

CALIFORNIA COMMUNITY COLLEGES

LAOC RC

los angeles | orange county regional consortium



CTE HARD TO CONVERT RECOMMENDATIONS NEXT STEPS

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LAOCRC HARD-TO-CONVERT RECOMMENDATIONS NEXT STEPS PANEL DISCUSSION



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Mr. Mike Murphy

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Dr. Gustavo Chamorro

LAOCRC – OC Director



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LAOCRC – LA Director

TOP CODES & CAREER TECHNICAL EDUCATION PROGRAMS

093400 - ELECTRONICS AND ELECTRIC TECHNOLOGY

LabVIEW, Multisim, Altera

122500 - RADIOLOGIC TECHNOLOGY

Labster & Visible Body

094800 - AUTOMOTIVE TECHNOLOGY

Automotive Service Excellence (ASE), Cengage's MindTap, Electude & zSpace

123010 - REGISTERED NURSING

Laerdal's vSim, zSpace, iHuman, & Visible Body

095220 – ELECTRICAL

Festo & Interplay Skilled Trades

125000 - EMERGENCY MEDICAL SERVICES

FISDAP, Zero Hour America's Medic, & 60 Seconds to Survival Disaster Triage.

095600 - MANUFACTURING AND INDUSTRIAL TECHNOLOGY

Labster, JoVE, LabArchives, Immerse2Learn, NCSIMUL, ToolingU, & zSpace.

