INSTITUTE FOR HIGHER EDUCATION LEADERSHIP & POLICY

Enhancing Community College Career Pathways Through Policy Change

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The Role of Community Colleges in Workforce Development for Low-Skilled Workers

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Key Topics

- Why focus on CTE? Why policy?
- Issues raised from our research
- Emerging policy issues/recommendations

INSTITUTE FOR HIGHER EDUCATION LEADERSHIP & POLICY

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

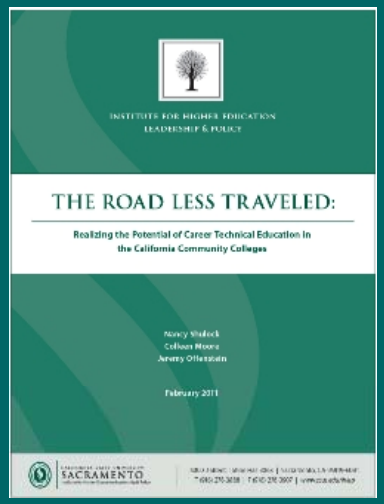
- Huge opportunity!

until now

Why Focus on Policy?

- Policies create incentives
- Misaligned policies create barriers

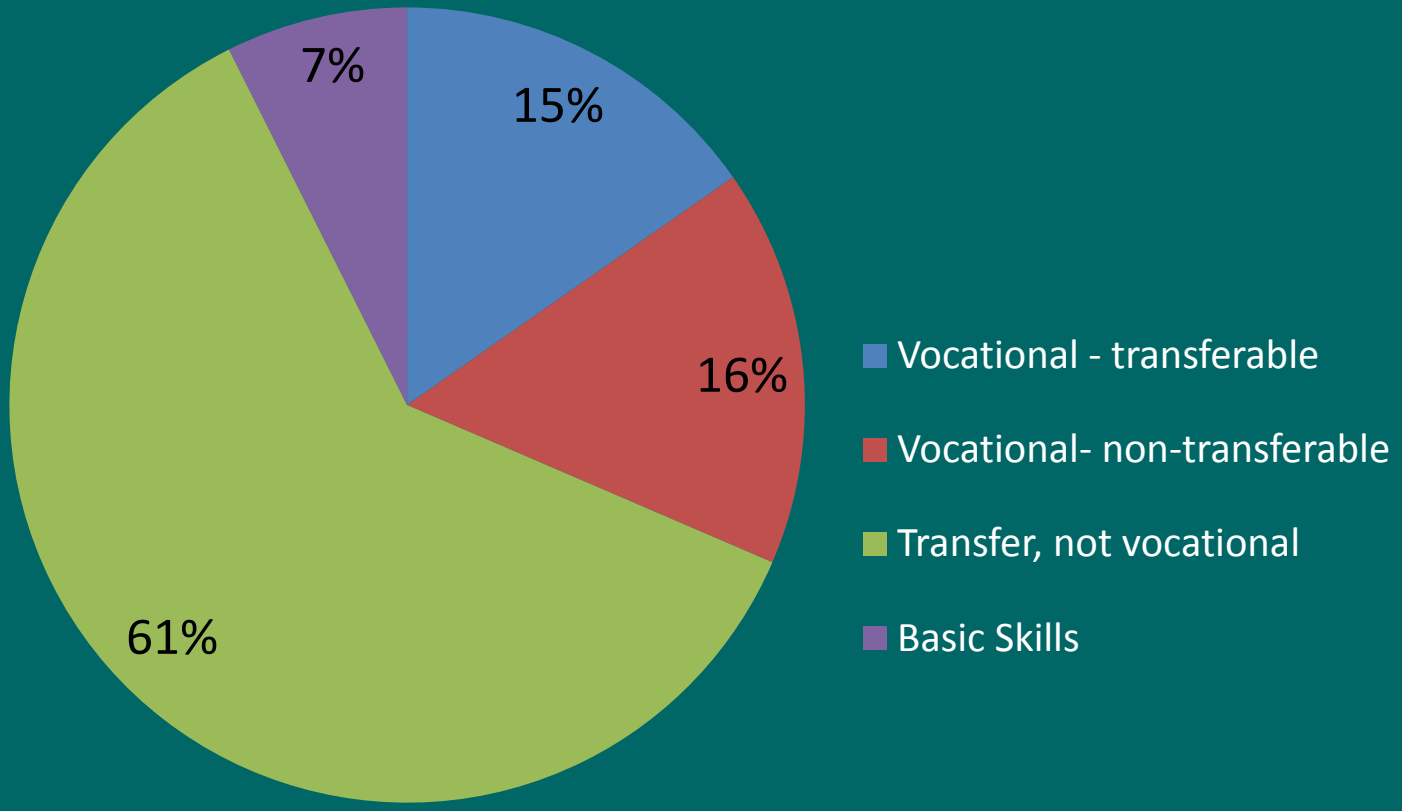
- CTE mission not well supported in policy
- Major changes underway – need *policy* to support, sustain and fully realize benefits



