

SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs

AGENDA ITEM: 5 – L

DATE: December 2-3, 2015

SUBJECT: Associate Degree Design Committee Report

In May of 2015, former SDBOR Executive Director Jack Warner convened a meeting with the purpose of discussing opportunities and challenges related to expanding associate degree offerings within the Regental system. At the conclusion of the meeting, university presidents agreed to appoint a committee for further investigation the issue with NSU President Jim Smith as chair. The committee’s charge included investigating methods for collaboration among institutions in offering new associate degree programs, analyzing data to determine if a market exists for expanded associate degree programming, recommending key elements of associate degree programming design, examining potential funding and finance models, and reporting findings to the Council of Presidents and Superintendents (COPS). Representatives from the committee met in June, August, and October of 2015.

The attached document represents a summary of the findings and recommendations of the Associate Degree Design Committee. Institutions will continue to investigate associate degree opportunities with the intent of bringing forth action items for the Board’s consideration at the April 2016 meeting.

RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

Information only.



Report of the Associate Degree Design Committee

I. INTRODUCTION

In May of 2015, former SDBOR Executive Director Jack Warner convened a meeting with the purpose of discussing opportunities and challenges related to expanding associate degree offerings within the Regental system. Meeting attendees included Dr. Warner, the presidents of all six Regental universities, and a small number of Board office and campus-based staff. The discussion topics included but were not limited to South Dakota's lack of a community college system, public perception for an increase in associate degree holders within the state, the associate degree as a mechanism to encourage four-year degree completion, the cost structure for associate degree programs, and associate degree program design.

At the conclusion of the May 2015 meeting, the presidents of each university agreed to appoint a committee for further investigation of expanded associate degree offerings within the Regental system. COPS appointed President Jim Smith of Northern State University to chair a committee consisting of twelve members including representatives from each campus.¹ The committee's charge included investigating methods for collaboration among institutions in offering new associate degree programs, analyzing data to determine if a market exists for expanded associate degree programming, recommending key elements of associate degree programming design, examining potential funding and finance models, and reporting findings to the Council of Presidents and Superintendents (COPS). Representatives from the committee met in June, August, and October of 2015.

II. PRELIMINARY MARKET ANALYSIS

Daniel Palmer, Director of Institutional Research for the Board of Regents, provided the committee with an in-depth market analysis to guide the committee's work. The analysis synthesized a variety of federal, state, and local data in an effort to evaluate market demand for associate degrees in South Dakota. Accordingly, the analysis considered a range of related topics, including population change, educational attainment, postsecondary degree awards, employment projections, and labor force outcomes of degree holders. Collectively, the information provided a reference to inform the committee's work and as a starting point for further market analysis. Any expansion of associate degree offerings within the Regental system needs to consider this and subsequent market data. A summary of Dr. Palmer's analysis is as follows:

¹ Committee members included Michael Card (USD), Rod Custer (BHSU), Sheila Gestring (USD), Lindsey Hamlin (SDSU), Michael Holbeck (SDSU), Craig Johnson (UC-SF), Monte Kramer (BOR staff), Daniel Palmer (BOR staff), Jay Perry (BOR staff), Sarah Rasmussen (DSU), Jim Smith (NSU), and Frank Van Nuys (SDSM&T).

A. State Demographic Overview

- The US Census Bureau estimates the 2014 population of South Dakota as 853,175 residents. Approximately thirty percent of the inhabitants reside in the state’s largest metropolitan area (Sioux Falls), and more than seventy percent live in one of the ten largest metropolitan or micropolitan areas (Table 1).² With only 11.4 inhabitants per square mile, South Dakota is among the least densely populated states in the nation.

Table 1
South Dakota Population Centers, 2014

Area	Metro/Micro Population	Percent of State Population	City Population	Percent of State Population
Sioux Falls Metropolitan Area	248,351	29.1	168,586	19.8
Rapid City Metropolitan Area	143,638	16.8	72,638	8.5
Aberdeen Micropolitan Area	42,391	5.0	27,800	3.3
Brookings Micropolitan Area	33,314	3.9	23,225	2.7
Watertown Micropolitan Area	27,938	3.3	22,057	2.6
Spearfish Micropolitan Area	24,657	2.9	11,091	1.3
Mitchell Micropolitan Area	23,304	2.7	15,693	1.8
Yankton Micropolitan Area	22,684	2.7	14,552	1.7
Pierre Micropolitan Area	22,063	2.6	14,054	1.6
Huron Micropolitan Area	18,169	2.1	13,163	1.5
All Areas	606,509	71.1	382,859	44.9

- Health care, retail trade, and manufacturing represent the three largest industrial components of the South Dakota economy, while concentration figures suggest that finance-insurance and agriculture are the state’s two strongest niche industries. Occupational data indicate that lower paying positions dominate the state’s most common occupations.

B. Population Change

- South Dakota’s population growth in recent decades has outpaced that of regional neighbors but not the nation as a whole. Despite growing overall, South Dakota’s population has not shown signs of expansion among young residents. In fact, the number of state residents in the 15-34 age group –the prime college-age demographic – was actually smaller in 2014 than in 1984.

- Projections indicate South Dakota’s overall population will grow moderately over the next three decades, but meaningful growth in the state’s young population is not likely to occur. The broader region can expect a similar pattern.

