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Update on the Community College Baccalaureate: Evolving Trends and Issues

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Context

Over the past two decades, the number of community colleges independently offering baccalaureate degree programs has steadily risen. Though still confined to a very small number of institutions and limited degree programs, this phenomenon continues to generate widespread attention and controversy. This occurs because the trend challenges fundamental assumptions about the mission of two-year colleges and threatens to upset the existing balance between the two- and four-year sectors in the American higher education system.

To place this development in context, there are several common policy approaches that involve community colleges in baccalaureate degree production. Such methods—which this paper intentionally does not focus on—typically involve collaboration between the two- and four-year sectors where the four-year institution (not the community college) confers the baccalaureate degree. First, many states, systems and collaborating institutions have developed transfer and articulation agreements, 2+2 arrangements, and other cooperative means to facilitate baccalaureate attainment by students who complete their general education requirements at community colleges. A second approach is partnerships between two- and

four-year institutions that bring four-year degree programs onsite to community colleges and other convenient locations where university access is limited—university centers, shared facilities, joint programs and other arrangements. Finally, online degree programs, enhanced by partnership and transfer agreements, are increasingly available to community college students who seek a bachelor's degree without leaving home. All of these policy options are well-established and far less controversial. They are continuing to expand nationwide, even in states that have begun to approve independent community college baccalaureate programs.

The focus of our attention is on a specific phenomenon that has arisen largely in response to increased demands for baccalaureate degrees in particular geographic areas and fields of study—often rural locations and high-demand fields such as education, nursing and technical subjects. It generally occurs where there is limited access to a four-year institution or where demand exceeds the existing capacity of the four-year sector. This phenomenon is also fueled by the upgraded educational credentials now needed for certain applied and technical fields, occupations in which associate degrees once sufficed, but where employers now prefer or require workers to possess a four-year degree.

The independently-offered community college baccalaureate has virtually never been the first response to meeting these needs. Generally, the community college baccalaureate requires legislative approval, or, at minimum, the approval of a systemwide governing body. Normally, there is a thorough review process through which workforce and student demand must be documented, alternatives explored and exhausted, costs estimated, and community college capacity determined. Following approval, two-year institutions must undergo regional accreditation in order to offer a four-year degree program. Faculty must then be hired, libraries and facilities brought up to speed, and so on. In sum, it is not a trivial endeavor, nor one that can be carried out quickly.

But times are changing, and it is unclear whether past trends will predict the future. The Obama administration has called for the nation to have the highest proportion of college graduates in the world by 2020, despite the tremendous challenges of access, cost and capacity. As new ideas to meet this goal are being examined, this is

a good time to take stock of what is happening with the community college baccalaureate. This paper presents recent trends in the community college baccalaureate, describes variations among the states and pending issues, summarizes arguments for and against the community college baccalaureate, and presents implications for policymakers considering this option.

Observations

The number of states that have approved at least one community college to offer a baccalaureate program has grown steadily over the past decade, as have the numbers of institutions and degree programs approved.

Currently, there are 18 states in which a community college has been approved to offer four-year degrees, compared to 11 states in 2004, when AASCU last published an update on this subject. There are now 54 institutions that have received such approval, compared to 21 institutions six years ago. These institutions

State	Year of First Approval	Number of Approved Institutions			
		Total Number	Number Offering Teacher Education Programs	Number Offering Nursing (B.S.N.) Programs	Total Number of Approved Programs
Arkansas	1998	1	1	1	44
Colorado	2010	1			0
Florida	2001	18	12	11	113
Georgia	1997	7	6	3	71
Hawaii	2004	1			2
Indiana	2004	1	1	1	6
Louisiana	2001	1	1	1	12
Minnesota	2003	1	1		2
Nevada	1998	3	1	1	15
New Mexico	2004	1	1	1	11
New York	1996	5		3	84
North Dakota	2006	1			1
Oklahoma	2004	2			4
Texas	2003	3			4
Utah	1992	2	2	2	69
Vermont	1993	1			11
Washington	2005	4		1	5
West Virginia	1989	1	1		11
Total		54	27	25	465

now offer—or have been approved to offer—a total of 465 four-year degree programs, compared to 128 programs in 2004. Taken together, these data illustrate the considerable growth in the community college baccalaureate that has taken place in just six years.

