

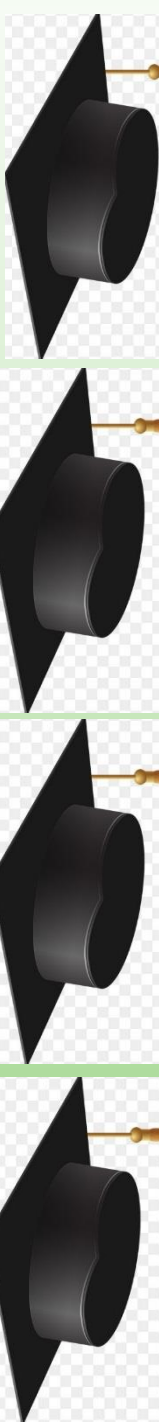
# Sea Change or Tsunami? Competency Based Education and Performance Based Funding

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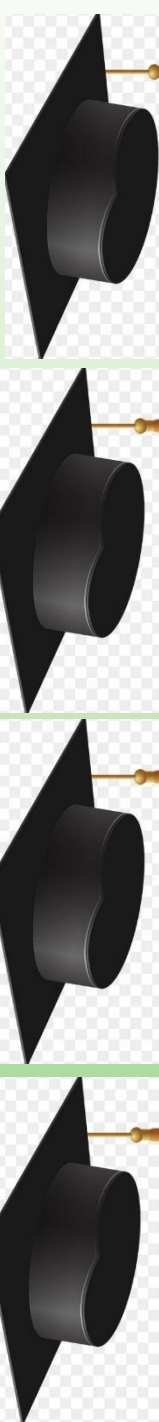


Teaching for Content Mastery **OR**  
for Competency Proficiency



# Content vs Competency Based Curriculum

Content Based	Competency Based
Organized by Content Topic	Organized by Competency
Time Fixed/Learning Varies	<b>Learning Fixed/Time Varies</b>
General SLO Statements	Specific Measurable Objectives
Credit Based on Seat Time	<b>Credit Mapped to Competency</b>
From Theory to Practice	From Practice to Theory
Inductive Logic & Memory	Deductive Logic & Reference
Academic Terminology	Application Terminology
Objective Assessment	Performance Assessment
Summative Testing	Formative Assessment



# Content vs Competency Based Curriculum

Content Based	Competency Based
Levels of Test Grades	<b>Levels of Proficiency</b>
Delivery by Lecture & Demo	<b>Instructor Facilitation &amp; Guidance</b>
Separate Lab & Lecture	Integrated Lab & Lecture
Weak Course-Program Alignment	Reinforced Course Alignment
No Capstone Course	Terminal Capstone Course
Weak Cross Discipline Alignment	Clear Cross Discipline Alignment
Weak on 'Why' and Application	Built on Purpose and Application
Prior Course Credit by Exam	<b>Prior Learning by Competency</b>
Challenging if Online	Online Works Well





# Competency Model Pyramid



OSCE = Objective Structured Clinical Exam

MCQs = Multiple Choice Questions

# Pros & Cons of Competency Based Curriculum

	Pros	Cons
Students	Less time to degree thus lower cost due to credit for prior learning and self-pacing.	Low cost and credit for prior learning may exacerbate race and ethnicity inequality.
	Credit for prior learning by each competency	Rigorous, high level, consistently applied standards and assessments are essential.
	Flexible: open entry, open exit, not dependent on class schedule. Unit credit based on mastery of competencies.	Credit models based on seat time. May result with fewer units. <b>May impact transfer of credit.</b>
	Less need to cover material learned in prior experience so higher level of student engagement.	Self-paced learning requires students to be highly motivated, more self-disciplined.
	Faster time to degree means less loan debt and earlier job earnings	<b>Financial aid</b> is based on credit units earned so may be impacted by CBE.

