ETS Proficiency Profile Winthrop University 2011-12

Introduction

As a member of the Voluntary System of Accountability (VSA), Winthrop University participates in institution-wide assessment of its undergraduate students to measure learning gains in critical thinking and written communication. Learning gains, or value-added scores, reflect the difference between the actual and expected scores of graduating and entering students, taking into account the academic ability of the students as measured by their SAT (or converted ACT) scores. The VSA approved three instruments to measure learning gains, the ETS Proficiency Profile, the ACT CAAP, and the Council for Aid to Education’s Collegiate Learning Assessment (CAECLA). Each of the three testing organizations (ETS, ACT, and CAE) uses the same method to compute and characterize their learning gains or value-added scores for VSA purposes.

Methods

During academic year (AY) 2011-12, Winthrop University administered the ETS Proficiency Profile, abbreviated form, to first year students enrolled in half of all fall 2011 sections of Principles of the Learning Academy (ACAD 101). First year students enrolled in ACAD 101 sections who were not assigned to complete the ETS Proficiency Profile completed Winthrop’s Global Learning Initiative questionnaire. Deans from Winthrop’s four degree-granting colleges asked faculties from their respective undergraduate degree programs to have senior students participate in the voluntary institutional assessment initiative.

The abbreviated form of the ETS® Proficiency Profile provides cohort-level criterion-referenced scores of proficient, marginal and not proficient for three skill areas: reading/critical thinking, writing and mathematics. Additionally, the abbreviated form of the ETS® Proficiency Profile provides norm-referenced cohort scores in four skills areas (critical thinking, writing, reading and mathematics) and three context areas (humanities, social sciences, and natural sciences).

Results

Winthrop student learning outcomes (for first year and senior cohorts) are reported on its VSA-College Portraits web site, http://www.collegeportraits.org/SC/WU/learning_outcomes. Learning gains or value-added scores for Winthrop’s first year and senior students was at expected level.
for both critical thinking and written communication. The table below operationally defines the five possible classifications for student performance.

Well Below Expected (2 or more standard errors below the expected score)
Below Expected (Between 1 and 2 standard errors below the expected score)
At Expected (Between -1 and +1 standard errors from the expected score)
Above Expected (Between 1 and 2 standard errors above the expected score)
Well Above Expected (2 or more standard errors above the expected score)

First year cohort results

Of the first year students (n = 490) who completed the ETS Proficiency Profile Abbreviated Form, 455 provided usable results. Table one is a cohort summary of scaled scores for Winthrop first year students enrolled in ACAD 101 during fall 2011.

Table One

Summary of Winthrop University first year student cohort scaled scores 2011-12

<table>
<thead>
<tr>
<th>Possible Range</th>
<th>Mean Score</th>
<th>95% Confidence Limits* for Mean</th>
<th>Standard Deviation</th>
<th>25th Percentile</th>
<th>50th Percentile</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>400 to 500</td>
<td>439.94</td>
<td>439 to 441</td>
<td>15.59</td>
<td>429</td>
<td>437</td>
</tr>
</tbody>
</table>

Skills Subscores:

Critical Thinking 100 to 130 110.61 110 to 112 5.48 106 110 114
Reading 100 to 130 116.91 116 to 118 6.02 112 118 121
Writing 100 to 130 113.80 113 to 115 4.48 111 114 117
Mathematics 100 to 130 112.18 111 to 113 5.32 108 111 115
Context-Based Subscores:

| Humanities | 100 to 130 | 113.79 | 113 to 115 | 5.58 | 109 | 113 | 118 |
| Social Sciences | 100 to 130 | 112.98 | 112 to 114 | 5.17 | 109 | 113 | 116 |
| Natural Sciences | 100 to 130 | 114.28 | 113 to 115 | 5.22 | 111 | 114 | 118 |

*The confidence limits are based on the assumption that the questions contributing to each scaled score are a sample from a much larger set of possible questions that could have been used to measure those same skills. If the group of students taking the test is a sample from some larger population of students eligible to be tested, the confidence limits include both sampling of students and sampling of questions as factors that could cause the mean score to vary. The confidence limits indicate the precision of the mean score of the students actually tested, as an estimate of the "true population mean" - the mean score that would result if all the students in the population could somehow be tested with all possible questions. These confidence limits were computed by a procedure that has a 95 percent probability of producing upper and lower limits that will surround the true population mean. The population size used in the calculation of the confidence limits for the mean scores in this report is 455.