As part of this trend, there has been substantial growth in baccalaureate-level teacher education programs available at community colleges. Today, 10 states have approved a total of 27 community colleges to offer at least one such program. In 2004, six states had approved just nine two-year institutions to offer a baccalaureate in this field. This growth has been stimulated by teacher shortages in specific geographic locations.

Similarly, there has been parallel growth in baccalaureate-level nursing programs available at community colleges. Today, 10 states have approved a total of 25 institutions to offer a Bachelor of Science in Nursing (B.S.N.) at a community college. In 2004, five states had approved only six community colleges to offer such a program. This tremendous growth is due both to nursing shortages as well as to efforts by the nursing profession to create a more highly educated nursing workforce (i.e., upgrading from the R.N. to B.S.N. degree).

Identifying and counting these institutions is not an exact science, however, and these totals may be a conservative estimate of this phenomenon. In cases where institutions underwent transformation into baccalaureate institutions some years ago, it was not possible to include them in the count. This accounting is generally consistent with the literature on this topic, which has tracked observable developments since the late 1990s.

As the most recent example of this trend, earlier this year, the **Colorado** legislature authorized its first community college baccalaureate. Recognizing the priority of improving access to higher education for citizens in rural areas of the state, S.B. 10-101 authorized Colorado Mountain College, a comprehensive community college with seven physical campuses and distance learning, to offer no more than five baccalaureate degree programs, to be approved by the Colorado Commission on Higher Education. The college must first demonstrate workforce and student demand.

comply with all accreditation requirements, demonstrate that its provision of the program "is the most cost-effective method of providing the baccalaureate degree program in the service area," and that the additional program "will not create a negative impact for the college or require additional state appropriated moneys to operate." Surveys to date have shown high demand for programs in resort-related business, teacher education and environmental science.

Despite substantial growth, the community college baccalaureate remains a very limited phenomenon, and considerable controversy and opposition remain.

Not all states are jumping onto the community college baccalaureate bandwagon. Two states in particular. after years of discussion and debate, rejected proposals to allow their community colleges to offer four-year degrees. In 2005, Arizona came close to taking this step when the House passed a bill that would have allowed 10 community colleges to offer four-year degrees in teacher education, health professions, law enforcement, fire services and other workforce-related disciplines not currently offered by state universities. This bill, opposed by the state's three universities, was defeated in the Senate appropriations committee, and subsequent versions of the bill were also defeated. These actions followed debates going back to 1997, with supporters citing population growth, critical shortages in the health professions and other fields, rising university tuition, and the need to improve access for rural students. Opponents cited high start-up costs, likely increases in tuition and taxes, and threats to the traditional community college mission.

In 2009, **Illinois** adopted an alternative approach that favors collaboration between two- and four-year institutions. S.B. 1883 requires the Board of Higher Education to implement a Collaborative Baccalaureate Degree Development Grant Program "to help deliver upper-division courses and bachelor's degree programs offered by bachelor's degree-granting colleges and universities at a location geographically convenient to student populations currently being served by existing public community colleges." As background, in 2005, after years of debate, the Illinois Board of Higher Education rejected a proposal from Harper College, a two-year institution, to pilot a four-year degree program. This proposal had raised broad statewide

questions and led to the creation of a Baccalaureate Access Task Force that eventually recommended against giving community colleges authority to offer baccalaureate degrees. Harper College continued to fight this battle for several years, leading to the introduction of competing bills in 2009. It was S.B. 1883, supported by both the Community College Board and the Board of Higher Education, that was eventually passed into law.

Among states that have adopted the community college baccalaureate, approaches have varied widely. There is variation in the number and types of institutions and programs approved, and in the extent to which approved institutions retain their community college mission and culture.

Morphing into baccalaureate institutions. Several states have authorized just one or two isolated community colleges to offer baccalaureate degrees, with no intention of expanding this practice to other two-year colleges in the state. Over time, such colleges have typically added more baccalaureate programs—including arts and sciences—and subsequently evolved into baccalaureate colleges, often as part of a state university system. For example:

- Arkansas. Westark Community College, approved to offer its first four-year degree in 1998, became the University of Arkansas-Fort Smith in 2002. It now offers 44 baccalaureate programs, representing nearly half of all degrees conferred.
- Louisiana. Louisiana State University at Alexandria, approved to offer four-year degrees in 2001, now offers 12 baccalaureate degrees, including degrees in arts and sciences, making up over half of all degrees conferred.
- Utah. Utah Valley Community College, first approved to offer a baccalaureate in 1992, became Utah Valley State College in 1993, and Utah Valley University in 2008. It now offers 53 baccalaureate programs, making up just over half of all degrees conferred, as well as master's degrees in education, nursing and business administration. Dixie State College of Utah, formerly Dixie Junior College (which was approved to offer four-year programs in 1999), now offers 16

four-year programs, making up a fifth of all degrees conferred annually.