# Pros & Cons of Competency Based Curriculum

	Pros	Cons
Teachers	Granular competencies with matching curricula, both formative and summative assessments	Requires redesign of entire programs
		<b>Articulation</b> across institutions is challenging.
	Student interaction is guidance, facilitation, and feedback on formative assessments.	Major changes in faculty role require considerable professional development

	Pros	Cons
Employers	Good fit for job training of adult learners	Requires skill identification, training, and assessment
	Enables retraining of transitional workers just on needed competencies	Need to assess transitional skills for changing occupation





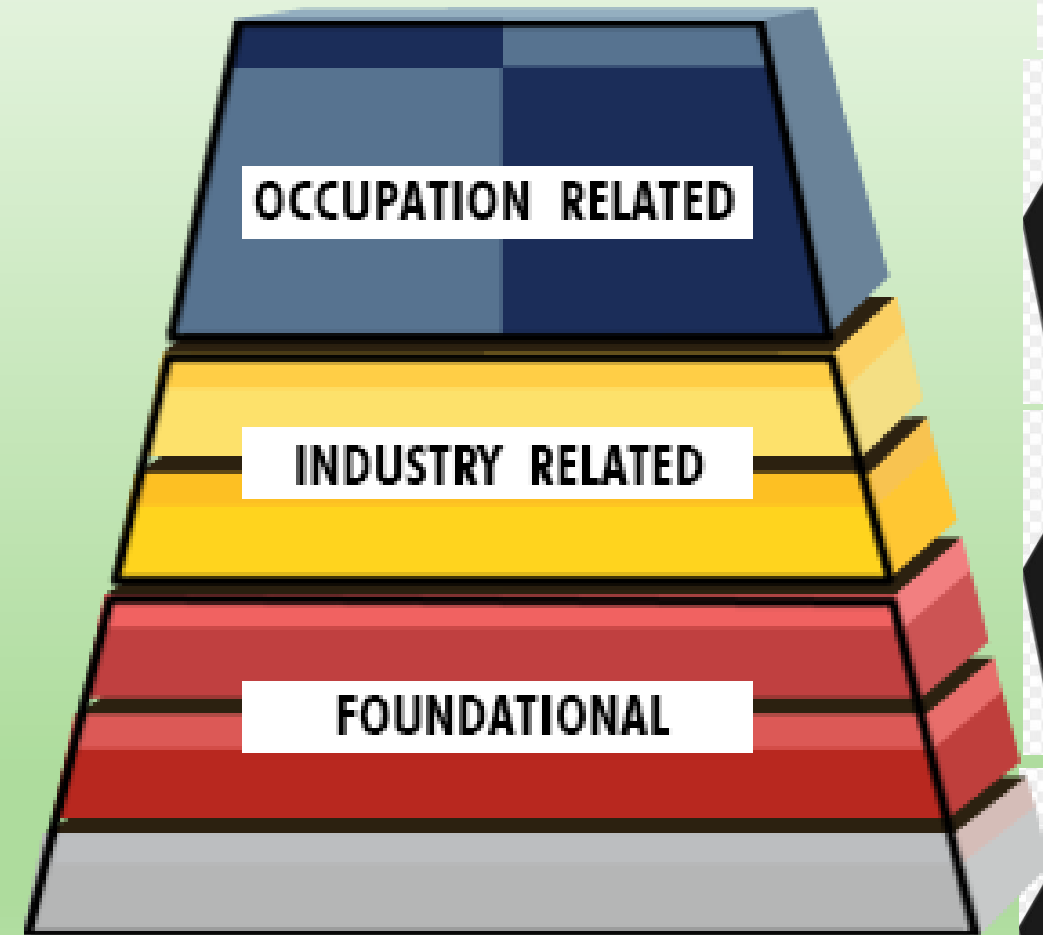
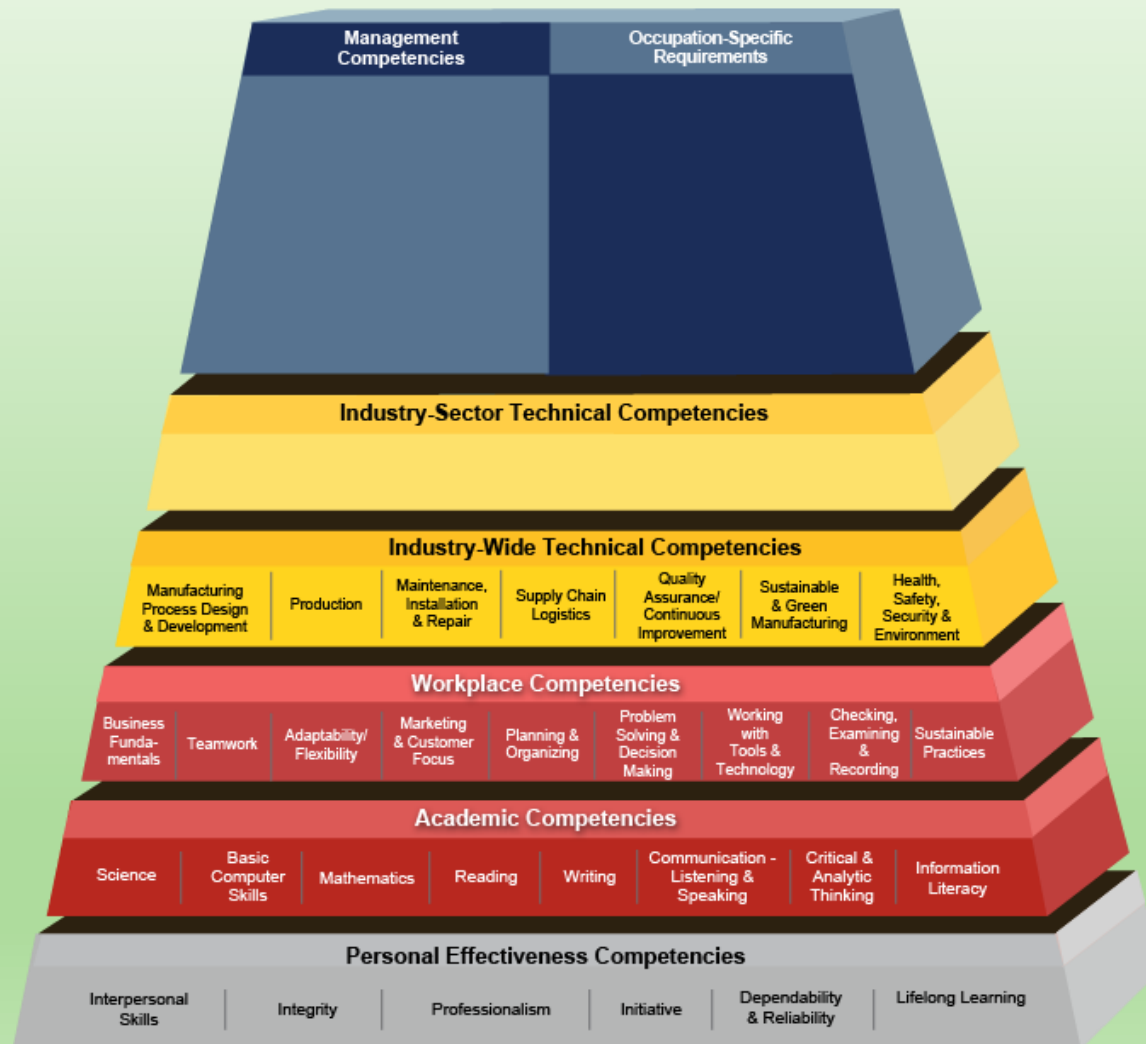
# Pros & Cons of Competency Based Curriculum

