SB 169

<TARGET><BILL>SB 169</BILL><SUBJECT>SB 169</SUBJECT><COMM>SEDC27</COMM></TARGET>

27-LS1169\B
Mischel
1/27/12

CS FOR SENATE BILL NO. 169( )

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-SEVENTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): THE SENATE EDUCATION COMMITTEE

A BILL

FOR AN ACT ENTITLED

"An Act providing for education funding for distance delivery courses offered by a school district."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*** Section 1.** AS 14.17.410(b) is amended to read:

(b) Public school funding consists of state aid, a required local contribution, and eligible federal impact aid determined as follows:

(1) state aid equals basic need minus a required local contribution and 90 percent of eligible federal impact aid for that fiscal year; basic need equals the sum obtained under (D) of this paragraph, multiplied by the base student allocation set out in AS 14.17.470; district adjusted ADM is calculated as follows:

(A) the ADM of each school in the district is calculated by applying the school size factor to the student count as set out in AS 14.17.450;

(B) the number obtained under (A) of this paragraph is multiplied by the district cost factor described in AS 14.17.460;

(C) the ADMs of each school in a district, as adjusted according to (A) and (B) of this paragraph, are added; the sum is then multiplied by the special needs factor set out in AS 14.17.420(a)(1) and the high school vocational education factor set out in AS 14.17.420(a)(3);

(D) the number obtained for intensive services under AS 14.17.420(a)(2)**, the number obtained for distance delivery courses under AS 14.17.422,** and the number obtained for correspondence study under AS 14.17.430 are added to the number obtained under (C) of this paragraph;

(E) notwithstanding (A) - (C) of this paragraph, if a school district's ADM adjusted for school size under (A) of this paragraph decreases by five percent or more from one fiscal year to the next fiscal year, the school district may use the last fiscal year before the decrease as a base fiscal year to offset the decrease, according to the following method:

(i) for the first fiscal year after the base fiscal year determined under this subparagraph, the school district's ADM adjusted for school size determined under (A) of this paragraph is calculated as the district's ADM adjusted for school size, plus 75 percent of the difference in the district's ADM adjusted for school size between the base fiscal year and the first fiscal year after the base fiscal year;

(ii) for the second fiscal year after the base fiscal year determined under this subparagraph, the school district's ADM adjusted for school size determined under (A) of this paragraph is calculated as the district's ADM adjusted for school size, plus 50 percent of the difference in the district's ADM adjusted for school size between the base fiscal year and the second fiscal year after the base fiscal year;

(iii) for the third fiscal year after the base fiscal year determined under this subparagraph, the school district's ADM adjusted for school size determined under (A) of this paragraph is calculated as the district's ADM adjusted for school size, plus 25 percent of the difference in the district's ADM adjusted for school size between the base fiscal year and the third fiscal year after the base fiscal year;

(F) the method established in (E) of this paragraph is available to a school district for the three fiscal years following the base fiscal year determined under (E) of this paragraph only if the district's ADM adjusted for school size determined under (A) of this paragraph for each fiscal year is less than the district's ADM adjusted for school size in the base fiscal year;

(G) the method established in (E) of this paragraph does not apply to a decrease in the district's ADM adjusted for school size resulting from a loss of enrollment that occurs as a result of a boundary change under AS 29;

(2) the required local contribution of a city or borough school district is the equivalent of a four mill tax levy on the full and true value of the taxable real and personal property in the district as of January 1 of the second preceding fiscal year, as determined by the Department of Commerce, Community, and Economic Development under AS 14.17.510 and AS 29.45.110, not to exceed 45 percent of a district's basic need for the preceding fiscal year as determined under (1) of this subsection.

* **Sec. 2.** AS 14.17 is amended by adding a new section to read:

Sec. 14.17.422. Distance delivery funding. (a) As a component of public school funding, a district is eligible for distance delivery funding in the amount obtained by multiplying a factor of 0.5 by the number of students who enroll in one or more courses by distance delivery if

(1) the course is part of the core academic curriculum required for eligibility for a scholarship under AS 14.43.820 and the district did not provide the course at a school in the district;

(2) the district provides the course to the student only by distance delivery; and

(3) an accredited public postsecondary institution located in the state provides the course.

(b) In this section, "distance delivery" means an online course that is taught in a central location and simultaneously relayed by technologic means to one or more distant locations.

