INITIATIVE

- Serving 16% of the state’s public high school students
- Student mix: 75+% non-white, 50+% disadvantaged
- 9 California School Districts with below average student achievement
LINKED LEARNING COMPONENTS

- Rigorous academics
- Career-technical education courses in sequence
- Work-based learning in real-world workplaces
- Integrated student supports
Quality pathways matter!
VARIETY OF WAYS TO IMPLEMENT

• Career academies
• College and career pathways
• Themed small schools
• Charter schools
• District wide strategy
INGREDIENTS FOR SUCCESS

• Clarify what college, career, and community ready students **know** and are **able to do**

• **Strengthen capacity** for effective learning, teaching, and leading

• Design and implement **high quality** college and career pathways

• Build **district** and **community systems** that help sustain equitable pathways
LESSONS LEARNED

• **District** and **site** leadership are essential
• Engage employers as **partners**, not just advisors
• Customize approach to local **community**, **region**, and **state**
• Achieving **high quality** takes time and effort
LINKED LEARNING
EVIDENCE

Anne Stanton
Executive Director,
Future Ready Venture
National Academy
Foundation
TAKING STOCK OF THE CALIFORNIA LINKED LEARNING DISTRICT INITIATIVE

Sixth-Year Evaluation Report, SRI International
CERTIFIED PATHWAYS

- Lead to more credits earned
- Show decreased dropout rates and higher graduation rates
- Have positive effect for students entering high school with low academic skills
EVALUATION RESULTS

Students in certified pathways earned 13.3 more credits in high school.

Equivalent to 2.6 more courses, about half a semester of coursework.
EVALUATION RESULTS

Underserved students

Perform equally or better on credit accumulation, graduation, and college eligibility indicators
In certified pathways, students with low prior achievement were 4.1 percentage points less likely to drop out.

- Accumulated 21.8 more credits
- Had GPAs 0.16 points higher
EVALUATION RESULTS

Student experience

A higher percentage of certified pathway students report that they experience rigorous, integrated, and relevant instruction:

- Challenged to understand a difficult concept: +14%
- Used classroom ideas or skills outside of school: +11%
- Had teacher explain how material applied to college or career: +12%
- Had teacher ask difficult questions in class: +10%
- Asked to use tools or equipment in class: +20%
- Had teacher explain how to apply material to real world: +15%
- Saw connections between class and real world: +10%
OBJECTIVES & AGENDA

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DISTRIBUTION PERSPECTIVE

John Snavely
Superintendent
Porterville Unified School District
City of Porterville

- Located in Tulare County at the eastern portion of California’s San Joaquin Valley; population approximately 55,000

- Rural district with an agriculture economic base

- PUSD attendance area covers 3,000 square miles

- Majority of high school students are from rural areas and attend one of 14 elementary feeder districts outside PUSD
PUSD Linked Learning Timeline

- 2006 – Small High School Construction Grant
- 2007 – Year of Planning
- 2008 – Harmony Magnet Academy Opens
- 2009 – PUSD District-wide Linked Learning Implementation
- 2010 – Moved from 2 to 9 Magnet “Open Choice” Linked Learning Pathways within 5 PUSD High Schools
- 2013 – PUSD named Linked Learning “Mentor” district for six districts in California central valley
- 2014 – PUSD with Tulare/Kings Consortium receive California Career Pathways Trust Grant (CCPT 1) – Linked Learning expansion to 11 districts and 45 pathways – $15 million
- 2014 – PUSD expands to 10 “Open Choice” Pathways
- 2015 – PUSD receives CCPT2 for $6 million – K-8 Exposure to College, Career, and STEM Instruction
- 2015 – PUSD receives California Math & Science Partnership Grant (CAmsp) for $1.9 million
- 2015 – 3 Emerging Academies in Year-of-Planning to become “Open Choice” Pathways...
### PUSD Academy/Pathway Status