C. High School Graduate Projections & High School Matriculation

- In contrast with national trends, South Dakota expects moderate growth in high school graduate production over the next fifteen years. This growth largely comes from racial and ethnic minority students. At the same time, regional high school graduate production should remain level in coming years, a trend that may lead to increased competition for college students both inside and outside of South Dakota.

² US Census Bureau (2014), Population Estimates (PEPANNRES)

- Data from the National Student Clearinghouse indicate that for every two South Dakota high school graduates who matriculate to a college or university after graduation, one student does not. Around 34 percent of in-state high school graduates do not enroll in any college or university within 16 months of high school graduation; similarly, the same is true of more than 12 percent of graduates with an ACT composite score of 18 or higher.

D. Educational Attainment & Degrees Awarded

- South Dakota's education attainment rates are relatively low across all categories of education attainment and tend to fall below national and regional figures. Data indicate that associate degrees represent a disproportionately large share of degrees in South Dakota in comparison with other states (Table 2).³

Table 2
Educational Attainment by State, 2013
(Percentages)

	Associate's Degree or Higher	Bachelor's Degree or Higher	Master's Degree or Higher
Iowa	37.5	26.4	8.4
Minnesota	44.2	33.5	11.1
Montana	37.4	29.0	9.3
Nebraska	39.2	29.4	9.8
North Dakota	40.9	27.1	7.2
South Dakota	38.0	26.6	7.6
Wyoming	37.3	26.6	8.8
United States	37.7	29.6	11.2

- Associate degree attainment has grown faster in South Dakota than for other levels of attainment relative to national and regional figures. Growth in graduate degree attainment has been relatively slow.

• In South Dakota, growth in degree conferrals has greatly outpaced growth in population since the 1980s. However, growth in degree conferrals fell considerably short of analogous growth for the region and nation. Recent degree growth in South Dakota has been oriented toward associate degrees while other states have tended to focus more on bachelor's and graduate degrees.

E. Associate Degree Awards & Placement

- Roughly six in ten associate degree completers from the state's technical institutes and public universities (combined) are employed in South Dakota one year after graduation.

³ US Census Bureau (2013), 2013 American Community Survey (B15003). In order to facilitate comparability with related research conducted by the Census Bureau, the scope of this analysis is limited to working-age adults only (defined here as all persons age 25 or older). For reference, the estimated working-age population of South Dakota in 2013 was 550,959.

- Roughly 50,000 members of South Dakota’s labor force (about 13 percent of the state’s total labor force) hold an associate degree only. Industries related to health care, finance and insurance, and retail trade employ approximately 44 percent of all associate degree holders in South Dakota. Overall, occupations typically requiring an associate degree are more concentrated in South Dakota than in the nation as a whole, particularly in health care-related occupations.

F. Labor Force Outcomes & Employment Projections

- Between 2012 and 2022, in-state employment in positions typically requiring an associate degree is expected to increase by 2,820, an increase of 12.6 percent. Projected percentage-based job growth for associate degree holders is the highest of all education levels; however, numeric growth is weak in comparison with that of bachelor’s-related occupations.

- No associate’s-level occupation is expected to grow faster – statewide, regionally, and in all areas of South Dakota – than registered nursing.

- Rough estimates derived from data provided by the US Department of Education and the US Bureau of Labor Statistics suggest that current levels of graduate production – both in South Dakota and in the broader region – may outpace projected demand for some associate-level occupations.

III. TYPES OF ASSOCIATE DEGREES

Three types of associate degrees are common in South Dakota, the Associate of Applied Science (AAS), the Associate of Science (AS), and the Associate of Arts (AA).

The AAS degree typically prepares graduates for immediate entry into a specific occupation. AAS programs primarily consist of technical (not academic) coursework and are not transferable to a bachelor’s program unless an articulation agreement exists between the AAS program and a bachelor’s degree granting institution.

In contrast, the AA and AS degrees typically prepare graduates for entry-level work in a broad occupational field and/or provide transfer options to bachelor’s programs. The AA and AS are the associate degree types offered at South Dakota public universities and typically require 60 credit hours for completion. The primary difference between the AA and AS at South Dakota public universities is the amount of general education credit required. Board of Regents Policy 2:26 requires 30 general education credit hours for the AA and 18 general education credits for the AS.

Within South Dakota, the AAS is the primary degree offered at South Dakota technical institutes, Globe University – Sioux Falls, and National American University. Dakota Wesleyan, Presentation College, University of Sioux Falls offer a limited number of AA/AS degrees. Kilian Community College, Oglala Lakota College, Sinte Gleska University, and Sisseton Wahpeton College offer both AAS and AA/AS degrees.

IV. ASSOCIATE DEGREE PROGRAMS CURRENTLY AVAILABLE IN SOUTH DAKOTA

Students wishing to pursue an associate degree have plentiful options. Over 250 associate programs are available at South Dakota's colleges, universities, and technical institutes. This total includes over 190 AAS programs and over 75 AA or AS programs. The chart below provides a summary of the total number of programs available at each institution.⁴

**Table 3
NUMBER OF ASSOCIATE DEGREE PROGRAMS AVAILABLE AT SOUTH DAKOTA POSTSECONDARY INSTITUTIONS**

SCHOOL	INSTITUTION TYPE	AAS	AA/AS
Dakota Wesleyan University	Private	0	1
Globe University (Sioux Falls)	Private	13	0
Kilian Community College	Private	5	9
Mount Marty College	Private	0	5
National American University	Private	14	0
Presentation College	Private	0	11
University of Sioux Falls	Private	0	2
Oglala Lakota College	Tribal	4	9
Sinte Gleska University	Tribal	1	13
Sisseton Wahpeton College	Tribal	3	6
Lake Area Technical Institute,	Technical Institute	53	0
Mitchell Technical Institute,	Technical Institute	30	0
Southeast Technical Institute,	Technical Institute	45	0
Western Dakota Technical Institute	Technical Institute	24	0
Black Hills State University	Public	0	3
Dakota State University	Public	0	5
Northern State University	Public	0	7
South Dakota School of Mines & Technology	Public	0	1
South Dakota State University	Public	0	2
University of South Dakota	Public	0	2
	TOTALS	192	76

⁴ With the exception of totals for public universities, these totals were determined from review of institutional websites. Additional programs may exist at each institution.

