A Blueprint for Creating Career-Focused Pathways

Using Data and Partnership to Integrate Career Exploration in GP

Breakout 4

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Los Angeles Trade-Technical College

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Objectives

✅ **Design Principles**
Learn design principles for career-focused pathways

✅ **Models, Maps, Tools**
Gain tricks/tips for developing competency models and program design/redesign tools

✅ **Process for Career-Focused Pathway Development**
Understand the steps for implementing (a data- and stakeholder-driven) career-focused pathway development process

✅ **Resources**
Gather templates, tools, and resources for designing career-focused pathways

✅ **What are Your Objectives?**
How are you Guiding Students’ on a Successful Journey?

1. Launch
How are students on-boarded to immediately enter a program of study (aligned with informed career goals), know requirements for success, and have resources in place to complete their journey?

2. Navigate
In what ways does the college help students navigate their pathway, minimizing time/credits to credential completion? How will their pathway be personalized to them?

3. Course Correct
How are students continually monitored to provide pro-active feedback so they stay on course?

4. Solutions
How are solutions, including technology, incorporated to “systematize” and “innovate” pathway delivery?

5. Success Formula
How are curriculum/co-curricular activities designed, integrated, delivered to ensure students graduate proficient in marketable and 21st Century competencies?

6. Work Ready/Future Ready
In what ways are students engaged in career-related experiences that broaden, deepen competencies; including future work skills?

7. Boost
When students graduate, what does their resume reflect about their journey at your college? How does it differentiate them... help them stand out... give them a boost?

8. Soar
How are students transitioned to careers... to their next step in their journey?
8 Design Principles

- Human-centric Design is Essential
- Guided Pathways + Competency Building
- Involve Key Stakeholders (internal and external)
- Ground Pathway Development in Research
- Develop Frameworks, Models to Guide Pathway Development
- Integrate Co-curricular Learning Activities to Expand Students’ Competencies and Career Experiences
- Backwards Design Starting with Students’ End Goals
- Design and Implement an Integrated Approach
Design Principle

- Human-centric design is essential
Human-Centric Design is Essential...

Human-Centric Design (HCD) methods involve the perspective of students in all steps of design, problem-solving, and implementation processes.
Design Principle

- Guided pathways + competency building
Ensuring Career Success:

**Credential Completion** through Guided Pathways AND

**Career Readiness** through Competency Building
Career-Focused Pathway DNA

**Guided Pathways**
Clear, coherent programs and maps with specific course sequences, progress milestones, and learning outcomes that guide students into and through college to credential completion, employment.

**Support Structure**
Extensive set of interdependent, integrated strategies and services that promote students’ academic success and close educational opportunity gaps by targeting academic and non-academic achievement barriers.

**21st Century, Competency-based Curriculum**
Structured sequence of learning and experiential activities prepare students with 21st competencies for 21st century careers.

**Co-Curricular Engagement**
Intentional co-curricular projects, activities, services, and resources to augment learning and increase student competencies.
Career-Focused Pathway DNA

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Clear, coherent programs and maps with specific course sequences, progress milestones, and learning outcomes that guide students into and through college to credential completion, employment.

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Six Steps for Developing Career-Focused Pathways

1. Prepare
   Career-focused pathway development requires shared vision/understanding, commitment, and participation of key stakeholders at each step of process.

2. Research
   Evidence and data provide the foundation for developing career-focused pathways.

3. Design
   College stakeholders engage in design thinking, modeling, user-centered design practices, and more to create an institutional roadmap for implementing career-focused pathways spanning the entire student journey.
Six Steps for Developing Career-Focused Pathways

4 Build
Intentionally structured and integrated sequence of courses, experiential learning activities, and integrated co-curricular enhancements form career-focused pathways

5 Launch
Supportive policies, processes, resources, structures, etc. are established to ensure efficient and successful implementation of career-focused pathways

6 Evaluate
Ongoing and intensive review of pathway implementation, competency gains, and student success is conducted
1 Prepare
Design Principle

● Involve key stakeholders
● (internal + external)
Stakeholders for Career-Focused Pathway Development

- Faculty & Subject Matter Experts
- Business & Industry Reps
- Counselors/Advisors/Support Staff
- Administrators
- Instructional Designers
- Current Students & Recent Graduates

Sample employer/industry advisory meeting agenda is available in the Toolbox. Refer to the Competency Model-Pathway Industry Advisory Meeting Agenda document.
Design Principle