<table>
<thead>
<tr>
<th>Pathway</th>
<th>LL Certification Status</th>
</tr>
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<tbody>
<tr>
<td>HMA – Academy of Engineering (AOE)</td>
<td>Certified – Distinguished</td>
</tr>
<tr>
<td>PHS – Academy of Health Sciences (PAHS)</td>
<td>Certified – Distinguished</td>
</tr>
<tr>
<td>PHS – Academy of Finance (PAB)</td>
<td>Certified – Distinguished</td>
</tr>
<tr>
<td>HMA – Academy of Performing Arts (APA)</td>
<td>Certified – Distinguished</td>
</tr>
<tr>
<td>PHS – Alternative Energy Academy (AERO)</td>
<td>Certified</td>
</tr>
<tr>
<td>MHS – Multimedia Technology Academy (MTA)</td>
<td>Certified</td>
</tr>
<tr>
<td>MHS – Environmental Science Academy (ESA)</td>
<td>Certified</td>
</tr>
<tr>
<td>SHS – Emerging Agriculture Technology Academy (EAT)</td>
<td>Certified</td>
</tr>
<tr>
<td>GHHS – Law, Justice, and Ethics (LJE)</td>
<td>Certified</td>
</tr>
<tr>
<td>GHHS – Digital Design and Communication Acad (DDC)</td>
<td>Under Review</td>
</tr>
<tr>
<td>MHS – Culinary Arts and Hospitality Academy (ACAH)</td>
<td>Site Based</td>
</tr>
<tr>
<td>MHS – Manufacturing, Construction, and Technology Academy (MCTA)</td>
<td>Site Based</td>
</tr>
<tr>
<td></td>
<td>Year of Planning – Graduate</td>
</tr>
<tr>
<td></td>
<td>Site Based</td>
</tr>
<tr>
<td></td>
<td>Year of Planning – Graduate</td>
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</table>
Students participating in Linked Learning pathways...

- Exceed Expectations
- Lower Dropout Rate
- Higher Postsecondary Enrollment
- Lower Discipline Problems
- Higher Achievement
- Higher Attendance Rate
Essential Elements

• Student Outcome Driven Practice

• Equity, Access, and Achievement – High expectations for all, interest driven

• Program of Study brings coherence to the four core components and integrates the academic and technical core
Essential Elements

• **Learning and Teaching**: Students engage in projects that are rigorous and relevant

• All students participate in a **continuum** of *Work-based Learning*

• Personalized **Student Supports** to meet student needs

• **Pathway Leadership and Partnerships** share responsibility for program effectiveness and accountability for student outcomes
Common Pathway Features

- Utilize pathway **student learning outcomes** to guide and align assessment, curriculum, and instruction
- Blend **academic and career-themed** course content through rigorous and relevant **standards-aligned projects**
- Students learn in **cohorts**; teachers use **common planning time**
- Offer **dual-enrollment and dual-credit** with college institutions
- Provide learning **beyond the classroom**
# Program of Study Worksheet

PAB, Academy of Finance - PHS

<table>
<thead>
<tr>
<th>ACADEMIC CORE (2.1)</th>
<th>9th grade</th>
<th>10th grade</th>
<th>11th grade</th>
<th>12th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>English 1P PAB**</td>
<td>English 2P PAB</td>
<td>English 3P PAB</td>
<td>English 4P / Business Communications PAB</td>
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<tr>
<td>Mathematics</td>
<td>Algebra I PAB</td>
<td>Geometry P PAB</td>
<td>Algebra 2P PAB</td>
<td>Pre-Calc PAB, Bus Algebra PAB</td>
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<tr>
<td></td>
<td>Geometry P PAB</td>
<td>Algebra 2P PAB</td>
<td>Pre-Calc PAB/Stats PAB **</td>
<td>Cal PAB/Statistic PAB</td>
</tr>
<tr>
<td>Science</td>
<td>Biology</td>
<td>Chemistry</td>
<td>Anatomy, Physics/AP Bio/AP Chem/Earth Science</td>
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</tr>
<tr>
<td>History/Social Science</td>
<td>World History P PAB</td>
<td>US History P PAB</td>
<td>Civics/Econ P PAB</td>
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</tr>
<tr>
<td>Language Other Than English</td>
<td>Spanish 1</td>
<td>Spanish 2</td>
<td>Spanish 3</td>
<td>Spanish 4/AP</td>
</tr>
<tr>
<td>Visual and Performing Arts</td>
<td>Band/Choir/Art 1</td>
<td>Band/Choir/Art 2</td>
<td>Band/Choir/AP Art</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TECHNICAL COURSES (2.2)</th>
<th>9th grade</th>
<th>10th grade</th>
<th>11th grade</th>
<th>12th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Courses</td>
<td>Prin of Finance* P Basic Comp Tech PAB</td>
<td>Financial Services* PAB/Financial Planning PAB</td>
<td>Comp Accounting PAB/Yearbook</td>
<td>Applied Fin-TCOVE / Adv Acct – TCOVE/Retail Sales – TCOVE/Entrepreneurship/Business Ethics/Yearbook</td>
</tr>
</tbody>
</table>

(*Proposed A-G course)(** Need Additional Coding by District)
PUSD Pathways
LINKED LEARNING
SCHOOL PERSPECTIVE

Paul Hirsch
Principal
STEM Academy
of Hollywood
ENGINEERING
Advisory Board
Student Support
10th Grade CAHSEE Scores

Year | % CAHSEE ELA | % CAHSEE Math
--- | --- | ---
12-13 | 75% | 76%
13-14 | 83% | 84%
14-15 | 89% | 90%