130630 - CULINARY ARTS

Shipt, FreshDirect, & Instacart

095650 - WELDING TECHNOLOGY

Lincoln Electric & zSpace

213300 - FIRE TECHNOLOGY

National Fire Protection Association

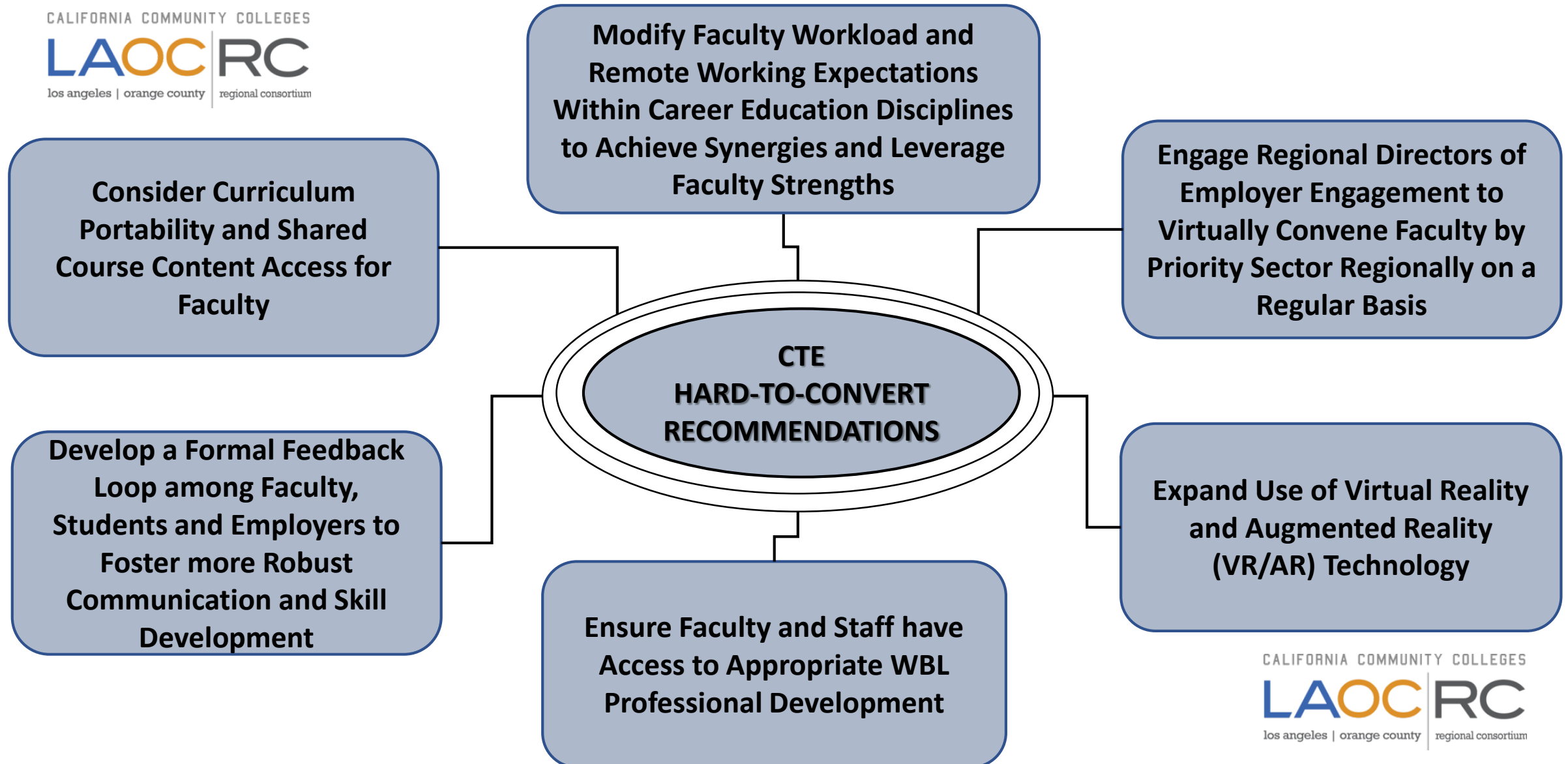
121000 - RESPIRATORY CARE/THERAPY

iCEV, Kettering National Seminars, & Visible Body

300700 - COSMETOLOGY AND BARBERING

MindTap, Zoom, & Today's Class Cosmetology

LAOCRC CTE HARD TO CONVERT SIX RECOMMENDATIONS



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Consider Curriculum Portability and Shared Course Content Access for Faculty

Modify Faculty Workload and
Remote Working Expectations
Within Career Education
Disciplines to **Achieve Synergies**
and **Leverage Faculty Strengths**

**Engage Regional Directors of
Employer Engagement to
Virtually Convene Faculty by
Priority Sector Regionally on a
Regular Basis**

Vertical Sector Lead framework

- **Identify needs within a specific sector and provide resources**
 - *Research conducted by a college lead in collaboration with Regional Director*
 - *An effective way to leverage resources*
 - *Common curriculum and equipment*
- **Sectors**
 - *Advanced Manufacturing*
 - *Advanced Transportation & Logistics*
 - *Biotech*
 - *Business*
 - *Global Trade*
 - *Health*
 - *Retail, Hospitality & Tourism*

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Expand Use of Virtual Reality and Augmented Reality (VR/AR) Technology

**Ensure Faculty and Staff have
Access to Appropriate Work-
Based Learning Professional
Development**

Develop a Formal Feedback Loop among Faculty, Students and Employers to Foster more Robust Communication and Skill Development

Faculty Leaders, Chairs, and Senate Presidents

LA/OC Faculty Resource and Career Education Innovation HUB

Steering Committee

Name	Discipline	LAOCRC Community College
Sal Veas	Business	Santa Monica College
Lance Heard	Administration of Justice	Mt. San Antonio College
Khai Lu	Computer Information Systems	El Camino College
Monica Thurston	Allied Health	East Los Angeles College
Roger Dickes	Visual & Performing Arts	Glendale Community College
Artemio Navarro	Mechanical Engineering	Los Angeles Trade-Technical College
Elisa Meyer	English	Santa Monica College
Sarah Barker	Audio & Video Production	Pasadena City College
Charlene Brewer-Smith	Cosmetology	El Camino College

Faculty Leaders, Chairs, and Senate Presidents

LA/OC Faculty Resource and Career Education Innovation HUB

Faculty Participants

Name	Discipline	LAOCRC Community College
Kristina Allende	English	Mt. San Antonio College
Jeremy Clark	Automotive Technology	Citrus College
Ed Matykiewicz	Automotive Technology	El Camino College
Tracy Harkins	Health & Kinesiology	Los Angeles Mission College
Leslie Howard	Health Science	East Los Angeles College
Leticia Barajas	Career Education & Workforce	East Los Angeles College
Dorothy Hendrix	Health Science	East Los Angeles College
Velveth Klee	Physics	Los Angeles Trade-Technical College
Andrew Maz	Music	Cerritos
Lisa Amos	Family Consumer Sciences	Mt. San Antonio College
Steven Sedky	Business	Santa Monica College
Evangelina Rosales	Career Education	Compton College
Haley Nguyen	Culinary Arts	Long Beach City College