- Ground pathway development with research
Research Areas

- Demographic and Socio-Political
- Economic, Industry, Labor Market, Occupational
- Technological
- Other Higher Education Providers, Competition, Alternatives
Today's and Tomorrow's Learners are seeking a more direct link between learning and work/career

Majority of Students Want Career Connected-Learning

57% of today’s postsecondary students are looking for a learning provider that:

• enables them reach their ideal career position in the shortest amount of time
• provides links to labor markets
• puts them in touch with relevant employers and prepares them for their career transition

Generation Z Learners*

• Born 1995 to 2010 (ages 6-21)
• Roughly 2 billion youth

Learning Preferences**

• Wired for fast delivery of content, data, and images from computers
• Want hands-on options and practical skills with employer internships
• Have preference for digital learning
• Dislike lecture-based classrooms
• Want their education customized
• Expect to work, learn, and study whenever/wherever
• Love to explore using own route – design own course of study

Sources:


### 5 Generations of Learners

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Wartime rationing</td>
<td>Cold War</td>
<td>Fall of Berlin Wall</td>
<td>Economic downturn</td>
<td>Economic downturn</td>
</tr>
<tr>
<td></td>
<td>Rock'n'roll</td>
<td>‘Swinging Sixties’</td>
<td>Reagan/Gorbachev-Thatcherism</td>
<td>Global warming</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nuclear families</td>
<td>Moon landings</td>
<td>Live Aid</td>
<td>Mobile devices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Defined gender</td>
<td>Youth culture</td>
<td>Early mobile technology</td>
<td>Cloud computing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>roles - particularly</td>
<td>Woodstock</td>
<td>Divorce rate rises</td>
<td>Wiki-leaks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for women</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitude toward career</th>
<th>Jobs for life</th>
<th>Organisational - careers are defined by employees</th>
<th>“Portfolio” careers - loyal to profession, not to employer</th>
<th>Digital entrepreneurs - work “with” organisations</th>
<th>Multitaskers - will move seamlessly between organisations and “pop-up” businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature product</td>
<td>Automobile</td>
<td>Television</td>
<td>Personal computer</td>
<td>Tablet/smartphone</td>
<td>Google glass, 3-D printing</td>
</tr>
<tr>
<td>Communication media</td>
<td>Formal letter</td>
<td>Telephone</td>
<td>E-mail and text message</td>
<td>Text or social media</td>
<td>Hand-held communication devices</td>
</tr>
<tr>
<td>Preference when</td>
<td>Face-to-face meetings</td>
<td>Face-to-face ideally but increasingly will go online</td>
<td>Online - would prefer face-to-face if time permitting</td>
<td>Face-to-face</td>
<td>Solutions will be digitally crowd-sourced</td>
</tr>
<tr>
<td>making financial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>decisions</td>
<td></td>
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</tr>
</tbody>
</table>
California and U.S. is Aging
What are Implications of 5 Generations of Learners for Career-Focused Pathway Design?

- Both prefer flexible routes to their end goals
- Both will choose to work in the Gig Economy
  - consider developing programs/options for high-demand gig jobs
  - consider incorporating gig skill-building in existing programs
- What are careers for older population and what education/training will they need?
Market Research Objectives

- In Demand and Emerging Occupations
- In-demand, Transferrable, 21st Century/Future Competencies (KSAs*)
- Employment Requirements
- Required/Desirable Certifications

*Knowledge, Skills, Abilities
Industry, Labor Market Sources

- U.S. and State Sources
- Economic Modeling (Aggregated) Sources - EMSI
- “Real-Time” Sources
- Employer Sources
- Socially-Sourced - LinkedIn

- Lists and links to research sources are available in the Toolbox. Refer to the Labor Market Research Sources document.
- Information on locating certifications is located in the Toolbox. Refer to the Locating Certifications Information document.
21st Century/Future Skills

Emergence of Hybrid Jobs – a New Genome of Jobs

- A whole new categories of jobs that draw from and integrate multiple disciplines are emerging from Industry 4.0
- Combining technical expertise with “soft” skill expertise
- Examples: experience architect, user experience designer
- Burning Glass Technologies refers to this as a “new genome” of jobs

