



*Report from
California Community Colleges
Baccalaureate Degree
Study Group*

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Overview:

There has been renewed interest in the addition of bachelor degrees to the California community college mission as evidenced by the responses to presentations made at recent statewide meetings and conferences. The establishment of bachelor degree programs at community colleges is seen by some as a strategy to increase college participation rates for local residents who are unable to relocate because of family or work commitments or to address the needs of rural communities and the state's need for additional bachelor degree-trained individuals in high demand technical disciplines that are either not offered by other segments of higher education or for which demand cannot be met by existing programs.

California has been falling behind other states in percentage of residents holding bachelor's degrees. The state ranked eighth in the nation in its share of 25 to 34-year-olds with bachelor's degrees in 1960 when the California Master Plan for Higher Education was implemented. Today it has slipped to 14th place, according to the Public Policy Institute of California.

Currently, state public institutions award slightly more than 110,000 bachelor's degrees each year and private institutions award 40,000. To meet the projected demand by 2025, the state would need to immediately increase the number awarded by almost 60,000 per year—about 40 percent above current levels.

While a community college bachelor's degree might assist in meeting this challenge, questions and reservations do exist regarding the idea of bringing this model to California. Some express concern that community college bachelor's degrees would represent a further erosion of the California Higher Education Master Plan's differentiation of missions across the state's systems of public higher education. Those voicing these objections argue that further broadening the California Community Colleges' mission, would diminish attention to transfer, basic skills, and career technical education—especially since the system is just now restoring access levels in the wake of the recent severe economic recession. Additional concerns involve the potential duplication of programs and efforts or other ramifications that might result from potential duplication amongst the systems.

A Study Group, appointed by Chancellor Brice W. Harris, was asked to review the various aspects of bachelor degrees at community colleges. The Study Group included members from various constituencies from across the community college system as well as members from the California State University and the University of California. It should be noted that the group engaged in dialogue and study but were not given the task for finalizing positions or policy statements on behalf of their constituent groups.

The granting of baccalaureates at community colleges is a growing movement. Nationwide, more than 50 community colleges operate almost 500 baccalaureate programs in 21 states. To help inform policy development in California, the Study Group reviewed the track records of these existing programs. In addition, current California demographic, economic, and workforce trends were analyzed to determine potential areas of need for such a program. Of special note is the work being done by the Community College Baccalaureate Association, a national organization promoting better access to the baccalaureate degree on community college campuses and serving as a resource for information on various models for accomplishing this purpose and the Office of Community College Research at the University of Illinois (http://occrll.illinois.edu/applied_baccalaureate/) which has done some of the most respected and extensive work on the applied baccalaureate.

Process:

The Study Group held a series of meetings and public presentations to discuss the various aspects of offering baccalaureate degrees in California community colleges. All Study Group members actively participated.

August 22	Webinar/Conference Call Introductions, Review Plan, History, Need Statement. Finalize Schedule of Meetings
September 17	Meeting (Sacramento) Facilitated Discussion, Research, Draft Recommendations
October 15	Conference Call Review Draft Recommendations
November 22	Release of Draft Recommendations at CCLC
December 9	Conference Call Review Final Recommendations, Submit to Chancellor

California Community Colleges Chancellor’s Office staff developed the final document by reviewing discussions and information from each meeting and summarizing this material according to key topics. The Chancellor will review the final document and use it to inform the Board of Governors and all constituents of the work completed.

Research Available and Reviewed

Through the course of the study period, the Study Group reviewed reports dealing specifically with community colleges bachelor’s degrees as well as more general information related to labor market demand and completion metrics.

The following website links provide key information and resources used by the Study Group:

Study Group Resources and Reports

- Baccalaureate Degree Study Group Website
- PowerPoint Presentation (Fall 2013)
- California Demand for Four-Year Degrees
- The Community College Baccalaureate: Process and Politics
- California Policy and Legislative History

Nursing Resources

- California Nursing Baccalaureate Sub Committee Report
- The Future of Nursing
- CCC-CSU Nursing Degree Pathways

General Resources

- More Community Colleges Confer Bachelor's Degrees
- A Cost-Effectiveness Analysis of Two Community College Baccalaureate Programs in Florida: An Exploratory Study by Edwin Bommel, 2008
- CTE Transfer - Literature Review
- Public Institutions Awarding 4 and 2 Year Degrees
- Save Community Colleges Org Inc.

Topics Covered

The Study Group reviewed the charge provided by Chancellor Harris. The following responses provide the basic directions and output received from the Study Group. In some cases, the discussion is still incomplete and will require further study, research, and analysis as well as meaningful engagement of constituent groups.

- How would bachelor's degree programs complement other programs and courses offered by the community colleges?

The Study Group agreed that the addition of baccalaureates should not alter or detract from the present mission of community colleges in California. Baccalaureates should achieve a net gain for the State of California without diminishing resources for programs already being sponsored at the 112 colleges in the system. Community Colleges in several other states have offered bachelor degrees without detracting from their primary missions. In Florida, for example, legislation requires the colleges to retain the community college missions when expanding to offer applied baccalaureates. If California were to pursue the idea of offering baccalaureates in its community colleges, similar protections for the primary missions of the colleges would be necessary.

- How bachelor's degree programs would address specific regional or state workforce needs.

The Study Group agreed that bachelor's degrees should be held to the same level of standards as associate degrees and certificates, especially in the area of regional or state workforce needs. Through the Doing What Matters initiative from the Chancellor's Office, colleges evaluating the offering of baccalaureate degrees would need to participate in regional research and discussion, including strong input from business and industry. In reviewing the workforce needs, California should take care that new degrees are based on documented demand from the California economy and not based solely on federal or international labor market data.

- Documented demand for additional bachelor's graduates in the programs proposed.

The Doing What Matters initiative provides a framework for setting the necessary levels of business and industry demand for workers needing more than an associate degree.

- Additional costs of delivering the proposed bachelor's degree programs.

The Workgroup discussed several funding models identified in the research on other states that offer a community college baccalaureate degree. These ranged from fully self-supporting using differential tuition revenue, to full state support. State-supported models with funds augmented with revenue from community partners and regional collaboratives were also discussed as important options. Based on current experience and research, the assumption is that offering community college baccalaureates would be a cost effective way for the state to prepare the workforce with the skills needed for the future of California.

- Admission criteria that could be used by colleges in selecting students for entrance into bachelor's degree programs along with the number of students to be admitted and served by the programs.

Currently, California community colleges have an open access policy, requiring only an application and minimal admission requirements. If colleges begin to offer baccalaureate degrees, there must be a discussion of when and how an admissions process should be engaged, governed by local policy. Should it be during the initial education planning process or at the end of the associate degree sequence? This topic must be studied further by a specific group of specialists in the area.

- Whether the proposed bachelor's degree programs would unnecessarily duplicate the degree programs offered by other postsecondary education institutions in certain regions (CSU, UC, and private) and that are meeting projected state workforce needs.

Although further study of the distribution of baccalaureate degree programs is necessary, it is anticipated that the regional statewide assessment of need would be based on business and industry need, coupled with an analysis of current offerings of degrees from the California State University (CSU), the University of California

(UC), and other higher education institutions and their capacity to meet California's workforce needs. The anticipation is that most (if not all) new baccalaureate degree programs at community colleges would not otherwise be offered in the region.

- How articulation strategies might complement or possibly limit the movement of students from community colleges to the CSU or UC systems.

The implementation of a baccalaureate program at community college is not meant to take away from current articulation, but to enhance it. There are already many examples of cooperative efforts between community colleges and baccalaureate-granting institutions. These should continue to operate and be encouraged. In addition, current strategies to increase the number of transfer students should not be decreased or otherwise negatively impacted by the addition of community college baccalaureates.

- The implications on the existing accreditation of California community colleges should the bachelor's degree option be added.

Currently, community colleges are limited to offering one baccalaureate degree under accreditation by the Accrediting Commission for Community and Junior Colleges (ACCJC). ACCJC is currently seeking changes in its scope with the U.S. Department of Education to accredit community colleges offering more than one baccalaureate. The decision on change in scope for ACCJC is projected to be determined sometime during Spring 2014.

- Ability of community colleges to support bachelor's degree programs including the adequacy of facilities, faculty, administration, libraries, and other student support and academic resources.

The actual cost of offering a baccalaureate degree was not reviewed by the Study Group. A cost study should be completed as costs may vary due to geography, program, service area, and population.

- What changes would be needed at the Chancellor's Office to support community college bachelor's degree (curriculum, student services, fiscal, facilities, etc.) programs.

The Chancellor's Office is currently understaffed. Adding the review, approval, and reporting of baccalaureates would increase the workload. Although this concern was clearly identified, the Study Group did not have sufficient data on which to predict the impact. Obviously, if only a few colleges move forward with baccalaureates, the impact would be minimal after the initial implementation process. If many colleges move toward the baccalaureate, it may be necessary to establish a single office with associated staff in the Academic Affairs Division.

The Chancellor's Office should respond to these challenges by identifying resources – external or otherwise. They should identify how many districts want to move forward with offering baccalaureate degrees and determine what impact that will have on the system. It could be possible that a limited, targeted, and strategic project would be more feasible than a system-wide initiative.

Data from states which have established community college baccalaureates could inform decisions about the need for state coordination.

- Data collection and evaluation needed to measure the success and effectiveness of bachelor's degree programs.

The Study Group identified that the Student Success Scorecard, Salary Surfer, and other reporting products from the Chancellor's Office would need to be expanded to capture and identify the impact of the degrees being offered.

Summary:

The Baccalaureate Degree Study Group studied the basic issue of awarding baccalaureates in California community colleges. In addition, the Study Group gathered feedback at two major community colleges conferences during the fall semester. At both conferences, there was significant interest and support demonstrated.

After much discussion and feedback, the Study Group believes that the offering of baccalaureates by the California community colleges merits serious review and discussion by the Chancellor and the Board of Governors.

We recommend that the Chancellor's Office and the Board of Governors conduct the necessary research and policy analysis that is noted above related to providing baccalaureates in the California community colleges, including a definition of the types of baccalaureates that would be appropriate for California Community Colleges, the criteria in which the Chancellor's Office would evaluate college proposals, and an analysis of related degrees already in existence. The research should include projections of workforce needs, demonstration of financial support, and measures of program quality. Further work should proceed with an ongoing dialogue with the California State University and the University of California. The research should include projections of workforce needs, analysis of potential sources of financial support and fiscal feasibility, and measures of program quality that would be used by the Chancellor's Office in evaluating future college proposals. Finally, further study should consider potential impact on the current mission of the California community colleges as well as on existing programs at local campuses.

Membership:

Dr. Marshall Alameida
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Contra Costa College

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University of California
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Community Colleges
Napa Valley College

Dr. Linda Thor
Chief Executive Officer
Foothill-De Anza Community
College District

Appendices

Study Group Resources and Reports

- Baccalaureate Degree Study Group Website
- PowerPoint Presentation (Fall 2013)
- California Demand for Four-Year Degrees
- The Community College Baccalaureate: Process and Politics
- California Policy and Legislative History

Nursing Resources

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- Save Community Colleges Org Inc.




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 - [CTE Transfer - Literature Review \[link\]](#)
 - [Public Institutions Awarding 4 and 2 Year Degrees \[pdf\]](#)
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 - [Community College BSN Implementation Points & Financial Model - Discussion Draft Only \[pdf\]](#)
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 - [San Diego City College ADN to BSN Curriculum Proposal \[pdf\]](#)

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The Community College Baccalaureate Degree

Constance Carroll, Ph.D.
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San Diego Community College District

Linda Thor, Ed.D.
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Barry A. Russell, Ph.D.
Vice Chancellor Academic Affairs
California Community College Chancellor's Office

Baccalaureate Degree Study Group Charge

- How bachelor's degree programs complement other community college offerings.
- How bachelor's degree programs address specific regional or state workforce needs.
- Documented demand for additional bachelor's graduates.
- Additional costs of delivering the proposed bachelor's degree programs.
- Admission criteria for bachelor's degree programs and number of students to be served by the programs.
- Would unnecessarily duplication of other degree programs occur in certain regions?

Charge...

- How articulation strategies might complement or limit the movement of students from community colleges to the CSU or UC systems.
- Implications for accreditation.
- Ability of community colleges to support bachelor's degree programs.
- What changes would be needed at the Chancellor's Office to support bachelor's degrees.
- Data collection and evaluation needed to measure the success and effectiveness.

Study Group Members

- Chief Executive Officers
- California Community College Trustees
- Chief Instructional Officers
- Chief Student Services Officers
- Chief Business Officers
- Faculty Senate (4 members)
- Student Senate
- Research and Planning Group
- University of California
- California State University

Timeline

- Aug. 22 Webinar/Conference call
- Sept. 17 In-Person Meeting
- Oct. 15 Webinar/Conference Call
- Nov. 22 Release of Draft Recommendations at CCLC Annual Conference
- December Webinar/Conference Call (Review Final Recommendations for submission to Chancellor)



Overview of Community College Baccalaureate Degrees Nationally

Community College Baccalaureate Association



CCBA Vision

CCBA members believe:

A baccalaureate degree is an important requirement for better jobs and a better lifestyle.

Every person should have an opportunity to pursue the baccalaureate degree at a place that is

- ✓ convenient
 - ✓ accessible
 - ✓ affordable

Baccalaureate Degree Pathways

- Articulation Agreement
- Two + Two Program
- University Center
- Distance Learning/Degree Completion
- Community College Baccalaureate



It's a movement!

More than 50 community colleges
confer 465+ baccalaureate
degrees in 21 states.

Conferring History

New York	1970
West Virginia	1990
Utah	1992
Vermont	1993
Florida	1997
Nevada	1998
Louisiana	2001
Hawaii	2003
Texas	2003
Minnesota	2003
New Mexico	2004
Indiana	2004
Washington	2005
Georgia	2005
North Dakota	2006
Arkansas	2006
Oklahoma	2006
Colorado	2009
Wisconsin	2010
Illinois	2012
Michigan	2012

Why?

Have so many states authorized the
community college baccalaureate
degree or

are considering doing so?

Community Colleges

- Increase access to BA degrees—geographically, financially and academically
- Flexible and responsive
- Committed to economic and workforce needs
- Are cost-effective

Local Workforce Need

- BAS in Instrumentation - Great Basin, NV
- BS in Energy Management - Bismarck, ND
- BAT in Technology Management - Midland, TX
- BS in Equine Studies - Vermont Technical
- BAS in Agriculture Management - Great Basin

Teacher Shortage

- BA in General Education - Vermont Technical
- BA in Bilingual Education - Northern New Mexico
- BS in Secondary Science Education - Chipola, FL
- BA in Elementary Education - Univ. of West Virginia
- BS in Biology Secondary Education - Indian River, FL

Health Care Crisis

- BS in Nursing (BSN) - Northern New Mexico
- BAS in Radiologic and Imaging Sciences - Bellevue, WA
- BS in Integrated Health Sciences - Northern New Mexico
- BS in Dental Hygiene - St. Petersburg, FL
- BAS in Cardiopulmonary Sciences - Edison State College, FL

Professional Credentialing

- BAS in Paralegal Studies - St. Petersburg State College
- BAS in Fire Science Management - Florida Community College
- BAS in Public Safety Management - Edison State College
- BS in Dental Hygiene - Community College of Southern Nevada

Technological Revolution

- BS in Technology - Vincennes, IN
- BT in Information Assurance & Technology - Oklahoma State
- BAT in Computers & Information Technology - South Texas
- BAS in Applied Business & Information Technology - Maui

Summary of national arguments in favor of the community college baccalaureate

- ✓ Ability to meet local workforce demands
- ✓ Expertise in applied and technical degrees
- ✓ Improved access to the baccalaureate
- ✓ Overcrowding at four-year colleges
- ✓ Support of under-represented students
- ✓ Reduced taxpayer cost
- ✓ Reduced student cost
- ✓ Alternative to for-profit institutions



Community College Baccalaureate Degree Option

California Policy and Legislative History

Legislative History of CCC Baccalaureate Degree Option

Five Legislative Items

- AB 1932 (Maze, 2004)
- AB 1280 (Maze, 2005)
- AB 1455 (Hill, 2009)
- AB 2400 (Block, 2010)
- AB 661 (Block, 2011)

AB 1932 (Maze): Public Postsecondary Education: Advisory Committee

- Established advisory committee to recommend a framework for Porterville College and College of the Sequoias to offer baccalaureate degrees
- Held by Assembly Committee on Higher Education

AB 1280 (Maze): Public Postsecondary Education: California Community College Baccalaureate Partnership Program

- Authorized 2 annual \$50,000 grants to a collaborative of one or more community colleges and baccalaureate degree-granting institution to offer baccalaureate programs on community colleges campuses
- Signed by Governor Oct. 2005

AB 1455 (Hill): Public Postsecondary Education: Community Colleges: Baccalaureate Degrees: Pilot Program

- Authorized the San Mateo CCD to offer baccalaureate degree
- Failed, but folded into AB 2400 in 2010

AB 2400 (Block): Public Postsecondary Education: Community Colleges: Baccalaureate Degree Pilot Program

- Authorized the San Diego, Grossmont-Cuyamaca and San Mateo CCDs to establish baccalaureate degree pilot programs
- Failed in Assembly Committee on Higher Education

AB 661 (Block): Public Postsecondary Education: Community College Districts: Baccalaureate Degree Pilot Program

- Authorized Grossmont-Cuyamaca and San Mateo CCDs to offer one baccalaureate degree pilot program per campus
- Passed Assembly Higher Education subcommittee, but failed in general Assembly due to inactivity



Accreditation Issues WASC and ACCJC

History of Accreditation

- Joint Accreditation


- ① Northern Marianas College: B.S. in Education, 2000
- ① Fashion Institute of Design & Merchandising: B.S. in Interior Design, 2005
- ① Maui College: B.S. in Applied Business Information Technology, 2007
- ① American Samoa Community College: B.A. in Education, 2012

ACCJC seeking to change

- 2013 DOE nixes joint accreditation
- ACCJC asks DOE for change in scope to accredit bachelor's degree at community colleges
- NACIQI review in December, 2013; notification expected in March, 2014

ACCJC requirements

- Added to draft standards new requirements specific to bachelor's degree
 - ⌚ Minimum 120 semester credits
 - ⌚ Minimum GE requirement 36 semester credits
 - ⌚ All standards apply and interpreted in the context of the degree (e.g. faculty credentials, library resources, etc. should be appropriate to the degree)



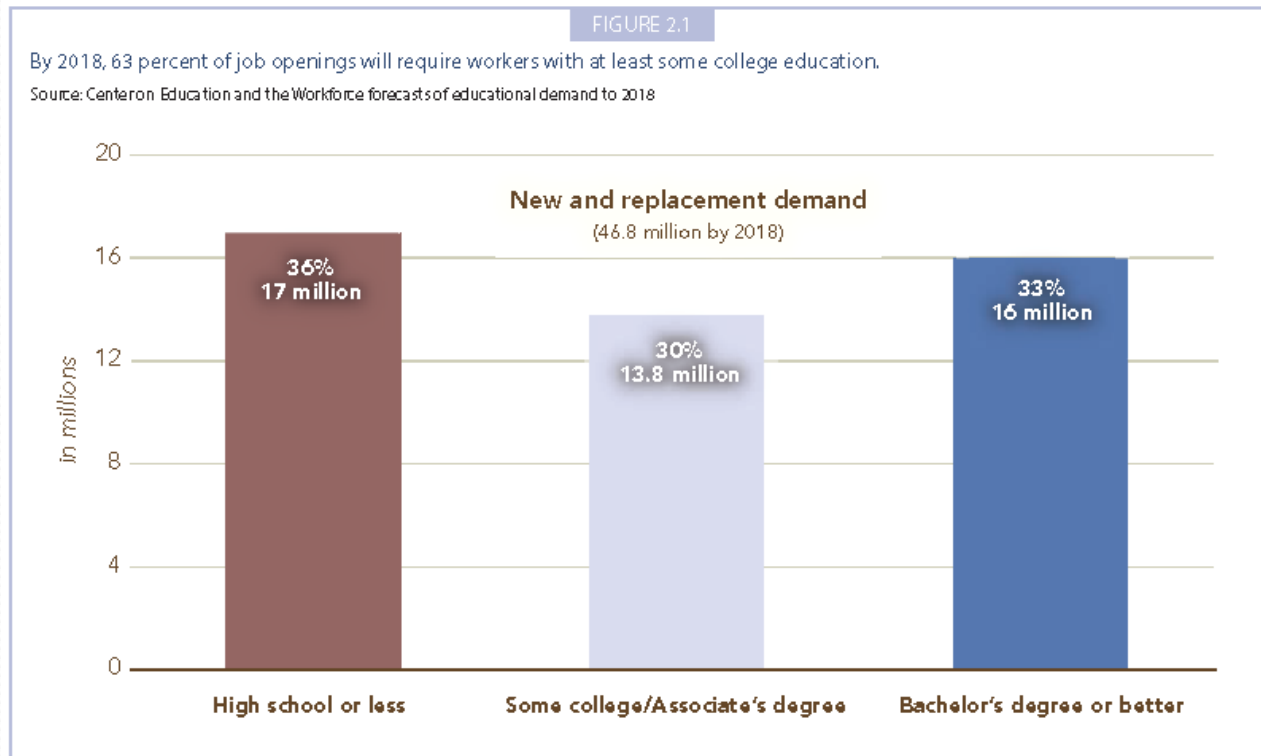
California demand for 4 year degrees

Adapted from

Andrew LaManque, Ph.D.

