Information and Advice Regarding Applied Baccalaureate Degree Programs

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1. What does the audience need to know to understand your answers to the questions that follow?

Much of what we found in our first phase of research (and verified in our second phase) is that the development of AB degrees is heavily contextualized in state and institutional governance. Even though this makes each state somewhat unique in its approach to the degrees, we have learned several lessons about AB degree implementation. One of the best ways to understand these nuances is by reading the reports we’ve released – our inventory, the policy brief, and journal articles. Our website provides links to reports at http://occrl.illinois.edu/projects/lumina

Some states that have the best lessons regarding legislated AB degrees are Washington, Texas, and Florida, all three of which are states we are investigating in our 2nd year of research. Deb is conducting site visit Wed-Thurs, Nov. 3-4 in Washington state, and she will have new information to share with OR group based on her interviews. Because of proximity and regional context, this data collection will likely yield some valuable new lessons that Deb will share with OR group.

2. What is your best nugget of encouraging advice?

We commend Oregon for interest in "experimenting" with AB degrees. Although they often begin by serving a relatively small population of students within higher education, they provide a necessary pathway to baccalaureate degree completion that has historically been a roadblock. Ultimately, if they take root, the potential for expansion and larger numbers will come. Though our data are limited, employers seem to be seeing the value in baccalaureate education for individuals, particularly in technical fields, for both management and employees alike. The fact that many AB degrees were created legislatively shows a level of state government’s support that is absent at the start of other educational reforms, and this is an interesting and important part of the story. Although data are preliminary, the fact that these degree programs are proliferating suggests a growing constituency across government, institutions and employers that bodes well for their continuation and growth. If they ultimately do help students achieve baccalaureate degrees and move on to upper-level employment, they have a potential for playing a role in improving state levels of baccalaureate completion and enhancing workforce and economic development. The chain of impact here is long and many of AB programs are too new to establish impact since students have not matriculated to completion of their baccalaureates, but the potential for impact is there -- and we definitely need to build better research and evaluation systems that assess it.
3. **What is your best nugget of cautionary advice?**

One of the difficulties in the AB degree is that it is often defined vaguely, or only presented as favorable to one population of individuals, or is advocated heavily by one group of constituents. Without a systematic approach, support for AB can erode quickly, as we've seen in some states. In Kentucky, the AB has played out as a baccalaureate completer degree designed particularly for adults and part of a larger initiative to increase baccalaureate attainment. One thing that seems to be lost in tailoring degrees this way is that they do not necessarily increase technical and professional skills, rather creating a degree that employers do not know if they even need. Depending on the goal, a general baccalaureate may be OK, but if it undermines or limits the potential advantage of the student's associate degree in a technical field, then there is a question of value added of the BAS. We advice careful thought needs to be given to the purpose of the degree, and in presenting the degree for it is. In Oregon, it seems as if the degrees are going to be played out within a framework we helped develop: career ladder degrees, management capstone degrees, and upside-down degrees (with a fourth added by Oregon legislation, a credit-for-experience model). Whatever degree is being used at a particular institution, it must be presented to stakeholders, particularly students and employers, as exactly what it is intended to do. The vagueness of these degrees has to be addressed if employers and students are to appreciate their qualities and understand and benefit from their potential impact.
1. What was the context of the development of Applied Baccalaureate programs in your state?

a. What is the governance structure of community colleges and public universities in your state and how did it affect the development of AB degrees?

The Nevada System of Higher Education contained all public institutions of higher education – four community colleges; two universities; one state college; and the Desert Research Institute.

b. What were some of the early motivations for beginning work on AB degrees in your state?

The first and foremost motivation was that an Applied Associates was a two year terminal degree and we began questioning whether this was an appropriate service to our students. Great Basin Community College began considering offering the select Baccalaureate degree in Elko, NV is so isolated. The closest university was 280 miles away from Elko and was not in the State of Nevada. Motivation for Elko citizens was the opportunity to complete four years of education – BA as well as AB.