Hybrid Jobs Require Increased Soft Skills

- Research: 29% (Data science and analysis jobs), 27% (All jobs)
- Writing: 22% (Data science and analysis jobs), 22% (All jobs)
- Problem-solving: 14% (Data science and analysis jobs), 19% (All jobs)
- Teamwork: 13% (Data science and analysis jobs), 19% (All jobs)
- Creativity: 6% (Data science and analysis jobs), 9% (All jobs)

Detailed information and lists of 21st Century competencies and future skills is available in the Toolbox. Refer to the Competencies and Competency Model Examples document.
Example Pathway Framework
### Occupations for Individuals with Degree in Psychology and/or English

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Psychology Pathwa</th>
<th>English Pathwa</th>
<th>Primary Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Services Manager</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Advertising Account Executive</td>
<td>X</td>
<td>X</td>
<td>Business</td>
</tr>
<tr>
<td>Advertising Agent</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Career Counselor/Advisor</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Case Manager</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Community Services Manager</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Content Specialist/Marketing Manager</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Copy Writer</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Corrections Officer</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Counselor</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Grant Writer</td>
<td>X</td>
<td>X</td>
<td>Social Services (Health)</td>
</tr>
<tr>
<td>Health Educator</td>
<td>X</td>
<td></td>
<td>Social Services (Health)</td>
</tr>
<tr>
<td>HR Professional - Human Resources Manager</td>
<td>X</td>
<td>X</td>
<td>Business</td>
</tr>
<tr>
<td>Human Factors Specialist</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Laboratory Assistant</td>
<td>X</td>
<td></td>
<td>Research, Science, IT</td>
</tr>
<tr>
<td>Management Analyst</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Market Researcher/Analyst</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Media Relations</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Medical Writer</td>
<td>X</td>
<td></td>
<td>Social Services (Health)</td>
</tr>
<tr>
<td>Proposal Writer</td>
<td>X</td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td>Psychologist</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Public Relations Specialist/Manager</td>
<td>X</td>
<td>X</td>
<td>Business</td>
</tr>
<tr>
<td>Rehabilitation Specialist</td>
<td>X</td>
<td></td>
<td>Social Services</td>
</tr>
<tr>
<td>Reporter</td>
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<td></td>
<td>Business</td>
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<tr>
<td>Researcher</td>
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<td>Research, Science, IT</td>
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<tr>
<td>Sales Manager/Representative</td>
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<td>X</td>
<td>Business</td>
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<tr>
<td>Social Media Specialist</td>
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<tr>
<td>Software Developer</td>
<td>X</td>
<td>X</td>
<td>Research, Science, IT</td>
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<tr>
<td>Speechwriter</td>
<td></td>
<td></td>
<td>Public Administration</td>
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<tr>
<td>Teacher/Professor</td>
<td>X</td>
<td>X</td>
<td>Social Services</td>
</tr>
<tr>
<td>Technical Writer</td>
<td>X</td>
<td>X</td>
<td>Business, Research, Science, IT</td>
</tr>
<tr>
<td>Writer - General</td>
<td></td>
<td></td>
<td>Business</td>
</tr>
<tr>
<td><strong>Experience Architect</strong></td>
<td>X</td>
<td>X</td>
<td>Business, Research, Science, IT</td>
</tr>
<tr>
<td><strong>User Experience Designer</strong></td>
<td>X</td>
<td>X</td>
<td>Business, Research, Science, IT</td>
</tr>
</tbody>
</table>

- LATTCC’s Advanced Transportation and Manufacturing Pathway’s occupation matrix is available in the Toolbox. Refer to the ATM Occupation Matrix document.
Core Competencies for Occupations for Psychology and/or English Graduates

<table>
<thead>
<tr>
<th>Core Competencies</th>
<th>Psychology Pathway</th>
<th>English Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Human Behavior</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Understanding Group Behavior</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Understanding/Appreciating Different Perspectives</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Decision-making</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Writing Skills</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Speaking/Oral Communication Skills</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Organizational Skills</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Time Management/Manage Schedule/Deadlines</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Creative Thinking</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Activity

From what you’ve seen so far, take a picture of the one thing you think is essential for implementing career-focused pathways at your college.

What are you aiming your camera at?
3 Design
Design Principle

- Develop frameworks, models to guide pathway development
Got Model?