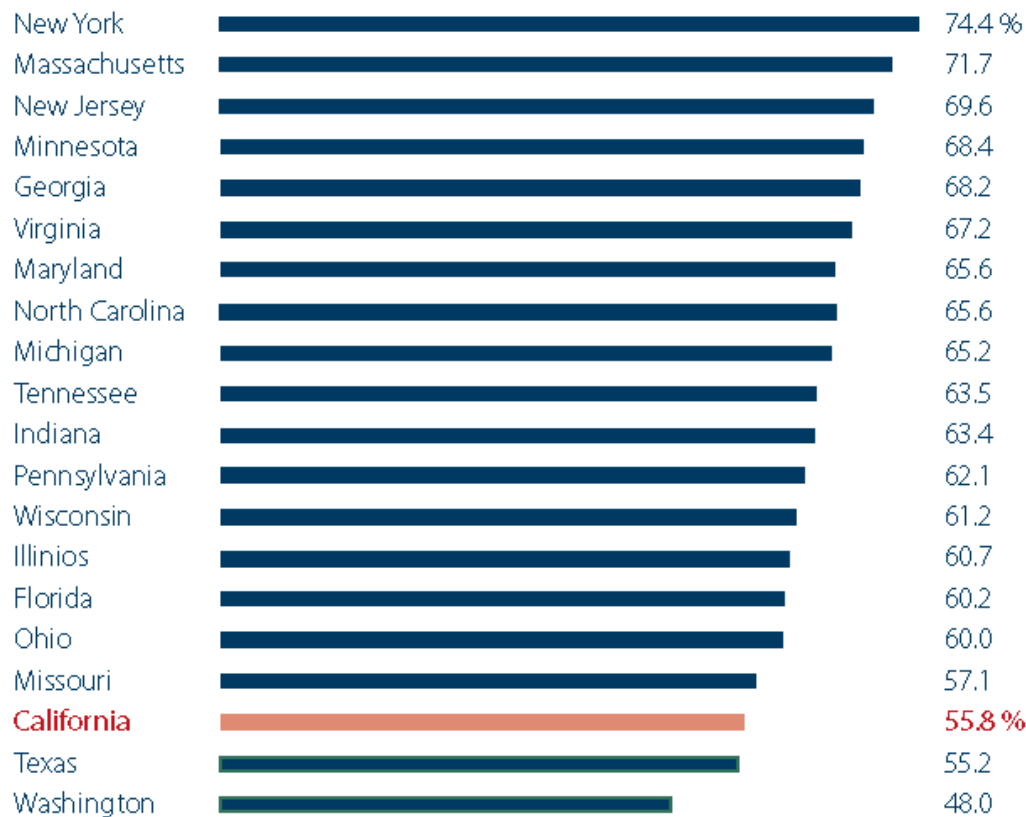
August 22, 2013

“(Nationally) Our Current Postsecondary System Will Not Meet the Growing Demand for Workers with Postsecondary Education and Training”



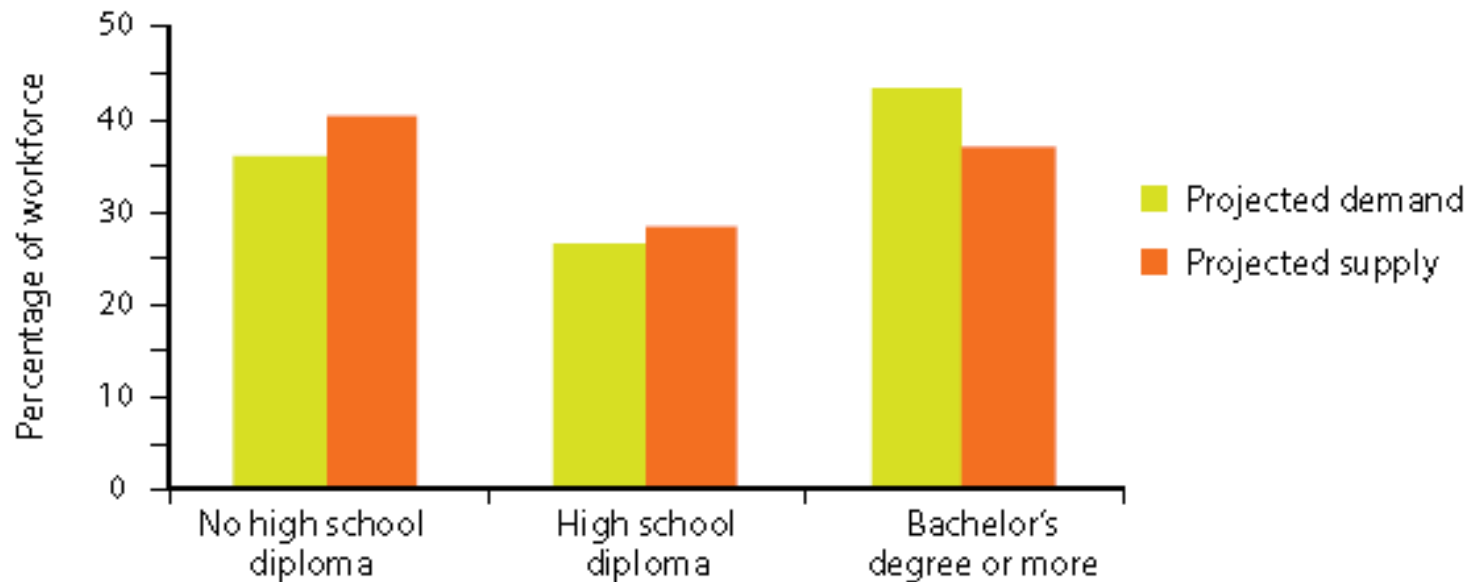
Among the 20 most populous states, California ranks 19th in the percentage of high school graduates who enroll directly in a four-year college or university; 18th in the percentage who enroll in any college, including community colleges; and 18th in the ratio of bachelor's degrees awarded to high school graduates.

CALIFORNIA'S COLLEGE-GOING RATES OF RECENT HIGH SCHOOL GRADUATES ARE LOW



Source: National Center for Higher Education Management System.

“(In California) By 2025, Demand for College-Educated Workers Will Outstrip the Supply”



SOURCE: PPIC projections.

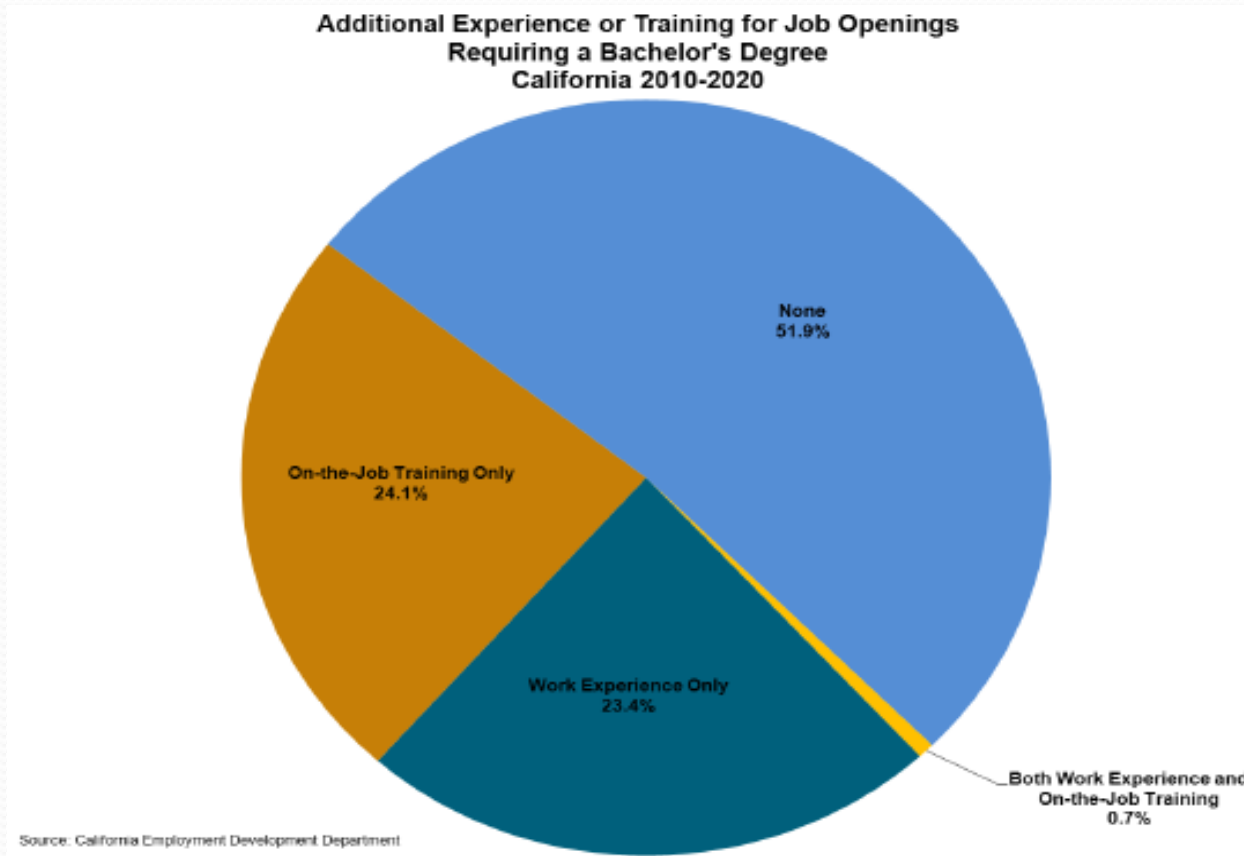
California 2025: Planning for a Better Future. Public Policy Institute of California. Sarah Bohn, Ryken Grattet, Ellen Hanak, Joseph Hayes, Laura Hill, Hans Johnson, Shannon McConville, Paul Warren, and Margaret Weston. January 2013.

California Degree Needs

- Since 2000, California has lost slightly more college graduates to other states than it has gained from those states. California does attract highly skilled workers from other countries, but not enough to meet the need.
- Currently, state public institutions award slightly more than 110,000 bachelor's degrees each year and private institutions award 40,000. To meet the projected demand by 2025, the state would need to immediately increase the number awarded by almost 60,000 per year—about 40 percent above current levels.

California 2025: Planning for a Better Future. Public Policy Institute of California. Sarah Bohn, Ryken Grattet, Ellen Hanak, Joseph Hayes, Laura Hill, Hans Johnson, Shannon McConville, Paul Warren, and Margaret Weston. January 2013.

“Of the more than one million job openings over the 10-year projections period requiring a bachelor’s degree, more than 250,000 also require pre-employment work experience in a related occupation, and more than 260,000 openings also require on-the-job training.”



The Need for Applied Baccalaureate Degrees

- Health profession jobs that once required no more than LPN or RN certification now demand the BSN or higher in addition to state licensure. In short, individuals seeking secure, established, and reasonably lucrative careers in allied health, public service, law enforcement, and the technologies must expect to make a commitment of no less than the baccalaureate merely to gain access to these fields.

Deborah L. Floyd & Kenneth P. Walker (2008).

The Community College Baccalaureate: Putting the Pieces Together.

Community College Journal of Research and Practice, 33:2, 90-124.

To link to this article: <http://dx.doi.org/10.1080/10668920802564667>

National Efforts to Increase Registered Nurse Requirements to Baccalaureate Level

“Rapidly expanding clinical knowledge and mounting complexities in health care mandate that professional nurses possess education preparation commensurate with the diversified responsibilities required of them...As such, registered nurses at the entry-level of professional practices should possess, at a minimum, the educational preparation provided by a four-year Bachelor of Science degree program in nursing (BSN).”



SOURCE: The Baccalaureate Degree in Nursing as Minimal Preparation for Professional Practice, American Association of Colleges and Nursing

72 Associate Degree Nursing Programs In California Community Colleges

Allan Hancock
American River
Antelope Valley
Bakersfield
Butte
Cabrillo
Canyons
Chaffey
Citrus
Contra Costa
Copper Mountain
Cuesta
Cypress
De Anza
Desert
East L.A.
El Camino
Evergreen Valley

Fresno City
Gavilan
Glendale
Grossmont
Hartnell
Imperial Valley
L.A. City
L.A. Harbor
L.A. Southwest
L.A. Trade-Tech
L.A. Valley
Long Beach City
Los Medanos
Marin
Mendocino
Merced
Merritt
Mira Costa

Mission
Modesto
Monterey Peninsula
Moorpark
Mt. San Antonio
Mt. San Jacinto
Napa Valley
Ohlone
Palomar
Pasadena City
Porterville
Redwoods
Reedley
Rio Hondo
Riverside City
Sacramento City
Saddleback
San Bernardino

San Diego City
San Francisco City
San Joaquin Delta
San Mateo
Santa Ana
Santa Barbara City
Santa Monica
Santa Rosa
Sequoias
Shasta
Sierra
Siskiyou
Solano
Southwestern
Ventura
Victor Valley
West Hills Lemoore
Yuba

Source: CCCCCO Curriculum Inventory, based on Active AS Degrees with a TOP Code in Registered Nursing

Discussion Points

- Values and Principles
- Opportunities and Challenges
- Questions to Be Considered

Values or Principles

- AA degrees are to remain the **primary** mission
 - Address critical workforce needs
 - Strategic and targeted
 - Meets the needs of the students
 - Colleges should be allowed to opt in and not be forced to do Baccalaureate programs
 - Avoid unnecessary duplication of services as much as possible
- Continue high **quality** programs
 - Comparable program at a 4-year college
 - Allow students to pursue a Masters Degree or higher

Opportunities

- Serves underserved areas and populations
- Responds to workforce needs
- Benefits the state economy
- Part of a national trend
- Removes barriers for completion
- Compensates for lack of university capacity in some fields

Challenges

- Need for additional funding
- Capacity issues (physical and programmatic)
- Mission creep
- Faculty hiring issues – possible collective bargaining complications
- Legislation needed

Questions to Be Considered and Discussions to Be Had

- Should this be part of a total reassessment of the Master Plan for Higher Education?
- What statewide or regional needs to be addressed first?
- How/why are CSU, UC, and others unable to fill the need?
- How should the Baccalaureate Degrees be funded?
 - Differential tuition?
 - State aid?
 - Local budget discretion?
 - Other?

What Happens Now?

- Study group will report its findings
- Findings will be given to the Chancellor
- Any further action by the Chancellor's Office will be through consultative processes
- The Legislature is very interested in the findings of this group but it is unknown what action will be taken.

More Information

Website

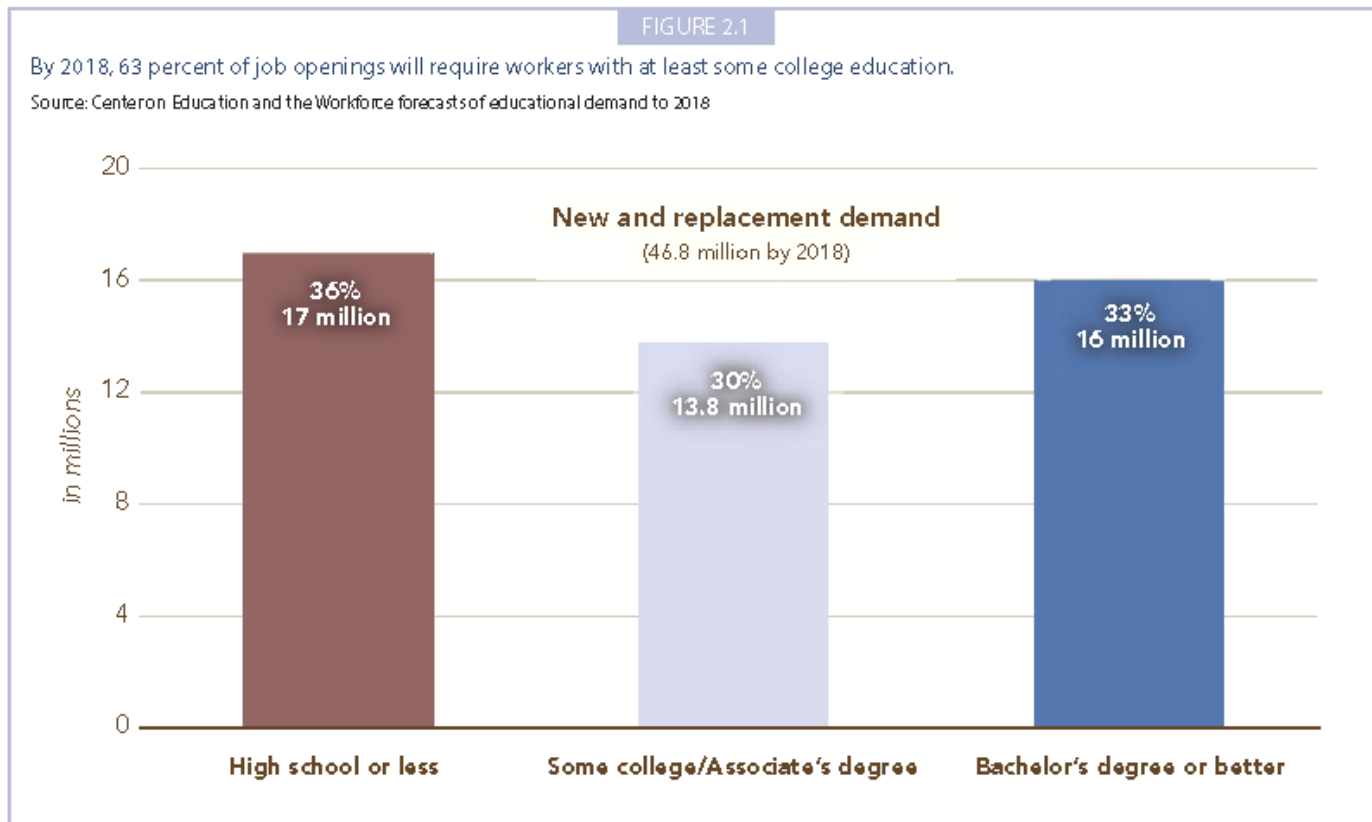
- CCCCO.edu
 - Academic Affairs
 - Baccalaureate Degree

California demand for 4 year degrees

Andrew LaManque, Ph.D.