V. *ASSOCIATE DEGREE CONFERRALS IN SOUTH DAKOTA*

Table 4
ASSOCIATE DEGREES CONFERRED IN SOUTH DAKOTA BY
INSTITUTION TYPE, LAST 10 YEARS

	'05	'06	'07	'08	'09	'10	'11	'12	'13	'14
SD Public Universities ⁵	387	397	449	399	423	419	432	413	461	461
SD Technical Institutes ⁶	1,230	1,240	1,180	1,047	990	1,047	1,415	1,554	1,535	1,692
All Other SD Colleges & Universities ⁷	608	678	639	599	551	486	754	732	614	543
TOTAL	2,225	2,315	2,268	2,045	1,964	1,952	2,601	2,699	2,610	2,696

The total number of associate degrees conferred by South Dakota postsecondary institutions has increased over the last 10 years, most notably from 2011 to 2014. While the figures for the public university system have edged up slowly for a decade, degree conferrals by the state's technical institutes have surged dramatically since 2011 while associate degree conferrals from all other postsecondary institutions has declined. The technical institutes' collective share of total associate degree production in South Dakota (63 percent) is now higher than at any point in the last decade. The public university system currently produces 17 percent of all associate degrees conferred by South Dakota institutions with the remaining 20 percent conferred by private and tribal colleges and universities.

It is worth noting that the majority of associate degrees conferred in South Dakota are AAS degrees as evidenced by the list of associate degree programs available in South Dakota (Table 3) and the list of total associate degrees conferred (Table 4). The emphasis on the AAS degree within South Dakota comes with positive and negative consequences. On the positive side, the design of AAS degrees leads to immediate entry into specific occupations and is a key element of workforce development initiatives within South Dakota. A negative consequence is that AAS degrees do not readily transfer to bachelor's programs, thereby limiting the educational attainment options for graduates.

⁵ Black Hills State University, Dakota State University, Northern State University, South Dakota School of Mines & Technology, South Dakota State University, University of South Dakota

⁶ Lake Area Technical Institute, Mitchell Technical Institute, Southeast Technical Institute, Western Dakota Technical Institute

⁷ Institutions conferring associate degrees in the last 10 years other than Regental public universities and state technical institutes include Colorado Technical University – Sioux Falls (note: no longer admitting new students), Dakota Wesleyan University, Globe University – Sioux Falls, Kilian Community College, Mounty Marty College, National American University (note: locations in Rapid City, Ellsworth Air Force Base, Sioux Falls, and Watertown), Oglala Lakota College, Presentation College, Sinte Gleska University, Sisseton Wahpeton College, University of Sioux Falls.

VI. ASSOCIATE DEGREE PROGRAMS AND CONFERRALS FROM SOUTH DAKOTA'S PUBLIC UNIVERSITIES

South Dakota public universities currently offer twenty associate degree options; however, that number is misleading given that six of the programs are AA degrees in general studies, a program available at all six Regental institutions.⁸ Current associate degree production within the public university system is disproportionately tied to two specific fields, nursing and general studies. USD's AS in Nursing program had 268 graduates in FY14, or 58 percent of the total associate degrees awarded in the Regental system.⁹ The AA in general studies at all six institutions accounted for 95 associate degree graduates within the Regental system in FY14, or 21 percent. Thirteen other programs combined to produce the remaining 98 associate degrees conferred.

**Table 5
AA/AS PROGRAMS AVAILABLE AT SOUTH DAKOTA
PUBLIC UNIVERSITIES**

SCHOOL	PROGRAM	DEGREE
BHSU	General Studies	AA
BHSU	Applied Health Sciences	AS
BHSU	Tourism and Hospitality Management	AS
DSU	General Studies	AA
DSU	Business Management	AS
DSU	Health Information Technology	AS
DSU	Network & System Administration	AS
DSU	Respiratory Care	AS
NSU	Applied Gerontology	AA
NSU	General Studies	AA
NSU	Business Administration	AS
NSU	Business – Management Information Systems	AS
NSU	Banking & Financial Services	AS
NSU	Biotechnology	AS
NSU	Digital Design	AS
SDSM&T	General Studies	AA
SDSU	General Studies	AA
SDSU	Agricultural Science	AS
USD	General Studies	AA
USD	Nursing	AS

⁸ The Associate of Arts in General Studies provides students with a foundation of general education courses and electives designed specifically for transfer to a variety of bachelor's degree programs.

