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Enhancing Community College Career Pathways Through Policy Change

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Capitol Briefing

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Key Topics

- Why focus on CTE? Why policy?
- Issues raised from our research
- Next steps: preview of policy issues/recommendations



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IHELP mission: to enhance leadership and policy for California higher education with an emphasis on community colleges because of their importance to providing a diverse and educated workforce.

Reports on community college student success:

Rules of the Game, February 2007

Beyond the Open Door, August 2007

Invest in Success, October 2007

It Could Happen, February 2008

Crafting a Student-Centered Transfer Process in CA, August 2009

Steps to Success, October 2009

Divided We Fail, October 2010

The Road Less Traveled, February, 2011

Sense of Direction, August, 2011

Career Opportunities (Parts 1-3), 2012

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Why Focus on Career Technical Education?

- Unmet workforce needs of 21st century economy
- Community colleges are key
- Growing focus on student success

but

- CTE mission has not been a priority

therefore

- Huge opportunity!

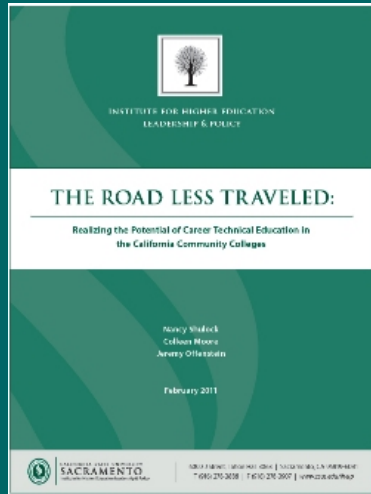
until
now

Why Focus on Policy?

- Policies create incentives
- Misaligned policies create barriers



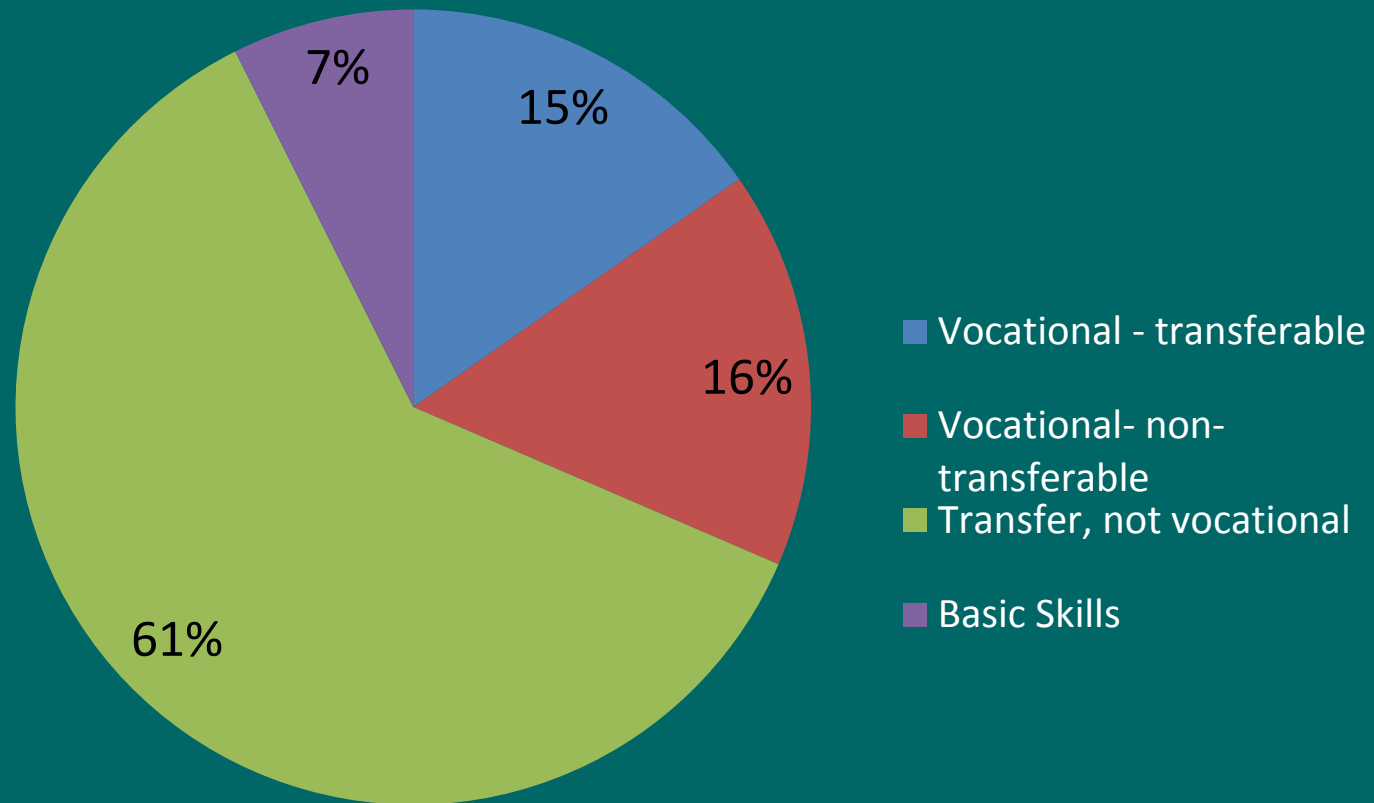
- CTE mission not well supported in policy
- Major changes underway – need *policy* to support, sustain and fully realize benefits