Faculty Planning & Development Facilitated by BrandIQ

Strong Workforce Project created by faculty, for faculty

providing a 'space' for:

Regional acceleration of the delivery of career education programs and faculty professional development

CE/GE cross-college/cross-discipline collaboration, sharing best practices and innovations for "at-scale" curriculum projects (*like Amazon Web Services-AWS*)

in 'co-creation' with Los Angeles regional industry partners

Hub Organizing Principals

- **Collective Impact**
 - **Collaborative Action Networks (CAN's)**
- **High Action and Core Indicator Results**
- **CANs Alignment**
- **Results-Based Frame**

Steering Committee

Planning 2-3 years,
 Governance

BrandIQ
 Capacity

Working Group
 CAN 1

Non-Credit to Credit
 CNA/Allied Health
 Career Ladders
 Template

Working Group
 CAN 2

Embed Equity

Working Group
 CAN 3

Faculty Professional
 Development Badge
 System

Working Group
 CAN 4

Creating a Virtual
 Innovation Space Cross
 College/Cross Discipline
 Hard-to-Convert Priority
 Sector

Working Group
 CAN 5

Guided Pathways
 Impact Accelerator

BrandIQ
 Capacity
 Other
 Projects

Identify + Assess new
 funding
 sources/sustainability

Initial 'innovation
 design thinking' &
 'results-based
 action framework

Development and
 Training
 Hub Innovators (2x)

Stakeholder
 Engagement

Collaboration
 platform for
 Virtual Hub
 innovation

Identify 2 pilots,
 purchase
 winner and deploy

Develop regional
 data analysis for
 tracking data

Regional data
 and living
 wage data

Hub 2.5 days
 Planning
 Convenings

2x
 Summer/Winter



HARD TO CONVERT CTE PROGRAM RESEARCH

6 RECOMMENDATIONS

1. **CONSIDER CURRICULUM PORTABILITY AND WIDESPREAD COURSE CONTENT ACCESS FOR FACULTY.** WE HIRE WELL AND OUR FACULTY ARE AMAZING, BUT THEY ARE ALSO HUMAN BEINGS; THUS, SOME OF THEIR INDIVIDUAL LECTURES AND COURSE CONTENT ARE FAR BETTER THAN OTHERS. CREATE A CONTENT DELIVERY CLEARINGHOUSE FOR REGIONAL FACULTY TO SUBMIT/SHARE THEIR BEST RECORDED LECTURES FOR FACULTY IN THE SAME DISCIPLINES TO DROP INTO THEIR CANVAS SHELL.
2. **REDEFINE THE FACULTY WORKLOAD AND REMOTE WORKING EXPECTATIONS WITHIN CE DISCIPLINES TO ACHIEVE SYNERGIES AND LEVERAGE FACULTY STRENGTHS.** WORK WITH LOCAL UNIONS TO PERMIT A FLEXIBLE STRUCTURE (AT LEAST AS A TEMPORARILY MEASURE) WHERE SOME FACULTY DELIVER THE PREPONDERANCE OF LECTURES, AND OTHERS FOCUS ON HANDS-ON SKILL VERIFICATION AND EMPLOYER ENGAGEMENT.
3. **RETURN TO THE BASICS AND DIRECT THE REGIONAL DIRECTORS TO VIRTUALLY CONVENE FACULTY BY PRIORITY SECTOR REGIONALLY ON A REGULAR BASIS.** CREATE AN INFORMAL SPACE FOR THEM TO COLLABORATE AND AGREE ON THE ADOPTION OF SOFTWARE AND SIMULATION TECHNOLOGIES, PLAN FOR CURRICULUM PORTABILITY, AND CULL CUSTOMIZED KITS TO MEET ALL OR PART OF THE HANDS-ON LAB EXPERIENCE FOR STUDENTS AMONG ALL CE PROGRAMS WITHIN THE CONSORTIUM. AS ORANGE COUNTY HAS DONE, ADOPT "VERTICAL SECTOR LEADS" FOR PROGRAMS WHERE A REGIONAL DIRECTOR DOES NOT EXIST.

