2010 – 2011 Annual Retention Committee Report

Presented to Chancellor Wray

November 17th, 2011

Co-Chaired by:
Dr. Harvest L. Collier
Vice Provost for Undergraduate Studies and Professor of Chemistry

&

Dr. F. Scott Miller
Associate Director, Freshmen Engineering Program and Faculty Advisor
49% Undergraduate Growth: 1706 on-campus, 100 distance
83% Graduate Growth: 421 on-campus, 353 distance
Retention Status (as of 4th week FS2011)

<table>
<thead>
<tr>
<th>Freshmen Retention &amp; Graduation Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Yr</td>
</tr>
<tr>
<td><img src="Image" alt="Graph" /></td>
</tr>
</tbody>
</table>

Entering Fall

| 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 40% | 50% | 60% | 70% | 80% | 90% | 100% | 95% | 90% | 85% | 80% | 75% | 70% | 65% | 60% | 55% | 50% | 45% | 40% | 35% | 30% | 25% | 20% | 15% | 10% | 5% | 0% |

Data representation includes various retention and graduation rates over the years, with specific rates highlighted for each academic year.
Percentage of First-Year Students at Four-Year Colleges Who Return for Second Year

Sources: Compiled from ACT Institutional Data Files.

www.act.org 2010 report
Percentage of Four-Year College Students Who Earn a Degree Within Five Years of Entry

Source: Compiled from ACT Institutional Data Files.

www.act.org 2010 report
## Retention Trends
**Freshman to Sophomore Year 1983–2010**

<table>
<thead>
<tr>
<th></th>
<th>Highest %</th>
<th>Lowest %</th>
<th>Current %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-year public</td>
<td>55.7 ('10)</td>
<td>51.3 ('04)</td>
<td>55.7</td>
</tr>
<tr>
<td>BA/BS public</td>
<td>70.0 ('04)</td>
<td>66.4 ('96, '05)</td>
<td>67.6</td>
</tr>
<tr>
<td>MA/MS public</td>
<td>71.6 ('06)</td>
<td>68.1 ('89)</td>
<td>67.3</td>
</tr>
<tr>
<td>PhD public</td>
<td>78.6 ('10)</td>
<td>72.9 ('08)</td>
<td>78.6</td>
</tr>
<tr>
<td>Two-year private</td>
<td>72.6 ('92)</td>
<td>55.5 ('08)</td>
<td>58.6</td>
</tr>
<tr>
<td>BA/BS private</td>
<td>74.0 ('89)</td>
<td>68.7 ('10)</td>
<td>68.7</td>
</tr>
<tr>
<td>MA/MS private</td>
<td>78.0 ('85)</td>
<td>71.4 ('10)</td>
<td>71.4</td>
</tr>
<tr>
<td>PhD private</td>
<td>85.0 ('85)</td>
<td>80.3 ('10)</td>
<td>80.3</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
<td>66.7</td>
</tr>
</tbody>
</table>

**SOURCE:** www.act.org
## Completion Trends 1983–2010

Two-Year Colleges — graduation in 3 years or less

<table>
<thead>
<tr>
<th></th>
<th>Highest %</th>
<th>Lowest %</th>
<th>Current %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>38.8 ('89)</td>
<td>25.5 ('10)</td>
<td>28.0</td>
</tr>
<tr>
<td>Private</td>
<td>66.4 ('90)</td>
<td>50.2 ('08)</td>
<td>53.2</td>
</tr>
<tr>
<td>All</td>
<td>44.0 ('89)</td>
<td>28.3 ('10)</td>
<td>30.6</td>
</tr>
</tbody>
</table>

**SOURCE:** www.act.org
Completion Trends 1983–2010
Four-Year Public Colleges — graduation in 5 years or less

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Highest % (Year)</th>
<th>Lowest % (Year)</th>
<th>Current %</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA/BS public</td>
<td>52.8 ('86)</td>
<td>39.6 ('06, '10)</td>
<td>39.6</td>
</tr>
<tr>
<td>MA/MS public</td>
<td>46.7 ('86)</td>
<td>37.0 ('00)</td>
<td>39.0</td>
</tr>
<tr>
<td>PhD public</td>
<td>50.6 ('89, '90)</td>
<td>45.0 ('01)</td>
<td>47.8</td>
</tr>
<tr>
<td>BA/BS private</td>
<td>57.5 ('06)</td>
<td>53.3 ('01)</td>
<td>55.1</td>
</tr>
<tr>
<td>MA/MS private</td>
<td>58.4 ('88)</td>
<td>53.5 ('01)</td>
<td>54.4</td>
</tr>
<tr>
<td>PhD private</td>
<td>68.8 ('86)</td>
<td>63.1 ('05)</td>
<td>64.7</td>
</tr>
</tbody>
</table>

