Mapping Long Pathways: 
*The Power of Pathway Mapping*

Career Ladders Project  
Career Pathways Leadership Institute 
Chapman University  
June 2016
Our Path Today

• CLP and Our Mapping Team
• Why Map? Why Pathways?
• Pathway Mapping, who and how?
Career Ladders Project fosters educational and career advancement through research, policy initiatives and direct assistance to community colleges and their partners.
Our Team, Our Mappers

- Luis Chavez, Senior Director, former Mount Sac Alumni, and College Counselor
- Sherry Shojaei, Program Associate, UC Irvine and Berkeley Alumna, and Avid Mapper
- Dr. Robert Jaurequi, CLP CACN Consultant and former Fullerton College Counseling Chair
- Dr. Monica Guerra, CLP Pathways and CACN Consultant, former Post Secondary Faculty
- Maeve Katherine Bergman, 4th Grade Teacher and Dean (Ret.), as well as Map Addict

In Spirit
- Lindsay Anglin, Program Coordinator and Cartographer
- Robert Curtis, Director, ConnectED
Why Map?
For our students.
Our Students need a Clear Pathway
Their current path is disconnected, with many gaps along the way.

- **Transition**
  - **Missed Opportunity**: 1 in 5 high school graduates admitted to college never matriculate.
  - **Disconnected**: 1:854 ratio of California students to a college/career counselor.

- **High School**
  - **Unprepared**: 58% haven’t completed a-g requirements.

- **Postsecondary**
  - **Progress Peril**: 58% of California community college students start in remedial courses.
  - **Income Disparity**: 70% of low-income students at two-year colleges do not complete a credential within 5 years.
  - **Planning Breakdown**
    - 30% of excess credit hours stem from students’ lack of information.
    - 64% less likely to complete postsecondary — the disadvantage of students who postpone enrollment.
“College students are more likely to complete a degree in a timely fashion if they choose a program and develop an academic plan early on, have a clear road map of the courses they need to take to complete a credential, and receive guidance and support to help them stay on plan.”

(What we know about Guided Pathways. CCRC, 2015)
For our communities.
We Losing Students our Communities Need

Each year dropouts represent $320 billion in lost lifetime earning potential

For ourselves.
School-wide Learning Outcomes (ESLRs)

Pathway Outcomes

CA State Content Standards
CAHSEE

21st Century Skills
Next Generation Science Standards
Common Core State Standards
Career-Technical Ed

CA State Content Standards
PSAT/SAT/ACT

College Admissions

School PD

21st Century Skills

Linked Learning

District PD

Pacing Guides

Differentiated student needs

Career Preparation

PSAT/SAT/ACT

Benchmark Tests

CST/EAP

Smarter Balanced Assessments

Social-Emotional Learning

Project-Based Learning

District PD

21st Century Skills

Differentiated student needs

Initiative Fatigue
Grants in Your Mirror May Be Larger than They Appear
FOCUSING AND ALIGNING OUR EFFORTS

K12 Reforms
• Local Control Funding Formula (LCFF)
• Local Control and Accountability Plan (LCAP)
• Next Generation Science Standards
• Common Core
• Smarter Balanced Assessment
• California Partnership Academies
• Linked Learning District Initiative/AB790

CA Community Colleges
• Basic Skills Initiative
• Career Advancement Academies
• Federal Initiatives: TAACCCT
• Doing What Matters
• Student Equity Plans
• Student Success Act of 2012
• CCC Bachelor’s Degrees

CCC/K12
• AB86 Adult Ed/CCC Regional Consortia
• SB1070
• CCC Linked Learning Initiative (CCCLLI)
• CA Career Pathways Trust (CCPT)
• WIOA/Youth and Young Adult Programs
• Irvine’s Hubs of Excellence
Okay. But, why map pathways?
path·way
ˈpaTHˌwā/
noun

noun: **pathway**; plural noun: **pathways**
a way that constitutes or serves as a path.
a way of achieving a specified result; a course of action.