- West Virginia. The former Parkersburg Community College became West Virginia University at Parkersburg in 1989. It now offers 11 baccalaureate programs that comprise more than a third of all degrees conferred.
- New Mexico. Though not as far along in its
 development into a four-year institution, Northern
 New Mexico College, formerly Northern New Mexico
 Community College, is on this same pathway. Once
 a "normal school" that was first authorized to offer a
 four-year elementary education degree in 2004, it has
 since been approved to offer four-year degrees in all
 subjects, and now offers 11 such programs making up
 about 15 percent of all degrees.

In each of the above cases, the institution was allowed to grow its baccalaureate offerings. Now, these six institutions collectively account for over 30 percent of such programs nationwide. Some observers would argue, in fact, that due to their transformation, such institutions no longer belong in the discussion of the community college baccalaureate.

Multiple institutions maintaining traditional functions.

A second pattern is to expand, more generally, the mission of a state's community colleges, albeit with a commitment that these institutions must maintain their traditional functions. Typically, these states view the community college as critical in meeting the state's baccalaureate needs, especially in high-demand workforce fields; the move is designed to aid place-bound adults who would otherwise have limited access to the baccalaureate. Frequently, states proceed in stages, beginning with a small number of institutions and programs, reviewing progress after some period of time, and making a further determination about continuation and expansion at a later date.

Following a comprehensive review of **Washington** state's educational system, convened by the governor, the state approved a pilot project in 2005 in which four community colleges were chosen to offer specialized four-year degree programs. The programs were designed to fill community needs not met by other colleges and to meet the needs of place-bound workers.

In 2007, South Seattle Community College launched a Bachelor of Applied Science (B.A.S.) in Hospitality Management, Olympic College a B.S.N. in Nursing, Bellevue College a B.A.S. in Radiation and Imaging Sciences, and Peninsula College a B.A.S. in Applied Management. Based on the success of these pilot programs, the state has begun to approve additional B.A.S. degrees.

Florida stands alone in the extent to which its policymakers have recognized a direct role for community colleges in meeting the state's baccalaureate needs. This arose from concerns about critical workforce shortages in the state, especially in teacher education and nursing, and awareness that the state ranked near the bottom in baccalaureate degree production. This new role for community colleges has evolved and expanded for over a decade, built on the explicit requirement that these colleges were not to become baccalaureate institutions. Key steps included:

- To avoid having to build new campuses to meet educational needs, a 1999 law encouraged joint baccalaureate programs between two-year colleges and universities. The law also allowed community colleges to seek approval to grant four-year degrees in areas of high demand—only as a last resort where no university was willing to establish a partnership.
- A 2001 law defined criteria for approval of community college baccalaureate programs. St. Petersburg Junior College was the first to receive such approval, and other colleges followed over the decade.
- The 2008 creation of the Florida College System made it possible that all community colleges might eventually offer the baccalaureate degree. Today, 18 of the state's 28 community colleges have been approved to offer at least one four-year degree.
- A 2009 law revised the primary mission of these colleges to include upper-level instruction and the awarding of baccalaureate degrees. It further set forth that beginning in 2010, colleges that have been offering baccalaureate programs for three years may apply to be exempt from the State Board of Education's approval for subsequent degree programs, the first time any state has made such a move.

Florida's progression thus far has generated significant concerns, especially about competition with universities and duplication of efforts. However, these misgivings have been declining to some degree as universities have faced tough budget constraints and have been unable to meet workforce demands.

The University System of Georgia classifies public institutions in the state as research universities, regional universities, state universities, state colleges and twoyear colleges. Similar to the Florida College System, the state colleges in Georgia are a type of hybrid institution designed to serve as associate-level access institutions and to offer limited baccalaureate programs targeted to the economic needs of their region. Macon State College, the first institution to be granted state college status (1997), now offers more than 30 fouryear degree programs. Dalton State College, the second state college (1999), now offers 20 four-year degree programs. Five other associate-level institutions were approved to offer four-year degrees within the past five years, and each currently offers just a few four-year programs.