SOURCE: www.act.org
Knowing All Of Our Students-
Profile Factors Likely to Impact Retention

- **Average Age:** 21.6 years old
- **Gender:**
  - 23% Female
  - 77% Male
- **First Generation College Students:**
  - 2010: 27%
- **Residency:**
  - Missouri Residents: 76%
  - Out-State Students: 22%
  - International: 2%
- **Ethnicity:**
  - African-American: 4%
  - Asian-American: 3%
  - Caucasian: 83%
  - Hispanic: 2%
  - Native-American: 1%
  - Non-resident, International: 2%
  - Not Disclosed: 5%
- From a Community <40,000: 45% approx.
- **Average Family Income:** $84,000
- **Average Indebtedness at Graduation:**
  - $23,500 USD approx.
- **High Financial Need (Pell qualifier):** 28%
- **Freshmen with Credit Cards:**
  - 24%
  - 6 arrive with over $1000 USD standing balance
- **Students with PCs:**
  - 97%
  - +70% laptops
  - 13% Macs
- **Students with Cell Phones**
  - 99%
National Survey of Student Engagement (NSSE) Results
(Given to Missouri S&T 1st Year Students and Seniors)

NSSE Indicators of Effective Educational Practice

First-Year Students

- Level of Academic Challenge
- Active and Collaborative Learning
- Student-Faculty Interaction
- Enriching Educational Experiences
- Supportive Campus Environment

Seniors

- Level of Academic Challenge
- Active and Collaborative Learning
- Student-Faculty Interaction
- Enriching Educational Experiences
- Supportive Campus Environment
# Student Success Rates

## Retention Rates

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Student Body</td>
<td>82%</td>
<td>85%</td>
</tr>
<tr>
<td>Female Students</td>
<td>88%</td>
<td>87%</td>
</tr>
<tr>
<td>Minority Students</td>
<td>94%</td>
<td>73%</td>
</tr>
<tr>
<td>Student Athletes</td>
<td>88%</td>
<td>92%</td>
</tr>
<tr>
<td>CAMPUS GOAL</td>
<td>N/A</td>
<td>90%</td>
</tr>
</tbody>
</table>

## Graduation Rates

<table>
<thead>
<tr>
<th>Category</th>
<th>2000</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Student Body</td>
<td>52%</td>
<td>66%</td>
</tr>
<tr>
<td>Female Students</td>
<td>66%</td>
<td>74%</td>
</tr>
<tr>
<td>Minority Students</td>
<td>41%</td>
<td>50%</td>
</tr>
<tr>
<td>Student Athletes</td>
<td>69%</td>
<td>71%</td>
</tr>
<tr>
<td>CAMPUS GOAL</td>
<td>N/A</td>
<td>70%</td>
</tr>
</tbody>
</table>
Top 5 Reasons Why Students Say They Are Leaving Missouri S&T (From Non Returning Survey)

1. Major change
2. Financial
3. Moving closer to home/family
4. Needing more diverse/larger education environment/student body
5. Looking for a more lively/diverse town/community

Note: Some students reported multiple reasons.
## FS2009 FTC Cohort Not Returning for FS2010