Findings – from Exploratory Research in Four Fields

- Low completions of vocational associate degrees and certificates
 - Despite credits earned and math
- Weak pathways, little progression within *technical* fields
- Career-oriented credentials not valued by colleges or (reportedly) by employers

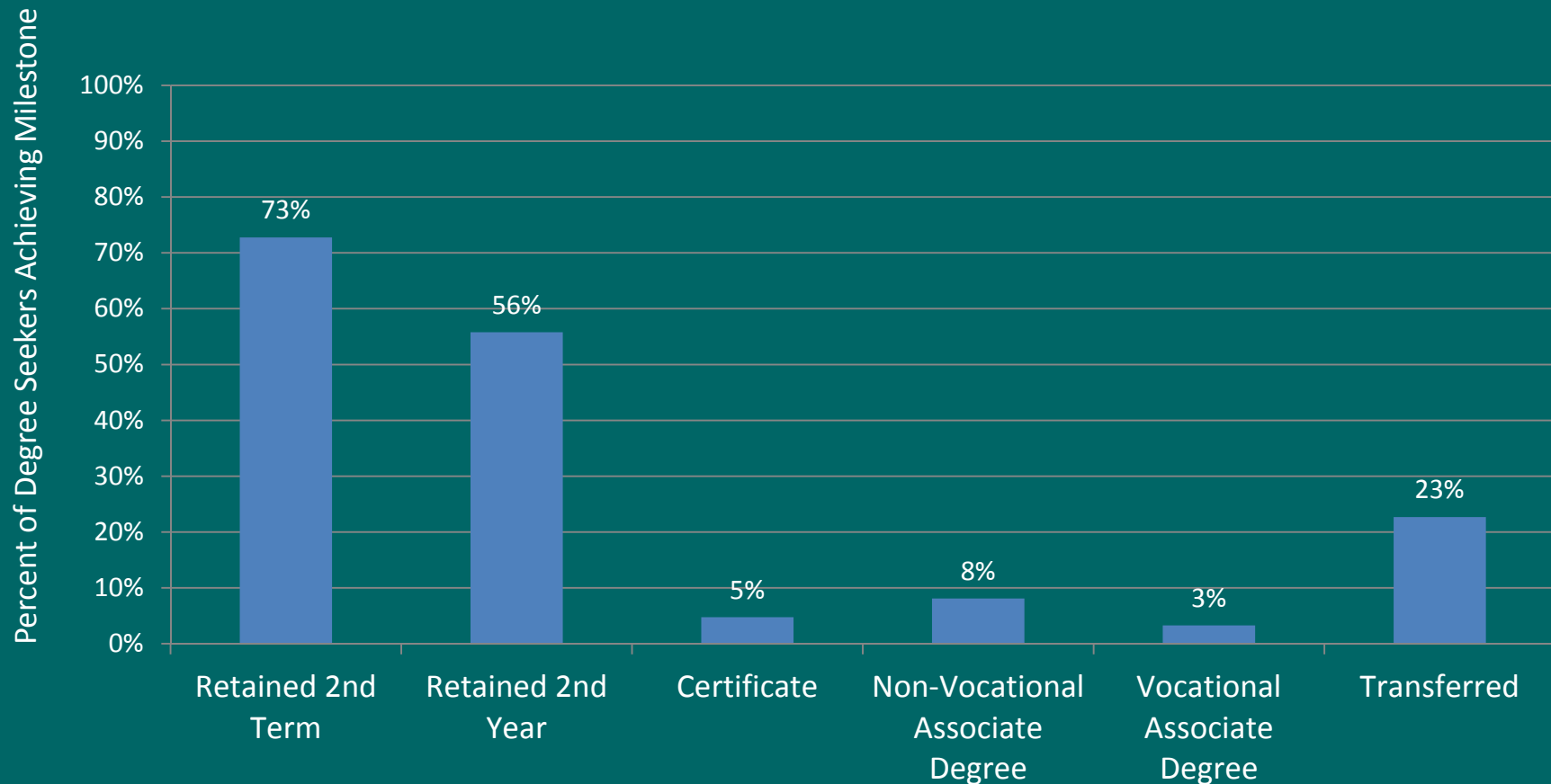
One Third of Course Enrollments are Vocational