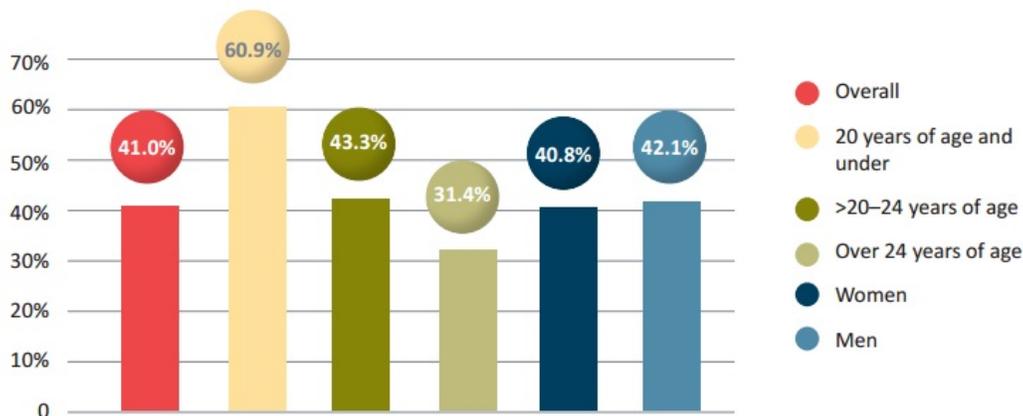
⁹ Recent trends indicate a move within the health care industry to nurses with bachelor's degrees. This trend has limited access to clinical placements for current students in nursing associate programs. As a result, nursing associate degree conferrals will either decline and/or promote additional persistence to the bachelor's degree. For more information, see USD's 2014 proposal to offer the Bachelor of Nursing at Capital University Center, available from https://www.sdbor.edu/theboard/agenda/2014/December/III_C2_CommA1214.pdf.

VII. STATEWIDE ATTAINMENT GOAL

The South Dakota Board of Regents established a statewide educational attainment goal at its October 2015 meeting.¹⁰ The Regents set the goal as 65 percent of South Dakota citizens, aged 25-34, holding a postsecondary credential by the year 2025. As of 2013, only 38 percent of South Dakotans over age 25 held an associate degree or higher. In addition, the Board's agenda item cited labor market data indicating South Dakota needs to increase bachelor's degree production by 7.9 percent by 2022 to meet workforce demand.

With those numbers in mind, any concentrated effort to offer more associate degree programs at Regental institutions should simultaneously encourage completion of four-year degrees. Recent research shows that 60 percent of students who earn an associate degree by age 20 go on to earn a bachelor's degree within six years; for students of all ages, 41 percent complete a bachelor's degree within six years.¹¹

Table 6
Students earning an associate degree as a first credential who subsequently earned a bachelor's degree



The expansion of associate degree offerings in the Regental system holds potential for attracting students that otherwise do not attend any postsecondary institution, an essential aspect of reaching the statewide attainment goal. Data from the National Student Clearinghouse indicate that for every two South Dakota high school graduates who matriculate to a college or university after graduation, one student does not. Around 34 percent of in-state high school graduates do not enroll in any college or university within 16 months of high school graduation; similarly, the same is true of more than 12 percent of graduates with an ACT composite score of 18 or higher.

¹⁰ South Dakota Board of Regents, Agenda Item 4 – E, October 7-8 (2015), available from https://www.sdbor.edu/theboard/agenda/2015/October/4_E_BOR1015.pdf.

¹¹ “Study: 2 in 5 Associate Degrees Lead to a Bachelor’s Degree,” *Inside Higher Education*, June 17 (2015). For the chart, see “Completion Pathways,” Data Points, American Association of Community Colleges, (September 2015), available from http://www.aacc.nche.edu/Publications/datapoints/Documents/DP_CompletPathways.pdf.

VIII. COMMITTEE RECOMMENDATIONS

The recommendations of the Associate Degree Design Task Force fall under the following headings: Program Design Elements, Location and Delivery Methods, Student Success and Advising, Administrative Considerations, Additional Market Research Needed, and Financial Considerations. There are limitations to the committee's recommendations – the recommendations assume a legitimate demand and untapped market for expanded associate degree offerings in the Regental system exists. Additional and ongoing analysis will answer that question more definitively.

A. Program Design Elements

- 1) New associate degree programs (and certificates) offered within the Regental system should be designed as “stackable” credentials. Stackable credentials encourage completion of additional degree programs by limiting the amount of time (credit hour accumulation) and money a student must invest to complete the next level of attainment. Stackable credentials involve creating programs at various levels (certificates, associate degrees, bachelor's degrees) with aligned curriculum. As an example, a 12-credit hour certificate in criminal justice is designed so that all 12 credit hours seamlessly transfer to the core required of a 60-credit hour associate degree in criminal justice (a student with a certificate in criminal justice would take only 48 additional credit hours to earn the associate degree). Similarly, a student completing the 60-hour associate degree in criminal justice can seamlessly transfer all 60 credit hours to the required core for a 120-credit hour bachelor's degree in criminal justice. Therefore, the student would need only an additional 60 credit hours beyond the associate degree to earn the bachelor's degree.¹²
- 2) New associate degree programs should relate to an established four-year bachelor's programs to encourage ease of transfer, program stackability, and promote bachelor's degree attainment.
- 3) Associate degree programs should include course curricula designed to provide workplace experiences for students (assignments, service-learning opportunities, internships, employer visits to the classroom).
- 4) New associate degree offerings should target fields with projected high student demand and high employment growth using several methods of projection (e.g., SD Department of Labor, content of job advertisements, etc.). The demand and need for programs should be determined through consultation with employers, high school population, economic and workforce development organizations, and area high school counselors and faculty.
- 5) Universities should investigate short-term, quick-to-market programming (based on previously articulated marketplace needs). Campuses and board staff should analyze markets for unfilled program niches. Once the number of program graduates fills the demand, the program can be inactivated to allow for reanalysis of the market and/or to move forward with the development of other niche program offerings. In essence, some new associate degree or certificate programs can be short-term in nature (e.g., three or four cohorts).