ALASKA STATE SENATE

SEN. KEVIN MEYER
Alaska State Capitol
Juneau, Alaska 99801
Room 103
Phone: 907-465-4945
Fax: 907-465-3476

SEN. JOE THOMAS
Alaska State Capitol
Juneau, Alaska 99801
Room 514
Phone: 907-465-2327
Fax: 907-465-5241

SENATE EDUCATION COMMITTEE

Senators Kevin Meyer & Joe Thomas, Co-Chairs

stevens: cost
On site: District pays?
variability for payment

Senate Bill 169

When the Alaska Performance Scholarship was established in 2010, 81 schools and seven districts were not able to offer the courses needed for students to qualify for the scholarship. All were smaller schools in rural districts. Sixty-three schools did not offer the full complement of science courses, and 32 schools did not offer the full complement of math courses. (Sixteen of these overlap, leaving a total of 81.)

Some students in these schools are able to take courses by distance delivery. While distance delivery is not an optimal way to take a math or science course, the quality of offerings is improving. There are a variety of options and styles of coursework available both privately and through the Department of Education and Early Development.

One option is for students to take dual-credit courses. In a dual-credit course, the student receives high school and college credit. When they come to college, they will already have some course credits.

Studies have shown that students who pass dual credit-courses tend to do better in post-secondary education than those with no dual credits. According to one researcher, "dual enrollment fosters more positive attitudes towards earning post-secondary degrees in students who did not previously hold these attitudes; dual enrollment participation greatly improves students' propensity to persist in college; and this persistence in turn improved greatly dual enrollment students' likelihood and odds to graduate from college with bachelor's or graduate level degrees." (*The Impact of Dual and Articulated Credit on College Readiness and Total Credit Hours in Four Selected Community Colleges* by Johyun Kim)

Senate Bill 169 provides funding for students without access to the coursework required for the Alaska Performance Scholarship to take courses from Alaskan post-secondary institutions that offer dual credit programs.

Currently students have to pay full university prices to take dual-credit courses. The least expensive course is $430, but most courses will run between $580 and $870, not including fees which can be up to $500. Often there is a travel component so the student can do labs, which can be as much as $1000. This is prohibitive for many students. SB 169 levels the playing field so that all Alaskan students can compete for the Alaska Performance Scholarship regardless of geography or family financial limitations.

We urge you to support SB 171, and vote for its passage.

Proposed Changes

(1) the course is part of the core academic curriculum required for eligibility for a scholarship under AS 14.43.820;
(2) the district has not provided the required course on site for at least the previous two years to the student; and
(3) no other courses offered on site by the district will satisfy the curriculum requirement;
(4) an accredited public postsecondary institution located in the state provides the course.

(b) In this section, "distance delivery" means an online course that is taught in a central location and simultaneously relayed by technologic means to one or more distant locations.

Murray Richmond

From: Daniel Solie <djsolie@alaska.edu>
Sent: Tuesday, January 31, 2012 2:01 PM
To: Murray Richmond
Cc: Bernice Joseph; Daniel Solie
Subject: Re: Tech Prep and dual HS courses

Murray-
3 credit math class (about 430 tuition)
4 credit science (about 580 tuition) + Lab Fee and Travel if student must go to where lab segment is offered (current model)
my 6 credit course (about 870 tuition) + Lab Fee (kit is approx $500 bus is returned and is reusable) + Travel (either student or lab instructor to school)

NOTE ON TRAVEL: While it is nice to imagine a totally distance delivered model for science courses - that is really not practical for most student learning - generally students come to a central location for a lab intensive (travel and perdeim for a week - figure $1K/ student - less if the students can come to a hub location for the region)
or: our Bush Physics model: we travel out to the schools for a 2 or three days (instructor then works with students in class for a more indepth lab experiment, and then spends much time in other classes as a "scientist in residence" - bringing science out to village schools (roughly $1K/location)

Thanks,
Dan.

On Tue, Jan 31, 2012 at 1:45 PM, Murray Richmond <Murray_Richmond@legis.state.ak.us> wrote:
Real quickly, what would be the cost of a science course through your program?

