The K-State Experience with the Voluntary System of Accountability (VSA)

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Kansas State University

2010 VSA Learning Outcomes Workshop
St. Louis, MO  July 8-9, 2010
Outcomes

1. Understand the value of participating in the VSA
2. Be able to compare the three standardized tests and determine which one is most appropriate for your institution
3. Analyze and report results
4. Consider strategies to use standardized test results for university-wide enhancement
K-State Basics:

• Kansas’ Land-Grant Institution
  – One of the first land grant institutions created under the Morrill Act (1863)

• Carnegie Classification
  – RU/VH: Research University (very high research activity)
K-State Facts:

- Enrollment
  - Undergraduate: 18,778
  - Graduate: 3,627
  - Total: 23,581

- Enrollment Demographics
  - 79.7% White
  - 3.8% African American
  - 2.0% Hispanic
  - 1.6% Mexican American
  - 1.6% Asian/Haw. Pacific
  - 0.6% American Indian
  - 1.1% Multi-Racial
  - 7.3% International
  - 2.4% Not Specified/Unknown

- Degrees Conferred (FY09)
  - Bachelors: 3,430
  - Masters: 868
  - Doctoral: 147

- Faculty
  - 973 full-time faculty with 50% or more instructional duties

- Retention
  - 79% of first-time students in Fall 08 returning for Fall 09

- 9 Colleges
  - 2 satellite campuses

*Common Data Set: Fall 2009*
Why Participate in the VSA?

• Benefits to Students & Families
  – Comparable information on institutions
  – Common format applied to each institution
  – Consistent metrics used across institutions
    • Standardized test scores
    • Student information (success rates, etc.)
  – Accurate estimates of tuition & fees
Why Participate in the VSA?

• Benefits to Institutions
  – Self Monitoring: Demonstrates institutions’ willingness to be transparent and communicate openly with potential students
  – Research: Database represents a rich source of information
  – Internal Decision Making: Allows faculty and staff to make valid comparisons across institutions
Requirements for VSA:
Student Learning Outcomes Component

• Must report on two learning outcomes:
  — Critical Thinking/Analytic Reasoning
  — Written Communication

• Must test First-Year and Senior students
  — Seniors must be 4-yr “naturalized” seniors

• Must choose one of three standardized tests
  — Collegiate Assessment of Academic Proficiency (CAAP)
  — Collegiate Learning Assessment (CLA)
  — ETS Proficiency Profile (formerly Measure of Academic Proficiency Progress {MAPP})
# Comparison of Tests

<table>
<thead>
<tr>
<th>Administration</th>
<th><strong>CAAP</strong></th>
<th><strong>CLA</strong></th>
<th><strong>ETS PP</strong></th>
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</thead>
<tbody>
<tr>
<td>Paper</td>
<td></td>
<td>Online</td>
<td>Online or Paper</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Format</th>
<th>6 optional modules (40 min. each)</th>
<th>Performance Task (90 min.) or Analytic Writing Task (75 min.)</th>
<th>Standard (120 min.) or Abbreviated (40 min.)</th>
</tr>
</thead>
</table>

| Sample size    | Minimum of 200/module for FY and SR; (KSU = 250) | Minimum of 100 FY & SR or 25% cohort | Minimum 200 FY and 200 SR |

<table>
<thead>
<tr>
<th>VSA Purposes</th>
<th>Critical Thinking &amp; Writing</th>
<th>Critical Thinking &amp; Writing</th>
<th>Critical Thinking &amp; Writing</th>
</tr>
</thead>
</table>

**K-STATE**
Selection of Standardized Test: Process Issues

• Stakeholders involved:
  – Faculty Senate, Committee on Academic Policies and Procedures, General Education Task Force, and Office of Assessment

• Factors critical to decision:
  – Cost
  – Time to complete exam
  – Paper vs. on-line
  – Test Format & administration
  – Sample size necessary
  – Usefulness of results
  – Need for incentives
Past National Test/Survey Experiences

Parsing the First-Year of College
(Spring 2007 - Penn State University)
• 2 CAAP modules and NSSE
• Degree-seeking first-year students from Fall 06
• Paper assessment
• Administered outside of class
• Offered incentives to participate
• Mass email to recruit students = Low response
• Final sample (241) due to instructors requiring participation
Reasons for Selection of CAAP

• Test Format – paper administration
  – Test could be administered in-class

• Time to Complete
  – Class periods of at least 50 minutes

• Cost
  – Incentives not needed if given in class

• Results useful for more than *College Portrait*
Administration of CAAP

• Modules
  – Critical Thinking, Writing Essay, and Reading

• Recruitment
  – First-Year Students
    • Assessment Office works collaboratively with faculty who teach primarily first-year courses
      – First-Year Seminars
      – Introduction to Honors
      – University Experience
    • Tested 737 F-Y students in Fall 08 & 748 in Fall 09
Administration of CAAP

• Recruitment (cont.)
  – Senior Students
    • Request, via the Provost, of faculty to voluntarily administer exam in senior-level/capstone courses
    • Often required multiple contacts with faculty before enough courses were identified
    • Tested 708 seniors in Spring 09 and 791 in Spring 10
Experiences with CAAP

• Advantages
  – Captive audience
  – No out-of-class time required
  – Tied to 2 of 5 undergraduate Student Learning Outcomes
    • Communication (Modules: Writing Essay & Reading)
    • Critical Thinking (Modules: Critical Thinking)
  – Allows for additional analysis of results
    • Report from ACT provides individual scores of each student
    • Scores can be matched with student data to analyze performance across specific groups of participants
Experiences with CAAP