¹² For more information on practical applications of stackable projections, see Katherine Mangan, “Stack Those Credentials,” *Chronicle of Higher Education*, September 14 (2015).

6) New degree offerings should emphasize specific fields where a degree can lead directly to licensure or employment. However, the Associate of General Studies concept with an area of specialization stackable to a variety of bachelor's programs is worth further exploration. Examples could include associate degrees in laboratory sciences, social sciences, information technology, etc. that allow students to complete the majority of general education requirements needed for a baccalaureate degree in addition to gateway courses that apply to multiple baccalaureate majors. The Associate of General Studies, while not occupation specific, can serve as an important step in promoting persistence to the bachelor's degree.

B. Location and Delivery Methods

1) New associate degree programs should include a combination of platforms and delivery methods to appeal to a variety of potential students. These platform and delivery methods should include traditional face-to-face options as well as online programs, hybrid methodologies (involving a combination of face-to-face and online instruction), and “fast track” or accelerated programs designed to move busy, working, or motivated students through the curriculum in a shorter time frame.

2) The physical locations offering associate degrees programs can (and should) vary. Face-to-face and hybrid programs should be offered in the geographic locations expected to yield the most students – community need/demand will drive site selection. In many cases, this will not be traditional campus locations, but will include university centers in Sioux Falls, Pierre, and Rapid City, as well as satellite sites in underserved communities.

3) Online programs should serve communities where a demonstrated need for academic credentials (certificates, associate degrees, etc.) exists but the community is not near a Regental university, university centers, or other programming site.

4) Universities should base the selection of associate degree programs to offer on analysis of worker demand forecasts by degree level and subject content. Universities should review South Dakota labor data on industries with high projected growth in relation to metropolitan and micropolitan areas using available data. In addition, analysis of population demographics (age, employment level, nationality, language, etc.) should shape future program offerings.

C. Student Success and Advising

1) National data indicate less than 30 percent of first time, full-time students enrolled in a two-year program graduate within three years.¹³ Dedicated student success initiatives should accompany any expansion of associate degree programs in the Regental system. Student success initiatives could include a variety of options, including orientation courses, cohort approaches, and assigning mentors/advisers/success coaches to students. Online programs should include the same focus on student success and degree completion as face-to-face programs, including student support services. This element is even more critical for associate programs that attract

¹³ National Center for Education Statistics, “Institutional Retention and Graduation Rates for Undergraduate Students,” May 2015, available from http://nces.ed.gov/programs/coe/indicator_cva.asp.

non-traditional students. Nationally recognized best practices for student success include but are not limited to¹⁴:

- a. “Meta-majors” aligning undecided students with broad course clusters (e.g., STEM, social sciences, business, etc.) that narrow to the major in the second year to reduce the accumulation of unnecessary credits.
- b. Align mathematics requirements with programs of study (i.e., algebra is not the appropriate mathematics requirement for all programs; quantitative literacy, statistics, and other mathematics courses may align better with certain programs).
- c. Provide students with defined program maps (course sequences that a student can follow for guaranteed completion).
- d. Automatically enroll students in default pathways/courses that lead to degree completion unless students make an explicit choice otherwise.
- e. Universities establish “critical path courses” that must be completed each semester to certify that students are on track for degree completion.
- f. Universities engage in “intrusive advising” (advisers regularly engage students, track prospects for degree completion, advising students of the most efficient route to degree completion, etc.).

2) Universities should provide students in associate degree programs with a rotation of core courses and clear outlines of overall coursework needed for completion. As a result, students should have a realistic view of the timeline for completion.

3) Universities should provide students in associate degree programs with accurate cost projections to attain the degree, as well as wage and employment projections for graduates.

D. Administrative Considerations

1) Associate degree planning should include system-wide review and improvement of methods for credit for prior learning experiences. Board Policy 2:5 currently allows universities to validate previous learning occurring outside of the classroom through a variety of testing services. However, the Regental system should continue to explore additional mechanisms for validating and credentialing prior learning to support increased education attainment of non-traditional students.¹⁵

2) An expansion of associate degree and certificate options must include plans by each institution to work with students in addressing federal financial aid requirements. This includes offering appropriate guidance for compliance with Title IV regulations that require educational certificates to prepare students for “gainful employment in a recognized profession” in order to receive financial aid.

¹⁴ These strategies align with those recommended by Complete College America, a national nonprofit working with states to increase the number of Americans with quality career certificates or college degrees and to close attainment gaps for traditionally underrepresented populations. A summary of these strategies is available from Complete College America, “The Game Changers,” 2014, available from <http://completecollege.org/the-game-changers/#clickBoxTeal>.

¹⁵ For additional background on credit for prior learning initiatives, see American Council on Education, “Credit for Prior Learning From the Student, Campus, and Industry Perspective,” (2013), available at <https://www.acenet.edu/news-room/Documents/Credit-for-Prior-Learning-Issue-Brief.pdf>.