Murray Richmond
Legislative Aide
Senator Joe Thomas
(907) 465-6443

-----Original Message-----
From: Bernice Joseph [mailto:bmjoseph@alaska.edu]
Sent: Tuesday, January 31, 2012 1:44 PM
To: Daniel Solie
Cc: Murray Richmond
Subject: Re: Tech Prep and dual HS courses

Dan - This is a good outline and I can reference how many dual credit offerings we've had at the rural sites as well as the collaborative teaching model we've developed through the Center for Distance Education with Victor Zinger, math faculty.
Bernice

On Tue, Jan 31, 2012 at 11:11 AM, Daniel Solie <djsolie@alaska.edu> wrote:
> HI Murray - Attached is a brief memo outlining my support. Bernice
> and I haven't had a chance to discuss this document, so I just

FISCAL NOTE

STATE OF ALASKA cost ≠ codes
2012 LEGISLATIVE SESSION

Bill Version **SB169**
Fiscal Note Number
Publish Date

Identifier (file name) SB169-EED-ESS-1-27-12
Title "An Act providing for education funding for distance delivery courses offered by a school district."
Sponsor Senate Education Committee
Requester Senate Education Committee

Dept. Affected Education & Early Development
Appropriation K-12 Support
Allocation Foundation Program
OMB Component Number 141

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY13 Appropriation Requested	Included in Governor's FY13 Request	Out-Year Cost Estimates				
OPERATING EXPENDITURES	**FY13**	**FY13**	**FY14**	**FY15**	**FY16**	**FY17**	**FY18**
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants, Benefits							
Miscellaneous							
TOTAL OPERATING	***	***	***	***	***	***	***

FUND SOURCE		(Thousands of Dollars)						
1002	Federal Receipts							
1003	GF Match							
1004	GF							
1005	GF/Prgm (DGF)							
1037	GF/MH (UGF)							
1178	temp code (UGF)							
TOTAL		***	***	***	***	***	***	***

POSITIONS							
Full-time							
Part-time							
Temporary							

CHANGE IN REVENUES							

Estimated SUPPLEMENTAL (FY12) operating costs _____ *(separate supplemental appropriation required)*
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY13) costs _____ *(separate capital appropriation required)*
(discuss reasons and fund source(s) in analysis section)

Why this fiscal note differs from previous version (if initial version, please note as such)

Not applicable initial version.

Prepared by Elizabeth Nudelman, Director — Phone 465-8679
Division School Finance & Facilities — Date/Time 1/27/12 5:30 PM
Approved by Commissioner Mike Hanley — Date 1/27/2012

(Revised 8/17/2011 OMB)

FISCAL NOTE

STATE OF ALASKA **BILL NO.** SB169
2012 LEGISLATIVE SESSION

Analysis

This bill adds an additional funding factor into the Public School Funding (Foundation) formula .

The factor provides funding for eligible high school students that are enrolled in eligible distance delivery courses which are provided through an accredited public postsecondary institution located in the state.

The bill provides additional funding of .50 base student allocation (.50 * $5.680 = $2,840 for fiscal year 2013) when a student enrolls in one or more distance delivery courses if:

the course is part of the core academic curriculum required for eligibility for a scholarship under AS 14.43.820 (Alaska Performance Scholarship;)

the district provides the course to the student only by distance delivery; and

an accredited public postsecondary institution located in the state provides the course.

Based on the bill language the possible enrollment is unknown. The language does not limit eligible students beyond those in grades 9 - 12, enrolled in a course necessary for the scholarship at 14.43.820,where the district provides the course to the student only by distance delivery, and the course is provided by an accredited public postsecondary institution in the state.

Section 1 of this bill amends the foundation formula to generate funding based on counting those students enrolled in eligible courses. The formula would apply a factor of .50 to the eligible distance delivery enrollment and then multiply by the base student allocation (BSA) of $5,680. One student participating in this program would generate $2,840 in funding in FY2013.

Section 2 provides eligibility as follows:

the course must be a part of the core academic curriculum as outlined in the scholarship program under AS 14.43.820.

the district provides the course to the student only by distance delivery; and

an accredited public postsecondary institution located in the state provides the course.

Governor's Performance Scholarship
Math and Science Four Year Course Offerings

How many schools do not currently offer the four years of math and science required in the GPS bill?

School Course Offering Counts for Mathematics and Science

339 schools were considered because they enroll high school students.

• Offer less than four years of mathematics		32
○ 2 math courses	16	
○ 3 math courses	16	
• Offer less than four years of science		65
○ 2 science courses	32	
○ 3 science courses	33	

Of the total 97 schools listed above 16 are the same schools, from 7 districts, that do not offer either four years of math and science.