When Nevada State opened its doors in 2000, they began exploring the offering of Applied Baccalaureate degrees in Business and Management for students graduating with an Applied Associates from the Community College of Southern Nevada. Later, CCSN developed an Applied Baccalaureate Degree for Dental Hygiene because when students in that program finished with pre-requisites and the Associates Degree, they had earned significant numbers of credits. It was decided to redesign this program so the credits earned resulted in a credential.

2. Why does your state have Applied Baccalaureate degrees?

See above.

3. What are the numbers of student that receive them and how many have found jobs in their field?

Labor statistics are reviewed as part of the program development process. Most Dental Hygiene students have opted for the BAS and because it is a limited enrollment program based on local labor statistics, students are able to find jobs. Great Basin has expanded its offerings in
AB and BA programs and students were finding jobs before this great recession – it’s difficult to make these observations during these terrible economic times and when the unemployment rate across the nation is so high.

4. How have your employers been involved in these programs?

Through the Advisory Committees associated with CTE Programs.

5. Why are AB programs valuable to students?

Vocational occupations were growing very rapidly as was the need for employees to be educated and trained to use sophisticated systems. A two-year terminal degree is generally insufficient in high tech jobs.

6. What limits the value of AB programs to students?

Having a credential of any kind is very valuable for students rather than having a transcript of credits that does not speak to outcomes and skill attainment.

7. What does the audience need to know to understand your answers to the question that follows?

Nevada System of Higher Education is constitutional autonomous – they may create degrees, programs, certificates and not submit them to the State of Nevada – the Board of Regents make the final decision (very different that here in Oregon).

8. What is your best nugget of cautionary advice?

Both of these colleges have dropped “community” from their titles. There is the possibility that the missions could drift from being comprehensive community colleges toward becoming a state colleges – this has happened in other states. Effective administration and expectations to mission is advised.
Vanessa L. Davis  
Assistant Director, Academic Programs  
Texas Higher Education Coordinating Board

1. What was the context of the development of Applied Baccalaureate programs in your state?

Texas has three different types of applied baccalaureate degrees- the Bachelor of Applied Arts and Sciences (BAAS), the Bachelor of Applied Technology (BAT), and the Bachelor of Applied Sciences (BAS). Historically, the BAAS was the first applied baccalaureate degree offered in Texas and continues to be the most popular in terms of both number of programs and number of graduates. This degree is usually a very general and flexible, often interdisciplinary, undergraduate degree somewhat similar to a Bachelor of General Studies; at some institutions it does not require the completion of an applied associate degree. Twenty universities offer the BAAS. Starting in the early 2000s, the Bachelor of Applied Technology (BAT) degree was approved. This degree is much more specific and focuses on a specialized technical track that requires the completion of an applied associate degree in that field as a condition for entry into the baccalaureate degree program. Texas BATs include degrees in business, process technology, medical technology, and computer and information sciences. The BAT is currently offered at one university and the three community colleges that have statutory authority to offer a baccalaureate degree. The most recent addition to the applied baccalaureate family in Texas is the Bachelor of Applied Sciences. Like the BAT, this degree is specialized and requires the completion of an applied associate degree for program entry. Currently only one university offers a BAS degree, Texas Woman’s University, and it is offered in the field of Culinary Sciences. In all, Texas has 21 public universities and three public community colleges that have authority to offer applied baccalaureate degrees. Since 1989, 16,194 applied baccalaureate degrees have been awarded from Texas public colleges and universities.

a. What is the governance structure of community colleges and public universities in your state and how did it affect the development of AB degrees?