- 3) An expansion of associate degree options within the Regental system potentially has significant impact on university center locations. It is conceivable that associate degree expansion and an emphasis on stackable programs could alter the missions of university centers to focus on AA or AS degrees.
- 4) Associate degree programs (and delivery site requests) related to demonstrated and documented workforce needs need more efficient approval processes. It can take months to approve a new associate degree under current policies and practices. However, the rapidly shifting marketplace for new programs that respond to workforce needs demands a revised, streamlined process.
- 5) The Regental system should consider revised entrance requirements for associate degree programs to encourage attendance from those not currently entering college or entering with challenges.
- 6) The Regental system should continue to develop and revise policies and procedures to articulate AAS programs to bachelor's programs. This includes continued work with South Dakota technical institutes on articulation agreements but also renewed exploration of Bachelor of Applied Technical Science (BATS) programs. This degree offered students with an AAS or other technical degree to build upon their existing skills and knowledge base and transfer their technical credits into a bachelor's degree program. A review of each AAS transcript determined the amount of transferable technical credit, up to 60 credit hours. SDSU and BHSU both offered the BATS programs at one time; however, low enrollments attributed to poor marketing and a lack of statewide understanding of the program led to its suspension. Opportunities may exist to revive the BATS program to encourage bachelor's degree completion among those in the state who currently possess an AAS degree.

E. Additional Market Research Needed

1) Universities and the Regental system should continue to collect and assess data on student interest in specific program features (course length, delivery method, location, etc.). Options for obtaining such data include conducting a survey of economic development officers across the state to assess impressions of worker demand by degree level and degree content area. The survey would include questions regarding current unmet employer demand, knowledge and skills of the current workforce, and employment prospects for additional degree holders.¹⁶ Survey results will aid in deciding whether a choice-based conjoint analysis¹⁷ could yield satisfactory data for determining individual willingness to pay for specific degrees and degree features. A conjoint analysis may yield data related to consumer preferences for various program features, including:

- a. Pricing units (e.g., credit, course, semester, degree)
- b. Program format (e.g., standard, accelerated)
- c. Course delivery format (e.g., face-to-face, hybrid, online, combination)
- d. Course delivery times (e.g., standard, weekend, evening, combination)

¹⁶ A sample draft of such a survey is available for review at http://sdbor.col.qualtrics.com/SE/?SID=SV_cSkIrkMcavs1viB.

¹⁷ A *conjoint analysis* is a marketing statistical technique used to determine how consumers value different attributes (feature, function, benefits) of a product or service.

- e. Course duration (e.g., standard, 6/8/10-week, self-paced, combination)
- f. Prior learning credit (e.g., yes, no)

2) Universities should review data, studies and reports/plans from local economic and community development organizations (such as Chambers of Commerce, Economic Development groups, nonprofit organizations, and K-12 school districts), and state government initiatives to identify potential need for associate programs. Examples of government initiatives include, but are not limited to Governor’s Office of Economic Development “Key Industries”¹⁸, “Areas of Critical Need” for which the Dakota Corps Scholarship is available¹⁹, Department of Labor and Regulation Targeted Occupations²⁰, and Department of Labor, “South Dakota Employment Projections 2012-2022, Fastest Growing.”²¹

F. Financial Consideration (Additional notes on these and other Financial Considerations are included as Appendix A)

1) The first step in establishing a financial model for associate degree programs is determining the target price point for such programs (the target price point will drive many of the other decisions related to a financial model). That target price point must be significantly lower than that of established bachelor’s programs in the system and competitive with other institutions offering associate programs (a point reiterated by Sioux Falls business leaders in recent meetings with Board members). The price point should encourage students to obtain general education credits from Regental institutions as the student volume in such courses often pays for the cost of specialty courses within majors. Within those parameters, determining the appropriate target price point requires additional market research (see also Recommendation E.1).

2) Outside of South Dakota, student demand for a transferable associate degree correlates in part to the significantly lower price offered at community colleges. Cities and/or geographic regions typically invest in community colleges to lower the price point for students (i.e., buying down the cost of attendance); a similar model where a city/region invests in degrees that are the most important to their communities would aid in offering competitively priced transferable associate degrees within South Dakota.

3) Where and how universities deliver associate degree programs can impact the financial model used to offer the programs. Offering programs face-to-face at university centers and other non-campus sites provides opportunities for soliciting community financial support; however, such sites could limit the impact of expanded programming to existing metropolitan or micropolitan markets. Offering associate programming online expands the reach of such programs but potentially creates public perception problems with the contrast of self-support rates for bachelor’s programs and reduced associate degree rates. The ongoing conversations of the appropriate price point and pricing models should consider the inefficiency of creating competition between Regental institutions and between delivery methods (e.g., on-line versus university center).

¹⁸ <http://www.sdreadytowork.com/Key-Industries.aspx>

¹⁹ <https://www.sdbor.edu/dakotacorps/whatisdakotacorps.html>

²⁰ http://dlr.sd.gov/lmic/menu_targeted_occupations.aspx

²¹ http://www.sdjobs.org/lmic/industry_projections_fastest_growth.aspx

4) Some committee members express interest in further exploration of banded tuition models for associate degree programs. A banded tuition model may provide incentives for students to take full-time credit loads (for accelerated program completion) and serve as a marketable enticement. Banded tuition establishes a flat rate for semesters based on established credit hour thresholds. For example, a student may pay one flat rate for all credits taken up to seven, a second flat rate for all credit hours between eight and twelve credits, and a flat rate for thirteen credits or more. However, banded tuition models pose challenges to part-time students (including non-traditional students to whom associate degrees are marketed). There is not enough current information to recommend placing associate degree programs on the banded tuition model; however, continued discussions and/or a pilot program exploring the benefits and challenges of the banded tuition model is worth exploring.