Source: CCC Chancellor's Office Datamart, Fall 2009, as reported in *The Road Less Traveled*, Figure 4

Few Students Earn Vocational Credentials

Milestone Attainment within 6 Years among Degree Seekers



Source: Author's analysis of CCC data for the cohort of entering "degree seekers" in 2003-04, as reported in *The Road Less Traveled*

Current Research Agenda

Strengthening CTE through Policy Reform

Ultimate goal: increase student success – credentials and other outcomes of value in workplace

Completed:

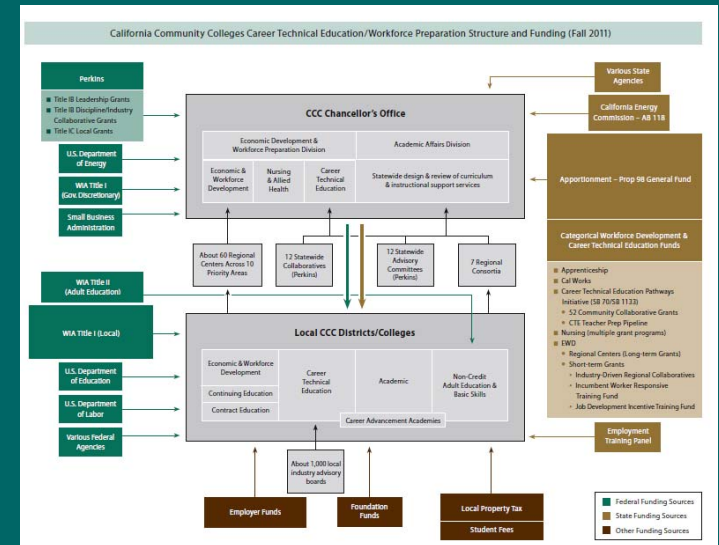
1. Document structure and funding for CTE and EWD
2. Inventory and analyze programs offered
3. What can we learn from policies in other states?