	Pros	Cons
Colleges	Potential for more effective use of resources: facilities, scheduling, instructional time.	<b>Perceived as lower quality</b> self-learning rather than expert teach-driven learning.
	Offers new opportunities to enroll adult learners.	Compliance with <b>accreditation</b> standards is often challenging.
	Many CTE programs are already competency based thru collaboration with employers.	Most academic programs are not based on specific, measurable competencies so not a good CBE fit.
	Faster completion of degrees, certificates, and transfer enhances performance based funding.	<b>Apportionment</b> is based on contact hours which will decline for CBE students.





# U.S. Department of Labor Competency Model



# Financial Aid & Accreditation Challenges

The U.S. Department of Education has pilot programs with both universities and high schools to develop accreditation and financial aid models compatible with competency-based education.

- Universities
  - California State University Monterey Bay
  - Kaplan University
  - Trinity Washington University
- State Level High School CBE Models
  - New Hampshire Competency-based System
  - Michigan Seat Time Waiver
  - Ohio Credit Flexibility Plan

## Higher Learning Commission CBE

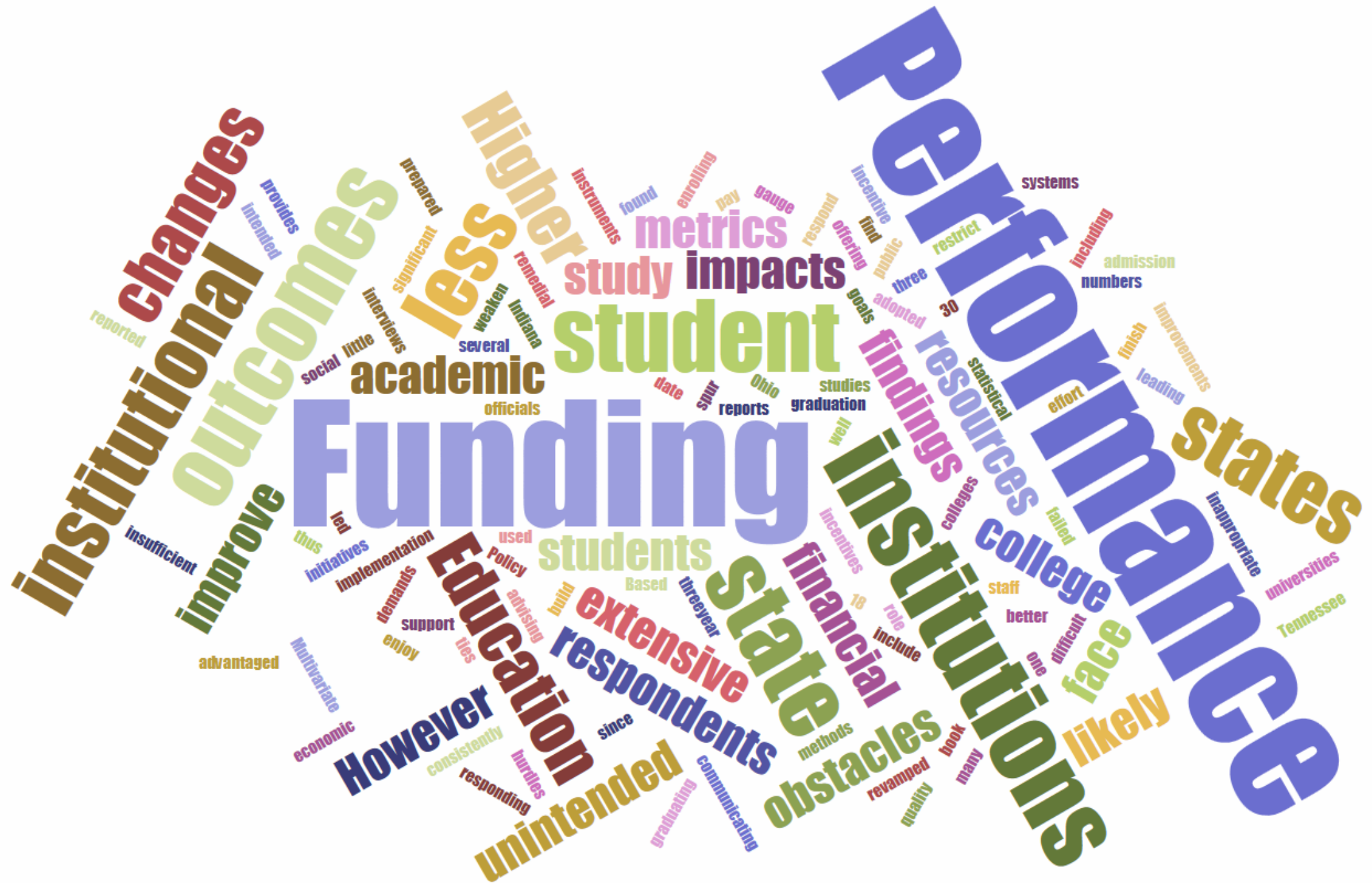
- Mohave Community College, Certificate of **Logistical Mgt**
- Kaplan University ,Associate of Science in **Professional Studies**
- Capella University Master of Science in **Nursing**
- Central New Mexico Community College, Certificate in **Retail Management**
- University of Wisconsin, Bachelor of Science in **Biomedical Sciences**



