MISSOURI
S&T
University of Science & Technology

RETENTION COMMITTEE
2012-13 ANNUAL REPORT
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Special thanks to the following offices as sources of information:

- Department of Chemistry
- Department of History
- Department of English & Technical Communication
- Enrollment Management
- Institutional Research & Assessment
- Student Affairs
- Undergraduate Studies
Introduction
The Retention Committee serves as an advisory committee appointed by the Chancellor to address key issues related to improving student retention and student academic success. During the 2012-13 academic year, the Retention Committee met every other week. This report includes a summary of the primary issues addressed by the Retention Committee, as reflected in the 2012-13 meeting minutes.

Committee Background and Charge
The Missouri S&T Retention Committee is authorized and established by the Chancellor to:

(1) Make a thorough study of attrition on the Missouri S&T campus;
(2) Recommend specific steps which should be taken to increase the retention of Missouri S&T students; and
(3) Implement approved specific steps that will enhance the retention of students, under the guidance of and with timely reports to the Chancellor.

The committee is responsible for its internal organization, i.e. (1) its own rules or procedures; (2) appointment of subcommittees; and (3) estimated costs, subject to Chancellor’s approval prior to commitment.

The Retention Committee meets every other week (August through May) to discuss issues related to improving student retention and student academic success, and to implement new programs and processes that impact student retention. At the end of the academic year, the Retention Committee presents its findings and recommendations to the Chancellor. A copy of the annual report is available on the Undergraduate Studies website and upon request.
2012-13 Retention Committee Members

Co-Chairs:
Dr. Larry D. Gragg, Interim Vice Provost for Undergraduate Studies
Dr. F. Scott Miller, Assistant Director, Freshman Engineering Program

Committee Members:
Timothy Albers, Director, Recruitment and Marketing Enrollment Development, Enrollment Management
Bridgette Betz, Director, Student Financial Assistance, Enrollment Management
Tyrone Davidson, Director, Academic Advising, Office of Undergraduate Studies
Cecilia Elmore, Director, Student Diversity, Outreach and Women’s Programs, Enrollment Management
Patty Frisbee, Director, Student Success Programs, Enrollment Management
Dr. Edna Grover-Bisker, Director, Career Opportunities Center, Student Affairs
Dr. Leon Hall, Chair, Mathematics
Deanne Jackson, Registrar, Registrar’s Office, Enrollment Management
Katie Jackson, Assistant Director, Miner Alumni Association
Dr. Thulasi Kumar, Director, Institutional Research & Assessment
Rachel Morris, Assistant to the Vice Provost, Undergraduate Studies
Dr. Stephen Raper, Assoc. Professor, Engineering Management & Systems Engineering
Dr. Daniel Reardon, Assistant Professor, English and Technical Communication
Kristi Schulte, Associate Director, Residential Life, Student Affairs
Lynn Stichnote, Director, Admissions, Enrollment Management
Laura Stoll, Vice Provost and Dean of Enrollment Management
Ramya Thiagarajan, Institutional Research Associate, Institutional Research and Assessment
Dr. Klaus Woelk, Interim Department Chair, Chemistry
Dr. Nangai Yang, Research Associate, Institutional Research and Assessment
**Current Status of Missouri S&T Retention**

In 2008, Missouri S&T achieved a record high first-second year retention rate of 88%. Since then, the figure has fluctuated. In fall 2012, that rate was 85%. It is likely that the economic downturn largely explains the dip in the retention rate. This is evident from an assessment completed by the Noel-Levitz organization which suggested that at least thirty students entering S&T in the fall 2010 semester were in good academic standing, but likely did not return due to unmet financial need. S&T was able to contact eighteen of those thirty students who confirmed that affordability challenges contributed to their not returning.