Pathway mapping is about finding the path...
....and moving into action!
High Impact Pathways integrate:

- Academic and CTE curriculum
- Sequenced and Stackable
- Early College Credit
- Project and Work Based learning
- Student Supports
  - Early matriculation and advising
  - Imbedded Career and College Readiness
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**Student Outcomes**

- HS Success & Completion
- College Access & Enrollment
- College Success & Completion
- Employment in Chosen Career
Sweet Spot: Our Students!
How are OUR K-14 Communities Mapping Pathways?
Together.
Communities of Practice

- Local, Regional!
- K-14, K-16!
- Comprehensive CoPs
  - Instructional, Counseling, and Student Support Faculty and Staff
  - K-14/16 Administrators
  - CCCCCO Key Talent
  - Industry
  - Community
    - City, County, Regional Government
    - Workforce Development Orgs/Intermediaries
    - Chambers
    - Non Profit Orgs/Faith Based Orgs

Long Beach K-16 Allied Health Community of Practice
Mapping ALL Together!

Rapid Mapping: Four Critical Steps

- Pre-Work: Setting the Table
- Three Hours, Full Table!
- Map and a Plan: Breaking Bread
- Next Steps and Follow Up: Community of Practice
Mapping: How To!

http://prezi.com/pun2jmh62xil/?utm_campaign=share&utm_medium=copy
Mapping Case Study: Long Beach Allied Health Pathway
By 12th grade, students will have:
- Completed AH 60 (3 units), AH 50 (2 units), AH 265 (1 unit)
- Earned up to 11 units with LBCC
- Completed LBCC application for admission
- Students are placed in math and English using multiple measures
- Completing LSBE student orientation, PAFSA
- Developed LBCC educational plan (could be a mini ed plan)
- Participated in career exploration activities, one experience on the LBCC campus and mini 40 hours on a health site and industry certifications

Jean Rodgers-Carillo High School
David Stahl Jr. High School
Lakewood High School
Emwall Middle High School
Long Beach Polytechnic High School

AH 265 Introduction to Basic Health Care Careers, 3 units or AH 62 Integration of Patient Care (for students pursuing DNV)
Possible capstone, 2 units transferrable to CSU Long Beach

Credit by Exam and Learn 11 Study Skills (3 units) during the school day and/or summer

Hospital Health Occupations
Animal Care

Applied Medical Terminology (3 units)

Hospital Health Occupations
Animal Care

Sports Medicine, Athletic Training
Anatomy and Physiology
Advanced Placement Psychology
Applied Medical Terminology (3 units)

Principles of Bio-Medical Science

Health Career Exploration + 1 (1 unit)
Applied Medical Terminology + 1 (1 unit)
Applied Medical Terminology + 2 (1 unit)

Credit by Exam

Health Career Exploration + 1 (1 unit)
Guest Speakers, Field Trips, HOSA, Blood Drive
Health Career Exploration + 1 (1 unit)

Middle School Computer Applications

LEGEND

Emergency Medical Responder Certification
Students that achieve the above are granted equivalency for AH 265
Moving Together to Action, and Beyond

- Map and an Action Plan
  - Alignment
  - Outreach, In Reach
  - Early College Credit
  - Integrated Student Supports
  - Work-Based Learning
  - Resource Development
- Rapid Mapping Toolkit and Train-the-Trainer
Local Curriculum Alignment

Long Beach Allied Health Pathways: Health Information Technology Recommendations

**Long Beach City College**

- **Health Information Technology, AS**
- **Saddleback College**
  - Early Credit Opportunities at LBCC
    - CIS 111 C: Computer Information Systems (3 units)
    - HS 145 C: Survey of Medical Terminology (3 units)
    - BIOL 219 C: Anatomy and Physiology (5 units)
    - HI 114 C: Beginning GD-10 Coding (3 units)

- **Bachelor of Arts, CAL State Long Beach**
  - MAJOR IN HEALTH CARE ADMINISTRATION
  - HEALTH INFORMATION SYSTEMS (5 units)
  - Early Credit Opportunities at LBCC and LBUSD
    - IS 233 Introduction to Computer Systems and Applications (or equivalent)
    - HSC 250 Medical Terminology (1 unit)
    - SOC 250** or PSY 219** or STAT 100**
    - BIOL 205 human biology** (or equivalent)
    - Computer proficiency**
    - IS 380 Database Management**

- **Health Information Management, Bachelor's Degree**
  - San Diego Mesa College