Limited technical degrees. A third pattern is to limit approval to applied and technical baccalaureate degrees, such as the Bachelor of Applied Science (B.A.S.), Bachelor of Applied Technology (B.A.T.) and Bachelor of Technology (B.T.) degrees. The rationale is that these represent an extension of technical programs already offered at community colleges and are designed to allow Associate of Applied Science (A.A.S.) graduates to further their education; four-year institutions have a shorter (or no) history with such programs. For example:

In 2002, several community colleges in **Texas** indicated an interest in offering the B.A.S. and B.A.T. degrees, arguing that the few programs of this type offered at four-year institutions were not enough to meet the needs of adult workers. In response, the legislature approved a pilot project in 2003 through which a limited number of community colleges could offer up to five B.A.S. or B.A.T. degrees that would correspond to the needs of local industry. The Texas Higher Education Coordinating Board (THECB) approved three colleges. A 2007 law removed the pilot status of the program, granting permanent approval to offer these programs. Further, a 2009 law directed THECB to prepare a study

to examine the feasibility of expanding this to other two-year institutions. THECB issued a report to the legislature in 2010 that recommended using a variety of methods to address specific areas of need, including online education and partnerships between two- and four-year institutions. It asserted that community colleges' expansion into baccalaureate degrees should be considered only when other options have been exhausted. To date, there are only four community college baccalaureate programs established at the three institutions.

Other examples include:

- Oklahoma. Oklahoma State University-Oklahoma
 City and Oklahoma State University Institute of
 Technology-Okmulgee, both associate-level colleges,
 offer a total of four specialized B.T. programs.
- North Dakota. Bismarck State College offers a single four-year program, a B.A.S. in Energy Management.

Others. Some states do not fit into any of the above models. For example:

- **Nevada.** Great Basin College was approved to offer four-year degrees in 1999 and now offers 13 baccalaureate programs in a variety of workforce subjects. One additional college was approved in 2004 to offer a B.S. in dental hygiene, and another in 2007 to offer a B.T. in construction management.
- **New York.** Five of the technical colleges in the SUNY system were authorized to offer four-year degrees in 1996. They now offer a total of 84 baccalaureate programs, up from 37 programs in 2004. Though no additional colleges have been approved since then, three of these colleges have added baccalaureate-level nursing programs in recent years, a change from their traditional program offerings.

As states grapple with ways to increase baccalaureate attainment with limited resources, there will be continued interest in and controversy surrounding the community college baccalaureate.

The University of **Wisconsin** System Board of Regents is considering action on a five-year pilot project through which five of the system's 13 two-year colleges will

be able to develop limited Bachelor's of Applied Arts and Science (B.A.A.S.) degree programs. Proposed as a way to increase access to the baccalaureate for rural, place-bound adults, this concept has been in the works for several years. Though there has been some internal disagreement about potential "mission creep," no legislative approval is required and the University of Wisconsin System has not experienced a major backlash by its four-year institutions. In fact, the programs will be developed in collaboration with partnering comprehensive universities. These universities will provide both on-site and online instruction, but the two-year colleges will be granting the degree, thus necessitating a mission change. The B.A.A.S. is a relatively new degree type that addresses workforce development, but in a manner that is less technical in nature than other applied baccalaureate degrees, as it emphasizes the liberal arts and their application to the work setting. Regent approval is expected later this fall (2010).

The state of Michigan is currently embroiled in a heated debate about the community college baccalaureate. For several years, a number of community colleges have been lobbying for legislation allowing them to offer the bachelor's degree in certain technical fields, as well as the Bachelor of Science in Nursing. Their primary arguments concern affordability and accessibility. On the other side of the debate, the Presidents Council, representing the state's four-year universities, has lobbied hard against this proposal and instead supports the expansion of existing collaborations as the most efficient way to address workforce needs. In a letter to state representatives, the Presidents Council states: "Michigan's 15 public universities hereby pledge to collaborate with our community college colleagues to provide locally any new baccalaureate or degree completion program for which there is a demonstrated and sustainable need within that community college district....This pledge by the public universities avoids duplication and waste, can be implemented immediately, and is far less costly." In September, the Michigan House of Representatives passed a bill authorizing limited community college baccalaureate degrees. The bill now moves to the Senate where it may face a greater challenge.