Submitted by Daniel Solie, PhD
Assistant Professor,
Interior-Aleutians Campus,
College of Rural and Community Development,
University of Alaska Fairbanks

Support for SB0169A

Rural Student Need and Potential number of Students Impacted:

•Few Small Rural Schools offer math and hard-science courses that successfully prepare students for degree programs in science, technology, engineering or math.

•Without those math and science courses students do not qualify for the AK Merit Scholarship (4 years of math and 3 of science or 3 years of math and 4 of science)

Estimated Potential Pool: A sum of the students who graduated from AK secondary schools with 10 or fewer graduates in 2011 (excluding the Anchorage, Fairbanks, Juneau and Ketchikan districts) gives a rough estimate of the potential number of students impacted. 548 students graduated from AK secondary schools with 10 or fewer graduates in 2011. Roughly 350 graduated from the regions served by UAF CRCD campuses. A subset of these students would potentially need distance delivered courses in their junior and senior years to qualify for the AK Merit based scholarship. (Data used are from http://www.eed.state.ak.us/stats/ 2011 high school graduates by District by school)

UA Dual-Credit Distance Delivery

•Currently, UA (CRCD and others) delivers dual-credit course math and science interactively via internet to rural secondary students in small schools (primarily math and Tech Prep). This could be expanded to accommodate more students.

•No other institution has the instructor and knowledge base, along with the delivery infrastructure to deliver math and science courses via distance to rural villages as effectively.

•However: UA Tuition costs are a barrier for many rural HS students; tuition support for secondary students is currently not consistent across school districts.

•SB0169A addresses tuition need for rural students, as well as providing tuition revenue the university to support expansion of delivery of the needed courses.

Description of a current course that is addressing the need for physical science in small secondary schools (developed and delivered through Interior-Aleutians Campus, CRCD, UAF):

Bush Physics for the 21st Century, (after the Northern colloquial term "*Bush*" meaning wilderness), is aimed at early college and high school students in the remote and often road-less villages of Alaska.

•Introduces the basic physics that explains the natural world with examples familiar to students in modern rural Alaska.

•Cultural and place-based connection.

•Stresses problem solving necessary for success in university science and math

•Direct delivery via Video-conference course content posted on web-based Black-Board™ , lecture videos available for download.

•Tutorial homework sessions using interactive internet classroom e-live™ (interaction is important for success.

•Course bridges semesters: late-start/early-end with a two week spring break to fit varied school schedules.

• 6 credit course translates to one year of high school science.

•Three-part laboratory component to give students a more complete laboratory experience at a distance.

CRCD Campuses: Number of Sections of Tech Prep and High School Dual Credit Courses
FY 2007 - FY 2011

	Fiscal Year					
Campus	2007	2008	2009	2010	2011	Campus Total
Bristol Bay	2	8				10
Chukchi		1				1
Interior-Aleutians	2	4	4	10	14	34
Northwest		2				2
Rural College				2	1	3
UAF CTC	40	35	38	59	70	242
Fiscal Year Total	44	50	42	71	85	292

Source: UA Information Systems Banner SI, semester closing extracts.

Laura Delisle (907) 450-8044
UAF Planning, Analysis, and Institutional Research

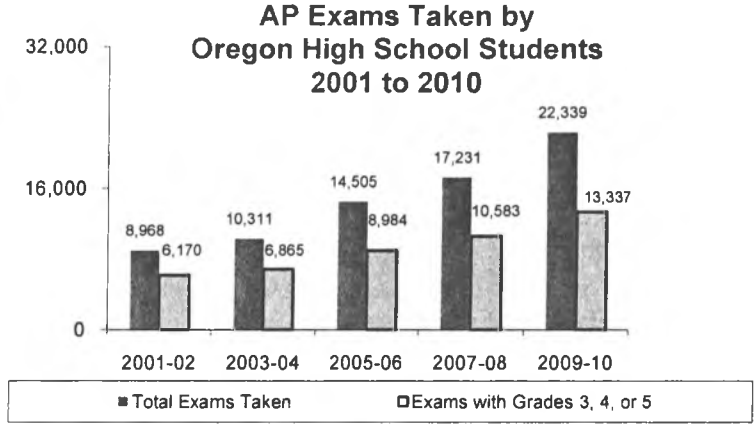
Dual Credit and Other College Prep Coursework for Oregon High School Students

Overview Dual Credit is one of several types of Accelerated Options that Oregon high school students can use to participate in college-level courses and earn college credit. These programs, which serve a wide range of students across Oregon, constitute an effective way to strengthen preparation for college and to ensure that students are work-ready. Accelerated Options increase rates of college entry, academic success in college, and college retention rates, and have the potential to keep Oregon's top performing high school graduates in state.