RECOMMENDATIONS

4. **INCENTIVIZE THE EXPANDED USE OF VIRTUAL REALITY AND AUGMENTED REALITY (VR/AR) TECHNOLOGY.** WHEN FEASIBLE, PARTNER WITH INDUSTRY LEADERS TO SHAPE THE DEVELOPMENT OF THEIR TOOLS AND CONNECT WITH OTHER POSTSECONDARY INSTITUTIONS THROUGHOUT THE NATION THAT HAVE SUCCESSFULLY INTEGRATED THIS EMERGING TECHNOLOGY.
5. **ENSURE FACULTY AND STAFF HAVE ACCESS TO APPROPRIATE WBL PROFESSIONAL DEVELOPMENT.** EXPAND WORK-BASED LEARNING OPPORTUNITIES AS A VIABLE WAY OF OFFERING STUDENTS THE HANDS-ON LAB PRACTICUM THAT CAN OTHERWISE ONLY OCCUR ON A COLLEGE CAMPUS; PROACTIVELY ENGAGE WITH LOCAL CE ADVISORY COMMITTEES TO FACILITATE SKILL VERIFICATION AND TO VALIDATE PROGRAM QUALITY.
6. **DEVELOP A FORMAL FEEDBACK LOOP AMONG FACULTY, STUDENTS AND EMPLOYERS TO FOSTER MORE ROBUST COMMUNICATION AND SKILL DEVELOPMENT.** USING THE PROGRAM SNAPSHOTS PROVIDED IN THIS REPORT, CREATE RELEVANT WORKING GROUPS TO NARROW PROSPECTIVE VENDORS AND FACILITATE THE INTEGRATION OF SUPPORTIVE TECHNOLOGY INTO EXISTING PROGRAMS AND ENSURE ONGOING QUALITY CONTROL. ADOPT LABSTER, ZSPACE, AND PROGRAM-SPECIFIC PLATFORMS.

1st Regional “Discipline Specific” CAN

- **EXAMPLE:** A discipline-specific working group could act on recent research to develop solution(s) for Hard-to-Convert areas of studies / labs, such as Automotive Tech
- Examine Best Practices In CE Online Learning: Ashworth College, GA and George Brown College, Toronto
- Automotive Tech Working Group could also create a regional ‘at-scale’ new program in a similar fashion to Allied Health, AND regional acceleration of successful local CE initiatives like an innovative program championed by LATTC during a past faculty retreat

“**AUTOMOTIVE TECHNOLOGY**—THIS PROGRAM LENDS ITSELF WELL TO ONLINE ADAPTION, AND SEVERAL ESTABLISHED RESOURCES EXIST FOR SOFTWARE AND SIMULATION THAT TEACH TO INDUSTRY STANDARDS. **AUTOMOTIVE SERVICE EXCELLENCE (ASE)** OFFERS AN ONLINE PROGRAM, AND SEVERAL LA | OC COLLEGES ARE USING **CENGAGE’S MINDTAP** WHICH ALLOWS FACULTY TO CONTROL ALL ASPECTS OF THEIR VIRTUAL INSTRUCTION. ADOPT **ELECTUDE & ZSPACE.**”

Main Criteria to CTE Hard-To-Convert Online Adaptation

Main Criteria

CTE Hard-to-Convert Online Adaptation

Legal and Licensing Requirements

Programs with direct patient care due to legal and licensing requirements

Skills Verification Requirements

Programs that require demonstration of highly refined skills

Occupational Supply & Demand

Programs that have high demand for completers

Heavy Machinery and Equipment Requirements

Programs that require the use of heavy machinery/equipment or specialized personal protective equipment

Top Code

CTE Hard-to-Convert

Alignment to

Labor Market

Information (LMI)

CTE Hard-to-Convert **Top Code** COE LA19 LMI Across Credit/Noncredit

Automotive 094800	18-19 FTES 796
18-19 Completions 606	Annual Openings 763
Electronics & Electrical Technology 093400	18-19 FTES 111
18-19 Completions 127	Annual Openings 340
Radiologic Technology 122500	18-19 FTES 415
18-19 Completions 99	Annual Openings 114