**Long Beach City College**

- **Health Information Billing and Coding, Certificate of Achievement (23 units)**
  - AH 60 Medical Terminology** (3 units)
  - BIO 60 Human Biology** (4 units)
  - OR ANAT 41 Anatomy & Physiology** (5 units)
  - COSA 20 Microsoft Word for Windows (4 units)
  - AH 276 Health Care Law (1 unit)
  - MA 200 Medical Insurance Billing (3 units)
  - MA 100 Medical Coding (to be developed) (3 units)

**Long Beach Unified School District**

- **Health Information Systems Support, Certificate of Achievement (23-24 units)**
  - COSA Core Classes - ICT Statewide Curriculum
    - COSN 5 Computer Technician Hardware Basics (4 units)
    - COSA 50 Introduction to IT Concepts & Applications (4 units)
    - COSN 271 Networking Security Fundamentals (3 units)
    - COSN 10 Networking Fundamentals (4 units)

  - Health IT Specific Courses
    - AH 276 Health Care Law (1 unit)
    - AH 60 Medical Terminology** (3 units)
    - BIO 60 Human Biology** (4 units)
    - OR ANAT 41 Anatomy & Physiology** (5 units)

- **Health Information Technology**
  - CLPIA
    - A+ Certification
    - Net+ Certification
    - Security+ Certification
  - Microsoft Technology Associate (MTA)

**Health Information Technology**

- Health Informatics (HI) is a science that defines how health information is technically captured, transmitted and utilized. Health Informatics focuses on information systems, informatics principles, and information technology as it is applied to the continuum of healthcare delivery.

**Early CSULB Course Opportunities**
- Early LBCC College Credit Opportunities

**Early LSUS Course Opportunities**

DRAFT DATE: 5/25/2023
Prepared for Long Beach City College by Career Ladders Project
Regional Curriculum Alignment
Outreach! And, In Reach!

Information and Communication Technology Pathway

7/8th Grade  9th Grade  10th Grade  11th Grade  12th Grade
Early College Credit

Includes:
- Articulation/Credit by Exam/Portfolio
- Concurrent Enrollment
- Dual Enrollment
- AB 288 Dual Enrollment
Early College Credit

Articulation/Credit by Exam/Credit by Portfolio
- Powerful K-14 Educator Partnership
- Local Decision Making
- Statewide Conversations
  - Ed Code on the Move! Section 55051 and Residency
  - CATEMA Allows for Critical Automation and Data!
  - Particularly Powerful in terms of Equity and Access
Early College Credit

Dual Enrollment supports HS completion & college readiness:

• Dual enrollment participants learn study skills and other habits related to college success; they learn “how to play the part.” (Foster & Nakkula, 2005; Karp, 2006; Nakkula, 2006)

• Dual enrollment is related to increased high school graduation. (Karp et al., 2007; Rodriguez, Hughes, & Belfield, 2012; Cowan & Goldhaber, 2013)

• Taking college courses on a college campus gives first generation college students college know-how and confidence. (Karp 2010)

• Dual enrollment participants are more likely to enroll in college than their nonparticipating peers. (Karp et al., 2007; Speroni, 2011; Rodriguez, Hughes, & Belfield, 2012; Cowan & Goldhaber, 2013; Struhl & Vargas, 2012)
Early College Credit

Dual Enrollment supports college persistence & completion:

- Participation is related to **improved college grade point averages**. (Allen & Dadgar, 2012; Eimers, & Mullen, 2003; Kotamraju, 2005)
- Participation is related to **persistence to a second year** of college. (Eimers & Mullen, 2003; Swanson, 2008 Struhl & Vargas, 2012)
- Participation is **positively related to credit accrual**. (Karp et. al, 2007; Michalowski, 2007; Speroni, 2011, Rodriguez, Hughes, & Belfield, 2012; Cowan & Goldhaber, 2013)
- Participation is positively related to **improved likelihood of degree completion**. (An, 2013; Struhl & Vargas, 2012)
- **Program model, course rigor, and implementation quality matter.** (Allen, 2010; Kim, 2008; Speroni, 2011)
Early College Credit

Dual Enrollment benefits sub-groups and target students:

- **CTE program students benefit** from dual enrollment participation. (Karp, et al., 2007; Rodriguez, Hughes, & Belfield, 2012; Struhl & Vargas, 2012)
- **Male students may benefit more** from participation than other sub-groups. (Karp et al., 2007)
- **Low-income, first-generation and academically “at risk” students benefit** from participation. (Rodriguez, Hughes, & Belfield, 2012; An, 2013; Struhl & Vargas, 2012)
- Some studies find that they do so **to a larger extent than other student groups**. (Rodriguez, Hughes, & Belfield, 2012; An, 2013; Struhl & Vargas, 2012)
Case Study: Dual Enrollment in California

2008-2011 study involving 3,000 students enrolled in career-focused DE courses at 8 sites across CA.