Ongoing:

4. Analyze CCC policies – recommend policy alignment

Structure Marginalizes CTE and Hinders Responsiveness

- Silos: CTE/EWD/Academic Affairs
 - CTE seen as not academic
 - Hinders responsiveness to industry
 - Basic skills for CTE have not been a priority
- Misaligned programs and structures
 - EWD - 10 strategic priorities
 - CTE/Perkins: 12 statewide collaboratives
 - CTE/Perkins: 12 statewide advisory committees
 - State CTE plan – 15 industry sectors
 - Myriad local advisory committees





Reliance on Competitive Grants Distorts Resource Allocation

- General fund allocations don't accommodate higher costs of CTE programs
 - Disincentive for high-cost/high-need programs
- Huge array of competitive grants
 - Uneven capacity to win grants
 - Money chase can shape the mission
 - Competition rather than regional cooperation



Chancellor's Office Not Designed for Strategic Leadership

- CO largely compliance and grant administration
 - Problematic “lead college” structures
 - Limited CO authority and capacity to ensure:
 - robust, high-need program offerings
 - career pathways with common competencies/standards
 - consistent policies (e.g., concurrent enrollment)
- Individual colleges work independently – fail to realize advantages of scale
 - Program/curriculum development
 - Labor market analysis
 - Employer engagement

Program Mix Not Well Targeted at Needs

- Average per college: 113 programs in 25 fields
- Average per region: 959 programs in 91 fields
- Enrollments and completions highly concentrated
 - 7% of fields enroll *half* of students
 - 6% of fields produce *more than half* of credentials
- Program approval/review/discontinuation processes don't work to reduce duplication and maintain currency
- No common competency/skill standards=>local variability



Seven Percent of Fields* Enroll Half of all Students (FTE)

Field	Average Annual FTES, 2007-08 to 2009-10	Percentage of Systemwide FTES (CTE courses only)	Cumulative Percentage of CTE FTES
Administration of Justice	29,456	8%	8%
Nursing	26,575	8%	16%
Child Development/ Early Care and Education	22,909	7%	23%
Accounting	19,372	6%	29%
Fire Technology	17,764	5%	34%
Office Technology/ Office Computer Applications	13,328	4%	38%
Information Technology, General	11,541	3%	41%
Nutrition, Foods, and Culinary Arts	11,445	3%	44%
Cosmetology and Barbering	10,493	3%	47%
Automotive Technology	9,610	3%	50%

***There are 142 fields in which CTE courses are offered (with “fields” defined as 4-digit TOP codes).**

Six Percent of Fields* Produce Over Half of all Completions

Field	Total Completions 2007-08 to 2009-10	Percentage of Total 2007-08 to 2009-10	Cumulative Percentage
Nursing	25,545	13%	13%
Child Development/ Early Care and Education	20,471	10%	23%
Administration of Justice	18,538	9%	32%
Fire Technology	8,921	5%	37%
Business Administration	8,801	4%	41%
Accounting	7,802	4%	45%
Automotive Technology	6,199	3%	48%
Business Management	5,229	3%	52%

***There are 142 fields in which CTE courses are offered (with “fields” defined as 4-digit TOP codes).**

Example of Variation across Programs

Associate Degree in Engineering Technology

Merced College	San Joaquin Delta College	Modesto Junior College
<p>30 major credits, as follows:</p> <ul style="list-style-type: none"> • General Chemistry (5) • Physics (4) • Engineering Materials (3) • FORTRAN Programming (3) • Elementary Mechanics (3) • Direct and Alternating Current Circuits (5) • Descriptive Geometry (3) • Calculus I (4) 	<p>18 major credits, <i>selected from</i> (all 3 credits):</p> <ul style="list-style-type: none"> • Drafting (Engineering, Computer-aided, Civil, Machine) • Materials & Measurement • 3-dimensional Modeling • Machine Design • Mech. & Elec. Systems • Industrial Control Systems • Applied Surveying • Technical Statistics • Applied Statistics 	<p>31 major credits, as follows:</p> <ul style="list-style-type: none"> • General Chemistry (5) • General Physics OR Mech. Heats & Waves (5) • Intro to Engineering & Architecture (1) • Engineering Graphics (4) • Elementary Statistics (5) • 6 credits from General Computer Lit (3), Machine Tool Tech (4), Arc & Gas Welding (3) • 5 elective credits from a list (mostly Drafting or Calculus)