• Challenges
  – Meeting VSA Requirements for seniors
    • 4-yr “natural” seniors
    • Within 6 months of graduation
  – Accessing representative sample of students across colleges
  – Motivating students to perform at high levels
  – Considering whether to use online form, when made available
Using CAAP Scores for University Enhancement

Current strategies

• Assess University SLOs
• Compare Writing, Reading & Critical Thinking skills across colleges
Internal Reporting

• Important to have a representative sample

• Compare data across colleges and student demographics

• Measure learning gains from FY to SR year

• Provide results to central and college-level administrators
Representative Sample

• Sample should reflect university student characteristics
  – Gender
  – Ethnicity/Race
  – ACT/SAT Scores
  – By College
# Participation of seniors in CAAP module by college

<table>
<thead>
<tr>
<th>College</th>
<th>Spring 2009</th>
<th></th>
<th>Spring 2010</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Writing</td>
<td>%</td>
<td>Writing</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
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<td>22</td>
<td>8.7%</td>
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<tr>
<td>Architecture</td>
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<td>0</td>
<td>0.0%</td>
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<tr>
<td>Arts &amp; Sciences</td>
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<td>0.0%</td>
<td>49</td>
<td>19.4%</td>
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<tr>
<td>Business</td>
<td>40</td>
<td>15.3%</td>
<td>55</td>
<td>21.7%</td>
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<tr>
<td>Education</td>
<td>0</td>
<td>0.0%</td>
<td>36</td>
<td>14.2%</td>
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<tr>
<td>Engineering</td>
<td>167</td>
<td>63.7%</td>
<td>39</td>
<td>15.4%</td>
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<tr>
<td>Human Ecology</td>
<td>54</td>
<td>20.6%</td>
<td>42</td>
<td>16.6%</td>
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<tr>
<td>Tech. &amp; Aviation</td>
<td>0</td>
<td>0.0%</td>
<td>10</td>
<td>4.0%</td>
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<tr>
<td><strong>Total</strong></td>
<td>262</td>
<td>100.0%</td>
<td>253</td>
<td>100.0%</td>
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## CAAP Critical Thinking Results

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<tr>
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<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>08-09</td>
<td>FY</td>
<td>238</td>
<td>62.5</td>
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<tr>
<td></td>
<td>SR</td>
<td>239</td>
<td>64.5</td>
<td>4.6</td>
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<tr>
<td>09-10</td>
<td>FY</td>
<td>245</td>
<td>63.1</td>
<td>5.8</td>
<td>9,531</td>
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<td></td>
<td>SR</td>
<td>273</td>
<td>64.6</td>
<td>4.9</td>
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## CAAP Critical Thinking Results by Ethnicity

<table>
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<th>K-State</th>
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<th>National</th>
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<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
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<tr>
<td>2009 -2010</td>
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<td></td>
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<tr>
<td>FY</td>
<td>W</td>
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<td>63.7</td>
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<td>NW</td>
<td></td>
<td>30</td>
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<td>5.1</td>
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<td>SR</td>
<td>W</td>
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<td>NW</td>
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<td>17</td>
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<td>5.2</td>
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## CAAP Critical Thinking Results by College

<table>
<thead>
<tr>
<th></th>
<th>K-State</th>
<th>National</th>
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<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>2009-2010 SR AG</td>
<td>22</td>
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<tr>
<td>2009-2010 AS</td>
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<tr>
<td>2009-2010 BA</td>
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<tr>
<td>2009-2010 ED</td>
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<td>62.8</td>
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<tr>
<td>2009-2010 EN</td>
<td>67</td>
<td>65.6</td>
</tr>
<tr>
<td>2009-2010 HE</td>
<td>26</td>
<td>65.1</td>
</tr>
<tr>
<td>2009-2010 TA</td>
<td>15</td>
<td>64.1</td>
</tr>
</tbody>
</table>
External Reporting

• Voluntary System of Accountability (VSA)
  – Mean scores for FY and SR Students
    • Critical Thinking
    • Writing

• Accreditation Self-Study
  – Currently conducting self-study for 2012 site visit
College Portrait

Pilot Project to Measure Core Learning Outcomes

Colleges and universities participating in the College Portrait measure the typical improvement in students’ abilities to think, reason, and write using one of three tests. This is part of a pilot project to better understand and compare what students learn between their freshman and senior years at different colleges and universities.

Results from the College Assessment of Academic Proficiency (CAAP)

The Collegiate Assessment of Academic Proficiency (CAAP) measures critical thinking and written communication using two test modules – critical thinking and a writing essay. The critical thinking and writing scores are reported separately below.

Test Administration Process

Test Information

Critical Thinking Results for First-time, Full-time Students

The increase in learning on the performance task is what would be expected at an institution with students of similar academic abilities.

Freshman Score: 0
Senior Score: 0
CAAP score range: 40 to 80

Writing Essay Results for First-time, Full-time Students

The increase in learning on the performance task is what would be expected at an institution with students of similar academic abilities.

Freshman Score: 0
Senior Score: 0
CAAP score range: 1 to 6
Accreditation Self-Study

CAAP
- Writing Essay
- Reading
- Critical Thinking

University SLOs
- Communication
- Critical Thinking
- Diversity
- Ethical Reasoning
- Knowledge

Other Assessments
- NSSE Survey
- Senior Survey
- Alumni Surveys
- Program Assessments

K-STATE
Using CAAP Scores for University Enhancement

Future Strategies

• Inform General Education program of any needed enhancements
• Collaborate with high schools
Outcomes

1. Understand the value of participating in the VSA
2. Be able to compare the three standardized tests and determine which one is most appropriate for your institution
3. Analyze and report results
4. Consider strategies to use standardized test results for university-wide enhancement
Contact Information

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Presentation and additional information may be found at: http://www.k-state.edu/assessment/resources/workshops.htm