5) The following practices provide opportunities for achieving efficiencies that can reduce costs of associate degree programs and thus reduce the price of such programs:

- a. Associate programs should feature a reduced set of options for general education and elective credit hours. Reducing such options will require associate degree students to enroll in specifically designated associate program course options, thereby driving enrollments in course sections closer to maximum capacity in order to create efficiency. In addition, the reduced set of course options prevents students from accumulating unneeded credit and promotes degree completion.
- b. Students in associate degree programs should register for courses specifically designated as part of an associate degree program. Designated associate degree program advisers can oversee the registration process for each student to ensure proper registration. In addition, a mechanism must exist to prevent students enrolled in bachelor's programs from enrolling in the lower priced associate programs (e.g., only the courses for which an associate program student or bachelor's degree student is eligible appear in their Web Advisor options).
- c. Designated associate program course sections should utilize instructors with master's degrees rather than doctoral degrees. The use of master's trained instructors complies with accreditation requirements while lowering instructional costs. In addition, the use of part-time instructors allows universities greater flexibility assigning staff to programs in response to shifting market demand.

IX. CONCLUSIONS/SUMMARY

Consideration of expanding associate degree offerings in the Regental system should consider population, demographic, labor, and education trends in South Dakota and the surrounding region. While South Dakota's population is showing growth, it is not occurring among young residents with the exception of traditionally underrepresented populations (a potential target for associate degree expansion). In contrast with national trends, South Dakota expects moderate growth in high school graduate production over the next fifteen years. This growth largely comes from racial and ethnic minority students. Industries related to health care, finance and insurance, and retail trade employ approximately 44 percent of all associate degree holders in South Dakota. Just 13 percent of the state's total labor force holds an associate degree only.

Evidence suggests that opportunities exist for expanded associate degree offerings. Occupations that typically require an associate degree are more concentrated in South Dakota as compared to the rest of the country, particularly in health care-related occupations. Employment projections for such occupations indicate an expected 12.6 percent growth through 2022. A population of potential students exists in the one-third of in-state high school graduates do not enroll in any college or university within 16 months of graduation (including 12 percent of graduates with an ACT composite score of 18 or higher). Moreover, South Dakota's postsecondary attainment rates tend to fall below national and regional figures. Roughly sixty percent of associate degrees awarded in South Dakota come from the state's technical institutes and limit further postsecondary attainment options because the degrees are typically non-transferable. The transferable AA/AS degrees awarded by the Regental system currently account for only 17 percent of all associate degrees conferred by South Dakota institutions.

Despite these existing opportunities, the evidence also begs caution for expansion into the associate degree market. Associate degree attainment has grown faster in South Dakota and represents a disproportionately large share of the state's postsecondary attainment in comparison with other states. Potential students already have an overwhelming number of options for associate programs in the state, including over 190 AAS programs and 75 AA/AS programs. Rough data estimates indicate the current levels of associate degree graduate production may outpace the demand for associate-level occupations within the state.

The committee's recommendations for best methods to structure associate programs assume a legitimate demand and untapped market exists; however, a better understanding of the market requires additional analysis and data. The committee recommends continued and ongoing collection and assessment of data on student interest in program features (price, delivery method, location, etc.). This includes conducting a survey of the state's economic development officers, exploring a choice-based conjoint analysis study, and reviewing reports from economic/community development organizations and state government initiatives to identify potential associate programs.

If Regental universities move forward with expansion of associate programs, the following practices should be considered and implemented:

New associate degree programs should target fields with projected high student demand and high employment growth, emphasizing fields where graduation can lead directly to employment or options for further educational attainment. To accomplish the employment aspect, curriculum should include workplace experiences; to accomplish transferability, new programs should stack to bachelor's programs by requiring the minimum number of credits to achieve the next academic credential. New programs should include a combination of platforms and delivery methods to appeal to a variety of potential students, including face-to-face, online, hybrid, and accelerated programs. Short-term, quick-to-market programming may serve unfilled niches in communities currently unserved by a university.

Expanded associate programs will require a renewed dedication to student success initiatives for enrolled students. Universities should consider a variety of tools, including but not limited to intrusive advising, the designation of critical pathway courses, and alignment of math

requirements to the major. Universities should provide students with accurate program cost projections, employment projections for graduates, a consistent rotation of core courses, and expertise on financial aid requirements (including “gainful employment in a recognized profession” provisions).

Expanding associate degrees to target students who otherwise might not attend a Regental institution may require changes to existing Board policies and practices. Revised entrance requirements for associate degree programs may encourage attendance from those not currently entering college or entering with challenges. Improved policies on granting credit for prior learning experiences can aid students with degree completion and reduce student expenses. A revised and streamlined approval process for programs with a documented workforce need will allow universities to respond to the market with more agility. Lastly, a new and reduced cost financial model must exist that is outside of current practice.

Determining the appropriate financial model and price point at which to offer associate programs is among the most critical decisions still to be determined. The price point must be lower than current bachelor’s programs and competitive with the state’s technical institutes. A variety of practices exists by which universities can reduce costs of offering associate programs. On-going conversations with communities may result in a modified version of a community college model where cities/regions invest in lowering costs for students. Reduced student options for general education and elective credit hours can maximize section enrollments. The use of instructors with master’s degrees rather than doctoral degrees can reduce operational costs. Course enrollments through advisers, modifications to Web Adviser, and other mechanisms can create “fire walls” preventing bachelor’s students from enrolling in the less expensive associate programs.