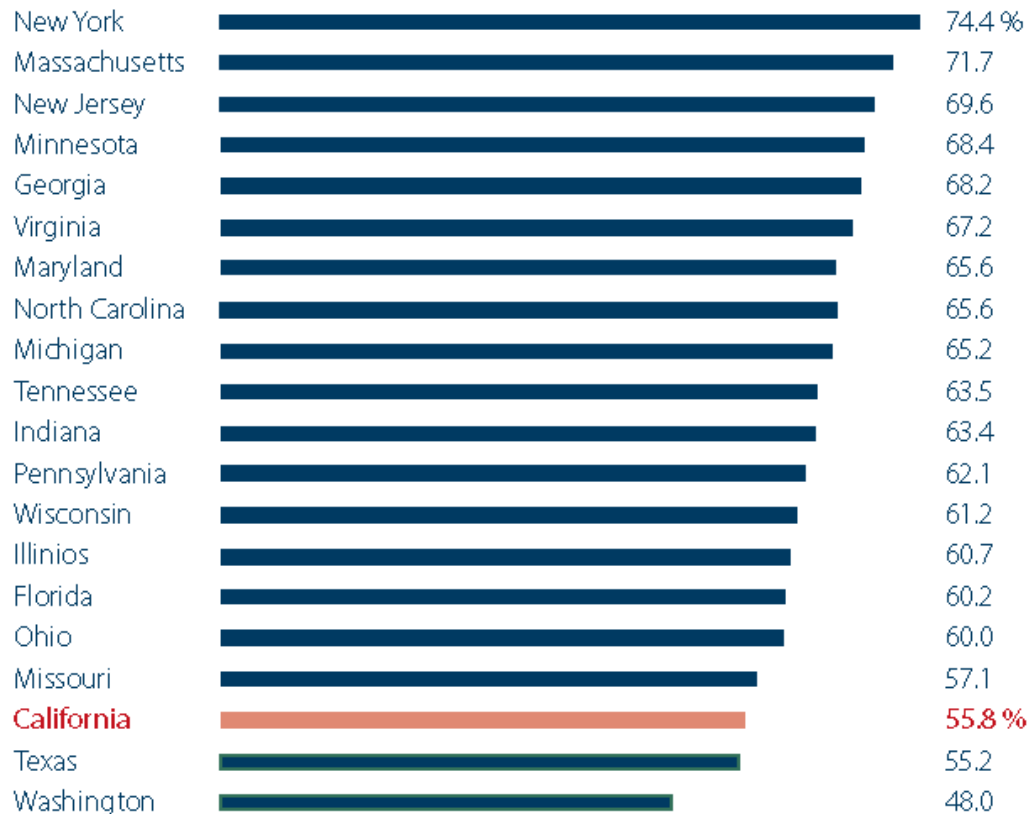
August 22, 2013

“(Nationally) Our Current Postsecondary System Will Not Meet the Growing Demand for Workers with Postsecondary Education and Training”



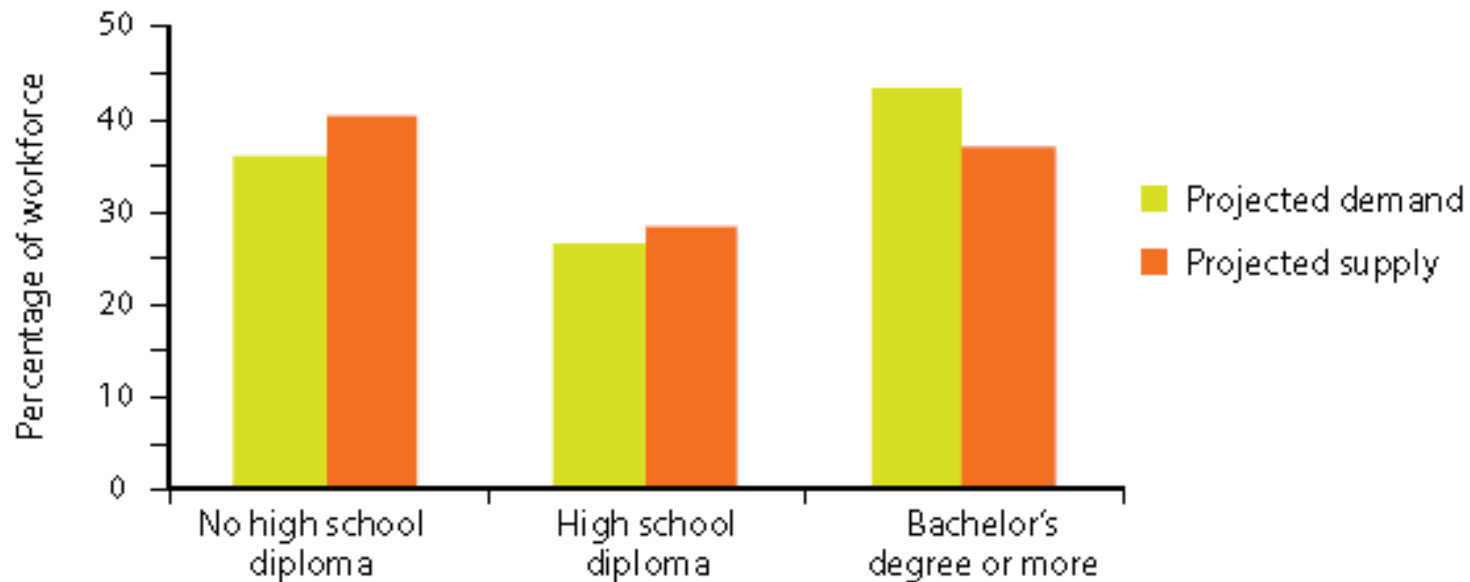
Among the 20 most populous states, California ranks 19th in the percentage of high school graduates who enroll directly in a four-year college or university; 18th in the percentage who enroll in any college, including community colleges; and 18th in the ratio of bachelor’s degrees awarded to high school graduates.

CALIFORNIA'S COLLEGE-GOING RATES OF RECENT HIGH SCHOOL GRADUATES ARE LOW



Source: National Center for Higher Education Management System.

“(In California) By 2025, Demand for College-Educated Workers Will Outstrip the Supply”



SOURCE: PPIC projections.

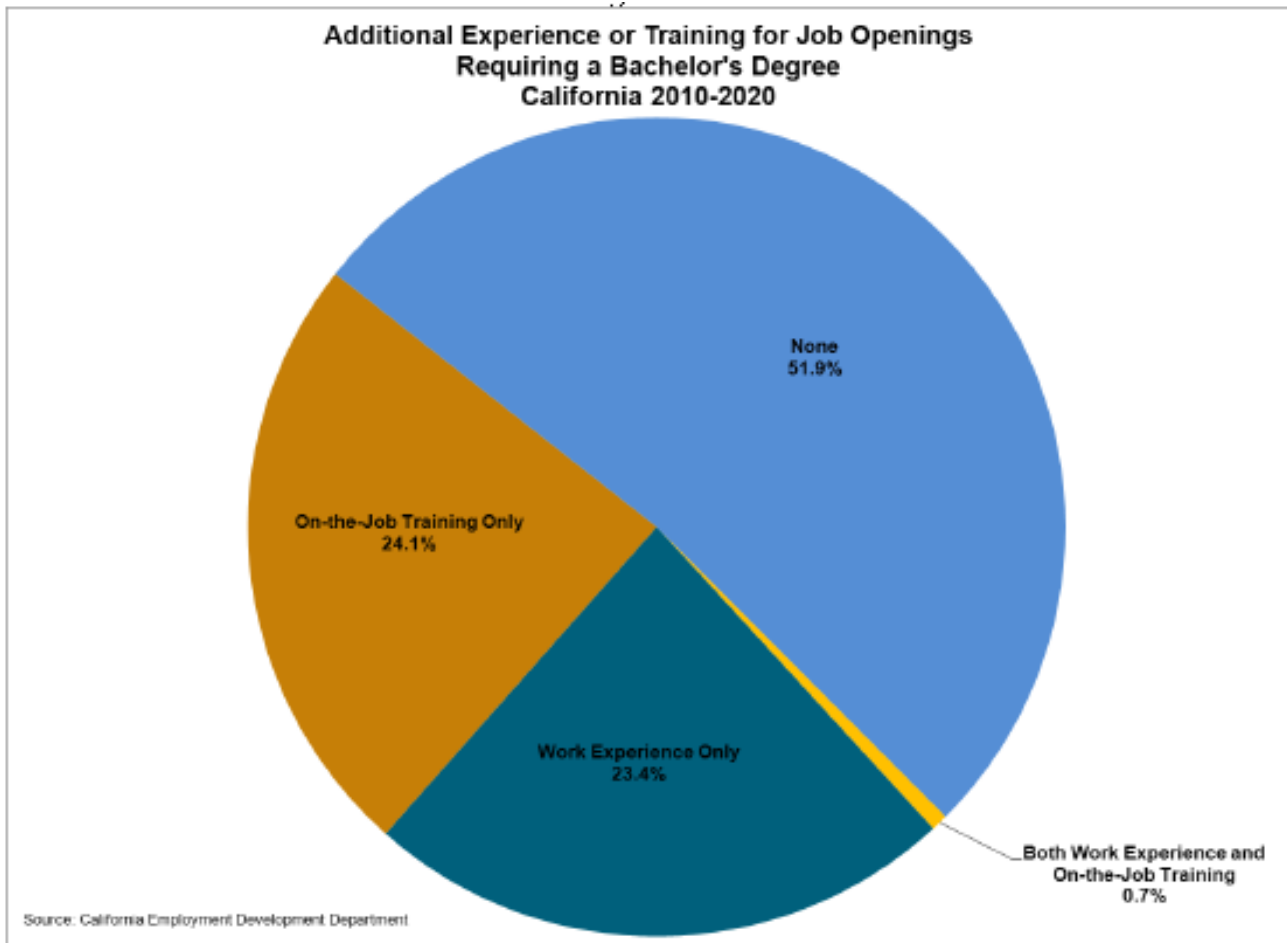
California 2025: Planning for a Better Future. Public Policy Institute of California. Sarah Bohn, Ryken Grattet, Ellen Hanak, Joseph Hayes, Laura Hill, Hans Johnson, Shannon McConville, Paul Warren, and Margaret Weston. January 2013.

California Degree Needs

- Since 2000, California has lost slightly more college graduates to other states than it has gained from those states. California does attract highly skilled workers from other countries, but not enough to meet the need.
- Currently, state public institutions award slightly more than 110,000 bachelor's degrees each year and private institutions award 40,000. To meet the projected demand by 2025, the state would need to immediately increase the number awarded by almost 60,000 per year—about 40 percent above current levels.

California 2025: Planning for a Better Future. Public Policy Institute of California. Sarah Bohn, Ryken Grattet, Ellen Hanak, Joseph Hayes, Laura Hill, Hans Johnson, Shannon McConville, Paul Warren, and Margaret Weston. January 2013.

“Of the more than one million job openings over the 10-year projections period requiring a bachelor’s degree, more than 250,000 also require pre-employment work experience in a related occupation, and more than 260,000 openings also require on-the-job training.”



The Need for Applied Baccalaureate Degrees

- Health profession jobs that once required no more than LPN or RN certification now demand the BSN or higher in addition to state licensure. In short, individuals seeking secure, established, and reasonably lucrative careers in allied health, public service, law enforcement, and the technologies must expect to make a commitment of no less than the baccalaureate merely to gain access to these fields.

Deborah L. Floyd & Kenneth P. Walker (2008).

The Community College Baccalaureate: Putting the Pieces Together.

Community College Journal of Research and Practice, 33:2, 90-124.

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The Community College Baccalaureate: Process and Politics

**By Linda M. Thor, Chancellor, Foothill-De Anza Community College District
and Chris Bustamante, President, Rio Salado College**

In most instances, obtaining authorization to offer the community college baccalaureate degree requires state legislative approval. When Rio Salado College challenged the status quo by seeking such approval from the Arizona State Legislature, a political firestorm erupted over issues of mission, need and cost. A heated battle ensued between this public Maricopa Community College and several of its public and private university competitors. The controversial issue was played out through legislative hearings, in the media, and behind the scenes for the next eight years. Although the legislative effort was ultimately unsuccessful, the goal of increased access has progressed in Arizona as a result of bringing attention to the need for more baccalaureate options and pathways. In this chapter, Rio Salado's experience will be presented as a case study along with strategies and lessons learned.

The origins of Rio Salado College's attempt to gain approval for the community college baccalaureate can be traced to the State of Arizona's legislative session beginning in January 1997. At the time, Linda Thor and Chris Bustamante were serving, respectively, as president of Rio Salado College and as a seasoned lobbyist for the Maricopa Community College District, the largest district of its type in the nation in terms of headcount.

Before proceeding with the specifics of the battle for the baccalaureate, it is worthwhile to review the statewide catalysts that led to the call for higher education change and to note the political climate of those times.

Arizona's Catalysts for Change

For decades, Arizona has ranked as one of the nation's top five fastest growing states, with a rapidly decreasing median age. According to U.S. Census data, between 1990 and 2000 Arizona's population grew from 3,665,228 to 5,130,632, the 5th-largest increase and 2nd-largest percentage gain (40%) among the 50 states. In spite of this soaring growth, during the 1990s the state had fewer higher educational options per capita than comparably sized states.

In addition to the community college system, the public higher education system was built around three state universities—Arizona State University (ASU) in Tempe, a suburb of Phoenix; University of Arizona (UA) in Tucson; and Northern Arizona University (NAU) in Flagstaff. The courses and degree programs at these institutions were still targeted largely at the 18 to 25-year-old population. There were limited evening and weekend classes. This was inadequate to address the specific needs of working adults, namely: rotating work schedules; commuting; juggling work, home and studies; and the need to constantly upgrade professional knowledge. However, Arizona's extensive rural populations were only accommodated by public university extension centers or distance learning. The smaller private universities that did exist tended to be highly specialized, such as Embry Riddle Aeronautical University in the Prescott area, or they were branches of

institutions headquartered elsewhere, such as Ottawa University. The exception, of course, is the mega University of Phoenix (UOP).

In contrast, there were 19 Arizona community colleges. Collectively they served in excess of 200,000 students—more than the public universities combined. However, Arizona's community colleges did and still do receive significantly less state funding per student than the three state universities. They were and are primarily funded through property-tax revenue and tuition. At approximately \$450 a semester for a full-time student, tuition in 1997 was just over half that of the state universities. In recent years, the community colleges have faced record student-enrollment increases. The largest district in the state is the Maricopa Community Colleges, with its 10 colleges: Chandler-Gilbert, Estrella Mountain, Gateway, Glendale, Mesa, Paradise Valley, Phoenix, Rio Salado, Scottsdale, and South Mountain. Arizona's rural colleges are Arizona Western, Central Arizona, Cochise, Coconino, Eastern, Mohave, Northland Pioneer, Pima, and Yavapai.

As is true today, the line between two-year and four-year colleges had become increasingly blurred. Nationally, studies indicated that on average it took a student up to four years to earn a so-called “two year” degree and up to seven years to earn a “four year” or bachelor's degree. The reasons varied. As tuition increased, students found it necessary to limit course loads. And, as more adults entered the higher education system, they needed to balance work and family life with studies. Noting this trend, the *New York Times* stated, “In ways legislators in state capitols and in Washington are struggling to make sense of, the higher education mainstream is coming to look a lot more like Rio Salado and Maricopa than like Harvard or Yale.”¹

The 1997 Legislative Session: SB1109 Introduces a New Model of Higher Education

With all these catalysts in place, the time appeared right for introducing new models that would revolutionize access to higher education in Arizona. It was in this climate, just prior to the 1997 Arizona legislative session, that Carol Springer, a powerful Republican who served in the Arizona State Senate from 1990 to 1998, set the community college baccalaureate movement in motion. Sen. Springer was the Appropriations Chair, and this gave her a great vantage point from which to push for this change because she had great influence on the purse strings of the state's public universities and community colleges. Her constituents resided in the rural areas surrounding the town of Prescott, and she recognized their unmet education needs. Her initial bill was simply a request to appropriate \$940,000 to aid an existing cooperative program between Northern Arizona University and Yavapai College in Prescott.

Shortly thereafter, she approached the Maricopa Community Colleges with a broader plan: Senate Bill 1109, which would authorize the community college baccalaureate. She had learned of similar models across the nation and in surrounding states with rural populations, such as Utah and Nevada. Implementing such a change would require the legislature to delete just four words in the statute authorizing community colleges. The Maricopa Chancellor, Dr. Paul Elsner, was favorably

¹ Applebome, Peter. (August 3, 1997). Community Colleges at the Crossroads: Which Way Is Up? *The New York Times*, 4A, 24-26.

inclined. He was nationally acknowledged as a visionary throughout his lengthy career with the Maricopa Community Colleges. In assessing the legislation's potential for the state's community colleges, he realized that the one most likely to grasp the concept and successfully implement it in short order was the very non-traditional Rio Salado. The college was not restricted by the usual geographic service boundaries. Established in 1978 as a "college without walls," it was never intended to have a large physical campus. Rather it brought quality, flexible college courses to working adults utilizing distance learning formats and in-person programs at major employers and in community centers.

In early 1997, Rio Salado served some 34,000 students annually, making it the third largest in headcount of the 10 Maricopa Community Colleges. The 1996-97 academic year was a pivotal one for Rio Salado for several reasons. First, during that time Rio Salado became the first college or university in the Southwest to offer courses online, backed up by placing the college's entire student support services online as well. Immediately, student enrollment began to surge, with a corresponding increase in full time student equivalents (FTSE). Within the next 10 years online offerings would grow to more than 500 courses and more than 30,000 online students annually. The growth and popularity of online learning at Rio, combined with several highly innovative programs, qualified Rio Salado to be a major provider for the community college baccalaureate.

The Rio Salado College Applied Baccalaureate Model

One of the themes that we would stress in legislative testimonies over multiple years was that the community college baccalaureate was a model whose time had come. The concept proposed by Sen. Springer was an excellent fit for the non-traditional Rio Salado. First, its focus would be on applied programs rather than theory-based programs offered by universities. The designated programs would offer advanced education and technical skills for specialized employment in communities already served by the college, which enrolled students state-wide. The four applied career fields that were ultimately selected were public safety, allied health, computer technology and business. A few years later, teacher education would be added to the mix.

Secondly, the community college baccalaureate and Rio Salado were a perfect fit was that it would utilize Rio's expertise in distance learning formats to reach students unable to access baccalaureate degrees because of geographic barriers. This would keep local students residing as taxpayers within their own Arizona communities, saving them the cost of relocating or time-consuming commutes.

Next, the community college baccalaureate would not compete with state university programs for students. The legislation would permit these degrees only in select career fields and "workforce-related disciplines" where degrees were not currently offered by one of the state universities. In addition, the applied baccalaureate degrees offered and conferred through Rio Salado would be delivered with full articulation to Arizona's other community colleges. As an example, in 1997 there was no career pathway at the three state universities for public safety personnel through a Bachelor in Applied Science degree in either Public Safety or Police Science. Yet Rio Salado had already served more than 10,000 police and public safety officers over the course of the decade through specialized courses and its law enforcement technology program leading to the Associate

in Applied Science degree. A more highly educated police force would greatly benefit all Arizona communities. Several prominent chiefs within the police community would ultimately join forces with Rio Salado in the bid for the applied baccalaureate.

Another very appealing feature of the applied baccalaureate was that it would provide an alternative means to address workforce shortages. For example, there were documented shortages of highly qualified dental hygienists when the Arizona Dental Association (AzDA) approached Rio Salado for educational remedies back in the mid-1990s. With the financial support and long-term commitment of AzDA and its member dentists, the college opened the Rio Salado School of Dental Hygiene in 1998, offering an accelerated 15-month program leading to the Associate in Applied Science degree. Still there was no state-wide equivalent baccalaureate program for articulation.

The financial plan behind SB 1109 was that applied baccalaureate students would pay “university” tuition for upper division courses. A critical factor that would become a legislative point of contention was that no additional state funds would be required beyond those already allocated to the community colleges. In addition, supporters of the bill were emphatic that no additional faculty or physical facilities would be required. Instead, Rio Salado was highly qualified and fully prepared to offer distance learning options for applied baccalaureate programs, most notably through online learning. These formats would effectively utilize existing resources, both human and tangible.

The 1997 Legislative Arguments For and Against the Community College Baccalaureate

The need to approach the Arizona Legislature for a statute change was driven by the necessity to remove four simple words from the definition of community college. The definition would be amended as such: “ ‘Community college’ means an educational institution which is under the jurisdiction of the state board and which provides a program training in the arts, sciences, and humanities beyond the 12th grade of the public or private high school course of study of vocational education...”²

From the time it was introduced to legislators, Arizona’s version of the community college baccalaureate created a firestorm of controversy. We were called upon multiple times to testify on behalf of SB 1109. Our testimony made it clear that this bill would enable our community colleges to do what we do best: be fully responsive to the needs of working adults and their employers. The curriculum and degrees would be designed in close partnership with the community and local employers. Other “pro” lobbying arguments we presented included:

- The mission of community colleges would not change: we did not seek to become research institutions.
- Applied baccalaureates would be customized for adults in ways university programs were not.
- Industry experts with current market experience, as opposed to full-time research professors, would teach classes.

² State of Arizona. Text of Senate Bill 1109, 15-1401 (3). Forty-third Legislature: First Regular Session, 1997.

- Arizona’s public universities were overflowing with students and were reaching capacity.
- The universities had education “gaps” that community colleges could fill more cost-effectively.
- Community colleges have always been a much more cost-effective alternative when it comes to educating.
- Despite articulation agreements, students were often finding that their community college credits were not accepted at the state universities.
- Students would receive more choices for lower-cost options.
- The middle class was being squeezed out of the higher education system due to cost.
- Rural communities could “grow their own” if their residents received their education in their own back yard.
- Rural students and working adults would receive better and improved access.
- Mothers with children, mortgages and jobs needed more higher education options because they cannot simply “pick up” and go off somewhere else to finish their degrees.

The issue began to receive extensive local and eventually national media coverage. As then-president of Rio Salado, Linda Thor wrote a guest column for the *Arizona Republic* called “Workforce Needs Community College Baccalaureate Degree,”³ explaining how our curriculum and degrees are community-driven. On the positive side, *Tribune Newspapers*—the region’s second-largest circulation newspaper chain—ran an editorial that asked “Why didn’t somebody think of this before?”⁴ A *Tribune* guest commentary by Sam Steiger, a former five-term member of Congress, appeared with the headline “Universities Standing in Way of Progress to Protect Their Turf.” He wrote, “The simple truth is that the 43,000-student ASU is riddled with the tyranny of a few elitists who prefer to publish rather than teach. UA is equally dedicated to preserving and expanding its student population at the expense of teaching values.”⁵

The “con” arguments against the applied baccalaureate by the university lobbyists included:

- Mission erosion: that is, community colleges would depart from their core mission of providing low-cost associate degrees, workforce development, remedial and vocational education.
- Mission creep: once the community colleges received limited authority to grant applied baccalaureates, down the road they would want the same authority for academic programs.
- There was simply no need and no demand for the applied baccalaureate.
- There would be hidden costs and the Legislature would have to produce additional funding.
- It would lead to a three-tier system in which minorities and low-income students came out short.