The Texas Higher Education Coordinating Board was formed by the Texas Legislature in 1965 and provides leadership and coordination for public higher education in Texas. There are 104 institutions of public higher education in Texas including 50 public community college districts (many with multiple campuses that are independently accredited), 35 four-year universities (including five university systems), 4 campuses in the Texas State Technical College System, 9 health-related institutions (including several with multiple campus locations), and 3 two-year, lower-division state colleges. The Coordinating Board provides general oversight and coordination of these programs including approval and evaluation of degree programs. The
Board also plays a role in the administration of statewide general education guidelines for academic degree programs. However, each institution has sole authority over participation in transfer and articulation agreements and decision relating to the degree programs that an institution wishes to offer. For those universities that are a part of one of the five university systems, all degree program decisions and articulation agreements must be approved by the appropriate Board of Regents. Recently, the Coordinating Board has decided to change the way that it will handle degree program proposals. Rather than conducting a staff review and approval of proposed bachelor’s and master’s programs, approval of these programs will be automatic if they meet the following conditions: cost under $2 million over the first five years of the program, are in any field except engineering, are being proposed by a four year institution or a health-related institution, and include a certificate of compliance with Board standards. Currently, academic associate’s degrees require no Board approval, applied associate’s degrees are approved at the staff level, and doctoral degrees require extensive staff review and approval by the Board at one of its quarterly meetings.

Coordinating Board guidelines apply to applied baccalaureate degrees as they apply to any other baccalaureate degree program. General guidelines for all baccalaureate programs include the requirement that they should contain at least 24 semester credit hours of upper-level coursework, meet the Texas general education core requirement, and ensure that all courses be taught by properly credentialed faculty as defined by Standard 3.7.1 in the Commission on Colleges of the Southern Association of Colleges and Schools’ The Principles of Accreditation.

Because the governance structure of Texas higher education is so diffuse, it is difficult for the Coordinating Board to play a more active role in the creation of new degree programs, including applied baccalaureate programs, as well as the creation of articulation and other cooperative agreements. The Board supports and encourages these arrangements but has little direct influence on their development.

b. What were some of the early motivations for beginning work on AB degrees in your state?

The creation of applied baccalaureate degrees in Texas was motivated by the need to create flexible baccalaureate degree completion programs for students with applied associate degrees. Because only a small amount of the academic general core curriculum is required for an applied associate degree, students with the degree who wished to transfer into a four year baccalaureate degree program found that sometimes only 20% of their associate degree credit was transferable. This motivation to improve transferability and increase degree completion options continues to drive the development of applied baccalaureate degrees in Texas.
2. Why does your state have Applied Baccalaureate degrees?

Applied baccalaureate degrees have been a part of Texas higher education for over 30 years. They have proven increasingly popular as they have become more widely known and available, and they appear to be well positioned for future growth in Texas. The number of applied baccalaureate degrees awarded has since 1989 has steadily risen. One of the reasons this degree has gained popularity is because it is generally seen as a flexible degree program that appeals to non-traditional students.

Applied baccalaureate degree programs in Texas are also designed to be directly responsive to employer demand and need. They provide an opportunity for students to remain current or advance to management positions in their careers, upgrading their existing associate’s degree to a bachelor’s. These degrees allow students to get training in a career field first, rather than last, and continue working in that field while they take their remaining general education courses and upper-level subject content courses.

Texas has set a 2015 goal to increase enrollment at public and independent institutions by 630,000 students. While enrollment has increased every year since 2000, the new students account for only 37% of the 630,000 additional students needed by 2015. To reach state participation goals, Texas will need to aggressively recruit individuals that have completed their associate’s degree but have not completed a full baccalaureate degree—exactly the candidate pool targeted by applied baccalaureate programs. The pool of potential applicants in Texas is enormous; according to the US Census Bureau’s 2007 American Community Survey, there are over 10.9 million Texans over the age of 25 who have not earned a baccalaureate degree or higher. The state’s Report of the Select Commission on Higher Education and Global Competitiveness reports, “Texas must more than double the annual degree production to reach the level of the best performing country of 55 percent of the population ages 24-64 with an associate degree or higher by 2025.... After accounting for increases in the population with bachelor’s and associate degrees resulting from population increase and net migration from 2005 to 2025, Texas must realize an additional 2,509,881 degrees between 2005 and 2025, an average annual increase of 125,494 or 102.6 percent beyond the 2005 level of 122,269 for every year through 2025.”