Findings – from Exploratory Research in Four Fields

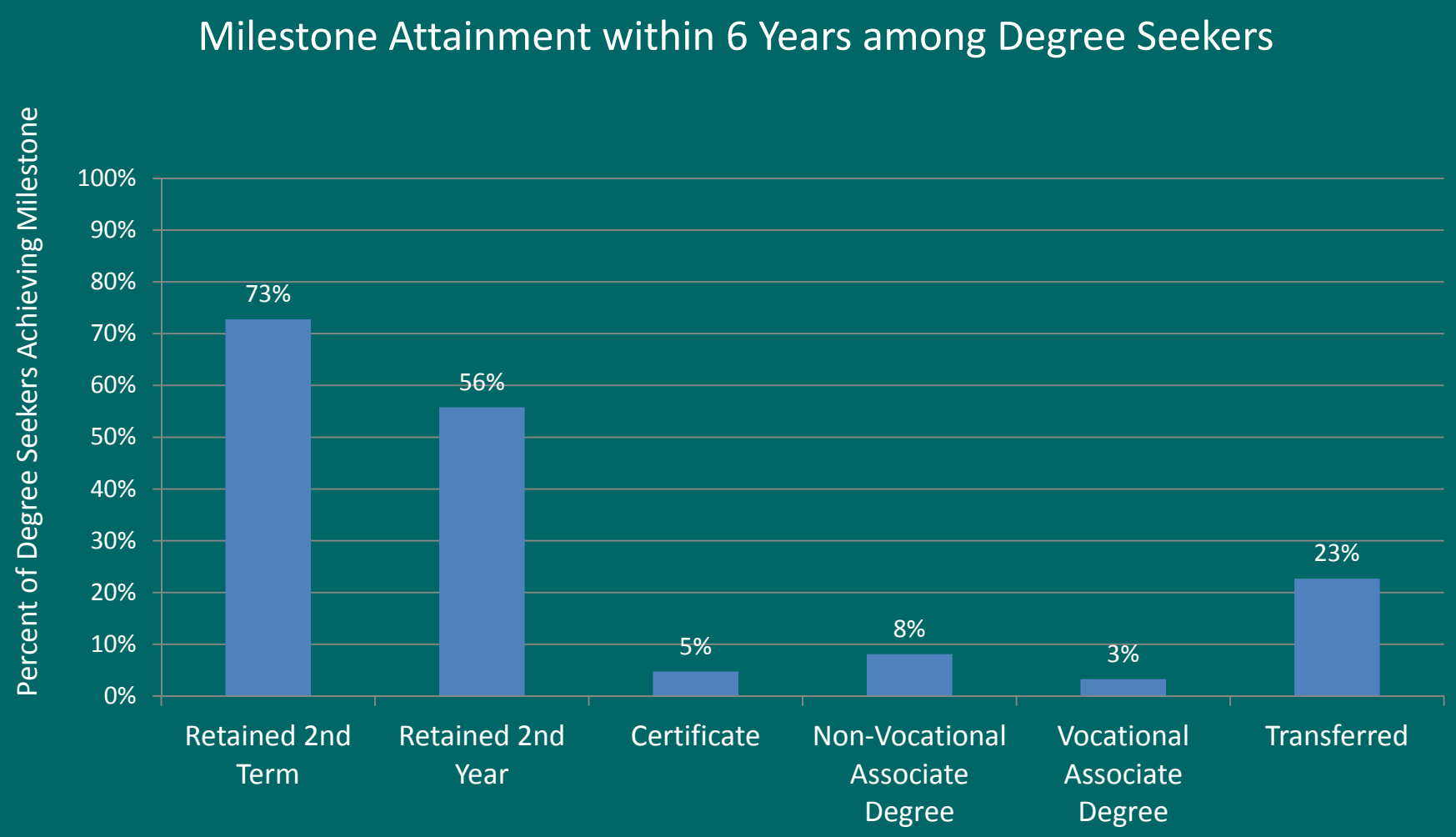
- Low completions of vocational associate degrees and certificates
  - Despite credits earned and math
- Weak pathways, little progression within *technical* fields
- Career-oriented credentials not valued by colleges or (reportedly) by employers

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



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:

I. Document structure and funding for CTE and EWD
II. Inventory and analyze programs offered
III. What can we learn from policies in other states?