³ Thor, Linda M. (April 3, 1997). Workforce Needs Community College Baccalaureate Degree. *The Arizona Republic*, B4.

⁴ Editorial Staff. (November 22, 1996). Expanding Community Colleges. *Tribune Newspapers*, A12.

⁵ Steiger, Sam. (February 18, 1997). Universities Standing in Way of Progress to Protect Their Turf. *Tribune Newspapers*, A9.

- Community colleges and their faculty members were not qualified to offer or teach baccalaureates classes.
- It would undercut the existing 2+2 programs between public universities and community colleges.
- It would lead to duplication of educational services that could lead to increased tuition.
- Physical expansion would be required.
- The universities had already greatly expanded their capacity to meet Arizona's needs.
- The change in higher education would be too radical.

Joining the university lobbyists in opposition was the head of the Arizona Tax Research Association (ATRA), an organization which has made it a perpetual mission to oppose every single tax increase in Arizona. It should be emphasized that although SB1109 specifically did not call for new taxes or state allocations, the ATRA representative claimed that would be an end result.

Midway through the 1997 legislative session, an editorial in *The Arizona Republic* was headlined "The Universities' Job" and declared "this well-meaning proposal is perilous for both the state's universities and its community colleges." The same article concluded the applied baccalaureate was "divisive and unneeded."⁶ At another point, Sen. Springer was quoted in *Tribune Newspapers* as saying her bill was causing "heartburn" for the universities.⁷

The Outcome of the 1997 Proposed Applied Baccalaureate Legislation

Nevertheless, SB 1109 was passed 22-8 by the Arizona Senate before its defeat in the House Education Committee. The final bullets were delivered in-person through appearances by the three public university presidents: Clara Lovett of NAU; Manuel Pacheco of UA and Lattie Coor of ASU. They argued that SB 1109 was well intentioned but misguided and needed much more study. Therefore, the House Education Committee complied by adopting an amendment to set up a committee to study the issue.⁸ It was well-known that then-Governor Fife Symington was squarely against the community college baccalaureate, and he vetoed the amended bill, stating it "represents a substantial departure from the existing structure of higher education in Arizona."⁹

Sen. Springer was equally outspoken. The *Arizona Republic* quoted her as saying, "This bill was absolutely not judged on its merits, period." She added that it was vetoed because the state's universities feared competition from community colleges.¹⁰

But the movement did not end there. The Legislature proceeded to form its own Higher Education Study Committee, with 13 members including Sen. Springer, representatives of major universities and the community colleges, the Arizona Board of Regents, the Arizona Community College

⁶ Editorial Staff. (March 19, 1997). Four-Year Degrees: The Universities' Job. *The Arizona Republic*, B6.

⁷ Noyes, Francie. (February 23, 1997). College Bill Debate Continues. *Tribune Newspapers*, A1.

⁸ Staff. (March 21, 1997). New Degrees for 2-Year Colleges Killed In House. *Arizona Capitol Times*, 4-5.

⁹ Van Der Werf, Martin. (April 29, 1997). Study of 4-Year Degrees for Small Colleges Vetoed. *The Arizona Republic*, B1.

¹⁰ Van Der Werf, Martin. (April 29, 1997). Study of 4-Year Degrees for Small Colleges Vetoed. *The Arizona Republic*, B1-2.

Association, the Governor's Office, and key legislators. Linda Thor served as one of the two community college members. Among the committee's responsibilities was to determine unmet higher education baccalaureate needs, identify options, and develop specific recommendations for meeting those needs. The committee was to also research non-traditional delivery needs for career or technical fields; articulation options; possibilities for community colleges and universities to coordinate and cooperate; a cost analysis; and models for the community college baccalaureate in other states.

Months later, the committee reached consensus that the Arizona Board of Regents and the Board of Directors for the Arizona Community College Association should jointly establish a committee to continue the collaborative process. The Legislature, in a 1998 footnote, provided specific charges to the committee. Thor was once again appointed, and we completed our work in December 1998. The committee proposed a system for identifying and meeting needs for additional baccalaureate degrees, but was unable to reach agreement on seeking legislation to allow the baccalaureate.

As reported by *Community College Week*, "What did emerge from the panel's work, however, was a proposal that if community college officials identified a need for a baccalaureate program, they could shop it around to the universities. If none were interested in offering the program on their own or in collaboration with a two-year college, then a joint review committee would look into other options—including handing the program to community colleges."¹¹

In the same issue, Linda stated that fears of mission creep or erosion were missing the point: "I am proud to be a community college. I do not want to be a university. We're not talking about a bachelor's that has the same characteristics. Frankly, we probably need another term. We're all getting hung up on the term bachelor's rather than talking about how community colleges meet certain needs."¹²

During 1998 the applied baccalaureate issue attracted the attention of the *Chronicle of Higher Education*, which referred to it as "a landmark plan," emphasized its "practitioner" approach, and raised important issues about the overall nature of baccalaureate degrees. Should they be practical or more holistic?¹³

The Revitalized 2004, 2005 and 2006 Legislative Campaigns

However, legislation would not be proposed again for six years. In spring 2004 Rep. Russell Pearce (R-Mesa), the Chair of the House Appropriations Committee, introduced a bill to allow community colleges to offer baccalaureate degrees in fire science, law enforcement, nursing and teacher education in a six-year pilot. This bill was defeated in committee 9-7. However, the lawmakers left the door open to reconsider the measure at a future legislative session.

¹¹ Evelyn, Jamilah. (August 23, 1999). The Bid for the Bachelor's. *Community College Week*, 12.

¹² Evelyn, Jamilah. (August 23, 1999). The Bid for the Bachelor's. *Community College Week*, 13.

¹³ Healy, Patrick. (February 27, 1998). A 2-Year College in Arizona Bills Itself as a New Model for Public Higher Education. *The Chronicle of Higher Education*, A32-33.

By 2005, Rio Salado was a dramatically expanded and different college than when the concept of the community college baccalaureate was introduced eight years prior. With credit enrollment exceeding 40,000 students annually, it was poised to emerge as the largest in headcount among the Maricopa Community Colleges. This growth was fueled largely by its online offerings, which numbered 450+ unique courses.

Working in partnership with the Maricopa District, Rio Salado was still the logical choice to advocate on behalf of all community colleges when in the winter of 2005, the community college baccalaureate issue emerged yet again in the Legislature. This time the Chair of the House Higher Education Committee, Rep. Laura Knaparek (R-Tempe), proposed House Bill 2079. It had the ardent support of several powerful legislators, including once again the House Appropriations Committee Chair, Rep. Pearce. Under the bill approximately half of Arizona's community colleges would be allowed to issue the baccalaureate, primarily in teaching, health professions, fire science and law enforcement. However, it was understood that with the exception of Rio Salado, most of the colleges were not positioned to offer all four career paths.

The legislation proposed by Rep. Knaparek would have changed how the state funds Arizona's universities and maximize use of the community college system for increased access. The funding, she stated, would follow the students, rather than the traditional "arbitrary formula where dollars are doled out by political whim instead of need."¹⁴

The legislation was bolstered by positive and widespread media coverage. In advance of the legislative session, the conservative *Daily News Sun*, serving residents of the retirement communities surrounding Sun City, issued an opinion column with the headline "Community College Bill Makes Sense." It began: "One of several disappointments by the Legislature last session was its failure to pass a sensible bill that would have allowed community colleges to begin offering four year degrees in select fields..."¹⁵ The *Arizona Republic*, which had been so opposed in 1997, challenged and chastised legislators, stating: "OK, skeptics, you axed university reform; now it's your turn for some new ideas."¹⁶ Another editorial in the *East Valley Tribune* touted, "4-Year Community College Degrees Deserve a Try."¹⁷

An additionally encouraging sign was an independent statewide public opinion poll, which found that 74% of those surveyed would support a bill "that would allow community colleges to offer four-year baccalaureate degrees."¹⁸

We again returned with our supporters to the Legislative chambers with our messages of access, affordability, specialization, economic efficiency, experience and this time, widespread support. We

¹⁴ Knaparek, Laura. (March 19, 2005). Let Funds Follow the Student. *East Valley Tribune*, B5.

¹⁵ Editorial Staff. (December 6, 2004). Community College Bill Makes Sense. *Daily News-Sun*, A6.

¹⁶ Editorial Staff. (February 16, 2005). Higher Education/Our Stand: OK, Skeptics, You Axed University Reform; Now It's Your Turn For Some New Ideas. *The Arizona Republic*, B6.

¹⁷ Editorial Staff. (December 2, 2005). 4-Year Community College Degrees Deserve a Try. *East Valley Tribune*, A20.

¹⁸ Merrill, Bruce. (February 22, 2005). Press Release. Cronkite/Eight Poll: Voters Don't Want Junk Food in the Schools in the Schools, But They Do Want Community Colleges to Award Four-Year Diplomas. Walter Cronkite School of Journalism, Arizona State University.

cited U.S. Census statistics indicating that Arizona ranks 20th in population with three public universities. In contrast, Maryland, ranking 19th in population, has 14 public universities, and Minnesota, ranking 21st in population, has 14 public universities. We told legislators how Rio Salado's 10,600 occupational certificates and degrees in 2004 accounted for 76% of the total awards presented that year. We were pleased to report that the accrediting body for Arizona's community colleges and three public universities—the Higher Learning Commission of the North Central Association—had concluded that these degrees would not compromise the community colleges' traditional mission.

But once again, HB2079 was met with fierce opposition from the universities and turf wars erupted. Each committee meeting was populated by a sizable number of opposition lobbyists from both the private sector, including the UOP, and the public sector, including all three state universities. And again, the representative from ATRA was on hand, claiming that taxpayers would be left footing the bill. As always, our position was that an adjusted tuition plan would pay for the costs incurred. However, university lobbyists told the legislators that if passed, the bill would cost the state \$20 million in its first year alone.

In spite of this, the bill proceeded fairly smoothly through the House, and was then approved by the Senate Higher Education Committee. At this point, we were as cautiously optimistic as we had ever been. It appeared this time the applied baccalaureate just might become a reality. The final hurdle to pass the bill was the vote in the Senate Appropriations Committee, scheduled for April 5, 2005. However, before any testimony was heard, Bob Burns (R-Peoria) who chaired the Senate Appropriations Committee, told Rep. Knaparek, "I don't think the bill, in its present form, will be able to make it through this committee."¹⁹

In a last-minute attempt to keep her legislation alive, Rep. Knaparek offered an amendment that would have gutted the specifics of the bill. For instance, it would have taken out any reference to funding. That would have eliminated writing a new university funding formula into statute. Under her revision, the community colleges would have been authorized to offer baccalaureate degrees without any funding. Nevertheless, on April 5, 2005, the community college baccalaureate bill received its final legislative defeat in the Senate Appropriations Committee on a 6-5 vote. The majority sided with university lobbyists who called for more time to study the state's higher education gaps and then determine the best way to fill them.

In spite of so many legislative committee meetings and testimonies, a previous report from an appointed Higher Education Committee, positive media messages, and community support, the cause was defeated by a single vote. In Rep. Knaparek's words, "The political reality is that their lobbyists beat us." She complained that the universities feared a "more cost-efficient competitor."²⁰

The rhetoric intensified within the media. "Blocking Community Colleges' 4-year Aspirations is Asinine" stated the *Arizona Republic*, adding: "Sensible people have been asking for years why this

¹⁹ Slivka, Judd. (April 6, 2005). College Bill Dies in Senate. The Arizona Republic, B1-2.

²⁰ Slivka, Judd. (April 6, 2005). College Bill Dies in Senate. The Arizona Republic, B1-2.

arbitrary barrier to community colleges meeting expanding educational demands in a variety of areas persists.”²¹

But in an unusual twist, six days later the baccalaureate authority was resurrected under a special legislative format as SB1109, ultimately passing through the full House on a 31-28 vote and proceeding to the Senate, where it was once again killed. Reminiscent of years before, another study committee was convened, this one called the Joint Ad Hoc Task Force on Higher Education.

By the end of 2005, the applied baccalaureate was still receiving considerable renewed media attention. Articles in the state’s largest newspapers were reporting a more positive outlook for the community college baccalaureate in Arizona. A Dec. 19 article appeared in the *Arizona Republic* with the headline: “Support For 4-Year degrees mounting.”²²

The Dec. 2, 2005 *East Valley Tribune* published this headline: “4-year community college degrees deserve a try.”²³ The editorial called for pilot programs, while mocking a UOP-funded study that concluded the applied baccalaureate was a bad idea. The headline for another *Tribune* commentary by a Scottsdale City Councilman stated: “ASU’s gouging justifies 4-year community college degrees.”²⁴ The councilman pointed out that 70% tuition increases at ASU do not follow the state university mission to provide in-state instruction in a manner “as nearly free as possible.”

Nevertheless, we were proud of the fact that this bill, which was characterized as higher education reform legislation, was approved by the full House and made it through its policy committee in the Senate. Although we faced heavy opposition and extensive public and behind-the-scenes lobbying by the public and private universities, we persevered because we believe that providing access to affordable, accessible baccalaureate degrees is the right thing to do for our students and our state.

Legislation for the applied baccalaureate would be sponsored one more time, in spring 2006. Rep. Knaparek, still chair of the House Higher Education Committee, again introduced bill, but it was compromised to the point that we could not support it.

Economic Crisis Precipitates Call for New Models

Five more years would pass before community college baccalaureate legislation was again introduced in the 2011 Arizona Legislative Session. In the intervening years, much had transpired locally on the economic front. Like California and other rapidly-growing states, Arizona’s economy had been hit extremely hard by the economic recession. The State of Arizona found itself with as much as a \$6 billion annual budget shortfall. In an effort to balance the state’s budget, higher

²¹ Editorial Staff. (April 7, 2005). Craven Cave-In: Blocking Community Colleges’ 4-Year Aspirations Is Asinine.” *The Arizona Republic*, A12.

²² Editorial Staff. (December 19, 2005). Support For 4-year Degrees Mounting. *The Arizona Republic*,

²³ Editorial Staff. (December 2, 2005). 4-Year Community College Degrees Deserve a Try. *East Valley Tribune*, A20.

²⁴ Lane, Jim. (date>) East Valley Voice: ASU’s Gouging Justifies 4-Year Community College Degrees. *East Valley Tribune*, A12.

education allocations for universities and community colleges were drastically reduced, and at one point there was an attempt to cut community college funding by as much as 50%.

In January 2011, Arizona Governor Jan Brewer, who is a community college graduate, called for more significant higher education budget cuts. However, in a special directive to the 2011 Arizona Legislature, Gov. Brewer stated she wanted to explore whether community colleges should be empowered to grant bachelor's degrees.

The Governor told the legislature there is no way the state can financially maintain Arizona's higher education system in its present form. She called for solutions beyond the extremes of further hikes in tuition or eliminating programs. In short, she called for new models of higher education that will not only expand existing programs to allow students to start their baccalaureate degrees at community colleges, but also for the creation of new four-year schools. Another option would be having additional campuses for the three public universities around the state, but with lower tuition than charged at the main campuses in Tucson, Tempe and Flagstaff. Other options she believed worth considering are the expansion of 2+ 2 programs. Ultimately, the governor set a goal to double the number of Arizona's students earning baccalaureate degrees by 2020.

Subsequently, during the 2011 Arizona Legislative Session, two bills were introduced. HB 2277 was introduced in the House, discussed and HELD in the House Appropriations Committee after much debate. This bill would have allowed any community college district in the state to offer baccalaureate degrees in Elementary Education and Nursing programs.

The second bill, SB 1289, failed on the Senate Floor on a 3rd Reading vote of 8 -21. This bill would have only allowed rural Eastern Arizona College (EAC) to offer baccalaureate degrees in three areas: Education, Business, and Mining Technology. Six months after that defeat, ASU announced a partnership with EAC to offer associate's and bachelor's degrees at tuition of \$5,500 dollars per year, a little more than half of the normal annual ASU tuition of close to \$10,000. The degree programs will be implemented in phases, starting with associate's degrees in nursing. Eventually, bachelor's degree programs will be offered in nursing, business/organizational studies, elementary education, operational management and more.

Lessons Learned

If hindsight is always 20-20, what would we do differently from a strategic point of view?

We believe we have learned the following lessons that may help colleges in other states advance their own cause of achieving the baccalaureate.

1. From the start, we needed more grassroots momentum leading the charge.

Admittedly, back in 1997 we were called upon to respond on extremely short notice when we were first approached by Sen. Carol Springer. The legislature was already in session. As a result, we did not have ample time to plan and execute a thoroughly organized grassroots campaign. Therefore, we advocated primarily through frequent testimony and through the

supportive voices and letters of select members of the community, such as the heads of the Arizona Nursing Association and the Phoenix Law Enforcement Association.

What was also missing from our campaign was the voice of the community at large, backing up our statements that there was a great demand for these baccalaureates. The community college baccalaureate was a radical concept for people to grasp, and unfortunately, not enough people were sold on the idea. A greater volume of powerful messages from our constituents, including students and even their parents, would ideally have reinforced these messages: Arizona needs a more highly educated workforce to compete and experience economic growth. We need more options to educate our youth and working adults within our own communities, where they will then likely reside and become taxpayers. We need more highly educated police, more allied health workers, more computer technicians, and more general business graduates than the universities alone can currently provide.

Also missing was an organized movement that would present students and their parents sharing their issues of access in their own words to the legislators. Ideally, after it was organized it would be led by "the people" so the community colleges don't appear self-serving.

Unfortunately, without this grassroots momentum, our campaigns eventually fizzled. Even worse, the community colleges often appeared to be self-serving or greedy and to not have the greater community good in mind. We were inadvertently positioned as adversaries to the very popular universities. Of course, in reality the opposite was true: Our cause would greatly benefit the community through increased options that the universities were not interested in providing.

The issue of building substantial grassroots momentum did not improve in subsequent years. Legislation for the baccalaureate was not introduced during every legislative session. We typically received very brief notice when the cause was about to be revived by one or more legislators. Coupled with this short notice was the fact that in several of those years, we were also engaged in very aggressive legislative battles to retain funding for our free Adult Basic Education classes, which had grown to become the largest program of its type in Arizona. Our resources and collective energy were spread thin during those years. We had to carefully choose our battles.

2. We needed to attract more peer support from within the leadership ranks of Arizona's community colleges themselves.

Throughout the eight-year battle for the baccalaureate, the issue proved to be highly sensitive among members of the Chancellor's Executive Council, which consisted of the Chancellor, all 10 presidents, and four vice chancellors. This was understandable, since not every college stood to benefit equally from the community college baccalaureate. In fact, a number of the colleges would not initially benefit at all, simply because the model did not fit their individual mission. This contributed to Rio Salado's reputation as a renegade college.

This was particularly true back in 1997. Although the Arizona Community Colleges Presidents' Council supported SB 1109, behind the scenes some of the state's community colleges were questioning why any of us would want to offer applied baccalaureates, and commenting publicly in local news media. Furthermore, support for our position was met with limited enthusiasm from our colleagues at the national level. "We are who we are," said David Pierce,

then-president of the American Association of Community Colleges. “We are community-based, associate-degree-granting institutions. This [granting baccalaureate degrees] isn’t necessarily our job.”²⁵

3. We underestimated the collective power of the public and private universities when they unite as allies.

As we discussed, at every legislative committee meeting, we were up against the very large, polished, and vocal contingent of unified lobbyists from the public and private universities—a sort of David and Goliath match-up. But in our case, the underdog did not always command sympathy from the majority of the legislators. In fact, our team of lobbyists was outnumbered eight to one. Also, the objections of the university lobbyists were bolstered by the Arizona Taxpayers Research Association (ATRA), which insisted that we were withholding the fact that that this was going to be a very expensive proposition for the public. The community colleges were unfairly perceived as wanting something for themselves—a type of power grab if you will—that was unnecessary. Therefore, the public and private universities came across as the ones who were truly looking out for the best interests of the general public.

4. We didn’t anticipate the legislators viewing the controversy behind the applied baccalaureate among higher education entities as a “family feud.”

The university lobbyists were already well positioned and had favor with the legislators due to the enormous local popularity of their campuses. The legislators could see merits behind both sides of the argument. Therefore, they wanted to avoid being held liable as decision-makers in a very divisive debate. They wanted the universities and community colleges to work the issue out among themselves.. But we could not, because the applied baccalaureate involved a change in statute.

The Rio Salado story is unique due to Arizona’s political composition. Each state’s political structure may call for different tactics and strategies. Issues of cost duplication and mission erosion and creep will always arise and need detailed explanations.

Subsequent Progress

As of early 2012, there is still no community college baccalaureate in Arizona. However, we believe our cause has yielded some positive outcomes. In the absence of formal legislation, we can report that several unprecedented avenues have opened that now increase access or transferability for students across our state and outside of Arizona. For example:

- Previously the Associate of Applied Science degree would not transfer. Now it is accepted as a block in the new Baccalaureate of Applied Science degree at NAU, ASU Polytechnic Campus and ASU West Campus.
- ASU and Rio Salado have a joint online Baccalaureate in Interdisciplinary Studies degree that transfers 75 credits from the community college.
- NAU accepts 90 credits from the Maricopa Community Colleges into the Baccalaureate of Interdisciplinary Studies program.