3. What are the numbers of students that receive them and how many have found jobs in their field?

Since 1989, 16,194 applied baccalaureate degrees have been awarded from Texas public community colleges and universities. In 2008 1,376 applied baccalaureate degrees were awarded, a 307% increase over the 474 degrees awarded in 1989. We do not have statewide employment data from all of our institutions; however, we have been closely monitoring the
three community colleges that offer the Bachelor of Applied Technology. Data from these programs indicates that there is a close to 100% employment rate for graduates and many of these graduates receive promotions or raises as a result of obtaining the BAT.

Over half of the applied baccalaureate degrees, mostly the Bachelor of Applied Arts and Sciences, in Texas could be classified as general degrees. The trend over the last five years, however, has been for the development of applied baccalaureate degrees that are linked to very specific technical fields. These fields include: applied business technology, emergency management administration, criminal justice, safety management, cancer information management, polysomnography, chemical process technology, organizational management, computer information systems technology, applied engineering technology, health services technology, and culinary sciences.

4. How do your employers value the AB programs and AB graduates and how do you know?

Statewide data in this area has not been collected. However, formal and informal employer satisfaction surveys have been conducted by the three community colleges that are offering the BAT. These studies indicate that employers are highly satisfied with applied baccalaureate graduates and often actively encourage their eligible employees to participate in the programs. In many cases, these employers have gone so far as to offer tuition assistance and flexible scheduling to assist students enrolled in the programs.

5. How have your employers been involved in these programs?

Yes, for those programs that involve a specific technical field and/or track, employer advisory boards are utilized both in the development of the program objectives and in the continued evaluation and evolution of the program. This has been most evident at the three community colleges that offer the BAT. Each of the BAT degree programs at those institutions as a community advisory board that is made up of employers, city and community officials, faculty, and, as soon as possible, graduates of the BAT. The advisory board meets regularly to discuss employer and community needs, job growth, use of assessment and evaluation material, and any changes in needed graduate skills.

6. Why are AB programs valuable to students?

Adult students who have family responsibilities often do not have the option of abandoning their careers while they return to school for two or more years to complete their bachelor’s degree. According to the Lumina Foundation for Education’s study, Returning to Learning: Adults’ Success in College is Key to America’s Future, adult learners have unique circumstances that make attendance at a traditional baccalaureate degree-granting institution challenging. Non-traditional students who are older than traditional college age, working part- or full-time,
and have family responsibilities that limit their ability to travel or relocate to attend college, often find applied baccalaureate programs particularly amenable to their needs. While adult students are not the exclusive target of these programs, they are often uniquely positioned to benefit from them.

Additionally, these programs are designed in such a way that students are more likely to see most of their associate degree level credit transfer into the programs. Applied associate’s degrees in Texas contain around 15 semester credit hours of general education core curriculum coursework as opposed to the 42 semester credit hours contained in an academic associate’s degree. Students with an applied associate’s degree who wish to enter into a non-applied baccalaureate degree program often see as much as 75% of their credit listed as non-transferable. With the applied baccalaureate degrees, these students lose little, if any, credit in the transfer process.

7. What limits the value of AB programs to students?

Accessibility to programs continues to be an issue in Texas. Because many students who are most likely to be attracted to an applied baccalaureate degree are non-traditional students, some experience difficulty in scheduling time for courses. Many Texas institutions are responding by offering portion or entire degree programs online. Currently, at least 16 institutions with applied baccalaureate degrees offer at least some of their courses online, and eight offer the entire degree online.

Another challenge that both students and institutions may encounter is a lack of knowledge regarding applied baccalaureate degrees. Although these degrees have been in Texas for over 30 years and are increasing in popularity, they still make up a very small percentage of the baccalaureate degrees awarded in the state. Many employers and potential employers must be educated about what the degree is and its value, especially for those degrees that are awarded by one of the three community colleges offering the BAT. Additionally, although we have seen applied baccalaureate graduates go on to graduate school, graduate schools sometimes must also be convinced of the academic integrity of the degree.
Malcolm Grothe  
Executive Dean  
South Seattle Community College

1. **What was the context of the development of Applied Baccalaureate in your state?**

   Washington State is one of the top producers of 2-year degrees in the country, but is far behind in the production of 4-year degrees.