Accelerated Options Prepare Students for College Oregon secondary and postsecondary institutions jointly share responsibility for the success of Accelerated Options provided in high schools. Offering Dual Credit and other college prep options is part of Oregon's agenda to increase the rigor of the Oregon Diploma and align standards with postsecondary academic requirements. Many college prep options offer some form of **tuition assistance and allow students to affordably start investing in their college education**. As a lower-cost way of getting postsecondary credit, Accelerated Options programs can bring savings in tuition and fees once students enter college as they can start well into their freshman year, or in some cases, even skip freshman year, saving thousands of dollars in tuition.

A 2010 study[1] completed by the Oregon University System showed that **students who participate in Dual Credit programs are more successful in college**. They:

- Have higher college participation rates of 81.4% compared to 72.6% of students who did not participate;
- Continue on to their second year of college at higher rates, 87% for those who took Dual Credit versus 79.9% for those who did not;
- Earn a higher GPA in their freshman year of college of 3.13 versus 2.97 for those who did not participate; and
- Accumulate more college credit by the second year in college of 61.3 credits on average versus 49.8 credits for those who did not participate in Dual Credit.



Source: College Board, State Reports

The study also verified that Dual Credit instruction prepares students for subsequent college coursework just as effectively as college-situated instruction.

A 2010 College Board report shows encouraging news of **increases in AP participation in Oregon.** Between 2007-08 and 2009-10, the number of AP exams taken by Oregon students, including low-income and minority students, increased by almost 30%. The number of examinations with grades of 3, 4, and 5 (5 is the top grade) increased by 26% in that same period.

[1] Dual Credit in Oregon, 2010 Follow-up: An Analysis of Students Taking Dual Credit in High School in 2007-08 with Subsequent Performance in College; OUS, Office of Institutional Research; September 2010

Campuses Active in Accelerated Options Accelerated Options are a common service provided by postsecondary institutions in Oregon and across the country. **All seven OUS institutions offer such opportunities to high school students,** spanning a wide variety of program types, delivered on OUS campuses, at high schools, or through distance education. Three of these types of programs – Dual Credit, Advanced Placement (AP), and International Baccalaureate (IB) – have program specific, statewide standards that are established by national or international academic organizations that define the programs' instructor qualifications and level of the curriculum. These standards ensure the rigor of the courses, which is reinforced for AP and IB courses by the external assessment provided by the AP and IB exams.

OUS and Oregon community colleges have worked to ensure consistency of Dual Credit, AP, and IB across the state. For Dual Credit programs, all 7 OUS institutions and 17 community colleges agreed to adopt the national standards and program approval process; and for both AP and IB, all OUS institutions and community colleges award students the same number of credits for a given score on an AP or IB exam. In addition to the formal Dual Credit, AP, and IB programs, Accelerated Options programs available to Oregon high school students include the Oregon specific Expanded Options program (see sidebar).

Programs Delivered at OUS Campuses A variety of OUS programs allow high school students to take college coursework, along with college students, via distance learning or on an OUS campus. OUS dual credit programs also offer students **college-level courses taught by qualified college- or university-approved high school teachers within high schools**. Most of these programs offer concurrent high school and college credits, reduced tuition rates, and support services such as advising. Examples include:

- **Eastern Oregon University**: Weekend College and Summer Institute Programs provide credit-bearing and early start for high school students
- **Portland State University:** LINK (Leap Into New Knowledge) Program makes it possible for intellectually gifted high school students to attend the University for part-time advanced study.
- **Oregon Institute of Technology:** High School Transition Program allows high school students to get a head start on college studies by taking appropriate 100 and 200 level courses on campus.
- **Oregon State University:** Expanded Options Program (XOP) provides opportunities for high school juniors and seniors to take classes either on-campus or on-line through extended campus.
- **Southern Oregon University:** Early Entry Program, offering concurrent high school and college coursework.
- **University of Oregon**: DuckLink program offering UO courses to area high school students.
- **Western Oregon University:** High School Dual Enrollment program offering concurrent high school and college coursework.