Senior cohort results

Of the senior students (n = 495) who completed the ETS Proficiency Profile Abbreviated Form during spring 2012, 463 provided usable results. Table two is a summary of scaled scores for Winthrop senior students who completed the ETS PP abbreviated form during academic year 2011.
## Table 2

**Summary of Scaled Scores for Winthrop University senior cohort 2011-12**

<table>
<thead>
<tr>
<th>Possible Range</th>
<th>Mean Score</th>
<th>95% Confidence Limits* for Mean</th>
<th>Standard Deviation</th>
<th>25th Percentile</th>
<th>50th Percentile</th>
<th>75th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>400 to 500</td>
<td>448.17</td>
<td>447 to 450</td>
<td>18.13</td>
<td>435</td>
<td>445</td>
</tr>
</tbody>
</table>

### Skills Subscores:

- **Critical Thinking**: 100 to 130
  - Mean Score: 112.63
  - Confidence Limits: 112 to 114
  - Standard Deviation: 6.03
  - 25th Percentile: 108
  - 50th Percentile: 111
  - 75th Percentile: 117

- **Reading**: 100 to 130
  - Mean Score: 119.29
  - Confidence Limits: 118 to 120
  - Standard Deviation: 6.31
  - 25th Percentile: 115
  - 50th Percentile: 121
  - 75th Percentile: 124

- **Writing**: 100 to 130
  - Mean Score: 115.01
  - Confidence Limits: 114 to 116
  - Standard Deviation: 4.63
  - 25th Percentile: 112
  - 50th Percentile: 114
  - 75th Percentile: 117

- **Mathematics**: 100 to 130
  - Mean Score: 114.63
  - Confidence Limits: 114 to 115
  - Standard Deviation: 5.82
  - 25th Percentile: 111
  - 50th Percentile: 115
  - 75th Percentile: 119

### Context-Based Subscores:

- **Humanities**: 100 to 130
  - Mean Score: 115.79
  - Confidence Limits: 115 to 117
  - Standard Deviation: 6.23
  - 25th Percentile: 111
  - 50th Percentile: 115
  - 75th Percentile: 120

- **Social Sciences**: 100 to 130
  - Mean Score: 114.95
  - Confidence Limits: 114 to 116
  - Standard Deviation: 5.55
  - 25th Percentile: 111
  - 50th Percentile: 115
  - 75th Percentile: 120

- **Natural Sciences**: 100 to 130
  - Mean Score: 115.85
  - Confidence Limits: 115 to 117
  - Standard Deviation: 5.65
  - 25th Percentile: 111
  - 50th Percentile: 117
  - 75th Percentile: 121

*The confidence limits are based on the assumption that the questions contributing to each scaled score are a sample from a much larger set of possible questions that could have been used to measure those same skills. If the group of students taking the test is a sample from
some larger population of students eligible to be tested, the confidence limits include both sampling of students and sampling of questions as factors that could cause the mean score to vary. The confidence limits indicate the precision of the mean score of the students actually tested, as an estimate of the "true population mean" - the mean score that would result if all the students in the population could somehow be tested with all possible questions. These confidence limits were computed by a procedure that has a 95 percent probability of producing upper and lower limits that will surround the true population mean. The population size used in the calculation of the confidence limits for the mean scores in this report is 463.

Discussion

Results from Winthrop’s 2011-12 institutional assessment of critical thinking and written communication provide one institutional measure of student proficiency with two of its four university level competencies (ULCs). Winthrop uses a best practice, multi-method approach to assessment of student learning outcomes.