   In addition the Applied Bachelor’s are designed to facilitate career advancement for students where:

   - No educational path available for students
   - Fields require increasing levels of education
   - Move from technical work to management
   - Move into more advanced technical work

   **a. What is the governance structure of community colleges and public universities in your state and how did it affect the development of AB degrees?**

   Washington State has the State Board for Community and Technical Colleges which connects the 2-year colleges with the state legislators. All two year college districts have their own Board of Trusties. The Higher Education Coordinating Board is the four-year and above schools leadership body. All four year institutions also have their own Board of Trusties.

   Community Colleges wishing to offer an applied baccalaureate degree need to receive approval from both Boards.

   **b. What were some of the early motivations for beginning work on AB degrees in your state?**

   Provide Pathways for two year professional technical students to attain a baccalaureate degree.

2. **Why does your state have Applied Baccalaureate degrees?**

   Increase baccalaureate attainment and provide pathways for professional technical two year students to earn a baccalaureate degree. Provide more educational access for nontraditional students.

3. **What are the numbers of student that have received them and how many have found jobs in their field?**

   This data in not available yet as the first students graduated just four months ago.
4. How do your employers value them and how do you know?

This Hospitality Management Bachelors program has had extensive employer support we have received several scholarships and commitments for internships and other support. In addition the employers surveyed in my dissertation perceived that graduates met and in some cases exceeded their expectations. In addition employers I surveyed felt these degrees were community builders.

5. How have your employers been involved in these degrees?

The employers have been extensively involved with preplanning and implementation, advisory groups and the development of the program outcomes.

6. Why are these programs of value to students?

They provide higher education access for nontraditional students who would otherwise not be able to attain a baccalaureate degree by:

   a) Mitigating Significant Barriers
   b) Providing Relevant Programming
   c) Preparing Students for Graduate School
   d) Utilizing Alternative Delivery Methods
   e) Meeting Student Job Demands

7. What limits the value to students?

Students wanting to attain a masters degree may want to inquire about the transferability of the BAS degree to the particular school there are interested in as some school may have a requirement for a BS or such.

8. What is your best word of encouraging advice?

I believe the offering Applied Baccalaureate degree can be component to help the citizens of the State of Oregon rebuild their economy by providing higher skilled workers to local businesses and upgrading workers skills at current jobs.

9. What is your best cautionary thought?

Community Colleges offering Applied Baccalaureate degrees is a building trend in the US and Canada. Preliminary data have been very positive, however, some community colleges that began to offer baccalaureate degree have morphed into universities. Providing safe guards to
help the community college offer applied baccalaureate degrees while maintaining their mission for open access and adult basic education as well as professional technical education would help to ease this concern.
David Young  
Senior Vice President for Academic Affairs  
Arizona State University

1. Why does your state have Applied Baccalaureate degrees?  

The three public universities in Arizona (Arizona State University – ASU; Northern Arizona University – NAU; University of Arizona – UA) are governed by a single board of regents, the Arizona Board of Regents (ABOR). Prior to 2003 there was a State Board of Directors for Community Colleges of Arizona (SBDCCA). However, the State Legislature eliminated the community college board in 2003. It is anticipated that the Legislature will create a new coordinating board during the 2010 legislative session. Currently, the ten (10) community college districts in Arizona are independently governed by locally elected boards.