# Conclusions on Competency-based Education

- CBE has had a record of successful implementation in Career Technical Education programs.
- CBE has a foothold in STEM bachelors and masters degrees particularly for adult professionals.
- Acceptance for accreditation is a challenge but growing—beyond the limits of national accreditation to include regional accreditation.
- Traditional Carnegie Unit systems of funding create a challenge. Unit credit based on mastery of competencies holds promise.
- Note the routine acceptance of funding online credits even though courses do not have “seat time.”







# Performanced-Based Funding in Higher Ed

- Funding is based on metrics—college characteristics and performance.
- Previously, “**unrestricted**” funding was based primarily on enrollment.  
Colleges “perform” by attracting more students.
- “**Restricted**” funding metrics are defined in legislation. Student Success is 40% on headcount and 60% on counts of service, e.g. counselor visits.  
Colleges “perform” by attracting students and providing services.
- Unrestricted funds, now under **Student Centered Funding Formula**, are 70% enrollment, 20% financial aid awards, and 10% completion.  
Colleges “perform” with more aid, degrees, and certificates.
- “Performance Funding” has come to mean **outcomes** (counts of services, awards, completions) **rather than on inputs** (enrollment).
- **SCFF is the first attempt by California** to provide unrestricted general funding based on performance outcomes.