Expanded Options

Expanded Options, established by the 2005 Legislature in Senate Bill 300, increases the likelihood that all students will have access to accelerated academic and professional/technical courses by requiring that high schools offer such opportunities.

Expanded Options provides opportunities for eligible high school students (juniors and seniors) to take postsecondary classes at Oregon public community colleges and universities, paid for by their school district. The program gives priority to academically able students who are at-risk for socio-economic reasons, or who have left school prematurely.

In 2009-10, 10,939 college/university credits were earned under the Expanded Options program, and there was a total tuition cost savings of $942,772*.

*Source: Executive Summary of the Expanded Options Program (ORS Chapter 340) Annual Implementation Report; December 2010, ODE

Frequently Asked Questions about Dual Credit

Updated 4/13/07

1. **What are dual credit courses?** Dual credit courses are college courses that also count toward high school requirements. These courses may be taken at the high school or at a college and are taught by a high school teacher with appropriate credentials or by regular college faculty. The student earns college credit and high school credit for the course. The high school and college work together to determine appropriate high school credit to be awarded upon successful completion of the course.

2. **What is the difference between dual credit and concurrent enrollment?** Concurrent enrollment means that a high school student is enrolled in and taking one or more courses at a college. Dual Credit may be viewed as a form of concurrent enrollment. Students may earn college credit through simple concurrent enrollment, but may only earn high school credit through the dual credit agreement between the high school and college.

3. **Can a student earn high school credit for any college course?** No. It is the responsibility of the institutions entering into a dual credit agreement to ensure the following requirements are met:

   - Courses offered for dual credit by public two-year associate degree granting institutions must be identified as college-level academic courses in the current edition of the Lower Division Academic Course Guide Manual adopted by the Board or as college-level technical education courses in the current edition of the Workforce Education Course Manual adopted by the Texas Higher Education Coordinating Board (THECB).

   - Courses offered for dual credit by public universities must be in the approved undergraduate course inventory of the university. Public colleges may not offer remedial or developmental courses for dual credit.

   - Courses offered for dual credit must provide advanced academic instruction that allows for mastery of the Texas Essential Knowledge and Skills for the appropriate high school course and that also goes beyond or into greater depth than those TEKS.

4. **What kind of agreement is required for an institution to offer dual credit courses?** Each high school that offers dual credit must enter into an agreement with the institution of higher education to offer the courses. This agreement must be updated and approved by the governing board of each institution annually. Specific elements of the dual credit partnership must be addressed in the agreement, such as the courses available, student

eligibility criteria, class location, faculty specifications, course curriculum, grading, assessments, and transcription of credit.

5. **Can any student enroll in dual credit courses?** No. Dual credit students must have the approval of the high school principal or other official designated by the school district, must meet the entrance requirements of the participating institution of higher learning, and must be in the 11th or 12th grade or enrolled in an Early College High School. (See http://www.tea.state.tx.us/ed_init/sec/thsp/echs.html.) Additionally, dual credit students must demonstrate college readiness. More information on the details of college readiness requirements and exemptions from specific eligibility requirements can be viewed at http://www.thecb.state.tx.us/Rules/tac3.cfm?Chapter_ID=4&SubChapter=D.

6. **How many dual credit courses may a student take?** High school students may not be enrolled in more than two dual credit courses per semester. Exceptions to this requirement for students with demonstrated outstanding academic performance and capability (as evidenced by grade point average, ACT or SAT scores, or other assessment indicators) may be approved by the principal of the high school and the chief academic officer of the college.

7. **Who teaches and assigns a grade in a dual credit course?** Dual credit teachers must be regularly employed faculty members of the college or must meet the same standards (including minimal requirements of the Southern Association of Colleges and Schools) and approval procedures used by the college to select faculty responsible for teaching the same courses at the main campus of the college. The participating college selects instructors of dual credit courses, and these instructors assign student grades. The method of providing that grade to the high school campus must be stated in the institutional agreement approved annually by both boards.

8. **Where are dual credit courses taught?** Dual credit courses may be taught on the college campus or on the high school campus.

9. **If a student takes dual credit courses on the college campus, does the time count toward a district's Average Daily Attendance (ADA)?** Time spent in dual credit courses counts toward a district's ADA. It is important to note, however, that for a district to receive FSP funding for a student taking a college course, documentation of the agreement between the school and college must be available (2006-07 Student Attendance Accounting Handbook, Section III(5-10)). Also, the student should not be charged tuition or for textbooks required for the course.