²⁵ Evelyn, Jamilah. (August 23, 1999). The Bid for the Bachelor’s. *Community College Week*, 13.

- The Maricopa Community Colleges now have articulation agreements with more than 25 states and out-of-state universities that transfer between 75 and 90 community college credits.
- The ASU Polytechnic Campus has two Maricopa Community College partners onsite; namely, Chandler-Gilbert Community College and Mesa Community College.
- The nation's first communiversity west of the Mississippi opened in 2009 and features unique public-private partnerships between the City of Surprise, Rio Salado, Glendale Community College, Phoenix College, Ottawa University and West-MEC, a public school district specializing in vocational education
- A similar communiversity is underway in the Town of Queen Creek, Arizona.

On the Horizon...Another Opportunity?

It is clear that the story of the community college baccalaureate in Arizona remains unfinished. Despite enduring multiple years of a housing collapse and state budget crises that mirror the national scene, Arizona emerged in the 2010 U.S. Census as the second-fastest growing state in population. Arizona is currently home to nearly 6.6 million residents, which translates into more than a 28% growth rate since the 2000 U.S. Census. In contrast, the total U.S. population recorded growth of slightly more than 9% during the same decade. Arizona, like most western states, is growing faster than the nation as a whole. Furthermore, more than 1 out of every 4 Arizonans is under the age of 18, which also exceeds the national average, according to the U.S. Census Bureau.²⁶

Faced with shrinking financial resources, the state's higher education institutions must undergo revolutionary changes to comprehensively serve two burgeoning populations: youth who will graduate from high school in the coming decade, and adults who will need to be retrained and retooled to keep pace with the state's post-recession job market. We would argue that in the foreseeable future, the only logical solution for our state is to move forward with new models of public higher education, which include the community college baccalaureate.

²⁶ U.S. Census Bureau Quick Facts, Retrieved 22 February 2011, from The U.S. Census Bureau web site, <http://quickfacts.census.gov/qfd/states/04000.html>

COMMUNITY COLLEGE BACCALAUREATE DEGREE OPTION

California Policy and Legislative History



Constance M. Carroll, Ph.D.
Chancellor, San Diego Community College District



Legislative History of CCC Baccalaureate Degree Option

Five Legislative Items

- AB 1932 (Maze, 2004)
- AB 1280 (Maze, 2005)
- AB 1455 (Hill, 2009)
- AB 2400 (Block, 2010)
- AB 661 (Block, 2011)



AB 1932 (Maze)

AB 1932: Public Postsecondary Education: Advisory Committee

In 2004, Assembly Member Maze proposed a bill that would have established an advisory committee to recommend to the legislature a framework to authorize Porterville College and College of the Sequoias to offer baccalaureate degrees.

The bill was held without recommendation by the Assembly Committee on Higher Education, and failed at the end of the legislative session on November 30, 2004.



AB 1280 (Maze)

AB 1280: Public Postsecondary Education: California Community College Baccalaureate Partnership Program

Introduced in 2005, this bill authorized the establishment of the California Community College Baccalaureate Partnership Program. Under the program, the Office of the Chancellor of the California Community Colleges would be authorized to annually award 2 grants, not to exceed \$50,000 each, to a collaborative, composed of at least one community college and at least one baccalaureate degree-granting institution, formed for the purpose of offering baccalaureate degree programs on the participating community college campus or campuses.

The bill was signed by the Governor on October 4, 2005.



AB 1455 (Hill)

AB 1455: Public Postsecondary Education: Community Colleges: Baccalaureate Degrees: Pilot Program

Introduced in 2009, this bill would have authorized the San Mateo Community College District to offer a baccalaureate degree.

The bill failed, but was basically folded into AB 2400 in 2010.



AB 2400 (Block)

AB 2400: Public Postsecondary Education: Community Colleges: Baccalaureate Degree Pilot Program

Introduced in 2010, this legislation would allow the San Diego, Grossmont-Cuyamaca, and San Mateo Community College Districts to establish baccalaureate degree pilot programs in subject areas where the workforce need is high.

The bill failed in the Assembly Committee on Higher Education at the end of the legislative session on November 30, 2010.



AB 661 (Block)

AB 661: Public Postsecondary Education: Community College Districts: Baccalaureate Degree Pilot Program

Coauthored by Assembly member Hill, this bill, introduced in 2011, would allow the Grossmont-Cuyamaca and San Mateo Community College Districts to establish one baccalaureate degree pilot program per campus in subject areas where the workforce need is high.

This bill cleared the Assembly Higher Education subcommittee, but failed due to inactivity in the general Assembly on February 1, 2012.



A Special Emphasis on Nursing



National Efforts to Increase Registered Nurse Requirements to Baccalaureate Level

“Rapidly expanding clinical knowledge and mounting complexities in health care mandate that professional nurses possess education preparation commensurate with the diversified responsibilities required of them...As such, registered nurses at the entry-level of professional practices should possess, at a minimum, the educational preparation provided by a four-year Bachelor of Science degree program in nursing (BSN).”

SOURCE: The Baccalaureate Degree in Nursing as Minimal Preparation for Professional Practice, American Association of Colleges and Nursing





72 Associate Degree Nursing Programs In California Community Colleges

Colleges that Offer an Associate Degree in Registered Nursing

Allan Hancock	Fresno City	Mission	San Diego City
American River	Gavilan	Modesto	San Francisco City
Antelope Valley	Glendale	Monterey Peninsula	San Joaquin Delta
Bakersfield	Grossmont	Moorpark	San Mateo
Butte	Hartnell	Mt. San Antonio	Santa Ana
Cabrillo	Imperial Valley	Mt. San Jacinto	Santa Barbara City
Canyons	L.A. City	Napa Valley	Santa Monica
Chaffey	L.A. Harbor	Ohlone	Santa Rosa
Citrus	L.A. Southwest	Palomar	Sequoias
Contra Costa	L.A. Trade-Tech	Pasadena City	Shasta
Copper Mountain	L.A. Valley	Porterville	Sierra
Cuesta	Long Beach City	Redwoods	Siskiyou
Cypress	Los Medanos	Reedley	Solano
De Anza	Marin	Rio Hondo	Southwestern
Desert	Mendocino	Riverside City	Ventura
East L.A.	Merced	Sacramento City	Victor Valley
El Camino	Merritt	Saddleback	West Hills Lemoore
Evergreen Valley	Mira Costa	San Bernardino	Yuba

Source: CCCCCO Curriculum Inventory, based on Active AS Degrees with a TOP Code in Registered Nursing

Nursing Baccalaureate Study Group

September 17, 2013

Chancellor's Office

Sacramento, CA

Chris Mallon; Marshall Alameida; Pam Kersey

Nursing Specific Topics

- Need
- Program Approval/Accreditation Issues
- Curriculum
- Pros and Cons
- Alternatives
- State Context
- Financial Considerations
- Conclusion

Need to Increase Number of Nurses with a BSN

The need for more BSNs has been well established and documented.

For this presentation we will not discuss the need but instead will look at specific information about how to make it happen.

California Board of Registered Nursing (BRN) Approval Issues

- Continuing to offer an ADN will not change current BRN approval
- ADN-to-BSN programs (post licensure) do not need approval by BRN
- Establishing new BSN programs requires BRN approval
- Pam received this information directly from the BRN

Accreditation Issues

Choice of accrediting bodies, each with different accreditation criteria and procedures

- Accreditation Commission for Education in Nursing
ACEN
- Commission on Collegiate Nursing Education (CCNE)
Part of the American Association of Colleges of
Nursing (AACN)

ACEN (formerly NLNAC) Accreditation

- Accreditation Commission for Education in Nursing
- All Types of Nursing Programs may be accredited by this organization
- A Community College with an ADN program that is accredited would have to go through the process to have a new RN to BSN program accredited.
- They did not respond to Pam's email however this information is based on what could be found on their website.

AACN

- Accreditation of Baccalaureate and Graduate nursing education
- Community College ADN program could not be accredited by this organization

ACCJC/WASC Accreditation Issues

- This would be a college level not nursing program specific issue. Another group is researching this.

Pros and Cons of Community Colleges offering a BSN

Pros

- Students graduating with an ADN can take the licensure exam and begin working as a nurse while they continue their education.
- Students who may be intimidated by moving into a larger university setting may be more comfortable continuing their education at the community college.
- Students may be able to start their BSN education sooner instead of waiting for a CSU placement.

Cons

- CCC would compete with existing programs for nursing faculty and clinical placements, already in short supply.
- Students remaining in the c c setting do not get the same experience that a university offers.
- Diverts state funding from enhancing existing programs to new programs and structures
- Does not focus on aligning ADN program curriculum for transfer

Curriculum

- See AB 1295 BSN Content handout
- Developed by CCC and CSU faculty working on AB 1295 in 2011
- CCC ADN programs have requirements that vary by district and college
- Units required for ADN programs vary
- LAO has urged greater consistency to improve transfer and to make degree completion more efficient
- CSU fulfillment of AB 1295 is online <https://www.calstate.edu/adn-bsn/>

Proposed Curriculum

- Developed by Community College Nursing Program Directors:
 - Debbie Yadow (Grossmont College)
 - Debbie Berg (San Diego City College)
 - Sandy Baker (Riverside College)
- See Handout

BSN Option

- Implementation of the 'differential nursing courses' that are currently not taught in the ADN curriculum as an ADN-BSN model.
 - The ADN-BSN could be considered as a one (1) year continuation curriculum, post NCLEX-RN, at which time student would be awarded the BSN.
 - The ADN-BSN could be considered as a concurrent, overlay to the existing ADN curriculum (e.g., summers).
 - The ADN-BSN could be considered in terms of a fee-based program, if allowable under Community College guidelines. In this manner, students could offset much of the cost of the program and still attain a BSN at a remarkably affordable cost.



BSN option

- The establishment of ‘Online Technology Centers’ that facilitate the differential BSN courses in an online environment.
 - An existing center(s) or a new center(s) with the most current technology that has built in capacity for future, long-term growth of online education in general.
 - Possibility of State budget funding for on-line education expansion. The following model does not address the infrastructure development for online education delivery.

Continued

- Multiple campuses would collaborate and their students would co-mingle in the lecture, learning environment.
- In this manner we can maximize student enrollment in the theory courses to offset the cost of clinical cohorts for Community (highest cost course).
- We can also maximize instructor resources from a system wide, statewide, nationwide pool.

BSN option

- The model is based on a 1:120 student/lecture class environment (online). It is also based on a 1:15 clinical ratio for Community clinical reflective of a preceptor method of instruction.
 - The model can be adjusted. ***Marshall suggests:*** increments of 15 in accordance with the clinical ratios.
 - Marshall acknowledges lack of knowledge on all of the possible variables associated with Community College funding though he is eager to learn.

BSN option

Course	Lecture Units Hours	Lecture Load	Lab Units Hours	Lab Load	Total Units Hours	Total Load	Cost
Advanced Health Assessment			1/54	15%	1	15%	\$12,375 *This lab is defined in the curriculum as an adjunct of Advanced Health Assessment Lecture. My suggestion is that it be integrated within currently funded clinical/lab hours of the ADN curriculum so that clinical/lab ratios would not have to be added to the model cost.

BSN option

Model Assumptions [120 Student Model]: \$356,668.75	State Level Model Cost Assumptions: \$0?	Additional Savings Assumptions
<p>-Faculty Cost: \$94,875 (\$82,500 + \$12,375 benefits [15%])</p> <p>-Centralized Online Delivery of Lecture Courses 1:120 Faculty/Student Ratios</p> <p>-One Lecture Course Each Topic/Model</p> <p>-Community Clinical Faculty/Student Ratios 1:15</p> <p>-Eight Clinical Sections per each 120 Student Model</p>	<p>-7700 Annual ADN Graduates (Foundation for California Community Colleges)</p> <p>-7700/120 Students = 65 Student Models</p> <p>\$356,668.75 x 65 Student Models = \$23,183,468.75 Annual Cost</p> <p>-\$23,183,468.75 / 7700 Students = \$3,111 Additional Student Fees</p> <p>-Student Cost For Community College Baccalaureate 92.8 (assumes 120 overall curriculum) Units X \$46/unit = \$4,268. Baccalaureate Differential Curriculum = \$3,111 [If we ran the program as an added year to the ADN Curriculum and or were able/willing to make it more of a fee based offering].</p> <p>Total ADN & BSN Tuition = \$7,380</p>	<p>-Reduction of overall units for students when individual colleges standardize prerequisites and reduce units to conform with an overall 120-130 unit ADN + BSN.</p>

CCC ONLINE TECHNOLOGY CENTERS (OTC) BSN potential benefits

- OTC BSNs potentially decrease the cost of a baccalaureate degree for California's students and California taxpayer
- OTCs allow for expansion of Community College course offerings inclusive of expanded baccalaureate degrees
- OTCs allow for the CSU to direct capacity planning toward IOM recommendations 5, 7 & 2, thereby benefitting California and the Profession of Nursing
 - 5: Double the number of nurses with a doctorate by 2020
 - ***Marshall suggests: EXPAND Doctor of Nursing Practice (DNP)***
 - 7: Prepare and enable nurses to lead change to advance health
 - 2: Expand opportunities for nurses lead and diffuse collaborative improvement efforts

CCC ONLINE TECHNOLOGY CENTERS (OTC) BSN potential benefits

- OTC BSNs provides a potential market of approximately 7700 California Community College graduates annually with a seamless transition into the ADN-BSN curriculum
- OTC BSNs provide a curriculum that follows the student vs. restricting employment migration and decreasing entry motivation into ADN-BSN programs
- OTC BSNs eliminate the complex maze of TMC development
- OTC BSNs provide the approximately 20% of CCC prior baccalaureate ADN graduates a shortened ADN-BSN timeline due to the potential elimination of 30 unit residency requirements

Alternatives to Community Colleges offering BSN

1. CSUs and CCCs jointly pursue state funding for streamlined ADN-to-BSN programs.
2. CCC nursing programs could agree on common standards that make ADN completion requirements more standardized, and that would make transfer to the CSU for BSN completion easier to accomplish (like has been done with CSU GE Breadth, IGETC, and Associate Degrees for Transfer).

Alternative

AB 1295 Seamless State Nursing Education Pathways



LAO recommendations



- Common GE Pattern for ADN programs
- Transfer model curriculum CCC-to-CSU
- Prescribed unit total for ADN-to-BSN

<http://www.calstate.edu/adn-bsn/>





State Context

2011-12 Pre-licensure enrollment distribution



- 46% in ADN (9.7% ) (Capacity exists here)
- 47.5% in BSN (1.9% ) (Capacity exists in ADN-to-BSN)
- 6.5% in ELM (Capacity exists here)

New Student Enrollment by Program Type

	<i>Academic Year</i>									
	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
New Student Enrollment	7,457	7,825	8,926	11,131	12,709	12,961	13,988	14,228	13,939	13,677
ADN 	5,316	5,547	6,160	7,778	8,899	8,847	9,412	8,594	7,688	7,411
BSN 	1,903	1,960	2,371	2,709	3,110	3,404	3,821	4,842	5,342	5,445
ELM	238	318	395	644	700	710	755	792	909	821
Private	980	1,150	1,614	2,024	2,384	2,704	3,774	4,607	4,773	4,795
Public	6,477	6,675	7,312	9,107	10,325	10,257	10,214	9,621	9,166	8,882

State Context

Since 2006-07

- public enrollments down 14% 
- private enrollments more than doubled 

California needs to invest in public nursing education programs

State Context

Enrollment Capacity in Existing CSU Nursing Programs

2014-2015 CSU Undergraduate Impacted Programs Matrix

	Bakersfield	Channel Islands	Chico	Dominguez Hills	East Bay	Fresno	Fullerton*	Humboldt	Long Beach*	Los Angeles	Maritime Academy N	Monterey Bay	Northridge	Pomona	Sacramento	San Bernardino	San Diego*	San Francisco	San Jose*	San Luis Obispo*	San Marcos	Sonoma	Stanislaus
Nursing, Basic	I	I	I		I	I	I		I	I					I	I	I	I	I		I	I	I
Nursing, RN to BSN	I	O	O	O	O	O	I		I	O			O		O	O	I	O	I		O	I	O

- All pre-licensure BSNs are impacted (“I”)
- Capacity (“O”) in post-licensure (ADN-to-BSN)
- **CSU can produce more BSNs through transfer**

Financial Considerations

- How will ADN tuition compare with RN to BSN tuition in the community college?
- Will financial aid be an issue when pursuing a Baccalaureate degree in a community college?
- Tax dollars are limited, how will allocation be different?
- If tuition is less at the CCC will students be drawn to these programs instead of the CSU?
- Will the CCCs only accept their own graduates or will they accept any RN wanting to obtain a BSN?
- Many students have opted for more expensive private schools to obtain their post licensure BSN.

Conclusion

- Pam, Marshall and Chris agreed to disagree as we worked on this project together. We have included our best information in these slides.
- A lot of work has been done by others before this work group was initiated and we have included some of that information.
- California is fortunate to have so many options available for students and so many educators who are passionate about giving the best solutions for RNs to obtain a BSN.

(1)

Report



The Future of Nursing: Leading Change, Advancing Health

8+1



Released: October 5, 2010

REPORT AT A GLANCE

- [Accessing Primary Care: Barriers to Nurse Practitioner Practice \(HTML\)](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Figure-3-3.aspx)
- [Infographic - The Future of Nursing \(JPG\)](#) (/~/media/Files/Report%20Files/2010/The-Future-of-Nursing/nursing-infographic.jpg), [HTML](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Infographic.aspx)
- [Press Release \(HTML\)](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Press-Release.aspx)
- [Report Recommendations \(PDF\)](#) (/~/media/Files/Report%20Files/2010/The-Future-of-Nursing/Future%20of%20Nursing%202010%20Recommendations.pdf), [HTML](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Recommendations.aspx)
- [Report Brief \(PDF\)](#) (/~/media/Files/Report%20Files/2010/The-Future-of-Nursing/Future%20of%20Nursing%202010%20Report%20Brief.pdf), [HTML](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Report-Brief.aspx)
- [The Future of Nursing: Focus on Education \(PDF\)](#) (/~/media/Files/Report%20Files/2010/The-Future-of-Nursing/Nursing%20Education%202010%20Brief.pdf), [HTML](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Report-Brief-Education.aspx)
- [The Future of Nursing: Focus on Scope of Practice \(PDF\)](#) (/~/media/Files/Report%20Files/2010/The-Future-of-Nursing/Nursing%20Scope%20of%20Practice%202010%20Brief.pdf), [HTML](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Report-Brief-Scope-of-Practice.aspx)

With more than 3 million members, (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Infographic.aspx) the nursing profession is the largest segment of the nation's health care workforce. Working on the front lines of patient care, nurses can play a vital role in helping realize the objectives set forth in the 2010 Affordable Care Act, legislation that represents the broadest health care overhaul since the 1965 creation of the Medicare and Medicaid programs. A number of barriers prevent nurses from being able to respond effectively to rapidly changing health care settings and an evolving health care system. These barriers need to be overcome to ensure that nurses are well-positioned to lead change and advance health.

In 2008, The Robert Wood Johnson Foundation (RWJF) and the IOM launched a two-year initiative to respond to the need to assess and transform the nursing profession. The IOM appointed the Committee on the RWJF Initiative on the Future of Nursing, at the IOM, with the purpose of producing a report that would make recommendations for an action-oriented blueprint for the future of nursing. Through its deliberations, the committee developed four key messages:

- Nurses should practice to the full extent of their education and training.
- Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
- Nurses should be full partners, with physicians and other health care professionals, in redesigning health care in the United States.
- Effective workforce planning and policy making require better data collection and information infrastructure.



The United States has the opportunity to transform its health care system, and nurses can and should play a fundamental role in this transformation. However, the power to improve the current regulatory, business, and organizational conditions does not rest solely with nurses; government, businesses, health care organizations, professional associations, and the insurance industry all must play a role. Working together, these many diverse parties can help ensure that the health care system provides seamless, affordable, quality care that is accessible to all and leads to improved health outcomes.