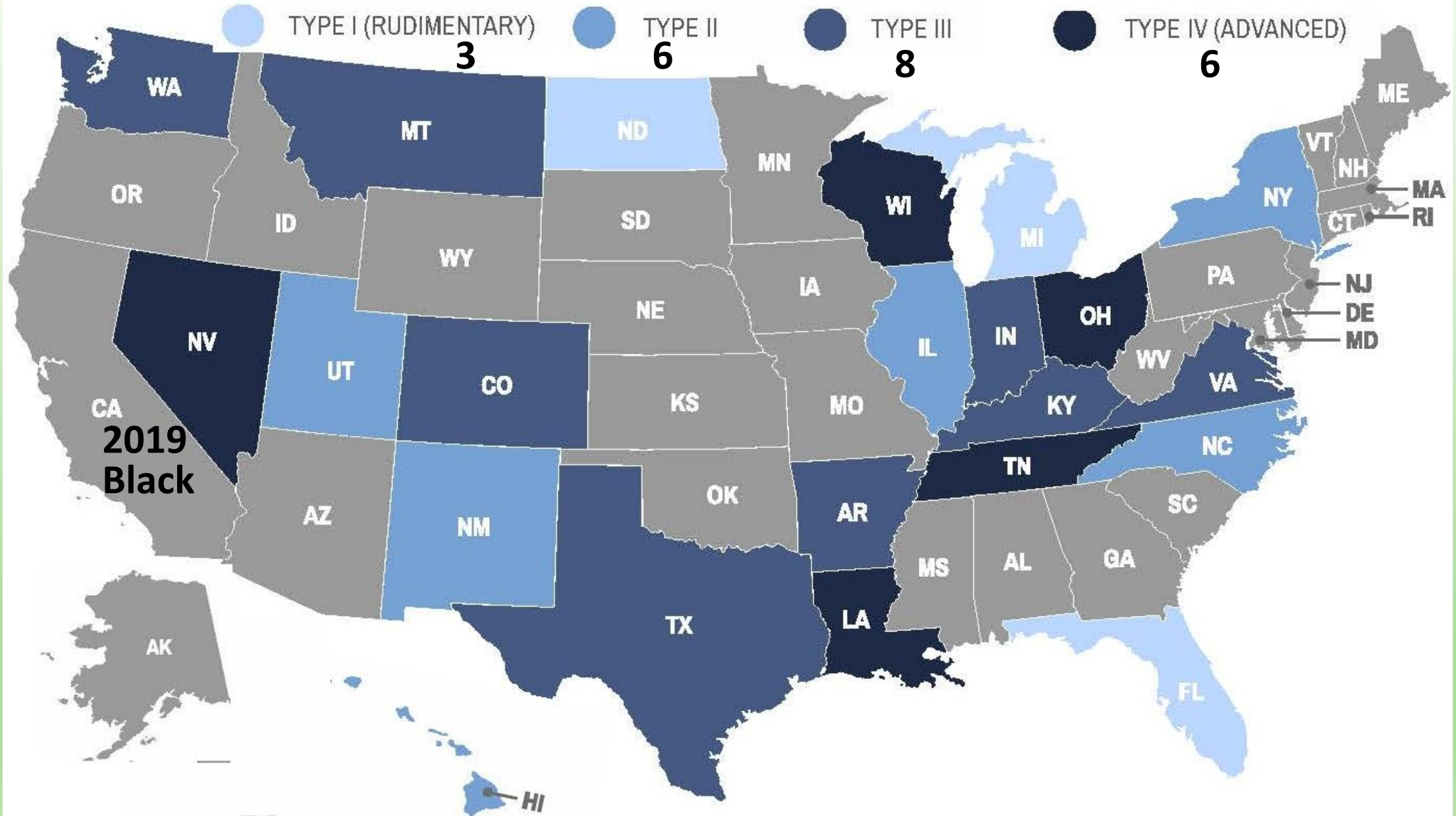


# States Vary in Degree of Outcomes Funding

- Type I
    - New funding only
    - In force **under 2 years**
  - Type II
    - Recurring funding also
    - In force **2 or less years**
  - Type III
    - Recurring funding
    - In force **under 2 years**
  - Type IV
    - Recurring funding
    - In force **2 or more years**
- Funding level **under 5%**
  - Underrepresented not prioritized
  - Funding level **under 5%**
  - May prioritize underrepresented
  - Funding level **5 to 25%**
  - Prioritizes underrepresented students
  - Funding **over 25%** *California*
  - Prioritizes underrepresented students



FIGURE 2. STATES IMPLEMENTING OBF IN FY 2018, BY TYPE: TWO-YEAR SECTOR



23 states use Performance Outcome Funding to support community colleges.



# Kentucky Performance Funding Allocation

## DISTRIBUTION OF ALLOCABLE FUNDING

### 35% Student Success

Based on

- Degrees and credentials awarded
- Degrees per 100 full-time enrollments
- STEM+H degrees
- Degrees earned by minority and low-income students
- Student progression

### 35% Course Completion

Based on each institution's share of sector total student credit hours earned, weighted to account for cost differences by degree level and academic discipline.

### 10% Maintenance & Operations

Based on each institution's share of square footage dedicated to student learning.

### 10% Institutional Support

Based on each institution's share of sector total instruction and student services spending.

### 10% Academic Support

Based on each institution's share of sector total full-time enrollment.





# Common Metrics In Outcome-Based Funding

Course Completion	Earned Student Credit Hours <b>Complete Transfer English &amp; Math**</b>	Dual-Enrollment Completers
Progression	Credit Hour Benchmarks	Retained Students Gateway Course Completers
Completion	<b>Certificate &amp; Degree Completers</b>	<b>Student Transfers</b>
Efficiency	Awards Per FTE Graduation/Completion Rates	Time to Degree Credits at Completion
Workforce	Non-Credit Workforce Training Job Placement/ <b>Wages</b>	Licensures/Certifications Apprenticeships
Cost/ Affordability	Core Expense Ratio Average Cost To Student	Tuition & Fees % of Median Family Income
Priority Fields	STEM Degrees	High-Demand Fields
Priority Populations	Underserved Minorities <b>Low-Income (Financial Aid**)</b> Adults	Academically Underprepared First-Generation Veterans

