SUBJECT: Annual Proficiency Exam Report (Lynda)

The attached report provides information on the results of the Regental Proficiency Examination testing for a cohort of students who tested for the first time during the Fall 2004 and Spring 2005 academic terms. The report also provides information on previous cohorts so that performance trends can be identified. An executive summary is provided below.

Executive Summary

- The proficiency requirement was first adopted for baccalaureate degree-seeking students in Spring 1998. The requirement became effective for entering associate degree-seeking students in Fall 1999.
- Seven cohorts of students have undergone initial proficiency testing and six of those cohorts have completed retesting as well. A cohort of students is defined as those students testing for the first time during an academic year and does not include the students testing in Spring 1998.
- A total of 4,713 undergraduate students were required to sit for the proficiency examination during the 2004-05 academic year with 92.8 actually sitting for the exam.
- As with the previous cohorts tested, system test score means for the 2004-05 cohort exceeded national mean scores for 4-year public institutions in all four areas tested.
- For the 2004-05 cohort, all six universities had institutional means that exceeded national means in science reasoning, but only five exceeded the national means in mathematics and reading, and only four universities exceeded national means in writing skills and only.
- For the seven cohorts tested, institutional means scores have been below the national mean in math ten times, ten times in writing skills, and eight times in reading. NSU accounts for approximately half of the number of times an institutional mean was below the national mean.
- On a system basis, more than half of the 2004-05 cohort earned scores above the national mean, and at least two percent earned scores at or above the 99th percentile.
- On a system basis, 7.2 percent of the students in the 2004-05 cohort failed to earn acceptable scores in one or more areas of the exam, which represents an all time low. On a university basis, the percentage ranged between 5.0 percent and 9.4 percent.
- The percentage of students requiring remediation in reading declined to 3.6% from a previous, 4-year trend of slight increases ranging from 3.4% to 4.3%.

RECOMMENDED ACTION

Discussion.
South Dakota Board of Regents
Annual Results of Proficiency Examination Testing
2004-05 Academic Year Cohort

This report provides information on the results of the Regental Proficiency Examination testing for a cohort of students who tested for the first time during the Fall 2004 and Spring 2005 academic terms. The report also provides longitudinal information by including data on previous cohorts so that performance trends can be identified. In each section of the report, information on the most recent cohort of students is presented first and then longitudinal or trend data is presented for comparison purposes.

Student Participation

Within the system, a total of 4,713 baccalaureate and associate degree-seeking students were required to sit for the proficiency exam for the first time during the 2004-05 academic year. Of those students, 341 (7.2%) were not tested. (Attachment I) Figure 1 shows the percentage of students who were tested, received deferrals, were exempted from testing, and who refused to sit for the exam. According to BOR Policy 2:28, students who refuse to sit for the proficiency exam are denied enrollment for two academic terms and required to sit for the exam the first semester they resume their enrollment.

![Figure 1: Student Participation in Proficiency Examinations 2004-05 Cohort](image)

Proficiency examinations were first required of baccalaureate degree-seeking students in Spring 1998 and of entering associate degree-seeking students in Fall 1999. The first associate degree-seeking students were tested in Fall 2000. A total of seven cohorts of students have participated in proficiency testing and the 4,372 students in the 2004-05 cohort represents the largest number of students tested during any one academic year (Figure 2).
Figure 2
Student Participation in Proficiency Examinations
Number of Students Tested by Cohort

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-99</td>
<td>3,192</td>
</tr>
<tr>
<td>1999-00</td>
<td>4,093</td>
</tr>
<tr>
<td>2000-01</td>
<td>4,098</td>
</tr>
<tr>
<td>2001-02</td>
<td>4,054</td>
</tr>
<tr>
<td>2002-03</td>
<td>4,224</td>
</tr>
<tr>
<td>2003-04</td>
<td>4,263</td>
</tr>
<tr>
<td>2004-05</td>
<td>4,372</td>
</tr>
</tbody>
</table>

Test Score Means

System Results
Weighted system mean scores for the 2004-05 cohort exceeded the mean for the national comparison group (4-year public institutions) in all four areas tested within the examination (Figure 3). (Attachment II)

Figure 3
Comparison of System and National Mean Scores
2004-05 Cohort

- Weighted system mean scores have exceeded national comparison group means scores for every cohort of students tested. (Attachment II) Standard deviations associated with the national means indicate that system means were not significantly higher than the national means. System mean scores have remained relatively unchanged over the seven cohorts tested (Figures 4, 5, 6, 7).
Figure 4
System Mean Scores for Writing Skills by Cohort
Seven Cohort Data

Figure 5
System Mean Scores for Mathematics by Cohort
Seven Cohort Data

Figure 6
System Mean Scores for Reading by Cohort
Seven Cohort Data
Figure 7  
System Mean Scores for Science Reasoning by Cohort  
Seven Cohort Data

In terms of the number of institutions whose mean scores met or exceeded the national mean scores, the strongest areas for the 2004-05 cohort were science reasoning (all six institutions) followed by math and reading (five institutions), and writing skills (four institutions). Table 1 provides information on which institutional means were below national norms. The standard deviations associated with the national means indicate that institutional means were neither significantly higher nor lower than the national means. (Attachment II)

Table 1  
Institutional Means Above and Below National Means  
By Institution and Area  
2004-05 Cohort