Actions Taken as a Result of this Report

- [Robert Wood Johnson Foundation and the AARP partner to establish The Future of Nursing: Campaign for Action](#) (/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health/Action-Taken.aspx)

Reports of Interest

<http://www.iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx>

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Details

Activity: Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the Institute of Medicine ([/Activities/Workforce/Nursing.aspx](#))

Type: Consensus Report ([/About-IOM/Study-Process/Reports.aspx](#))

Topics: Health Care Workforce ([/Global/Topics/Health-Care-Workforce.aspx](#)), Quality and Patient Safety ([/Global/Topics/Quality-Patient-Safety.aspx](#)), Health Services, Coverage, and Access ([/Global/Topics/Health-Services-Coverage-Access.aspx](#))

Committee Members

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AB 1295

Program Content: Elements of CCC-CSU Nursing Degree Pathways

GOAL: Streamlined transfer pathways for CCC-to-CSU BSN degrees (ADN-to-BSN pathways)

AGREED: No difference in pre-licensure content, whether delivered at CCC or CSU

<u>BRN Requirements (Pre-Licensure)</u>	<u>Courses and Content for ADN (as beginning of BSN pathway)</u>	<u>CSU Nursing Prerequisites</u>	<u>Underlying principles of BSN, compared to ADN</u>	<u>Courses and Content for BSN Continuum</u>	<u>AACN Essentials of Baccalaureate Education</u>
<p>Not fewer than 58 semester/87 quarter units: <i>Art and science of nursing (36/58 units)</i> --18 sem/27 qtr units of theory --18 sem/27 qtr units of clinical practice <i>Communication skills 6 sem/9 qtr units</i> --verbal, written, group communication <i>Related natural, behavioral, & social sciences</i> --16 sem/24 qtr units <i>Theory and clinical nursing areas:</i> --Medical-surgical; Maternal/child; Mental health; Psychiatric; Geriatrics <i>Theory and Clinical Instruction in (but not limited to):</i> --Personal hygiene; Human sexuality; Client abuse; Cultural diversity; Nutrition; Pharmacology; Legal, social and ethical aspects of nursing; Nursing leadership and management <i>Integrated throughout nursing curriculum</i> -Basic intervention; Human development across lifespan; Knowledge & skills to develop collegial relationships; oral, verbal, & group communication; anatomy, physiology, and microbiology; related social & behavioral sciences emphasizing social and cultural patterns, human development, and behavior relevant to health-illness</p>	<p>BRN Standards of competent performance SLOs match competencies Approved by Board Students have to pass NCLEX [Chemistry may be hidden prerequisite and not visible as program prerequisite] Evidence-based practice Community-based healthcare (not community health) Leadership & management at bedside, with groups (not case management, not at organizational level) Theory-based programs (but not theories and how they are applied)</p>	<ol style="list-style-type: none"> 1. Anatomy 2. Physiology 3. Microbiology 4. Integrated Chemistry 5. Written Communication 6. Oral Communication 7. Math (Confirm: statistics is required for the BSN) 8. Critical Thinking (CSU GE or IGETC certified) 	<p>Expanding analytical and critical interaction with data, theory, research, practice</p> <p>Orientation toward organizational level</p> <p>Change-agency, innovation and transformation skills</p> <p>Population-based care</p> <p>Designing and changing systems</p> <p>Application of statistics and research principles</p> <p>Application of informatics and information technology for improving client outcomes</p>	<ol style="list-style-type: none"> 1. "Transition" course (meet individual' 2. Nursing research (beyond evidence-based practice) 3. Health care policy, politics and economy 4. Community health lecture and clinical (90 hours of public health clinical lab) 5. Leadership & management theory at the organizational level 6. Nursing theory and application to practice <p>Campus-specific content</p> <ol style="list-style-type: none"> 1. Care of high risk populations across settings 2. Family theory 3. Ethics (biomedical ethics) 4. Health promotion in individuals, families and aggregates 5. Health education in individuals, families and groups 6. Informatics 7. Genomics and genetics 8. Leadership and management at the organizational model—clinical, precepted model 	<ol style="list-style-type: none"> I. Liberal Education for Baccalaureate Generalist Practice II. Basic Organization and Systems Leadership for Quality Care and Patient Safety III. Scholarship for Evidence-Based Practice IV. Information Management and Application of Patient Care Technology V. Healthcare Policy, Finance, and Regulatory Environment VI. Interprofessional Communication and Collaboration for Improving Patient Health Outcomes VII. Clinical Prevention and Population Health VIII. Professionalism and Professional Values IX. Baccalaureate Generalist Nursing Practice

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More community colleges confer bachelor's degrees

By Ellie Ashford, Published December 5, 2013

A growing number of community colleges are jumping on the baccalaureate bandwagon, but college leaders say the trend is not a threat to the associate degree or community college concept.

"This isn't about turning two-year colleges into four-year colleges," said Beth Hagan, executive director of the [Community College Baccalaureate Association \(CCBA\)](#), a council affiliated with the [American Association of Community Colleges](#).

"People don't understand that the bachelor's degrees conferred by community colleges are not the degrees being offered by local universities," she said.

In fact, community college-based baccalaureate through the accreditation process to offer a bachelor's degree in hospitality management, it had to make improvements to the library, advising services and other support mechanisms.

"That benefits all the associate programs and made the whole college stronger," said Malcolm Grothe, associate vice chancellor for the [Seattle Community College District](#) and executive dean for hospitality management at [SSCC](#).

Community colleges and 'next generation universities'

degrees in culinary arts had no opportunities for educational advancement. Now, he said, they can pursue a bachelor of applied science (BAS) in hospitality management and seek a supervisory position in food or beverage management at a hotel, restaurant, cruise ship or private club, work for a trade association or start their own catering business.

The program "has raised the college's profile and improved our ability to connect with industry," Grothe said.

[Holland America](#), [Sheraton](#) and [Compass Group](#) are all represented on a college advisory committee and are generous in funding scholarships.

Meeting a need

"It's all about meeting local needs," Hagan said. "The entry-level degree is still the associate degree for community colleges."

"The idea is to make baccalaureate degrees accessible to those who want them. Nursing is a perfect example; community colleges already have the labs and equipment, so why shouldn't they provide the second two years?"

Bachelor's degrees are needed for certain professions, and often there isn't a four-year college nearby that offers an appropriate program, so community colleges are stepping in. That allows students with jobs and families to continue their education while staying in their communities.

In North Dakota, [Bismarck State College \(BSC\)](#) started a BAS degree in energy management in 2008 because of industry demand, said Kari Knudson, vice president for the college's [National Energy Center of Excellence](#) (see video, below). None of the four-year colleges in the region offer that program.

Working with K-12, four-year partners on student success

Tuition is slightly higher, \$232 per credit hour plus fees, compared to \$220 for associate degree programs.



Vinson Doan earned a bachelor's degree in hospitality management at South Seattle Community College in 2010 and now owns Just Crepes in downtown Seattle.

Photo: SSCC

Giving students an opportunity to continue in higher education "debunks the myth that the associate degree is a dead end," he said.

Most public universities in Washington don't accept a two-year technical degree, and that meant people with associate

degrees in culinary arts had no opportunities for educational advancement. Now, he said, they can pursue a bachelor of applied science (BAS) in hospitality management and seek a supervisory position in food or beverage management at a hotel, restaurant, cruise ship or private club, work for a trade association or start their own catering business.

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The BAS degree is aimed people who want to be a supervisor or manager at an energy facility, including power plants, nuclear facilities, process plants or oil and gas facilities, Knudson said. The program covers such topics as energy economics, energy markets, safety, facility management, ethical issues and government regulations.

Tuition is slightly higher, \$232 per credit hour plus fees, compared to \$220 for associate degree programs.

Courses are entirely online and are in eight-week blocks rather than the traditional 16 weeks. Only about 10 percent of the 250 students in the program are in North Dakota; the rest are all over the country. Most are adults already working in the field, although there are some traditional students who've just completed an associate degree.



Partners with four-year colleges

CCBA's mission is a lot broader than just focusing on community colleges that confer baccalaureate degrees. The association helps community colleges work with four-year institutions to help graduates complete bachelor's degrees through such efforts as improved articulation and online learning.

Calif. district leaders endorse plan to offer certain baccalaureates

Colleges that are members of CCBA's [Distance Learning Alliance](#) work with one of the association's five online university partners—[Walden University](#), [University of Maryland University College](#), [Western Governors University](#), [Excelsior College](#) and [National American University](#)—to facilitate pathways leading to bachelor's degrees.

CCBA also supports 2+2 programs, a form of articulation in which all the courses a student takes at a community college are matched with a university's requirements. That allows students to earn a bachelor's degree in two years, with all of the community college courses they take counting toward the degree.

About half of the nation's community colleges have some sort of "university center," a dedicated place on campus where students can work on a baccalaureate degree, Hagan said.

Florida leads the pack

According to Hagan, 52 community colleges confer baccalaureate degrees, mostly in applied technology or science. Twenty states allow community colleges to confer baccalaureates but not all of the colleges in those states do so.

Florida is the most active state in this trend. Twenty-four of its 28 associate degree-granting institutions are authorized to confer bachelor's degrees since the state allowed community colleges to do so in 2001. [St. Petersburg College \(SPC\)](#) offers the most, with 25.

Together, Florida's two-year institutions have more than 168 baccalaureate programs, most of them in management and supervision, education, nursing and allied health fields. A wide variety of other degrees are also offered, including, for example, criminal justice at [Indian River State College](#), industrial biotechnology at [Santa Fe College](#) and orthotics and prosthetics at SPC.

Enrollment in these programs has been growing, with more than 10,000 students currently enrolled, said Carrie Henderson, spokesperson for the [Florida College System](#). Still, that's only 5 percent of community college enrollment statewide, she said.

Partnership taps reverse transfers to boost college completion

To add a baccalaureate program in Florida, colleges require approval from their board of trustees and from the state board of education. Two-year colleges set their own admission requirements and are encouraged to work with state universities and private colleges to ensure they are not duplicating existing programs.

Four-year institutions in Florida can object to a community college's request to add a baccalaureate program, and that has happened four times during the past two years, Henderson said. In all of those cases, the state board overruled the objection and approved the college's request.

An impetus to earn a degree

In Washington, community colleges have about 30 or 40 baccalaureate programs, with new ones added every year. In 2007, the state legislature agreed to let four community colleges start baccalaureate programs, including a bachelor of science in nursing at [Olympic College](#), a BAS in applied management at [Peninsula College](#) and a BAS in radiology and imaging sciences at [Bellevue College](#), as well as the hospitality BAS at SCCC. A few years later, the state allowed all community colleges to confer bachelor degrees.

The first four programs had completion and graduation rates of 80 to 90 percent, Grothe said. And although there is no confirming data yet, he believes baccalaureate programs are contributing to higher graduation rates for students in two-year programs as they realize they'll need an associate degree to continue to the next level.

The dual mission of community colleges

SSCC added baccalaureate programs in behavioral science, building sustainability management, dental hygiene and several health fields. This fall, the college launched a baccalaureate program in professional technical teacher education and plans to add more. Still, only about 100

SSCC students are in baccalaureate programs, compared to a total enrollment of nearly 6,400.

Grothe noted that some fields, such as dental hygiene, already require more than the 90 credits it generally takes for an associate degree, so it doesn't take much more to earn a BAS.

Slow and steady

At [South Texas College](#) (STC), about 400 to 500 students are enrolled in bachelor degree programs. STC has conferred 586 baccalaureates since starting its first one—in technology management—in 2005, said Ali Esmaeili, dean of math, science and bachelor programs.

STC is authorized to offer up to five baccalaureate degrees, which cannot duplicate existing programs in nearby universities.

A BAS in computer information technology was added in 2008, followed by medical and health sciences management in 2011. In January, a competency-based BAS in applied science in organizational leadership will be launched. After that, STC is considering a bachelor's degree in public safety and homeland security.

Study debunks community college 'penalty'

The courses in each program are a mix of traditional, online and hybrid formats. Most courses are in the evening or Saturdays to make them more convenient for working adults.

Before launching any applied program, STC surveys local employers, seeks input from advisory committees, and convenes experts from the field for a brainstorming session to identify required skills and knowledge. Faculty use that information to develop the curriculum.

Allowing a community college to confer bachelor's degrees "makes it more comprehensive and better able to respond to the needs of business and industry in the region," Esmaeili said.



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Report (183 pages) can be found on the web at:

<http://extranet.cccco.edu/Portals/1/AA/Miscellaneous/BaccalaureateDegreeStudyGroup/BemmelCostEffectiveness2008.pdf>

A COST-EFFECTIVENESS ANALYSIS OF TWO COMMUNITY COLLEGE

BACCALAUREATE PROGRAMS IN FLORIDA:

AN EXPLORATORY STUDY

by

Edwin P. Bemmel

A Dissertation Submitted to the Faculty of

The College of Education

in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Florida Atlantic University

Boca Raton, Florida

December 2008

Literature Review Summary

CTE Transfer
Research Project



theRPgroup

center for student success

The Research and Planning Group for California Community Colleges (RP Group) strengthens the ability of California community colleges to undertake high quality research, planning, and assessments that improve evidence-based decision making, institutional effectiveness, and success for all students. It does so through three primary strategies. First, RP's Center for Student Success (CSS) conducts research and evaluation projects that utilize the skills and unique perspectives of California community college institutional researchers, faculty, and administrators. Second, the RP Group builds the skills of administrators, faculty, and staff through a broad range of professional development offerings and by disseminating effective practices. Finally, the RP Group develops strategic partnerships and provides leadership on statewide initiatives to help keep evidenced-based decision making, accountability, and student success at the forefront of California community college efforts.

Since 2000, CSS has led dozens of system-level research and evaluation projects that have resulted in significant changes to the California community college system, including the laying of the groundwork for the statewide accountability system (ARCC), the modification of admission requirements for the registered nursing programs, and the publication *Basic Skills as the Foundation for Success in the California Community Colleges*, which was instrumental in the development of the Basic Skills Initiative and provided the framework for evaluating college-level basic skills programs throughout the state. The success of CSS projects is rooted in their design. Each project is led by a unique team of community college staff, faculty, and administrators who have proven research skills and a direct understanding of the subject at hand. Projects culminate in audience-specific products that stimulate discussion, improve outcomes, and strengthen student success. You can find out more about CSS research and the RP Group at www.rpgroup.org

Introduction

The Research and Planning Group's Center for Student Success is currently engaged in the Career and Technical Education (CTE) Transfer Research Project. This study aims to assess the state of transfer between community colleges and four-year institutions for CTE students (2/4 CTE transfer) and document factors that inhibit and support such transfer. Funding from the California Community College's Chancellor's Office launched Phase I of this investigation, conducted between Fall 2007 and Summer 2009. The research continues into a second stage with additional support from the James Irvine Foundation; Phase II of the project will conclude in Fall 2010.

This document summarizes an extensive review of literature related to CTE transfer performed during Phase I. The research team carried out this literature review between Fall 2007 and Spring 2008 to provide context for its subsequent exploration. Specifically, the goal was to identify current research on and policies and practices impacting occupational transfer; inform the study's research questions and design; and distinguish gaps in existing research that could potentially be addressed by the CTE Transfer Research Project. This summary highlights information found in the literature that particularly relates to preliminary results from the study's first phase and in a few cases, supplements the initial literature review with publications and findings produced after Spring 2008.

Reader's Guide

Based on the available literature, this document addresses the following: 1) the definition of CTE transfer; 2) the context for studying CTE transfer; 3) models that facilitate and support CTE transfer; and 4) factors that influence this transition. Where possible, information is highlighted on the status of these issues in California policy and practice. Each section concludes with the identification of specific research questions that arise from the literature to guide the CTE Transfer Research Project's quantitative and qualitative investigation, including those that the team addressed during Phase I or will respond to during Phase II.

The information presented in this literature review summary reflects one major discovery: only limited research has been conducted on transfer between community college and four-year institutions in occupational disciplines. This finding underscores that CTE transfer is an emerging area of educational practice, policy and research.

What is CTE Transfer?

Practitioners, policymakers and researchers alike have historically tied career technical education, often referred to as vocational or occupational programming, to the terminal function of the community college system. Separating students in CTE disciplines from those in transfer programs, vocational candidates were generally expected to complete their education and enter the workforce; in turn, they were not considered transfer bound (Townsend, 2001). However, in recent decades, researchers have begun to examine if, how and why CTE students make this transition to baccalaureate programming and what states and institutions do to encourage or impede it. In the early 1980s, Kintzer (1983) defined a “vocational transfer student” as one who moves to a senior institution as a career/occupational candidate rather than to pursue a liberal arts degree. He also predicted increased attention would be paid to vocational transfers as “more four-year colleges developed career-oriented undergraduate programs and worked with community colleges to develop joint degree programs” (Townsend, 2001).

This study acknowledges that today, CTE programs are designed to achieve a wide range of outcomes and transfer is only one such outcome. Yet, recent workforce studies (referred to in the following section) agree that there is a pressing need and opportunity for both the community college and four-year systems in the state to increase transfer for students in a large number of CTE disciplines. Given this trend, community colleges and other education stakeholders face a new era in career technical education where defining what occupational transfer does and should mean for their students will become all the more critical.

For the purposes of this study, CTE programs are those that include 12 or more units of transferable coursework that is either (1) marked as vocational in the California’s *Taxonomy of Programs*¹ (TOP) guide (a system of numerical codes for collecting and reporting information on community college programming) or (2) relates to a high-growth, high-demand occupation in the state. Notably, the California Community Colleges’ TOP code system demarcates “vocational” and “transfer” programs; those with a vocational designation can be counted for the purposes of government vocational education funding and accountability mandates. However, separating “vocational” from “transfer” programs may present limitations for students and institutions and reinforce traditional ways of thinking about CTE. The distinction can be particularly problematic when considering those disciplines that relate to preparation for specific occupations and simultaneously place students on a path toward baccalaureate completion (e.g., engineering).

The following section further explores the changing context for CTE and how the historical view of vocational education as ending with community college certificates and degrees is evolving in some educational circles.

1 For more information on the state’s Taxonomy of Programs, visit: <http://www.cccco.edu/ChancellorsOffice/Divisions/AcademicAffairs/CreditProgramandCourseApproval/ReferenceMaterials/tabid/412/Default.aspx>

Why is CTE Transfer Important?

Changing workforce demands

At a time when gains in education are becoming sluggish, several national studies project an increased need for a workforce with higher levels of education (Kirsch, Braun, Yamamoto & Sum, 2007; Aspen Institute, 2003). In the literature researchers debate what is driving this demand—the market value for higher-level credentials to access particular occupations or actual changes in the education and skills requirements of jobs (Kirsch, 2007). Moreover, researchers ascribe to different theories about what kind of post-secondary preparation is most urgently required to fuel our nation's economy. In particular, several studies examine the need for baccalaureate-trained workers versus those with sub-baccalaureate degrees and certificates across and within sectors (Aspen Institute, 2003; Carnevale, 2008; Holzer & Lerman, 2007; Levy, 2007; Executive Office of the President-Council of Economic Advisers, 2009).

Reports produced by multiple initiatives and organizations in California emphasize the urgent need to close the gap between the growing number of positions that demand baccalaureate-level preparation and the number of individuals available to fill them (Fountain and Cosgrove, 2006; Johnson & Reed, 2007; Reed, 2008; Johnson, 2009). Most recently, the Public Policy Institute of California (PPIC) released a series of reports projecting a significant shortage by 2025 in the supply of college-educated workers versus the demand for those workers by employers. These reports suggest that while the number of baccalaureate-prepared workers increased between 1980 and 2006, this supply did not keep pace with employer need for four-year college graduates. The trend can be attributed largely to the fact that those currently retiring have high levels of four-year degree attainment while those entering the workforce have dramatically lower baccalaureate preparation. Based on these developments, PPIC predicts that by 2025, the percent of jobs for which a bachelor's degree is required or preferred will increase to 41% of all employment in California (Reed, 2008). At the same time, the study predicts that only 33% of the population will possess a baccalaureate degree. PPIC and other researchers conclude that the resulting gap will present a significant economic challenge to the state that urgently requires a coordinated response from educators, policy makers, funders and employers.

Research Questions:

- Which sectors and disciplines will show the greatest need for workers with post-secondary education in California— in terms of number of job openings and the rate of growth?
- In which occupations and disciplines should California community colleges and four-year institutions prioritize transfer efforts?
- How well do community colleges and four-year institutions collaborate to transfer students in these disciplines?

Changing student demographics

Community colleges increasingly serve as the point of entry for individuals to higher education and this movement is particularly alive in California. Nationwide, just over one-half of all first-time freshmen attend community colleges; by comparison, in California, two-thirds of all first-time freshmen are community college enrollees (NCES, 1993; Wassmer, Moore & Shulock, 2003). Further, recent estimates for California's public undergraduate population show that figure rising to nearly three-quarters (Shulock & Moore, 2007).

Using national data from the American Association for Community Colleges, the Lumina Foundation (2006) reported that these students are often older, working adults. The average age of a community college student is 29 years old with 32% of students over the age of 30. Most (85%) are employed with more than half holding down full-time employment. According to this information, 30% of those who work full time also take a full academic load (12 or more credit hours). This rate rises to 41 for students 30-39 years of age. According to *Measuring Up 2006*, a national report on higher education, California ranked second highest in the rate of participation of working-age adult enrollment in post-secondary education, just below New Mexico (National Center for Public Policy and Higher Education). Moreover, as noted by Ignash and Kotun (2005), research indicates that these adult students will also enroll in multiple institutions and transfer more than once.