In January 1998 the Higher Education Study Committee (HESC) of the State Legislature charged ABOR and SBDCCA to “continue the collaborative process that assures the advanced postsecondary education needs of place-bound and time-constrained learners and of employers, including private business, not-for-profit and government, are efficiently and effectively met without displacing students’ families or existing employment and without unnecessary duplication of programs.” In addition, ABOR and SBDCCA were charged to “develop a system for identifying and meeting demonstrated needs statewide,” including the need for an applied baccalaureate degree program. The HESC charge was in response to the desire of some community colleges to offer the baccalaureate degree and the belief that the universities were not responding to the workforce needs of the state. A fairly elaborate process was proposed to determine need and implementation of applied baccalaureate degree programs that engaged the entire higher education community within the state. The process allowed for the development of applied baccalaureate programs at the community colleges, but only if the public and private four-year colleges and universities elected not to respond to the need. Today, much of the original process is no longer in use and BAS degrees are offered only by the universities. However, the community colleges and universities continue to work collaboratively to meet the workforce needs of the state, primarily through individual community college-to-university interactions and through the statewide Academic Program Articulation Steering Committee (APASC).

Arizona pursued development of the applied baccalaureate in recognition of the fact that in some fields there was a need for workforce development educational programs that went beyond the scope of the Associates of Applied Science (AAS) degree. By spring of 1998 ASU-East (now the ASU Polytechnic Campus) and NAU had received permission from ABOR to develop Bachelor of Applied Science (BAS) degree programs. ASU Polytechnic accepted students into the BAS program in Emergency Management in the fall of 1998.
Implementation of the BAS introduced the concept of “block transfer” of credit in Arizona to address issues regarding lack of transferability of many of the courses included in AAS degree programs. Today, BAS programs are offered at ASU Polytechnic, West and On-Line campuses, NAU, and UA South.

2. **What are the numbers of student that receive them and how many have found jobs in their field?**

Over the past five years, approximately 580 students have transferred each year to one of the three state universities with an AAS from an Arizona community college (out of approximately 8500 transfer students per year). In 2008-09 approximately 200 students graduated from one of the three state universities with the BAS degree, with the majority of those degrees granted by ASU and NAU. ABOR does not have specific data regarding how many students have found jobs in a field related to their BAS degree. However, at ASU the majority of students pursuing a BAS degree are already employed in the field and are using the BAS degree for career advancement within the field.

3. **How do your employers value them AB programs and AB graduates and how do you know?**

BAS degree programs appear to be of most value to employers because they provide a mechanism for employees to acquire additional technical and general education skills that are not included in the AAS degree. In addition, a baccalaureate degree often is required for career advancement (e.g., RN to BSN). Recent focus groups with the healthcare industry as well as the manufacturing, engineering, and technical fields revealed that while employers are very satisfied with the level of technical skill attainment among BAS graduates, there is still room for improvement in the areas of critical thinking, written and oral communication skills, and quantitative literacy.

4. **How have your employers been involved in these programs?**

Arizona community colleges and universities have industry advisory groups that are engaged in the development of AAS and BAS degree programs and curricula. For example, at ASU Polytechnic each of the departments in the College of Technology and Innovation that offer the BAS degree have industry advisory groups that assist the departments in ensuring that curricula are current and meeting industry needs with respect to the workforce. In addition, the community colleges use input from industry groups to develop and implement new AAS programs.

5. **Why are AB programs valuable to students?**

In Arizona, BAS degree programs are of most value to students who have completed an AAS degree at a community college because it allows them to pursue a baccalaureate degree,
usually for career advancement purposes, AND not lose transfer credit for courses in the AAS degree that otherwise would not transfer to the university (Arizona universities accept 60-64 hours in the AAS degree as a block; that is, the universities do not do a course-by-course evaluation of the AAS transcript). This allows students to complete a baccalaureate degree in a timely and cost effective manner.

6. What limits the value of AB programs to students?

In Arizona, the most significant issue that limits the value of the BAS is that it is perceived by students as a “second class” degree compared to the BA/BS degree. In addition, the BAS may not provide a student with a pathway to graduate programs. In fact, in Arizona more students who transfer to the three public universities with the AAS degree elect to pursue a BA/BS degree instead of the BAS even though the AAS is not a “transfer” degree (that is, most of the courses in the AAS will not be accepted for transfer credit in BA/BS programs).