**California Community College Student Centered Funding Formula Metrics**  
**\*\*Unique to California Community Colleges**

# Student Centered Funding Formula

- For 2018-19 Statewide Formula
  - 70% Base—Foundation + Enrollment (FTES)
  - 20% Supplemental: Counts of Pell Grants, Fee Waivers, AB540
  - 10% Success (Point System)

Metric	Success	Pell
AA/AS	3	4 ½
ADT	4	6
Certificate 16+	2	3
CTE 9 units	1	1 ½
Transfer	1 ½	2 ¼
Transfer Math/English	2	2
Living Wage	1	1 ½

All Unduplicated  
Student  
Headcount  
Numbers



# Student Centered Funding Formula

So how has Mt. SAC done under SCFF Outcome Performance Funding?

Increase in Funding from 2017-18 to 2018-19				
Base	Supplemental	Success	SCFF 18-19	17-18
\$138.1 M	\$35.0 M	\$12.6 M	\$185.7 M	\$175.7 M
74.4%	18.8%	6.8%	\$10 M Gain*	5.7% Gain

\*Includes 2.71% COLA

Increase* in 1 <sup>st</sup> 6 Months of 2018-19			
18-19 Adopted	18-19 P1	Change	%
\$185.7 M	191.5 M	5.8 M	3.1%

\*Increase balanced among Base, Supplemental and Success

# Does Performance Funding Improve Outcomes?

- At four-year institutions, bachelor's degree completions and graduation rates did not improve after the introduction of a performance funding policy. Hillman, 2014
- At two-year colleges, performance funding generally fails to produce increases in associate degree completions. The policy produces declines in degree attainment among studies of Washington, Ohio, and Tennessee. Hillman, 2015
- Even among policies that give a higher performance-based funds (over 5%), the policy is more likely to result in declines in associate degrees. Li, 2014
- Evidence in Washington State, Tennessee, and nationally suggest an increase in short-term certificates after performance funding. Li, 2018

References from Amy Li, Lessons Learned: A Case Study of Performance Funding in Higher Education, 2018





# Does OBF Change Institutional Practices?

- The policy draws greater attention towards college completion goals and builds awareness of institutional performance. Zumeta, 2016
- Academic changes include improving course articulation and transfer, placing in cohorts to improve retention, and reducing excess credit hours required for a credential. Dougherty, 2016
- Among two-year colleges in Washington, Tennessee, Ohio, Florida, and North Carolina, improvements have also been made to developmental education. Dougherty, 2013
- Institutional responses consist of adding resources for in-person and online tutoring, improving upon first-year orientation programs Ness, 2015

References from Amy Li, Lessons Learned: A Case Study of Performance Funding in Higher Education, 2018



# Conclusions on Outcomes-based Funding

- Evidence overwhelmingly shows that Outcomes-based Funding does not improve student goal attainment.
- Changes in institutional practices show positive improvements in a variety of student support and transition practices.
- Analysis of institutional practices also show, in some cases, increases in short term certificates at and a loss of associate degrees.





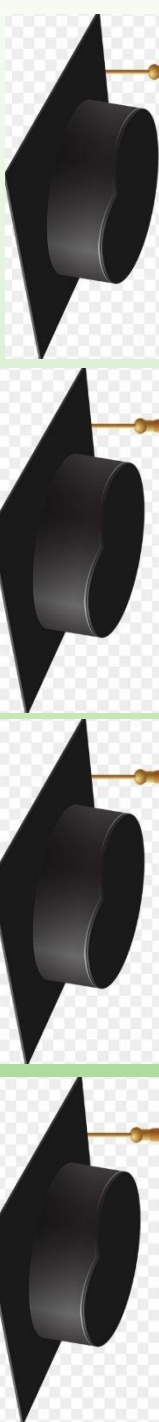
*Sea  
Change*

**Competency  
Based Education:  
Get on Board!**



*Tsunami*

**Performance  
Based Funding:  
Run for Cover!**



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- Chancellor’s Office, “Overview of the Student Centered Funding Formula,” August, 2018 ([link](#))
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