National research also shows that a significant portion of these community college students enroll in vocational education (Cohen & Brower, 1996; Townsend, 2001; Hudson & Shafer, 2004). For example, a 2004 report produced by the National Center for Education Statistics (NCES) found that a majority of baccalaureate and sub-baccalaureate students enrolled in career-oriented majors in 1999-2000, as opposed to academic majors. According to this study, "sub-baccalaureate students were more likely than baccalaureate students to enroll in career majors, with about 7 out of 10 sub-baccalaureate students having vocational career majors" (Hudson & Shafer, 2004).

The literature challenges the widely held belief that college students in career and technical education programs do not wish to transfer (Townsend, 2001). Significantly, one longitudinal report (Berkner, Horn & Clune, 2000) found that about one-third of vocational students enroll with the intent to transfer to four-year institutions, representing a 23% increase in CTE student interest in transfer based on data collected a decade earlier. However, limited research exists examining the actual transfer rates of students from two-year occupational to four-year baccalaureate programs.²

One NCES (Bradburn, Hurst & Peng, 2001) report indicates that between 20% and 40% of vocational students successfully make the transition to baccalaureate institutions. As noted by Townsend (2001), tracking student transfer in occupational disciplines can be challenging as students often take a "non-linear" path, leaving the community college and returning to higher-education after several years based on the demands of the workplace or an evolution in the skills and knowledge necessary for success in rapidly-changing occupations. At present, student transfer rates from California community college vocational programs are not specifically tracked through the system's performance framework detailed annually through the *Accountability Reporting for Community Colleges* (ARCC) initiative. State-defined

2 Community college transfer rates are reportedly low according to the literature and they can range considerably given the varying ways of calculating this data used by different researchers. Of note, some estimates may exclude vocational students from the equation given the kinds of courses or programs in which they enroll, thus potentially lowering the transfer rate further (Townsend, 2001).

and generated Perkins accountability data currently lumps CTE student transfer rates together with degree and certificate completion. Accordingly, colleges are unable to identify specific information and trend data on their CTE students' pursuit of baccalaureate degrees.

Research Questions:

- What are California community college CTE enrollments? What are these students' demographics?
- What impact do the demographic characteristics of CTE students have on transfer?
- How should CTE transfer be defined?
- What are the transfer rates for California community college CTE students?
- What do CTE students' transfer patterns look like?

Changing approach to career preparation

Reflective of changes in students' educational interests and goals and in the economic and workforce demands facing our nation, the literature reveals that a growing number of educators are thinking differently about the relationship between community college career preparation and transfer. As noted above, transfer preparation and vocational education have been historically viewed as separate functions within community colleges, with some researchers pointing to career preparation as a potential obstacle to student outcomes like transfer and degree attainment (Brint & Karabel, 1989, Dougherty, 2001). Yet, many community colleges are rethinking these silos, considering ways to expand CTE beyond the terminal certificates and degrees commonly characterizing this part of the system's mission and including transfer as an option for students enrolled in career-focused programs.

As noted by the Association for Career and Technical Education, CTE has advanced from a "limited number of vocational programs available at the turn of the 20th century into a broad system that encompasses a variety of challenging fields in diverse subject areas... constantly evolving [with] the changing global economy."³ Terming this shift "new vocationalism," Bragg (2001) outlines several principles that characterize this revised way of thinking, a few of which are highlighted given their specific relevance to CTE 2/4 transfer:

- An emphasis on career clusters or pathways⁴ that extend from entry to the professional level in career fields integral to the current and future marketplace such as business, health care and technology—connecting community college preparation explicitly to workforce and economic needs
- Integrated academic and vocational curricula and instruction that prepares individuals to solve real-world problems

3 <http://www.acteonline.org/ctereseach.aspx>

4 The Center for Occupational Research and Development, with the U.S. Department of Education's endorsement, defines a "career pathway" as "a coherent sequence of rigorous academic and technical courses that prepare students for successful completion of state academic standards and support transition to more advanced post secondary coursework related in a career area of interest" (Hull, 2004).

- A focus on ensuring vocational education is highly integrated into the K-16 system and broader economic and social structures—emphasizing career ladders that offer opportunities for educational and career advancement

Recognizing this changing dynamic in community college career preparation, the federal government permitted for the first time in the 2006 Carl D. Perkins Career and Technical Education Act (CTEA) reauthorization the allocation of funds to facilitate the transition of sub-baccalaureate degree students to baccalaureate-level programming. The Perkins legislation previously precluded this kind of investment on the part of states and colleges.

Research Questions:

- What is the prevailing thinking about CTE among California community college faculty, counselors and other practitioners?
- Do these practitioners consider transfer an option for students in occupational disciplines or does current practice reflect the traditional approach of primarily encouraging completion of terminal degrees and certificates?
- How does the thinking about CTE transfer vary by college and/or by discipline?
- How have CTE reform initiatives (see following page) played into ground-level efforts to encourage 2/4 CTE transfer?

How is California rethinking CTE?

California has made several efforts to improve career preparation and align its education systems with the state's workforce and economic needs. For example, the *California Community Colleges System Strategic Plan 2006* outlines partnerships for economic and workforce development as one of five primary goals, including development of career pathways, support for regional collaboration and alignment with long-term economic and workforce trends. One realization of this goal includes the Economic and Workforce Development (EWD) program of the California community colleges. Regional EWD centers hosted in colleges across the state provide education and training services to employers in emerging and/or growth industries such as health, advanced manufacturing and transportation. In some cases, these initiatives broker relationships between colleges and four-year institutions that promote transfer in disciplines related to high-demand occupations.

Additionally, the 2005-06 *Governor's Initiative on Improving and Strengthening Career Technical Education* passed through Senate Bill 70 (SB70), funds CTE opportunities for middle and high school students and seeks to strengthen linkages between secondary schools and community colleges. Four-year partners were encouraged to take part in this initiative, which despite the current economic downturn, is expected to receive modified funding through 2013-14. California's *2008-2012 California State Plan for Career Technical Education (2007)*, developed as part of the CTEA 2006 reauthorization, also highlights investment in career technical education as the lynchpin in

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California's workforce development plan and similarly emphasizes career pathways. Although the bulk of this plan focuses on K-12 and community college infrastructure and alignment, it also outlines a system that will move vocational education in the direction of greater two- to four-year program articulation.

At the same time, the California Postsecondary Education Commission (CPEC) asserts that the state "has no single workforce and economic development plan that aligns workforce systems with all levels of education and economic development entities" (CPEC, 2007). The Commission notes that current federal funding requirements mandated through CTEA and the Workforce Investment Act (WIA) do not yet serve that function. CPEC views California's vast array of CTE funding streams as adding to the complexity. The Postsecondary Commission notes that the lack of a robust career development component throughout the system leaves students with no clear understanding of the resources and programs available to successfully continue and complete a course of study and how best to plan and implement career goals including transfer (CPEC, 2007).

What approaches and strategies exist to support and facilitate CTE Transfer?

Articulation agreements between community colleges and four-year institutions in CTE disciplines serve as the primary traditional method for supporting transfer between postsecondary segments. Yet, the literature refers to several emerging approaches and strategies that also lay the foundation for transfer in CTE disciplines and/or that aid students in pursuing baccalaureate-level preparation in a particular occupation. These examples include innovative associate and bachelor's degrees such as the Associate of Applied Science and community college baccalaureate; university partnerships; and special articulation agreements designed to transfer a block of credits in a particular discipline or major.

Innovative Degrees

A growing body of research shows a range of models to bolster CTE transfer pathways and connect occupational associate degrees to baccalaureate options, recognizing that "the educational needs of the workforce have resulted in increasing amounts of course content that have begun to exceed the limits of what can be called two year degrees" (Puyear, 1998). These models include specialized associate and bachelor's degrees; take varying but often overlapping forms; emphasize different kinds of content; are conferred by both two- and

four-year institutions; and can be initiated at the institutional level or legislated by the state. Research uncovers a range of factors contributing to institutions and states adopting these models. While motivations and approaches differ by model and across states, common themes include efforts to:

- address specific institutional or curricular needs (Townsend, Bragg, & Rudd, 2009)
- reduce duplication of coursework and increase course-taking efficiencies (Ignash & Kotun, 2005)
- respond to particular workforce demands (Townsend, Bragg, & Rudd, 2009)
- enhance transfer as a means to grow baccalaureate attainment in the state (Townsend, Bragg, & Rudd, 2009)
- improve financial, geographic and programmatic access for students to bachelor's level preparation; and (Floyd & Walker, 2009; Jacobs, J., Grothe, M. & Borofsky, D., 2007)
- address the various issues of adult learners in their efforts to advance to bachelor's level training and progress to supervisory or management-level positions (Townsend, Bragg & Rudd, 2009)

Critiques of these models include concerns about “watering down” and decreasing the quality of baccalaureate degrees, departing from the community college mission for those two-year institutions offering four-year degrees and increasing the cost of an already expensive higher education system (Bragg, Townsend & Rudd, 2009; Floyd & Walker, 2009). While the following literature reveals multiple models to enhance CTE transfer and baccalaureate attainment, minimal research exists exploring their efficacy, largely due to their emergent nature.

Community colleges across the nation are offering applied associate degree programs in specific technical/occupational areas such as Accounting and Welding. Applied associate degrees have been those traditionally designed for students who plan to enter the workforce after completion of program requirements, focusing content on a specific occupation. However, some colleges have begun to develop articulation agreements with four-year colleges that allow students in these applied degree programs to transfer. For example, states like Oregon and Washington offer the Associate of Applied Science – Transfer (AAS-T)—a professional-technical degree with a core of general education courses commonly accepted when students transition from community colleges to four-year institutions.⁵ These degrees focus on particular occupations such as early childhood education or computer programming and are often negotiated for transfer between individual community colleges and four-year institutions. According to Bragg, Townsend and Rudd (2008), applied associate degrees provide a “potentially important curriculum path to the baccalaureate for a sizeable number of postsecondary students.”

Research by Ignash and Kotun (2005) found a significant number of states engaged in efforts to improve CTE transfer including the development of degrees that grouped into three categories: 1) career ladder; 2) inverse (or upside down); and 3) management ladder degrees. In their study, 31 of 40 responding states indicated they were or had developed “career ladder” degrees through policies or agreements that transfer an occupational to a bachelor's degree in a specific field such as nursing or computer programming (e.g.

5 <http://www.spscc.ctc.edu/academics/degrees.html>

Associate's Degree in Nursing to Bachelor's of Science in Nursing). States included Florida, Texas, Illinois, New York and Washington.

Ten states reported developing "inverse" or "upside down degrees," in which general education coursework is typically taken in the junior and senior years and the technical and vocational work is mastered at the community college. States included Indiana, Kentucky, North Carolina and Washington. Eight states specified developing "capstone" or "management ladder" degrees which "cap off" the two-year technical degree with broad-based courses in the field. Some additional technical coursework may be allowed during the last two years of study. These states included Arizona, Michigan, New York, Utah and Wisconsin.

Townsend, Bragg and Ruud (2009) performed a 50-state inventory of "applied baccalaureate degrees," which they define as follows:

a bachelor's degree designed to incorporate applied associate courses and degrees once considered 'terminal' or non-baccalaureate level while providing students with the higher-order thinking skills and technical knowledge and skills so desired in today's job market.

According to their research, institutions assign these programs a range of titles such as Bachelors of Applied Science, Bachelors of Applied Arts and Sciences, Bachelors of Technology or the more traditional Bachelors of Science and Bachelors of General Studies. Of the states contacted, 39 (78%) indicated they offer applied baccalaureate degrees in a public higher education institution. States with more than seven institutions offering these degrees include Kentucky, Florida, Georgia, Illinois, Texas and Washington.

As discussed by Townsend, Bragg and Rudd (2009) and explored extensively by Floyd and Walker (2009), Floyd (2006), Floyd, Skolnik and Walker (2005), community colleges in states across the nation have begun conferring applied baccalaureate degrees in addition to four-year institutions. Termed "community college baccalaureate degrees" (CCB), Floyd and Walker (2009) define this option specifically as "the degree granted by postsecondary institutions approved for associate degree awards with the addition of limited baccalaureate degree approval in specialized fields." Their research identified 16 states authorizing community college baccalaureates, although only 11 states legislate that institutions providing this degree maintain their emphasis on the community college mission. These states include Florida, Nevada, New York, Texas, Utah and Washington.

How has Florida implemented career ladder & capstone degrees?

According to research conducted by the Columbia University Teachers College Community College Research Center (Hughes & Karp, 2006), Florida's state colleges offer nine "career ladder" arrangements through AS to BS articulation. Those who complete an AS in one of these nine programs are guaranteed admission to a university BS program in the same field. Florida legislation also enables universities to create "capstone" programs that enable AS degree recipients to achieve their BS degree. As juniors and seniors, these students top off major and technical requirements completed through their community college program with general education coursework at the university level.

University Centers

Another model with a slightly longer history, several community colleges have formed collaborative relationships with four-year institutions, broadly termed “university center[s],” to provide students greater local access to the baccalaureate degree (Lorenzo, 2005). Most of these arrangements have developed through collaboration with local and regional

partners to meet pressing workforce needs (Windham, Perkins & Rogers, 2001). Lorenzo (2005) notes that the university center does not award the baccalaureate, rather the partnering institution confers the degree. According to Lorenzo (2005), these university center arrangements group into six different formats. Collaborations range from minimal commitments such as co-location of university programs and services at the community college to intensive arrangements such as the sponsorship model where the community college leads center development, operations, program selection and engagement of public and private partners. Florida, Illinois, Michigan, Ohio, Texas are homes to some of the most intensive models.

How has Washington enacted Community College Baccalaureate (CCB) degrees?

Washington’s legislature passed a bill (E2SHB 1794) in 2005 to improve baccalaureate attainment in the state, including provision of applied baccalaureate degrees by community colleges. Washington State Board of Community and Technical Colleges (SBCTC) received funding to initiate pilots at four community colleges serving 100 students total beginning in Fall 2007; the Board approved two additional pilots to admit students in Fall 2009.

According to SBCTC, degrees must specifically target those students with an associate of applied science to maximize use of technical course credits in baccalaureate degree attainment and include a curriculum that integrates theoretical and applied knowledge and skills in a particular occupational area. Colleges receive reimbursement at the same rate as universities for students engaged in applied baccalaureate programs.

For more information, visit http://www.sbctc.ctc.edu/college/_e-transferbachelorspilots.aspx

Special Block Articulation Agreements

Finally, Ignash and Kotun (2005) identified several states that have developed articulation agreements or policies between community college and four-year partners to facilitate the transfer of “smaller ‘chunks’ of courses within occupational/technical programs.” Of 40 responding states, 19 indicated arrangements that allowed for the transfer of blocks of courses within a CTE major. An analysis of state responses indicated that the most commonly articulated fields included nursing, computer science and engineering with a handful reporting criminal justice, business, allied health and early childhood education. California indicated engineering and business were most easily articulated.

Research Questions:

- What can California learn from other states that have developed other models for supporting CTE transfer?
- What are the limitations of these models in the California context?
- How effective are the alternative models already embraced by CA?
- Do the colleges and universities implementing them show improved transfer rates and baccalaureate attainment for their students?
- How aware of these options are California community college policy makers, practitioners and students?

How has California engaged with models to support & facilitate transfer?

While California does not generally appear in the abovementioned research, ground-level investigation reveals that the state is in fact home to some strategies to facilitate transfer in occupational disciplines.

University Centers: A handful of community colleges across the state have generated partnerships with a range of universities based on local needs and resources. For example, Cañada College's university center offers the baccalaureate in nursing, a degree in child and adolescent development and some business courses through San Francisco State University. A collaboration with CSU-East Bay leads to a bachelor's in health science. College of the Canyons maintains arrangements with three private universities (Chapman University, La Verne University, and National University) and three public institutions (CSU-Bakersfield, CSU-Northridge, and UC-Los Angeles). Bachelor's degree options are available in a range of disciplines such as business administration, child development and criminal justice.

In 2006, the California legislature allocated \$100,000 for the Baccalaureate Partnership Program (BPP) which competitively awarded two \$50,000 grants through the State Chancellor's Office. The purposes of this funding included increasing access to bachelor's degrees in areas with low baccalaureate attainment and meeting documented labor market demand. College of the Sequoias developed a partnership with CSU-Fresno resulting in the provision of baccalaureate degrees in early childhood development with additional options such as social work, nursing, business and criminology in development. Porterville College collaborated with CSU-Bakersfield to confer a bachelor's degree in Child Adolescent and Family studies. BPP has not received continued funding since the initial allocation, although efforts continue at both colleges.

Bachelors of Applied Studies: Designed for "community college students who have earned associate degrees in technical fields for which there

is no apparent bachelor's degree program into which they may readily transfer,"⁶¹ CSU-Dominguez Hills and CSU-Stanislaus both offer this degree, each establishing their programs in the late 1990s. Students must earn an associate degree prior to program entry and the interdisciplinary curriculum focuses on preparing them with management and supervisory skills. Both universities offer the degree through their College of Business.

Bachelors of Vocational Education:

CSU-San Diego, CSU-San Bernardino and CSU-Sacramento offer this option, in existence since 1943 with the passage of the Swan Bill. This baccalaureate program is intended for vocational professionals with more than seven years experience who wish to teach in their area of expertise. While students submit an application to the State Board of Examiners for Career Technical Teachers, individual institutions determine how many units to award for work experience. Students then take teacher education classes at the university.

Special Articulation & Transfer

Agreements: Some individual community colleges locally negotiate CTE program-level articulation agreements with CSUs and UCs, although these do not appear on ASSIST, an online information system for those interested in transferring between California's public community colleges and universities. Other initiatives like the Intersegmental Major Preparation Articulate Curriculum (IMPAC) and Lower-Division Transfer Pattern (LDTP) have also promoted agreements designed to facilitate community college students' transfer into particular occupational disciplines. For example, through IMPAC, community college and baccalaureate Nursing faculty collaborated with Chemistry instructors to consolidate three Chemistry courses required for transfer to the CSU BSN programs into one, five-unit course, making lower-division major requirements identical for entry into all CSU BSN programs.

6 <http://www.csudh.edu/apscoast/>

What factors impact CTE transfer?

The research also indicates a range of factors can impact CTE transfer, including those any community college student might encounter as well as those specific to students attempting transfer in occupational disciplines.

Factors Impacting Transfer in General

The literature identifies several elements that influence general student transitions from community colleges to four year institutions which can be informative to the CTE transfer discussion. These elements include state-level policies, institutional practices and particular student attributes.

Wellman (2002) notes several state-level variables that can impact transfer including: governance that takes into account multiple factors influencing transfer; enrollment planning that anticipates student demand; academic policies that promote transfer; and data collection and accountability that tracks success and provides transparency to the legislature. She argues that “states need to understand the correlates of success within their own state, to build upon them, and to identify the missing ingredients for students and institutions that do not have a history of success,” (Wellman, 2002).

At the local level, research shows that institutional commitment can significantly influence transfer rates (Cohen & Brawer, 1996). This collective dedication of administration, faculty, counselors and support staff to moving students from community college to four-year institutions is referred to as the “transfer culture,” (Wassmer, Moore & Shulock, 2003). Simply put, the stronger the culture, the higher the rates of transfer. Factors contributing to a transfer culture include: counselor advisement (Wassmer, Moore & Shulock, 2003); faculty involvement (Cuseo, 1998); student interaction and engagement (Dougherty, 2001; Moore & Shulock, 2007); and transfer center support (Zamani, 2001).

Moreover, individual student attributes or characteristics also impact transfer to four-year institutions. Transfer students tend to come from historically underrepresented groups, be non-traditional students, and use the community college as the primary portal for post-secondary education (Dougherty and Kienzl, 2006). In turn, research shows that several variables play a role in the success or failure of students’ transfer process including: extent of academic preparation (Best & Ghering, 1993; Roska, 2006); the availability of financial resources, access to support for navigating the educational system and socio-economic status (Dougherty & Kienzl, 2006; Roska, 2006; Moore & Shulock, 2007); enrollment status (Roska, 2006); age, gender and ethnicity (Dougherty & Kienzl, 2006; Moore & Shulock, 2007); and individual motivation (Roska, 2006).

Research Questions:

- What state-level transfer policies and practices in California may be inhibiting or facilitating CTE transfer specifically?
- Observing other states, what combination of or revision in policies should California consider to promote CTE transfer?
- At the institutional level, what are CTE programs and/or colleges doing to develop a culture of transfer with occupational students?
- In terms of student characteristics, how do attributes of CTE students differ from traditional transfer path students and how do these factors impact their transfer motivations, experience and success?

Factors Specifically Impacting CTE Transfer

Limited research discusses factors that uniquely effect student transfer in CTE disciplines. The research highlights fundamental issues of alignment between two- and four-year systems that can compromise smooth transitions and clear career pathways. Most of the literature discusses specific challenges CTE students encounter when attempting to transfer credits. An additional factor impacting occupational transfer identified by the literature includes the goals and expectations community colleges have for their CTE students.

