

## APPROPRIATENESS AND ADEQUACY OF HIGH SCHOOL CURRICULA - BACKGROUND MEMORANDUM

### CHALLENGING OUR STUDENTS

Section 11 of 2007 Senate Bill No. 2030 (attached as an [appendix](#)) directs the Legislative Council to study the appropriateness and adequacy of high school curricula, with respect to preparing students for higher education and for the workplace, and to examine curricular changes implemented in other states and expectations placed on students in other countries. The Legislative Council assigned this study to the interim Education Committee.

In a 2005 survey released by the Educational Testing Service (ETS), only 9 percent of Americans said they believe that most high school students are being challenged by their schoolwork and that after nearly two decades of reform efforts, the key to success continues to reside in rigorous learning for all students and improved teacher quality. Americans believe in standards and accountability and they want reform efforts expanded to address pressing quality issues with our nation's high schools (see ETS press release, *Americans Say High Schools Aren't Challenging Our Students*, June 2005).

The ETS survey found that:

- 74 percent of the public strongly favors measures to ensure teachers are experts in the subjects they teach;
- 80 percent strongly or somewhat agree that teacher salaries should be increased to hire and retain more well-qualified teachers even if doing so means increased taxes;
- 64 percent strongly favor emphasizing real-world learning opportunities in high school through work study, community service, and vocational courses;
- 80 percent favor requiring students to pass a statewide graduation test before they can receive a high school diploma; and
- All groups overwhelmingly favor a rigorous course of study that all students should have before graduation. This includes support for computer science (95 percent), four years of English (85 percent), three years of history and civics (81 percent), four years of mathematics (73 percent), at least three years of science (69 percent), and two years of a foreign language (63 percent).

### Challenging North Dakota Students

North Dakota Century Code (NDCC) Section 15.1-21-02 contains a list of courses very similar to that supported by the ETS survey respondents:

1. Four units of English language arts;
2. Four units of mathematics;
3. Four units of science;
4. Four units of social studies, including one of world history and one of United States history;
5. One-half unit of health;
6. One-half unit of physical education;
7. Two units of fine arts, at least one of which must be music;
8. Two units of the same foreign language;
9. Two units of career and technical education; and
10. One-half unit of North Dakota studies.

However, the courses listed in NDCC Section 15.1-21-02 are those that a high school must make available in order to be approved. They are not the courses that students must take in order to graduate.

In 2007 the Legislative Assembly enacted the first bill providing a list of courses required for high school graduation. Beginning with the 2008-09 school year, a student may not graduate from a high school unless the student demonstrates successful completion of:

- Four units of English language arts;
- Two units of mathematics;
- Two units of science;
- Three units of social studies, which may include one-half unit of North Dakota studies and one-half unit of multicultural studies;
- One unit of physical education, which may include up to one-half unit of health; and
- One unit of a foreign or American Indian language, fine arts, or career and technical education.

For purposes of comparison, both the University of North Dakota and North Dakota State University web sites suggest the following courses for admission:

- Four units of English;
- Three units of mathematics (at the level of algebra I and above);
- Three units of laboratory science; and
- Three units of social science.

### South Dakota - Pathways to Graduation

In 2004 the South Dakota Legislature enacted "Pathways to Graduation." Under this program, each student, beginning with the 2006 freshman class, must select either the distinguished path or the advanced path, unless the student's parent and a school counselor or administrator agree that the student should take only a basic high school program.

<b>Distinguished</b>	<b>Advanced</b>	<b>Basic</b>
Is designed to fulfill the minimum requirements for admission to most major colleges and universities	Is designed to fulfill the minimum requirements for admission to South Dakota's public universities and to most fields of study at technical institutes	Is designed to prepare students for entry-level jobs and some technical programs
4 units - English reading and communication arts <ul style="list-style-type: none"> <li>• Writing (1.5 units)</li> <li>• Literature (1.5 units)</li> </ul>	4 units - English reading and communication arts <ul style="list-style-type: none"> <li>• Writing (1.5 units)</li> <li>• Literature (1.5 units)</li> </ul>	4 units - English reading and communication arts <ul style="list-style-type: none"> <li>• Writing (1.5 units)</li> <li>• Literature (1.5 units)</li> </ul>
4 units - Mathematics <ul style="list-style-type: none"> <li>• Algebra I (1 unit)</li> <li>• Algebra II (1 unit)</li> <li>• Geometry (1 unit)</li> <li>• Advanced mathematics elective (1 unit)</li> </ul>	3 units - Mathematics <ul style="list-style-type: none"> <li>• Algebra I (1 unit)</li> <li>• Algebra II (1 unit)</li> <li>• Geometry (1 unit)</li> </ul>	3 units - Mathematics <ul style="list-style-type: none"> <li>• Algebra I (1 unit)</li> <li>• Mathematics elective (2 units)</li> </ul>
4 units - Science <ul style="list-style-type: none"> <li>• Science electives (2 units)</li> <li>• Biology (1 unit)</li> <li>• Chemistry or physics (1 unit)</li> </ul>	3 units - Science <ul style="list-style-type: none"> <li>• Science elective (1 unit)</li> <li>• Biology (1 unit)</li> <li>• Chemistry or physics (1 unit)</li> </ul>	2 units - Science <ul style="list-style-type: none"> <li>• Science electives (2 units)</li> </ul>
3 units - Social studies, including: <ul style="list-style-type: none"> <li>• US history (1 unit)</li> <li>• US government (.5 unit)</li> <li>• Geography (.5 unit)</li> <li>• World history (.5 unit)</li> </ul>	3 units - Social studies, including: <ul style="list-style-type: none"> <li>• US history (1 unit)</li> <li>• US government (.5 unit)</li> <li>• Geography (.5 unit)</li> <li>• World history (.5 unit)</li> </ul>	3 units - Social studies, including: <ul style="list-style-type: none"> <li>• US history (1 unit)</li> <li>• US government (.5 unit)</li> <li>• Geography (.5 unit)</li> <li>• World history (.5 unit)</li> </ul>
1 unit - Fine arts	1 unit - Fine arts	1 unit - Fine arts
.5 unit - Health or physical education	.5 unit - Health or physical education	.5 unit - Health or physical education
.5 unit - Economics or personal finance	.5 unit - Economics or personal finance	.5 unit - Economics or personal finance
2 units - World language <ul style="list-style-type: none"> <li>• Same world language</li> </ul>	2 units from: <ul style="list-style-type: none"> <li>• World language</li> <li>• Computer studies</li> <li>• Career and technical education</li> </ul>	2 units from: <ul style="list-style-type: none"> <li>• World language</li> <li>• Computer studies</li> <li>• Career and technical education</li> </ul>
.5 unit - Computer studies		

### Determining Course Content

One of the challenges that arises in discussing graduation requirements is that of terminology. For example, a course named "world history" might have significantly different content, depending on the school district in which it is taught. South Dakota began to address this issue by statutorily requiring that its basic course of study be aligned to the state content standards. North Dakota also recognized the challenge of terminology and its impact on determining whether a student in fact meets the graduation requirements of NDCC Section 15.1-21-02.2. As an example, a student might be enrolled in an agriculture course. Is the amount of science included in that course sufficient so that it can

be considered a "science" for purposes of meeting the newly enacted graduation requirements? Under Section 15.1-21-02.2, the Superintendent of Public Instruction is required to work with each school district and identify course offerings that meet the graduation requirements of that section. As this committee pursues its directive to study curricular adequacy, it will be in a position to closely examine this state's first efforts at implementing graduation requirements as well as the depth and breadth of course offerings available to students and how those courses and efforts compare to those of other states and nations.

ATTACH:1