<table>
<thead>
<tr>
<th>Cumulative GPA FTC Students</th>
<th>Composite ACT FTC Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.000 – 3.500 8.2% (13)</td>
<td>&gt;30 14.4% (22)</td>
</tr>
<tr>
<td>3.499 – 3.260 5.7% (9)</td>
<td>27-30 34.0% (52)</td>
</tr>
<tr>
<td>3.250 – 3.000 12.0% (19)</td>
<td>24-26 27.5% (42)</td>
</tr>
<tr>
<td>2.999 – 2.500 12.7% (20)</td>
<td>&lt;24 24.2% (37)</td>
</tr>
<tr>
<td>2.499 – 2.000 15.8% (25)</td>
<td></td>
</tr>
<tr>
<td>1.999 – 0.100 45.6% (72)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Due to rounding, percentages may not total 100%.
<table>
<thead>
<tr>
<th>Major</th>
<th>MO Majors (128)</th>
<th>OOS Majors (32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>75.8% (97)</td>
<td>81.25% (26)</td>
</tr>
<tr>
<td>Math/Science/Computing/GL&amp;GPH/IST</td>
<td>20.3% (26)</td>
<td>12.5% (4)</td>
</tr>
<tr>
<td>Business</td>
<td>0.0% (0)</td>
<td>6.25% (2)</td>
</tr>
<tr>
<td>Humanities &amp; Liberal Arts</td>
<td>1.6% (2)</td>
<td>0.0% (0)</td>
</tr>
<tr>
<td>Undecided</td>
<td>2.3% (3)</td>
<td>0.0% (0)</td>
</tr>
</tbody>
</table>

Note: Due to rounding, percentages may not total 100%.
102/160 students were contacted.

Of the 102, 95 did not re-enroll.

20/95 students responded to the survey (21%)

Of those:

- 80% of responders were transferring to another school (16/20)
- 25% said nothing would have kept them at S&T (5/20)
- 40% participated in student activities (8/20)
- ½ of the responders said they would possibly recommend S&T (10/20)
What would have kept you at Missouri S&T?

- Nothing (5)
- Lower cost / not paying out-of-state fees (3)
- Having the desired major/program (2)
- Finances (2)
- Fewer “weird people”
What would you tell us that needs to be improved?

- Nothing / Liked everything (4)
- Faculty and TA’s hard to understand
- Advisors and Sports staff
- Need a slower track for students
- Communication about costs and fees
1. Early Intervention Strategies
2. Parent/Family Support/Outreach
3. Student Academic Advising Support & Training Enhancement
4. Need-Based Financial Aid Resources
What we were committed to:

Improve strategies for early, intensive and continuous intervention for students.

*(Student-faculty engagement, academic advising, academic support services, disability support services, peer mentoring, utilization of the academic alert system, etc.)*
Work Group 1

What we learned:

The LASSI (Learning and Study Strategies Inventory) was administered to Dr. Gragg’s students at the beginning of the semester.

Dr. Gragg then conducted an interview with each student to go over the results of the LASSI and found that their grades did increase.
Dr. Collier administered the LASSI to his Chemistry 1 students who had a D or F in Chemistry by the 5th week of classes.

Dr. Collier then offered credit to students for attending LEAD. He found that LEAD sessions helped students study together.

Another finding revealed that 90% of the students would not have participated in a learning culture of practicing with rigor in high school.
Work Group 1
Continuous Improvement:

Improve strategies for early, intensive and continuous intervention for students.

This goal will move forward this year and involve Math 2 and 3.
What we were committed to:

Continue parent and family support/outreach services to improve communication and campus engagement.
Student Affairs launched an e-newsletter utilizing Google group technology
Newsletter messages go out to families twice a week on Tuesdays and Fridays when classes are in session
Parent engagement is being measured through an on-line survey and focus groups
Work Group 2
What we learned:

- 1200 Google group invitations sent. 562 members received 34 emails during the FS2010 semester
- Electronic survey was distributed with the following findings (35% response rate):

When asked, during fall semester, 2010 on what topic(s) their student requested assistance or advice: participants reported the following:

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial questions/concerns</td>
<td>95</td>
</tr>
<tr>
<td>Roommate or housing issues</td>
<td>48</td>
</tr>
<tr>
<td>Mental health concerns</td>
<td>9</td>
</tr>
<tr>
<td>Physical health concerns</td>
<td>61</td>
</tr>
<tr>
<td>Academic concerns</td>
<td>96</td>
</tr>
<tr>
<td>Career planning</td>
<td>48</td>
</tr>
<tr>
<td>Campus or community involvement opportunities</td>
<td>46</td>
</tr>
<tr>
<td>Safety or security issues</td>
<td>11</td>
</tr>
<tr>
<td>Adjustment issues</td>
<td>36</td>
</tr>
<tr>
<td>Relationship/dating issues</td>
<td>23</td>
</tr>
<tr>
<td>Social/friendship issues</td>
<td>27</td>
</tr>
<tr>
<td>None</td>
<td>24</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>21</td>
</tr>
</tbody>
</table>

- 100 families attended a homecoming breakfast reception
Continue parent and family support/outreach services to improve communication and campus engagement.