● Purpose:
  - Shared vision, understanding
  - Brand the pathway approach at your college
  - Illustrate how the whole is bigger than the sum of the parts
  - Communication tool with stakeholders – particularly students
  - Serves a roadmap for pathway development and implementation

● Elements of Successful Models:
  - Developed with stakeholder engagement (including students)
  - Level of detail is sufficient enough to tell the complete story (balancing act)
  - Stands on its own, is easily understandable – self-explanatory to user/reader
  - Provides context and insights as to what strategies, activities are core to the pathway(s)
Potential Pathway Framework

- Business
  - Marketing, Sales, Customer Relations
    - Advertising Account Exec
  - Management, Entrepreneurship
    - Content Specialist
    - Technical Writer
    - Management Analyst
    - Technical Writer
  - Research & Development
    - Researcher
    - Experience Architect
Ensuring Career Success:
Credential Completion through Guided Pathways AND Career Readiness through Competency Building

Guided Pathways
- Map Pathways to Student End Goals
- Help Students Enter a Pathway
- Keep Students on the Path
- Ensure Students are Learning

Career Readiness
- Ensure Students have Marketable Skills
- Expose Students to Career Opportunities
- Conjointly Design and Deliver Co-curricular Learning
- Track and Assess Learning Outcomes and Competencies
The complete competency model is available in the Toolbox. Refer to the LATTC Diesel Tech Program Competency Model document.
Pathways/Competency Model Example

Source: Oregon Health & Science University, School of Medicine

- Competency model examples are available in the Toolbox. Refer to the Competencies and Competency Model Examples document.
Competency-Based Curriculum/Program Development

1. **Competency Model Framework**
   - Competency model framework is used as foundation-reference point for pathway design

2. **Curriculum Mapping**
   - Compare existing curriculum to competency model framework – identify gaps and outlying content

3. **Horizontal & Vertical Alignment**
   - Horizontal alignment - competencies cross courses, disciplines, programs
   - Vertical alignment - competencies build upon pre-existing knowledge and/or prior competencies

4. **Proficiency Milestones**
   - Identify at what point competency proficiencies are sufficient for employment in field of study

5. **Stack & Lattice Courses/Programs**
   - Occupational profiles, horizontal & vertical alignment and proficiency milestones are used to determine where to stack and lattice credentials
Design Principle

- Integrate co-curricular activities to expand students’ competencies and career experiences
Co-Curricular Learning Activities

Co-curricular learning activities should be purposively designed and delivered con-jointly with course activities and included in academic/pathway maps and other materials provided to students. Learning outcomes resulting from co-curricular learning activities extend beyond academic and personal and also include 21st Century/Future competencies. Conditions for optimizing co-curricular learning should also utilized such as pre-activity student orientations, student learning agreements, student self-reflections, and planning/debrief meetings with students.

Tips and resources for co-curricular learning activities are available in the Toolbox.
Design Principle

- Backwards design starting from students’ end goals
Design Pathways with End Goals in Mind

What a robust career-focused pathway looks like for the student

• LATTCC’s Diesel Tech student resume and cover letter is available in the Toolbox. Refer to the Resume and Cover Letter Example_DieselTech document.

Guided Pathway Milestone
Curricular Enhancements
Integrated, Co-Curricular Learning

LATTC’s Diesel Tech student resume and cover letter is available in the Toolbox. Refer to the Resume and Cover Letter Example_DieselTech document.
ACTIVITY: What Will Your Students’ Resume Look Like?

- This resume activity is available in the Toolbox. Refer to the Resume-Letter Exercise document.
Activity

Looking at the resume, take a picture of the one thing you think is essential for implementing career-focused pathways at your college.

What are you aiming your camera at?

What do you need to include in your pathway model?
Design Principle

- Design and implement an integrated approach
Curricular/Co-Curricular Learning Integration

Source: GradSkills Program, Competency-based Education Gets Its Own LMS & College Rankings. Online Learning Insights (Adapted). https://onlinelearninginsights.wordpress.com/category/skills-for-students/
• Journey mapping templates and instructions are available in the Toolbox.
How are you Guiding Students’ on a Successful Journey?

1. **Launch**
   - How are students onboarded to immediately enter a program of study (aligned with informed career goals), know requirements for success, and have resources in place to complete their journey?

2. **Navigate**
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8. **Soar**
   - How are students transitioned to careers... to their next step in their journey?
Questions
??????
Career-Focused Pathways Toolbox

Link to Open the Toolbox

www.tinyurl.com/LATTCCareerToolbox