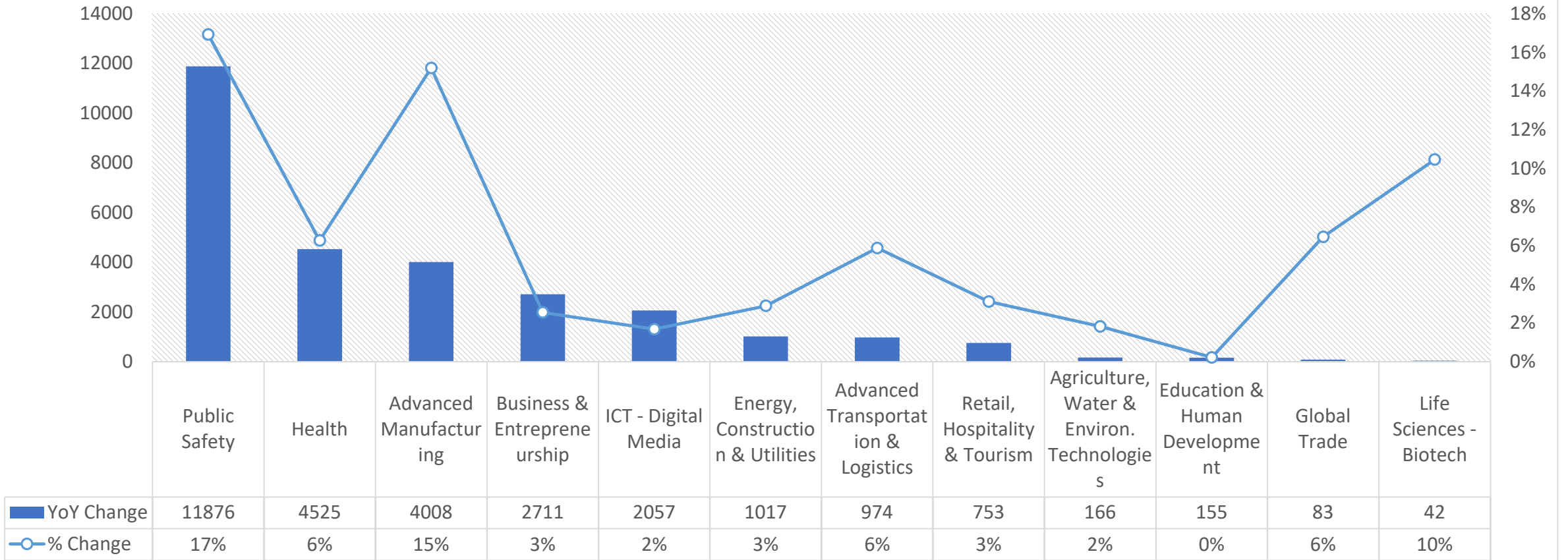
Cosmetology and Barbering 300700	18-19 FTES 2,007
18-19 Completions 510	Annual Openings 2,460
Emergency Medical Services 125000	18-19 FTES 308
18-19 Completions 188	Annual Openings 167
Respiratory Care/Therapy 121000	18-19 FTES 53
18-19 Completions 12	Annual Openings 118

Culinary Arts 130630	18-19 FTES 351
18-19 Completions 296	Annual Openings 2,185
Fire Technology 213300	18-19 FTES 1,199
18-19 Completions 524	Annual Openings 144
Registered Nursing 123010	18-19 FTES 1,125
18-19 Completions 478	Annual Openings 1,796

Electrical 130630	18-19 FTES 122
18-19 Completions 100	Annual Openings 2,749
Manufacturing and Industrial Technology 095600	18-19 FTES 361
18-19 Completions 64	Annual Openings 2,404
Welding Technology 095650	18-19 FTES 224
18-19 Completions 89	Annual Openings 429

Using Enrollment Data to Assess Student Demand Alignment to Industry Needs

Change in Enrollments: 2017-2018 vs 2018-2019 Academic Year



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NEXT STEPS

BrandIQ

RECOMMENDATIONS NEXT STEPS

- **Prioritize Implementation of Hard-To-Convert Recommendations**
- **Finalize Strong Workforce Program Regional Investments**
- **Finalize Composition of Hard-To-Convert Stakeholder Groups**
- **Expand CAN membership and College Participation**
- **Convene Faculty in Hard-To-Convert Career Education (2-3) Priority Sectors**
- **Identify regional Industry partners leveraging advisory council relationships when appropriate**
- **Schedule Webinars – Statewide Dissemination and Feedback**
 - *Design student input loop framework*



**CTE Hard-To-Convert Inquiries, Contact:
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