A bill to authorize the **Virginia** Community College System to establish baccalaureate programs in nursing, education, applied technology and other high-need areas was introduced earlier this year but later tabled. Proponents cited this as a means to promote the governor's goal of producing 100,000 more college graduates in the state, but members of the Higher Education Subcommittee felt the legislation was premature. It is expected that the proposal will receive further consideration as part of the Governor's Commission on Higher Education: Reform, Innovation and Investment, established earlier this year.

There are a variety of compelling arguments in favor of the community college baccalaureate. These include:

- Improved access to the baccalaureate. Supporters argue that baccalaureate programs offered by community colleges increase educational opportunities for place-bound, adult workers, particularly in rural areas where there is no access to four-year institutions. Some argue that for first-generation college-goers and underserved groups, the opportunity to continue one's education in the familiar community college environment makes it more likely that these students will persist in college and earn a four-year degree.
- Greater affordability for students. Though more expensive than lower division courses, tuition for upper division classes at community colleges is typically lower than tuition for similar courses at four-year institutions. Also, the absence of a public four-year option might lead some workers seeking baccalaureate degrees to turn to the for-profit sector, which is significantly more expensive.
- Reduced taxpayer costs. Supporters argue that it is cheaper to offer upper division classes at community colleges than at four-year institutions, largely because faculty are paid less and teach more, resulting in limited state dollars going further.
- Ability to meet local workforce demands. Community
 colleges traditionally work with local employers and
 develop degree and certificate programs that respond
 to specified workforce needs. Offering specific
 baccalaureate degrees in certain high-demand fields
 is a logical extension of this practice.

• Expertise in applied and technical degrees.

Traditionally, applied associate degrees offered by community colleges, such as Associate of Applied Science degrees, have been the industry standard for employment in certain technical fields. However, some high-skill occupations increasingly require a baccalaureate for job entry or promotion. Supporters argue that it makes sense to develop these degree programs where two-year programs already exist, since many four-year institutions have no history or expertise in these areas.

 Overcrowding at four-year colleges. In some states, demand currently exceeds capacity at four-year institutions. Offering selected baccalaureate programs at two-year colleges can help reduce overcrowding and meet regional and state workforce needs.

There are equally compelling arguments opposing the community college baccalaureate. As a general rule, opponents share the underlying contention that adding one more mission to community colleges is unnecessary, time-consuming, expensive and fraught with unintended negative consequences. Instead, they support expansion of the various models of collaboration between two-year and four-year institutions to address baccalaureate needs of the state (including university centers, shared facilities, joint programs, online education and articulation agreements). Specifically, they argue:

- Mission creep. Opponents express concern that offering baccalaureate programs at community colleges weakens the traditional community college mission and leaves behind those students it is designed to serve; this option may shift resources, raise tuition for all students, challenge open-door policies and divert attention away from developmental education. As a worst-case scenario, the community college might morph into a four-year institution and, as a result, totally abandon the access mission.
- Program duplication. Many believe this approach
 produces a less efficient state system overall,
 with duplication of programs offered at four-year
 institutions and creation of competition instead of
 cooperation. For example, due to limited availability
 of nursing faculty and clinical sites, increasing the
 number of institutions with baccalaureate nursing

programs may exacerbate problems rather than solve them.

- Accreditation obstacles. Attaining regional
 accreditation for four-year programs is both
 expensive and time-consuming. It is far more efficient,
 many argue, to develop partnerships with four-year
 institutions that bring programs to the community
 college campus, thus not necessitating new
 accreditation.
- High costs/need for additional state dollars. In order to add upper division coursework, community colleges need to upgrade faculty, libraries and laboratories. In addition to high start-up costs, there are also high ongoing costs in terms of the employment of new categories of faculty.
- Faculty issues. Baccalaureate programs may require faculty with higher degrees who demand more pay. They may be harder to recruit and may be less focused on teaching. Rifts among the different faculty classes may develop.
- Too burdensome on overtaxed community colleges. Community colleges around the nation are increasingly being asked to do more with less. Some are already over capacity and do not have the luxury of taking on more responsibilities. Some community college presidents themselves have expressed these concerns, and not all are seeking mission expansion.
- Concerns about quality. Some critics believe that a
 baccalaureate degree earned at a community college
 is inferior to one earned at a four-year institution.
 The belief is that courses may not be as rigorous, and
 faculty and resources may be substandard. Some
 employers may share these concerns.
- Availability of online education. Given the
 widespread availability of online degree programs,
 students are no longer limited by where they live.
 Adding community college baccalaureate programs
 may be unwarranted, especially for programs that can
 be effectively delivered online.