Systems Alignment

The literature notes that fundamental issues of coordination between two- and four-year systems contribute to the disjointed nature of career pathways for CTE students, including transfer. This lack of alignment and cohesion can lead to a range of challenges encountered by vocational students when transferring credits earned at their community college to their receiving institution (see below). As observed by Hughes and Karp (2006), many states bifurcate higher education into community college and four-year university systems which are organized as separate entities with distinct governance and leadership. These divisions can minimize communication and maximize confusion between systems, with community colleges unclear about university-level expectations and four-year institutions unaware of what CTE students learned prior to their transfer (Hughes & Karp, 2006). This issue is underscored by a 2003 Lumina Foundation for Education survey designed to identify barriers to the universal acceptance of the associate degree as equivalent to the first two years of study at a senior institution underscores this issue (Lumina Foundation for Education, 2003). Respondents from both community colleges and four-year institutions identified a range of obstacles particular to vocational transfer based in poor communication, lack of understanding about one another's expectations and requirements and insufficient alignment between systems.

Research on general issues of transfer in California echoes these findings. With three systems of higher education established under the *California Master Plan for Higher Education* (1960)⁷, state policy makers intended the transfer function to be a primary point of access to baccalaureate-level preparation. However, several studies note that despite the intentions for transfer outlined in the original plan, results have fallen short of the original goal. As discussed by Reeves Bracco and Callan (2002), the level of collaboration needed to support student transitions is inhibited by a governance structure that is separated into three distinct “silos” or tracks, limiting the opportunity to develop a more fluid transfer process.

Research Questions:

- How do issues of alignment specifically impact CTE transfer between California's three higher education systems?
- What advantage do private universities have over the state's four-year systems in attracting CTE transfer students due to their operation outside of the limitations of these public systems?

⁷ <http://www.ucop.edu/acadinit/mastplan/mpsummary.htm>

Transferability of Credits

Several issues specifically related to the impact of course transferability on occupational transfer arise in the literature including those related to the transferability of CTE coursework, general education courses and applied academic offerings as well as the availability and efficacy of statewide articulation agreements.

CTE Courses. The research reveals variable data on the transferability of occupational versus traditional liberal arts and sciences courses, indicating that the willingness of four-year institutions to accept CTE credit earned at the community college level may impact student success in this transition. The Center for the Study of Community Colleges (CSCC) conducted a study in 1991 on “the extent to which courses classified as occupational are accepted for transfer at four year institutions,” involving 164 two-year colleges in California, Florida, Illinois, North Carolina, and Texas. Researchers found that 41.6% of all vocational courses in Texas, 61.7% in California, and 80.4% in Illinois did transfer to a comprehensive state university from a two-year college (Cohen & Ignash, 1993). Nationally, Schuyler (1999) found that generally over 70% of liberal arts and science courses transfer to four-year colleges while slightly under a third of vocational courses do, although results naturally varied by state.

Following up on the abovementioned Cohen and Ignash (1993) investigation, Striplin (1999) examined the transferability of non-liberal arts courses in 26 California community colleges with the CSU and UC systems. Reflective of their different missions, Striplin discovered that 26.7% of the non-liberal arts courses transferred to the UC system while 72.6% transferred to CSUs. Additionally, the investigation found that in all individual subject areas, more non-liberal arts and sciences courses transferred to the CSU than to UC. Striplin expressly attributed the findings to the greater selectivity of the UC system and its continued emphasis on traditional liberal arts and sciences baccalaureate degrees, while CSU campuses offer more career-based degrees.

According to Ignash and Kotun (2005), an additional challenge to CTE course transferability is the number of credits a student must take in their occupational discipline at the lower level compared to the number their receiving institution will accept. Of 40 responding states in their 2005 study, nine indicated establishing minimum credit hour requirements for an associate degree’s occupational coursework.

General Education Courses. Research suggests that students do not necessarily observe strict distinctions between liberal arts and career pathways and expect that the general education credits they earn as part of their occupational programs will transfer if they continue towards a bachelor’s degree (Townsend, 2001). However, they may encounter otherwise in the transfer process. According to Ignash and Kotun (2005),

general education coursework in occupational programs is different in content and purpose than general education in transfer-oriented programs, and often doesn’t transfer from 2- to 4-year institutions. Because it is different, however, does not mean that it is necessarily less rigorous (Ignash & Kotun, 2005).

These researchers found that among the 40 states reporting on the transferability of general education courses in occupational/technical degrees, just over half (23) reported specifying a general education core for CTE programs. Twenty states indicated setting credit hour guidelines, with California indicating a required minimum of 18 general education credit hours (often increased by districts) for degrees. The vast majority of the states in the survey reported policies that “required” or “encouraged” *transferable* general educational course

requirements in occupational degrees, depending on the major course of study. According to the study, California encourages but does not mandate inclusion of transferable general education coursework in CTE degrees—potentially impacting the time to and cost of baccalaureate degree completion for those who do transfer.

Ignash and Kotun (2005) remark that the variation in content across CTE disciplines, often determined by accrediting bodies and licensing agencies, also impacts the kinds of general education requirements desirable if not required for different programs. These course requirements may not fit with the general education expectations of receiving institutions when students attempt transfer. Another factor influencing the transferability of general education offerings in occupational degree programs noted by the research includes the reluctance of community college occupational programs to add prerequisites to their courses. However, many baccalaureate-granting institutions require them and will not accept courses for transfer without prerequisites.

Applied Academics Courses. Another approach to enhancing CTE transfer argues for an integration of vocational and academic courses (Bragg & Reger, 2000). Bragg and Reger state that isolating academic and occupational education negatively impacts students who have difficulty transferring what they have learned from one discipline to another. Brewer (1992) asserts that academic and vocational integration can improve student learning, regardless of their curriculum or major, by broadening occupational education and strengthening its connection to civic goals.

At the same time, one study found few applied academics transfer courses intended for occupational students. In an investigation of these courses in Illinois community colleges, Bragg and Reger (2000) discovered that only 10 of 48 colleges indicated implementation of applied academic transfer offerings, which primarily included technical writing, advanced technical communications, and science classes related to health care programs. Bragg and Reger note that, despite a statewide adoption of transfer guarantees, colleges did not guarantee the transfer of applied academic courses toward a baccalaureate degree.

Articulation Agreements. Several researchers point to state-level articulation policy as a key factor in facilitating transfer. Townsend (2001) asserts that state-level articulation policy can specifically help to facilitate CTE transfer but that few states have “paid attention to the articulation of what are traditionally considered nontransfer degrees.” As mentioned above, Ignash and Kotun’s (2005) research noted that while 22 states indicated state-wide agreements to facilitate transfer, most reported doing so within only one CTE discipline (e.g. nursing). According to their research, many states show articulation activity at the individual college and university level. In California, a vast array of course-level articulation agreements developed between individual community colleges and CSU or UC institutions can be found catalogued on ASSIST. However, these localized agreements potentially leave students navigating a confusing array of agreements that vary from institution to institution, making course selection challenging.

Research Questions:

- What issues of credit transferability do CTE students most face in California when transitioning to baccalaureate programs and how might these challenges differ between CSU, UC and private institutions and/or across disciplines?
- How well does the “traditional” course-to-course system of articulation work for CTE students intent on transfer?
- In which disciplines does this system support CTE transfer the most effectively?

CTE Program Goals and Expectations

A number of studies have linked the occupational emphasis of community colleges, including their associate degree programs, with decreased student outcomes (Brint & Karabel, 1989, Dougherty, 2001). However, Roska (2006) utilized National Education Longitudinal Study (NELS) data to specifically explore the impact of the vocational focus of an associate's degree on student transfer and bachelor's degree attainment. Roska controlled for factors not considered in prior research, including aspects of the state environment such as the presence of four-year institutions, the existence of state-wide articulation agreements and the occupational structure of the labor market as well as individual student attributes like demographic characteristics and academic ability.

Ultimately, the data revealed that “the vocational training within degree-granting programs does not have a negative effect on students’ successful completion of associate degrees” (Roska, 2006). Furthermore, this investigation determined that the occupational emphasis of a degree program is not a deterrent to transfer. The report (Roska, 2006) states that “students who attend community colleges focusing on providing training in degree-granting programs fare equally well” regardless of whether that training has a vocational or academic emphasis.

At the same time, Roska (2006) reveals in her research that when community colleges focus on awarding certificates in CTE disciplines rather than degrees, student attainment—including transfer—is negatively impacted. The study specifically discovered an inverse relationship between the number of certificates awarded and the number of students transferring. Data analysis revealed that “students enrolled in community colleges awarding all of their credentials as certificates would be approximately 60% less likely to transfer than students attending community colleges that award no certificates.”

The literature also discusses how the historical view of CTE programs as terminal or as expecting CTE students to end their education with a community college degree or certificate may impact students’ transfer experience. Despite their educational and career interests or needs, some researchers assert that CTE students receive little encouragement to pursue transfer (Bragg, 2001; Cohen & Ignash, 1993; Frederickson, 1998; Townsend, 2001). This perception of occupational students as “non-transfer” material may add to the complexity of their transfer experience, manifesting in a lack of support from college educators and/or provision of information on transfer opportunities.

Research Questions:

- What emphasis on degree versus certificate completion exists at California community colleges showing high rates of transfer across CTE programs?
- Do colleges with high CTE transfer rates (overall or in a particular CTE program) tend to have lower associate degree or certificate completion rates?
- How do these colleges encourage transfer among their students and provide accurate and timely information to facilitate this pursuit?

What are the implications for research?

As noted at the beginning of this document, an assessment of the available literature reveals that very limited research has been performed on the specific issues of CTE transfer. The research does reveal data on workforce trends and projections indicating that transitioning students from community college CTE disciplines to bachelor's level preparation presents a critical new horizon in postsecondary education. With CTE students increasingly considered the primary future drivers of the nation's economic health and well-being by many researchers, legislators and educators, understanding how both policy and practice can contribute to their ongoing education and career advancement appears vital.

Moreover, several models for and approaches to promoting occupational students' transition to baccalaureate opportunities are emerging within California and across the nation. Innovative degrees such as the applied and community college baccalaureate, university partnerships and strategic articulation agreements transferring a block of coursework all offer possible modes for improving students' movement from community college to four-year career preparation programs. Recognizing these efforts and understanding their unique benefits and limitations can help inform stakeholders interested in improving and expanding transfer paths for CTE students within the state.

At the same time, the literature reveals several factors that may impact student advancement from community college CTE programs to related baccalaureate degree opportunities. Achieving the appropriate mix of transferable general education and major-related coursework and having those units accepted by four-year institutions appears in the research as particularly problematic. Moreover, a particular focus on certificate achievement (versus degree completion) and the historical perspective of community college programs as terminal may negatively impact students' awareness and pursuit of transfer in the first place. Further exploring the relativity of these findings to the California context as well as examining how factors related to general transfer distinctively impact CTE students' transitions can also help stakeholders in formulating strategies for improving this outcome for students, institutions and the state.

These findings combined with the fact that such narrow information exists on the topic present the CTE Transfer Research Project with the opportunity to contribute to this emerging body of research on a number of fronts. Specifically, as indicated by the *Research Questions* identified throughout the above literature review discussion, the research team will pursue a number of issues in its qualitative and quantitative investigation. These areas of inquiry are summarized as follows:

Context for CTE Transfer

- Documenting numbers and trends for students transferring from community college CTE programs to four-year institutions in the state, both public and private, with a particular focus on high-growth, high-demand occupations
- Exploring how California community college practitioners define CTE and CTE transfer
- Understanding the impact of state-level initiatives efforts to “rethink” CTE on ground-level efforts to increase CTE transfer

Models for and Approaches to CTE Transfer

- Examining practices and policies other states have developed to promote CTE transfer and their particular viability in the California context
- Understanding existing models to promote CTE transfer in California, assessing student and practitioner awareness of these efforts and their perceptions of their effectiveness

Factors Impacting CTE Transfer

- Investigating issues of systems alignment, including transferability of credits for CTE students
- Exploring the relationship between community college goals and expectations for CTE students and occupational students' success with transfer
- Identifying the unique factors that enhance or inhibit transfer between community college CTE disciplines and private and public four-year institutions, with a particular focus on student and practitioner perspectives and experiences in high-transfer programs and/or colleges

The CTE Transfer Research Project will present findings from these investigations throughout 2009 and 2010 in a series of reports, briefs and presentations.

Kelley Karandjeff (Researcher, RP Group) compiled this literature review summary based on previous research performed by Suzanne Korey and Lorraine Giordano. For more information on and publications produced by the CTE Transfer Research Project, visit www.rpgroup.org/css/CTETransfer.html.

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the Research & Planning Group
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**Colleges Awarding Both 2 Year and 4 Year Degrees
(Sorted by the Number of Bachelor's Degrees Awarded)**

Note: this list includes University Centers and Native American Colleges that awarded at least 50% of their degrees at the pre-baccalaureate level.

September 10, 2013

NAME	STATE	All Awards 2011-12	Bachelor's Degrees Awarded 2011-12	Program Area (Classification of Instruction Programs - CIP at the 2 digit level)								
				Computer and Inform Sciences	Education	Engineer Tech	Law Enfor and Protective Services	Visual and Performing Arts	Health Professions	Business	All Other CIP Areas	
Fashion Institute of Technology	NY	3,350	1,405					569		548	288	
St Petersburg College	FL	5,647	1,044	81	189		88			437	187	62
CUNY New York City College of Technology	NY	1,933	847	111	10	65		127	126	131	277	
Miami Dade College	FL	14,123	667		150	0	168	13	145	191	0	
Pennsylvania College of Technology	PA	1,628	590	55		188		22	90	103	132	
CUNY Medgar Evers College	NY	995	484	10	19				33	202	220	
Dixie State College of Utah	UT	2,051	483	36	66		3	9	58	99	212	
Florida State College at Jacksonville	FL	8,501	392	60	64		15		26	227	0	
University of Arkansas at Monticello	AR	1,058	370		51	5	14	12	33	73	182	
Daytona State College	FL	4,625	355		57	17				281	0	
Indian River State College	FL	4,213	306		46				41	204	15	
Edison State College	FL	2,979	294		110		29		77	78	0	
Broward College	FL	7,442	281	24	57				27	173	0	
SUNY College of Technology at Canton	NY	936	254	25		3	42	9	37	80	58	
SUNY College of Technology at Delhi	NY	900	250	2					54	155	39	
SUNY College of Agriculture and Technology at	NY	590	248	24				2		52	170	
West Virginia University at Parkersburg	WV	742	232		29	19				29	155	
SUNY College of Technology at Alfred	NY	1,052	215	23		85	5			58	44	
Dalton State College	GA	683	210		59		19			69	63	
Northwest Florida State College	FL	1,819	173		38				26	109	0	
Morrisville State College	NY	686	168	29			8		12	42	77	
Palm Beach State College	FL	5,921	157	0					0	157	0	
College of Coastal Georgia	GA	406	124		59				48	14	3	
Vermont Technical College	VT	614	123	20		31			3	41	28	
Gainesville State College	GA	965	121		79			2		15	25	
Ohio State University-Newark Campus	OH	263	114		45					13	56	
South Texas College	TX	3,964	109	35						74	0	
Vincennes University	IN	1,633	108		40	20	22		26		0	
Gordon State College	GA	574	101		50				39		12	
Ohio State University-Mansfield Campus	OH	295	96		46					2	48	
Pennsylvania State University-Penn State Worthi	PA	210	96	8					27	30	31	
Chipola College	FL	617	82		27				30	25	0	
Haskell Indian Nations University	KS	185	75		3					34	38	
Wright State University-Lake Campus	OH	159	73		19				11	34	9	
Ohio State University-Marion Campus	OH	171	71		32					5	34	
Santa Fe College	FL	3,534	66		0				66		0	
Great Basin College	NV	452	61	3	9	5			15	14	15	
Polk State College	FL	2,131	56						0	56	0	
Oklahoma State University Institute of Technolo	OK	695	54	36		18					0	

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September 10, 2013

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				Computer and Inform Sciences	Education	Engineer Tech	Law Enfor and Protective Services	Visual and Performing Arts	Health Professions	Business	All Other CIP Areas	
Pennsylvania State University-Penn State Hazlet	PA	111	53	9							25	19
Bellevue College	WA	2,663	51					38	13			0
Northern New Mexico College	NM	194	51	0	4	0		0	5		26	16
Oglala Lakota College	SD	192	50	2	16						6	26
Pennsylvania State University-Penn State Dubois	PA	160	50								17	33
Abraham Baldwin Agricultural College	GA	503	49									49
Middle Georgia College	GA	520	46		11							35
Kent State University at Salem	OH	178	45						41			4
Pennsylvania State University-Penn State Mont / PA	PA	163	45	3					15	8		19
State College of Florida-Manatee-Sarasota	FL	1,823	44		0	0	0		44			0
Bismarck State College	ND	1,097	43							43		0
Olympic College	WA	2,301	27						27			0
Seattle Community College-South Campus	WA	1,444	20								20	0
Sitting Bull College	ND	56	19		2						7	10
Oklahoma State University-Oklahoma City	OK	770	17				17					0
Pensacola State College	FL	2,391	17						2		15	0
Seminole State College of Florida	FL	4,548	17	0		0		17			0	0
Columbia Basin College	WA	1,500	15								15	0
Potomac State College of West Virginia Universi	WV	186	15				0				0	15
Seattle Community College-Central Campus	WA	1,121	15						15			0
Brazosport College	TX	619	14								14	0
College of Southern Nevada	NV	2,348	14						14			0
Lake Washington Institute of Technology	WA	1,116	14					14				0
Peninsula College	WA	1,000	13								13	0
Midland College	TX	644	11								11	0
University of Cincinnati-Blue Ash College	OH	601	9						9			0
Northwest Indian College	WA	78	8									8
Dine College	AZ	168	7		7							0
University of Hawaii Maui College	HI	560	7			3					4	0
Fort Berthold Community College	ND	38	6		4							2
Western Nevada College	NV	495	5									5
Gulf Coast State College	FL	1,364	4	4								0
Kent State University at Stark	OH	207	2					2				0
Saint Johns River State College	FL	1,270	2		0						2	0
Kent State University at Trumbull	OH	124	1									1
Kent State University at Tuscarawas	OH	271	1									1
Total		121,566	11,762	600	1,398	459	430	836	1,672	3,831	2,536	



An educational site dedicated to providing information on the benefits of and threats to Community Colleges.

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Community College ROI

Interesting Links

Guestbook

Community college tuition and fees are rising faster than many citizens' ability to access them. If those in need cannot obtain higher education services from them, they no longer fulfill their missions. "Community" colleges cease to exist! America's prosperity depends upon community college's open access and affordable education and career training.

Most economists and historians credit the GI Education Bill of 1944 as one of the leading causes of the great prosperity achieved since World War II. It is easy to see why they came to this conclusion; millions of GIs went on to become college graduates. (The average WW2 GI's education was one year of high school!) These GI graduates then became the entrepreneurs and leaders who made our continuing prosperity possible.

The presidents of two of the country's greatest universities both wrote letters to President Roosevelt opposing the GI Education bill. They stated that opening up higher education to veterans (a poor uneducated group) would be a disaster for the United States and its universities. What the university presidents did not see, was what individuals can accomplish when given the chance. They also did not envision the tremendous return on investment higher education provides to both the individuals and to the nation.

Community colleges have been and are continuing to support this affordable open access higher education and our prosperity. "Open access" and "affordable" however are being threatened, placing community colleges and our future prosperity in jeopardy.

Just as the GI Education Bill provided a tremendous return on investment, community colleges have and continue to do so. Community colleges are in the business of teaching. They are not in the research business. They have generated little or no information on their economic impact. Hence, their heavy economic impact and their gigantic return on investment are not well known. The present value of the cumulative return on local taxes invested in community colleges is in the thousands of percents! That is correct. You put in \$1.00 in local tax and the community receives back the \$1.00 and almost \$20.00 in community earnings!

Using Illinois data, one dollar of state funding of its community colleges results in the state receiving more than a dollar in increased tax revenue and saves Illinois over a dollar of state social welfare expenses. This allows the state to fund other programs. This leads us to the conclusion; "Community colleges are not a state budget problem, they are a state budget solution." A link to a white paper detailing the very large returns community colleges provide to the state of Illinois is included in our interesting links section.

Underfunding of existing community college missions has already priced out many Americans. The move to expand community college into four year institutions without commensurate funding will further reduce their availability. We hope this site will help to save them, to save community colleges as we know them.

Save Community Colleges Organization Inc. is an Illinois Non-Profit corporation and it is a listed 501 (c) 3 educational charity. All funds are used for educational activities and all work is performed by volunteers. We have no paid employees or fund raisers. Tax deductible donations can be made to the: Save Community Colleges Organization Inc. c/o American Chartered Bank 459 S Rand Rd. Lake Zurich, IL 60047. Please email us at donor@saveccs.org with donor information so that we may thank you and supply you with a donation verification letter. Your information will not be used for any other purpose.