Found that of those students who engaged in dual enrollment:

- 60% students of color
- 40% living in non-English speaking households

Participating students—compared to similar students not enrolled in dual enrollment—overall, had better academic outcomes:

- More likely to graduate from HS
- More likely to transition to a 4 year college
- More likely to persist in postsecondary education
- Less likely to take basic skills courses in college
- Accumulate more college credits
Early College Credit

Dual Enrollment Questions?
CCCCO hired CLP and RP Group to create a Dual Enrollment Tool Kit for all K-14 pathway faculty and staff.

Please join the 7 June 2016 10-11:30 AM Webinar

http://www.careerladdersproject.org/ccccode/
Integrated Student Supports

High Impact Pathways have integrated student supports!

Counseling and Student Support faculty and staff can, and need, to help!

California Counseling Network (CaCN), a community of practice of K-14 counselors is working state-wide to gather and share emerging practice for colleges integrating counseling and student support services with mapping work.
Work-Based Learning

EB CPT Work-based Learning Continuum Learning Outcomes

Career Awareness
- Learning ABOUT work.
  - Build awareness of the variety of careers available and the role of post-secondary education; broaden student options.

Learning Outcomes:
- Describe a variety of career pathway options.
- Describe how basic skills such as math and reading are used in the workplace.
- Explain the importance of post-secondary education and training following high school graduation.

Career Exploration
- Learning ABOUT work.
  - Explore career options and post-secondary requirements to motivate and inform decision-making in high school and post-secondary education.

Learning Outcomes:
- Explain basic knowledge and skills required for success in college and careers.
- Connect individual skills and interests to variety of career options.
- Connect the pathway experience to the workplace experience.
- Describe how post-secondary education connects to a career path of interest.
- Describe and use multiple resources to find jobs.
- Explain the options available through and importance of post-secondary education.

Career Preparation
- Learning THROUGH work.
  - Apply learning through practical experience that develops knowledge and skills necessary for success in careers and post-secondary education.

Learning Outcomes:
- Explain how the workplace functions and the skills required to succeed.
- Demonstrate ability to apply for employment (write a resume, interview, complete application).
- Demonstrate appropriate business dress, behavior and etiquette.
- Describe a workplace experience, the skills required to succeed.
- Explain the elements and importance of workplace safety.
- Demonstrate general work-related skills including collaboration, effective communication, creativity, critical thinking and taking initiative.

Career Training
- Learning FOR work.
  - Train for employment and/or post-secondary education in a specific range of occupations.

Learning Outcomes:
- Demonstrate knowledge AND skills specific to employment at specific site in line with specific industry standards.
- Develop an informed, detailed plan for career path through post-secondary and beyond.
- Utilize resources available at job site, and at post-secondary institution to support individual career plan.
- Complete clinical or apprenticeship experience as needed for full employment in career field.
- Explain work history and career path to others, in and outside of industry of choice.
Rapid Mapping & Train-the-Trainer

Career Ladders Project and ConnectED partner across the state with K-14 communities!

**Rapid Mapping Tool Kit**
- Pre-work Support
- Agenda
- PowerPoint
- Handouts
- Pre-Filled Map Template

**Train-the-Trainer**
- K-14/16 Faculty and Staff
- Key Talent
OC SB 1070 Rapid Mapping & Train-the-Trainer

OC SB 1070 Timeline
- July
  - Pre-work Support
    - Setting the table
    - Choosing pathway
  - Pre-populating the map
- August
  - Teams mapping!
  - CLP updates drafts
- September
  - CLP updates drafts
  - Teams review drafts
- October
  - All Team Session

Career Pathways Leadership Institute
Building dynamic pathways for students' career and life success demands new approaches to educational leadership and organizational structures.
Thank you!
Questions? Feedback? Ideas?

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