Policymakers need to weigh, in context, these pros and cons when considering the approval or expansion of

community college baccalaureate programs. The key issue is whether the independently-offered community college baccalaureate is the best alternative for meeting student and workforce demands, or whether it is preferable that only four-year institutions confer the baccalaureate degree. In doing so, policymakers should consider the following questions:

Cost and finance issues:

- What are the short-term costs associated with developing new community college baccalaureate degree programs?
- What are the long-term costs? How will costs per degree compare to similar costs at four-year institutions?
- How will the flow of state funding be affected? If they exist, do state funding formulas need to be altered?
- What will the impact be on community college budgets, and how will adequate resources be found?
- How will access to federal policy money be affected?
- How will tuition rates be affected? Who will bear the increased costs of higher-cost programs?

Mission issues:

- What is the long-term purpose of introducing baccalaureate programs into the community college environment? Will the community college be expected to maintain its traditional open access mission? Is the intention for the community college to morph into a baccalaureate institution?
- How will the needs of associate-degree students and others currently being served continue to be met?
- Will developmental education be protected?

Student issues:

- How will chances for baccalaureate completion be affected?
- Will it be cheaper or more expensive for students?
 Will traditionally low tuition rates be maintained for lower-division students?
- Will employers accept community college baccalaureates as equal to degrees from four-year institutions?

Faculty/staff issues:

- Will new faculty need to be hired? If so, what qualifications will be sought? How will qualified faculty be attracted and retained?
- How will the pay structure be affected?

- Will a two-tier faculty result, and how will this affect the institution?
- How can faculty and program quality be assured?
- Will additional administrative staff be needed to manage the new programs?

Conclusion

The community college baccalaureate is not a new phenomenon but one that has been growing and evolving for over two decades. Though there has been tremendous expansion over the past 10 years, such programs are still the exception rather than the rule—often the option of last resort after other alternatives have been exhausted. The current picture is one of great variation among states in how they have implemented this practice, due to varying demographics, workforce needs, higher education systems, fiscal conditions and political pushback (from those opposed to the concept). Florida is at the forefront of this movement, but largely stands alone. Other states are making far more limited use of this option, or have rejected it outright.

As pressures mount to reach state and national postsecondary education goals, there will undoubtedly be continued attention being directed toward this phenomenon. Policymakers and campus leaders are cautioned against viewing the community college baccalaureate as a silver bullet. In considering this option, they should keep in mind the pros and cons outlined in this paper and be alert to unintended consequences. They would be wise to proceed cautiously, following the maxim: "first, do no harm."

Resources

American Association of State Colleges and Universities (AASCU) (2004). Update on the Community College Baccalaureate. http://www.congressweb.com/aascu/docfiles/v1n1.pdf

Community College Baccalaureate Association (CCBA).

This organization promotes better access to the baccalaureate degree on community college campuses and serves as a resource on various models for accomplishing this purpose. http://accbd.org/

- Florida Department of Education (2008). Baccalaureate Programs in Community Colleges: A Program Review. http://www.fldoe.org/cc/Vision/PDFs/PR2008_02_Baccalaureate_Program_Review.pdf
- Floyd, D.L., Skolnik, M.L., and Walker, K.P. (2005). The Community College Baccalaureate: Emerging Trends and Policy Issues (available for purchase at http://www.styluspub.com).
- National Association of Community College Teacher Education Programs (NACCTEP). This organization promotes the community college role in teacher education and serves as a resource on various models for community college involvement. http://www.nacctep.org/
- Presidents Council, State Universities of Michigan (2008).

 Community College Baccalaureate: A Solution in

 Search of a Problem. http://pcsum.org/Portals/0/docs/
 Community%20College%20Baccalaureate-%20A%20

 Solution%20in%20Search%20of%20a%20Problem-FINAL.
 pdf
- Presidents Council, State Universities of Michigan (2009). Offering Baccalaureate Degree Programs at Community Colleges. http://pcsum.org/Portals/0/docs/Community%20College%20Baccalaureate%202009.pdf
- Texas Higher Education Coordinating Board (2010). The Feasibility of Expanding Texas' Community College Baccalaureate Programs: A Report to the 81st Legislature (DRAFT). http://www.thecb.state.tx.us/index.cfm?ObjectID=388644C9-B13A-773D-4C38A96B0E769BC2