Ongoing:

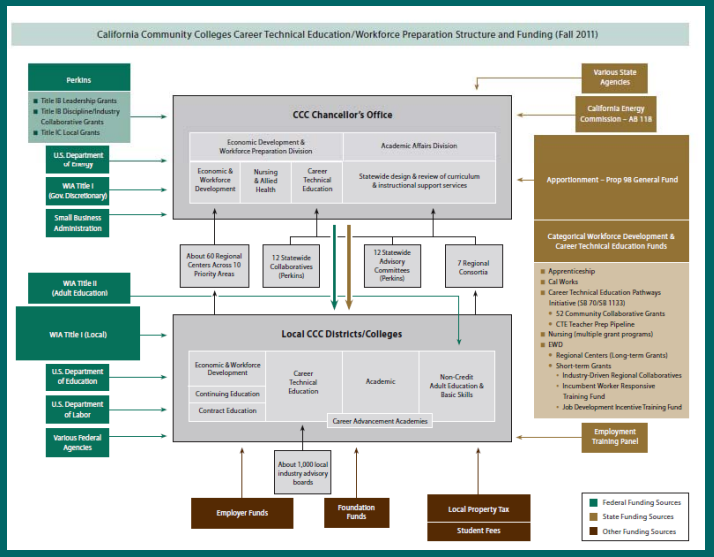
IV. Analyze CCC policies – recommend policy alignment

the James Irvine foundation
Expanding Opportunity for the People of California

Criteria for Effective CTE – from literature review

1. Programs articulate with K-12 where appropriate
2. Prospective students are helped to identify and enroll in community college CTE programs of interest
3. Program offerings adapt to changing labor market needs
4. Efficient pathways exist for transition into entry level credentials and advancement through credential levels
5. Students and employers understand the skills and competency outcomes of credential programs
6. Credentials offered have market value for students, as validated by outcomes data
7. Resource allocation for CTE programs is predictable and responsive to workforce priorities

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 (not the same)
  - 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
  - CTE taking disproportionate cuts
- 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
30 major credits, as follows: • 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)	18 major credits, *selected from* (all 3 credits): • 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	31 major credits, as follows: • 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
47 - 56 credits • 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.)	21 - 22 credits • C++ Programming I (4) OR C++ Scientific Prog. (3) • C++ Programming II (4) • UNIX/LINUX Op. Sys. (4) *10 credits from among:* • 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)	30 credits • 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 ≠ program outcomes
- Value of certificates?
- Value of “non-completions”?

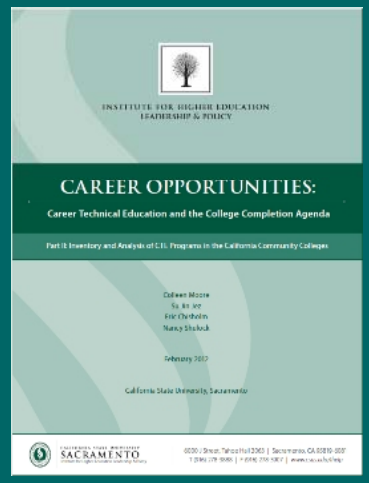
Certificates - Which Ones? How Valuable?

- 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”? What is the value of stacking?
- Labor market outcomes of completers?
- Few proficiency requirements for certificate completion

Career Opportunities, Part IV - Ongoing Policy Alignment Phase



- Advisory panels from the field; interviews
- 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

Examples of Emerging Policy Issues

- Better associate degree options for career-bound
- More valuable certificates – industry alignment, proficiency
- Better program approval/review processes
- Better aligned career pathways from high school
- Better aligned pathways from noncredit to credit
- More appropriate compensation for CTE faculty
- Better accountability for CTE outcomes