Example of Variation across Programs

Certificate in Computer Programming

Laney College	Gavilan College	San Jose City College
<p>47 - 56 credits</p> <ul style="list-style-type: none"> • Intro. Comp. Sci. (5) • Intro. Programming (5) • C Programming (4) • Intro to Op. Sys. (1) • Op. Sys. Scripting (1) • Web Publishing (1) • Data Comm./Networks (4) OR Web Pub. II (2) • One writing class (3) • Programming w/C++ (4) • Data Struc./Algorithms (4) • Java Programming I (4) • UNIX/LINUX Op. Sys. (4) • 3 electives (e.g., Java, Assembly Language, Info Security, XML Apps.) 	<p>21 - 22 credits</p> <ul style="list-style-type: none"> • C++ Programming I (4) OR C++ Scientific Prog. (3) • C++ Programming II (4) • UNIX/LINUX Op. Sys. (4) <i>10 credits from among:</i> • Web Page Authoring I (2) • Assembly Lang. Prog. (4) • Java Programming I (4) • C#.NET Programming (4) • Visual Basic.NET Prog. (4) • Perl Programming/Lab (3) • Web Sites with SQL and PHP (4) 	<p>30 credits</p> <ul style="list-style-type: none"> • Intro. Comp. Info. Sys. (3) • C++ Programming (3) • Visual Basic Prog. (3) • Data Structures (3) • Object-oriented Prog. (3) • Java Programming (3) • Intro to UNIX (3) • 9 credits of CIS department electives



Accountability for Outcomes is Inadequate

- CTE outcomes complex – better data being sought
- Until now, accountability reporting (ARCC) limited to annual counts and activities
- No tracking of CTE program labor market outcomes
- No *program* data
 - Students do not enroll *in programs* (a few exceptions)
 - Course outcomes \neq program outcomes
- Value of certificates?
- Value of “non-completions”?

Certificates - Which Ones? How Valuable?

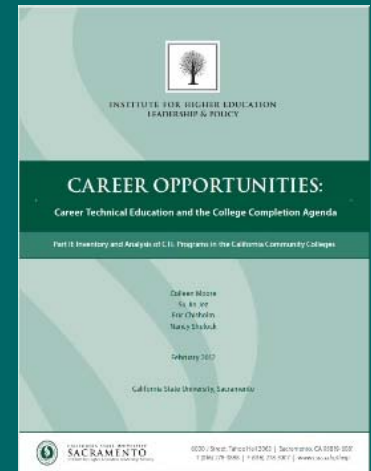
- Most CA completers get certificates, which are of uneven and often unknown value
 - Two-thirds of programs offered are short-term certificates (< 30 semester credits)
 - Reported completions (many unreported short-term certificates):

Associate Degrees	40%
Certificates 30+ credits	19%
Certificates < 30 credits	41%

- How many are “stackable”?
- Labor market outcomes of completers?
- Few proficiency requirements for certificate completion

Career Opportunities, Part IV - Ongoing Policy Alignment Phase

- Advisory panels from the field
- Policy papers – different topics
 - Problems
 - Education Code/Title 5 issues
 - Possible recommendations (learn from other states – *Career Opportunities Part III* as reference)
- Surveys for feedback
 - Potential impact: high/low
 - Feasibility: high/low
- Final report with recommendations – Spring 2013



Some Emerging Policy Issues

- Better associate degree options for career-bound
- More valuable certificates – industry alignment, proficiency
- Better program approval/review processes
- Joint ownership of programs
- Model curriculum frameworks
- More effective concurrent enrollment/dual credit
- More and stronger work-based learning
- Better pathways from noncredit to credit
- Differential funding for high cost/high need
- Accountability for outcomes *of programs*



Hope and Change

- CTE finally getting needed recognition
- System is “doing what matters...”
- A policy agenda will support the changes - institutionalize
- Stakeholder support is needed
- The bigger agenda: get beyond the limited rhetoric of “career” versus “academic”
- The big goal: jobs and careers to drive the CA economy