10. **Can a course be both a dual credit and an Advanced Placement (AP) course?** Yes, if the course meets the requirements of both. A College Board-approved Advanced Placement (AP) course must adhere to the AP course descriptions and be approved through the AP audit process.

11. **Who pays for the college courses?** Unless enrolled in an Early College High School, the student is responsible for all required college fees and tuition. Some districts choose to pay all or part of the tuition or the college may waive tuition. (See question 9.)

12. **What are the benefits of taking a dual credit course?** The student may earn college credit prior to graduating from high school. Additionally, if the student completes the course with a 3.0 or higher (B), it can be counted as an advanced measure for the

Distinguished Achievement Program (DAP). Students benefit most from earning dual credit for courses that help them meet graduation requirements established by the State Board of Education (SBOE). (See appropriate subchapter of TAC Chapter 74 Graduation Requirements here: http://www.tea.state.tx.us/rules/tac/chapter074/index.html.)

13. **Is a district required to offer dual credit courses?** No. However, legislation passed in 2006 (House Bill 1) includes provisions which require all school districts to implement a program by the fall of 2008 in which students will be able to earn the equivalent of 12 hours of college credit while in high school. These requirements may be met by offering dual credit for college courses, advanced technical courses, Advanced Placement courses, and/or International Baccalaureate courses.

14. **What does HB 1 require of colleges regarding dual credit?** On request, a public institution of higher education in this state shall assist a school district in developing and implementing a program designed to provide students with the opportunity to earn the equivalent of 12 hours of college credit while in high school. Colleges should work with districts to identify and provide opportunities for dual credit courses.

Closing the Education Gap in Math and Science for Rural High School Students with SB0169A

Bernice Joseph, Vice Chancellor for Rural, Community and Native Education

Daniel Solie, Assistant Professor,

College of Rural and Community Development (CRCD), University of Alaska Fairbanks

Rural Student Need and Potential Number of Students Impacted

- Few Small Rural Schools offer math and hard-science courses that successfully prepare students for degree programs in science technology, engineering or math.
- Without those math and science courses students do not qualify for the AK Merit Scholarship (4 years of math and 3 of science or 3 years of math and 4 of science)

- Estimated Potential Pool: 548 students graduated from AK secondary schools with 10 or fewer graduates in 2011 (excluding the Anchorage, Fairbanks, Juneau and Ketchikan districts). Roughly 350 from the UAF CRCD Region. (http://www.eed.state.ak.us/stats/)

UA dual-credit distance delivery:

- Currently, UA (CRCD and others) delivers dual-credit course math and science interactively via internet to rural secondary students in small schools (primarily math and Tech Prep). This could be expanded to accommodate more students.
- No other institution has the instructor and knowledge base, along with the delivery infrastructure to deliver math and science courses via distance to rural villages as effectively.
- However: UA Tuition costs are a barrier for many rural HS students; Tuition support for secondary students is currently not consistent across school districts.
- SB0169 addresses tuition need for rural students, this tuition provides revenue to the university to help support expansion of delivery of the needed courses.

A model for e-Delivery of dual-credit lab science courses to small village schools:

- *Bush Physics for the 21st Century*, (after the Northern colloquial term "*Bush*" meaning wilderness), is aimed at early college and high school students in the remote and often road-less villages of Alaska.
- Introduces the basic physics that explains the natural world with examples familiar to students in modern rural Alaska
- Cultural and place-based connection
- Stresses problem solving necessary for success in university science and math
- Direct delivery via Video-conference course content posted on web-based Black-Board™ , lecture videos available for download.
- Tutorial homework sessions using interactive internet classroom e-live™ (interaction is important for success).
- Course bridges semesters: late-start/early-end with a two week spring break to fit varied school schedules
- 6 credit course translates to one year of high school science
- Three-part laboratory component

Laboratory Component for Bush Physics

The laboratory segment consists of 3 components:

- 1) A series of weekly lab introductions (Simple hands-on-lab experiment kits are shipped to the students).
- 2) An in-depth experimental session (guided by an instructor or mentor)
- 3) A group collaborative experiment where they coordinate times of sun angle measurements with teams in other villages to determine their latitude.

e-Delivery of Bush Physics for the 21st Century (Delivery locations (2008-2010)

Supporting the Education of Rural Students Across the State for Careers in Science, Technology, Engineering and Mathematics for the Future of All of Alaska