Associate Degree

- Problem
  - Students seeking associate degrees to gain entry to workforce are not well served; most associate degrees awarded in “general ” or “interdisciplinary” studies
- Policy Constraint
  - New transfer degree leaves unclear the intent of AA/AS degrees
  - AA/AS degrees lack flexibility for English, math, GE
  - CA one of only two states that do not offer *applied* associate degree in public colleges (private schools may offer the degree)
- Suggestions for Policy Change
  - Authorize CCC to offer applied associate degree that allows different math, English, general education requirements *or*
  - Recast the non-transfer associate degrees to make them more explicitly aimed at preparing for employment

Certificates

- Problem
  - Large numbers of certificate programs offered with little evidence of labor market value
- Policy Constraints
  - No policy on proficiency expectations for certificates
  - No required system oversight of programs <18 units
  - No systematic review of labor market outcomes in required program reviews
- Suggestions for Policy Change
  - New Chancellor's Office role to provide resource on external standards to guide certificate offerings (licensure, certifications, industry standards)
  - Require labor market outcomes in program review
  - Record all completed certificates on transcripts

Program Approval and Review

- Problem
  - Program approval/review processes do not produce coherent set of programs that meet labor market needs
- Policy Constraints
  - Process too decentralized
  - Insufficient labor market analyses required
  - Insufficient use of other state expertise, e.g., Statewide Advisory Committees; Workforce Investment Board
- Suggestions for Policy Change
  - Designate one entity as primary provider of labor market info
  - Reorganize advisory committees by region and industry sector
  - Allow joint ownership of programs (multiple colleges; district)
  - Make program review process more rigorous, standardized
  - Standardize criteria for program discontinuation

Pathways from High School

- Problem
  - Counseling about CTE pathways is inadequate and pathways are not well aligned with colleges
- Policy Constraints
  - Counseling function is poorly funded and not mandated
  - No statewide career exploration curriculum as in some states
  - Pathway articulation efforts are grant-dependent, temporary, and have focused on course alignment, not pathway alignment
  - Dual enrollment, dual credit, and articulation policies vary widely
- Suggestions for Policy Change
  - Consider career exploration curriculum in middle/high schools
  - Regulations to specify that counseling needs to address available programs of study at colleges
  - Standardize policies on dual enrollment, credit, articulation
  - Develop statewide articulated career pathways (as complement to new SB1440 transfer pathways)

Pathways from Noncredit to Credit

- Problem
  - There are no clear onramps for students to move from noncredit to credit or to get credit for appropriate noncredit work
- Policy Constraints
  - Policies do not differentiate between credit and noncredit CTE courses, as same course may be either one
  - Credit by exam is on course-by-course basis
- Suggestions for Policy Change
  - Develop guidelines for consistency across colleges in what CTE courses are noncredit v credit
  - Develop systemwide guidelines for articulating noncredit and credit courses for pre-collegiate and job training coursework
  - Revise credit by exam to ensure more consistency across colleges in awarding credit and to ensure portability of credits

Faculty Issues

- Problem
  - Pay schedules and workload compensation can present barriers to recruiting and retaining quality CTE faculty
- Policy Constraints
  - CCC salaries are directly proportion to level of academic degree and years of teaching experience, neither of which correlates strongly with the value that a CTE faculty offers a college
  - CTE faculty role typically includes more essential non-teaching tasks that are not reflected in workload compensation policy
- Suggestions for Policy Change
  - Develop criteria and associated regulations to equitably compensate non-instructional workload for all faculty
  - Develop policies for sharing non-teaching workload across multiple colleges (e.g., lab design, internship coordination)
  - Clarify authority of local boards to implement alternative salary schedules that better reflect expertise and experience

Accountability

- Problem
  - Current metrics do not provide meaningful information on *program* performance or student success
- Policy Constraints
  - Data required of colleges/districts does not include *program-specific* data on student progress and completion or labor market outcomes
  - There are no systemwide measures of students' reasons for enrolling in CTE courses – reasons which could include just taking one or a few courses for job advancement or retraining
- Suggestions for Policy Change
  - Revise ARCC reporting to include CTE completion rates by program, in addition to aggregate CTE rates
  - Devise systemwide metrics to track students' reasons for enrolling in CTE courses or programs and to report outcomes of non-completers who earn threshold level of credits

Hopeful Signs But…

- CTE finally getting needed recognition
- CCC System is “doing what matters…”
- A policy agenda can support the changes – institutionalize
- The bigger agenda: cultural change to complement policy change
  - Respect for, and better understanding of, “career education”
  - New vocabulary to replace “career” versus “academic” and “CTE” versus “transfer”