<table>
<thead>
<tr>
<th>Institution</th>
<th>Writing Skills</th>
<th>Mathematics</th>
<th>Reading</th>
<th>Sci. Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHSU</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
</tr>
<tr>
<td>DSU</td>
<td>Below</td>
<td>Above</td>
<td>Below</td>
<td>Above</td>
</tr>
<tr>
<td>NSU</td>
<td>Below</td>
<td>Below</td>
<td>Above</td>
<td>Above</td>
</tr>
<tr>
<td>SDSMT</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
</tr>
<tr>
<td>SDSU</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
</tr>
<tr>
<td>USD</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
<td>Above</td>
</tr>
</tbody>
</table>

For the seven cohorts of students tested, none of the institutional means in science reasoning have been below the national means. Institutional means scores have been below the national mean in math ten times, below the national mean in writing skills ten times and below the national mean in reading eight times (Table 2). NSU accounts for half (14/28) of the number of times an institutional mean was below the national mean with DSU and BHSU accounting for 29% (8 of 28) and 21% (6 of 28) respectively.
Table 2
Number of Times the Institutional Mean for a Cohort was Below National Mean
By Institution and Area
Seven Cohort Data

<table>
<thead>
<tr>
<th></th>
<th>Writing Skills</th>
<th>Math</th>
<th>Reading</th>
<th>Science Reasoning</th>
<th>University Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHSU</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>DSU</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>NSU</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>SDSMT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SDSU</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>USD</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>0</td>
<td>28</td>
</tr>
</tbody>
</table>

Student Performance

Percentage of Students Scoring Above the National Norm

On a system basis, more than half of the students testing for the first time in 2004-05 performed above the national means for public 4-year institutions in all four areas of the exam. (Attachment III) However, this performance level was not consistent among the six South Dakota public universities (Figures 8, 9, 10, 11). These figures are consistent with results earned by previous cohorts. (Attachment III)

Figure 8
Percentage of Students Performing Above the National Mean in Writing Skills
2004-05 Cohort
Figure 9
Percentage of Students Performing Above the National Mean in Mathematics
2004-05 Cohort

Figure 10
Percentage of Students Performing Above the National Mean in Reading
2004-05 Cohort

Figure 11
Percentage of Students Performing Above the National Mean in Science Reasoning
2004-05 Cohort
**Percentage of Students Scoring At or Above the 99th Percentile**

On a system basis, at least two (2) percent of the students testing for the first time in 2004-05 performed at or above the national scores set at 99th percentile. (Attachment IV) Again, this performance level was not consistent among the six South Dakota public universities (Figures 12, 13, 14, 15). These figures are generally consistent with results earned by previous cohorts. (Attachment IV)

![Figure 12](image1)

**Figure 12**
Percentage of Students Performing At or Above the 99th Percentile in Writing Skills
2004-05 Cohort

![Figure 13](image2)

**Figure 13**
Percentage of Students Performing At or Above the 99th Percentile in Mathematics, 2004-05 Cohort
Figure 14
Percentage of Students Performing At or Above the 99th Percentile in Reading, 2004-05 Cohort

Figure 15
Percentage of Students Performing At or Above the 99th Percentile in Science Reasoning, 2004-05 Cohort

**Percentage of Students Requiring Remediation**

On a system basis, 7.2 percent of the students in 2004-05 cohort required remediation in one or more areas of the examination. (Attachment V). The percentage of students requiring remediation varied among the six public universities (Figure 16) and by examination area (Figure 17, 18, 19, 20).
Figure 16
Percentage of Students Requiring Remediation in One or More Areas
2004-05 Cohort

Figure 17
Percentage of Students Requiring Remediation in Writing Skills
2004-05 Cohort

Figure 18
Percentage of Students Requiring Remediation in Mathematics
2004-05 Cohort
The percentage of students requiring remediation in one or more areas of the examination, on a system basis, has dropped to its lowest level since testing began (Figure 21). In terms of the percentage of students requiring remediation in a specific area of the examination, the previously identified trend of slight, consistent increases in the percentage of students requiring remediation in reading has been broken with an overall system decline of 1.0% from 2003-04. (Figure 22).
Overall Passing Rates

Board policy 2:28 allows students who failed to perform at a satisfactorily level during their initial testing, the opportunity to re-test twice during the following calendar year. Students who are unable to earn satisfactory scores during re-testing are no longer permitted to enroll in courses at any of the six public universities. Students who are denied enrollment may apply for certification of their proficiency through an alternate method. The performance of each cohort of students sitting for the proficiency examination for the first time in a given academic year has been tracked over time to determine the number of students who eventually meet the Board’s proficiency requirement. The following information is provided for those six cohorts of students who have completed their initial testing and any required re-testing.

Between the inception of the proficiency requirement in Spring 1998 and Spring 2004, seven cohorts containing a total of 25,772 students have taken the proficiency examination. Since the proficiency examination requirement was first implemented in Spring 1998, the first cohort only includes students who tested for the first during that term; all other cohorts are comprised of students testing for the first time in either the fall or spring term of the academic year. Overall, 90.5 percent of those students passed on their initial attempt (Figure 23). Ultimately, only 2.3 percent of all students tested were unable to demonstrate an acceptable level of proficiency, either through re-testing or alternate methods, and were denied permission to re-enroll (Attachment VI). The percentage of students denied re-enrollment has decreased slightly over the six cohorts (Figure 24).
Figure 23
Passing Rates by Attempt
Spring 1998 through Spring 2004

Figure 24
Percentage of Students Denied Re-Enrollment
Spring 1998 through Spring 2004