Appendix A

Associate Degree Financial Questions**1) What Delivery Methods are we considering****a) Face-to-face at centers or other face-to-face locations only**

i) If Yes

(1) Pros

- (a) Easier to explain the reason for the price difference (i.e., course is offered at a different location than campus, may have community financial support, limited course selection options, etc.)

(2) Cons

- (a) Will we have enough demand outside of Sioux Falls and Rapid City?

b) Face-to-face at centers, other face-to-face locations and internet

i) If Yes

(1) Pros

- (a) A larger reach and larger market to help fill classes to capacity and drive efficiencies in the program
- (b) Make the program available to more people as well as capturing the market of people who prefer on-line and those who may be only interested in on-line

(2) Cons

- (a) How do we explain to the legislature that English 101 for the A.A program is \$200 per credit, but self-support English 101 is \$325 per credit?

(i) Possible Answer:

- 1. The A.A. program is a distinct entity that only hires master's prepared faculty, thus allowing a lower the price point.

- (b) How do we keep current students from wanting to sign up for these lower priced A.A. Courses?

(i) Possible Answer:

- 1. Advisors do the registering for the students, this serves multiple purposes
 - i. It allows the advisor to see where the excess capacity is available and put students in those courses instead of opening a new section (students have limited freedom in course sequence)
 - ii. The courses do not show up on Web Advisor so that are not shown to non-A.A students
- b. Possible problem with this, students could try to leave their current B.A program in the summer to sign up for a block of A.A. courses to get their general education completed at this lower price point. It would be a lot of work dropping and their registering (with limited course selection) to save \$300 per course, but some students may do it.

(ii) Alternative Answers

- 1. We allow A.A students to take on-line courses with B.A. students, but they pay the same price as B.A. students and are in the same courses.

- a. Pros
 - i. No price difference issue to explain to the legislature, students, etc.
 - ii. Allows the A.A. advisor to put the student in the courses where excess capacity exists.
 - b. Cons
 - i. Lose cohort benefits by mixing students from different programs
 - ii. They pay a higher price point for these courses than the rest of their A.A. courses
2. We have specific A.A. courses that are on-line but they pay the self-support rate
- a. Pros
 - i. No price difference issue to explain to the legislature
 - ii. Would be taught by master's prepare instructors similar to face-to-face course in the A.A. program
 - b. Cons
 - i. May create excess capacity (example: An A.A. English 101 section with 10 students and a B.A. section with 10 students, resulting in 2 sections taught when only 1 was needed [assuming a capacity of 20])
 - ii. They pay a higher price point for these courses than the rest of their A.A. courses

c) Offer it at all locations

- i) This is NOT suggested
- ii) If we decided we wanted to do it
 - (1) We would have to increase prices on all 300/400 level courses significantly to remain revenue neutral
 - (a) Pros
 - (i) It may be more of a cost based approach
 - (ii) Students who are not successful in college and drop out after their first year or two would have less student debt
 - (b) Cons
 - (i) Would have a huge sticker shock once students started taking 300/400 level courses (possibly double or higher tuition costs)
 - (ii) The higher price may be a deterrent for some students to finish degrees (even though it may be fairly revenue neutral to them overall throughout their career, they may get used to their first and second year costs and then not be prepared to pay the much higher third and fourth year costs).

2) Do we price per credit or in tuition bands?

a) If tuition bands

- i) Do we price 6 credits or less on a per credit basis (we don't want to discourage people who just want to take one or two courses)
- ii) Price 7-12 credits at 12 credits
- iii) Price 13-18 credits at 15 credits
 - (1) Pros:

- (a) This differentiates us from the on-campus pricing structure
- (b) Incentivizes faster completion
- (2) Cons:
 - (a) May lead to people taking more classes and then dropping them, leading to us creating excess capacity

b) If per credit

- i) Students may compare the associate degree program to their on-campus price (depending on our answers to #1 this may or may not be an issue on internet)

3) What are the support services needed and the cost

- a) Director?
- b) Success Coaches/Advisors (how many per xx students?)
- c) Can we leverage on-campus resources to minimize costs to the A.A. program?
 - i) Are we OK with using our current infrastructure to lower our costs to their students?

4) What do we want our price point to be?

a) Competitive with the Tech Schools

- i) \$200 (or something else)
- ii) Pros;
 - (1) Could make us competitive
 - (2) Allows us to reach more students
 - (3) Could increase transferability to the B.A. programs at the schools, increasing the pipeline
- iii) Cons
 - (1) We will have to leverage on-campus infrastructure to get a price point at this level
 - (2) May have to explain why we are pricing at this level to the legislature

b) Keep our current prices

- i) This is using a B.A. pricing structure for an A.A. (community college) model
 - (1) Pros
 - (a) We don't have to do anything with our pricing structure, just have to advertise and increase our A.A. offerings
 - (2) Cons
 - (a) Will the market respond to this price point
 - (b) This may not be cost based
 - (c) May not differentiate us

c) Work with the Tech schools on increasing articulation agreements

- i) Pros
 - (1) Would help us increase the pipeline without worrying about space for some of the face-to-face locations
- ii) Cons
 - (1) Would we need to teach the general education courses that we want to transfer or would we simply start accepting the tech school's credits more regularly?