- Parent engagement will be strengthened by increased participation in various services offered
- Next years goal is to partner with the Admissions office to work with prospective families before PRO
What we were committed to:

Continue and enhance academic advising support and training.
Progress to date:

Missouri S&T Advising Handbook was developed and is located at http://advising.mst.edu/handbook/home.html

Faculty attendance at the Academic Advising Conferences

New faculty participation in the New Faculty Advisor’s Forum
Work Group 3
Continuous Improvement:

Continue and enhance academic advising support and training.

Next years goals:

- Formation of an Advising Assessment Team

- Establish an Electronic advising packet by automating certain advising processes and utilizing the class scheduler feature.
Focus new financial aid resources to increase need-based student financial aid availability.
Work Group 4

What we learned:

- 80% of all students are receiving scholarships & financial aid
- 32% freshmen qualify for Low Income Pell Grants in Fall 2010
- 81% freshmen plan to work while enrolled at S&T
- 27% freshmen have/carry a credit card

S&T Affordability

- Approximate indebtedness: $23,500
- Average 2010 starting salary: $57,800

What impact is financial need having on student retention?
Work Group 4
What we learned:

13% (+375) increase in FAFSA submissions over AY09
25% (+641) increase in FAFAS submissions over AY07
Work Group 4

Issues:

- Elimination of federal SMART and Academic Competitiveness grants, will cut aid to Pell-grant eligible students by $1.2 million after allowance for increases in Pell.
  740 S&T students impacted (387 ACG, 353 SMART)

- Missouri ACCESS need-based grants declined by 36% ($1400 ave. AY08-09 award to $900 ave. AY10-11 award)
  1271 S&T students impacted

- Missouri Bright Flight merit grants declined by 25% ($2000 per recipient AY08-09 to $1500 in AY10-11)
  909 S&T students impacted
Work Group 4

Issues:

- **New financial pressures are being felt by students of all economic statuses.** Initial AY2009–10 data indicates that almost 2/3 of the students leaving for financial reasons come from families with incomes above $80K per year.

- **More students being held from registration due to missing payments.** 618 students had a pre-registration hold applied in October of 2010 for past due balances. The only resources available to SFA to assist these students are loans (federal or university).

What impact is financial need having on student retention?
SFA initiative to make more university loans available resulted in $1,000,230 in University Loan funds being awarded in AY11, compared to $759,539 in AY10

Silver and Gold Need-based Endowments/Gifts: 12 Need-Based Silver and Gold Endowments were created from 2009 – 2011 representing a total of approximately about 135,000 in funds in endowments or pending endowments, and a commitment of $25,000 per year in an annual gift account for five years. This program is currently on hold pending planning discussions with new Vice Chancellor of University Advancement

Noel Levitz Financial Aid Leveraging Project has been approved by the campus to determine levels or merit, need-based gift, and self-help aid required to recruit target populations and meet campus goals

Campus Financial Aid and Scholarship Task Force has been created to review current merit- and need-based aid and will report in January to the Vice Provost of Enrollment Management

No significant initiatives to plan for need-based aid funding have been launched since the change in campus leadership at the UVA level have interrupted the previous initiatives that had begun between SFA and UVA
Focus new financial aid resources to increase need-based student financial aid availability.

This goal will move forward this year in partnership with Development efforts for matching loans and scholarship endowments and discussion of other initiatives.
Work Groups for 2011-2012

- **Alternate Majors Promotion**  
  Chair: Rance Larsen

- **Financial Aid**  
  Chair: Lynn Stichnote

- **Fit in S&T Environment**  
  Chair: Scott Miller

- **Access 2 Success (A2S)**  
  Chair: Brad Starbuck

- **Academic Performance in Math**  
  Chair: Stephanie Fitch

- **Student Persistence**  
  Chair: Larry Gragg
Questions?