The FY2012-FY2016 strategic tactical plan was approved by Interim Chancellor Wray in December 2011. The plan details annual targets that would meet the overall strategic planning goals. The desired student profile developed by the Strategic Planning Committee in 2004 has not changed drastically with the new plan and includes the following long-term targets:

- **Academic Preparedness:**
  --27.8 average ACT score (upper 10% in nation)
  --90% having completed the full Missouri college-prep curriculum
  --50% from the upper 20% of high school class

- **Geographic:**
  --70% in-state
  --25% out-of-state
- 5% international

- **Gender:**
  - 26% female
  - 74% male

- **Ethnicity:**
  - 13% under-represented minority students

- **Majors:**
  - 70% Engineering (all programs)
  - 17% Math, Sciences, Computing (math, chemistry, biological sciences, physics, computer science, information science & technology, and geology & geophysics)
  - 6.5% Business, Economics, Psychology
  - 3% Humanities, Liberal Arts (Technical Communications, History, English, Philosophy)

- **Success Rate:**
  - 90% first to second year retention rate
  - 80% return for third year
  - 70% graduate in six years

A full report of Cumulative Retention & Graduation Rates of First-Time, Full-Time Degree Seeking Freshman, is included as Appendix A of this report. A complete list of Retention Strategies and Tactics is included as Appendix B.
Total Enrollment 2000-2012
65% Total Enrollment Growth

Graduate Students
Undergraduate Students

Total Enrollment 2000-2012
65% Total Enrollment Growth
Key Issues Addressed by the Committee

In 2012-13, the Retention Committee focused on six priority goals deemed critical to retention issues. The committee organized itself into six subcommittees to coordinate the implementation of recommended actions. Action items were pursued as tactical planning items where practical.

Subcommittee #1: Math Performance
  Members: Patty Frisbee, Leon Hall (chair), Rachel Morris, Daniel Reardon, Ramya Thiagarajan, Klaus Woelk

Subcommittee #2: English Performance
  Members: Patty Frisbee, Larry Gragg, Leon Hall, Katie Jackson, Stephen Raper, Daniel Reardon (chair), Nangai Yang

Subcommittee #3: Fit in the S&T Environment
  Members: Tyrone Davidson, Edna Grover-Bisker, Deanne Jackson, Katie Jackson, Kristi Schulte, Lynn Stichnote (chair)

Subcommittee #4: Access to Success (A2S)
  Members: Timothy Albers, Bridgette Betz, Larry Gragg, Rachel Morris, Stephen Raper, Lynn Stichnote, Laura Stoll (chair), Nangai Yang

Subcommittee #5: Academic Policies
  Members: Cecilia Elmore, Deanne Jackson (chair), Thulasi Kumar, Scott Miller, Laura Stoll, Nangai Yang

Subcommittee #6: Student Success Courses
  Members: Tyrone Davidson, Cecilia Elmore, Patty Frisbee, Scott Miller (chair), Kristi Schulte, Klaus Woelk
Subcommittee #1: Math Performance

Structure of Algebra and Trigonometry

The current Algebra-Trigonometry structure has been in place since fall 1992. Since then, student performance in fall semester College Algebra and Trigonometry courses has improved significantly.

The mathematics placement process at S&T recommends that first-semester freshmen begin their mathematics study in one of the following courses:

- Math 3 (3 credit hours) Fundamentals of Algebra (4 sections, 107 students FS2012)
- Math 2 (5 credit hours) College Algebra (7 sections, 221 students FS2012)
- Math 4 (3 credit hours) College Algebra (8 sections, 260 students FS2012) and/or
  - Math 6 (2 credit hours) Trigonometry (8 + 4 sections, 282 + 154 students FS2012)
- Math 14/8 (4/5 credit hours) Calculus for Engineers I/Calculus with Analytic Geometry I (4 + 1 sections, 468 + 35 students FS2012)
- Math 15/21 (calculus 2) or higher

Math 3 is the most basic algebra course offered at Missouri S&T. It is for students whose algebra skills and background, based on the placement exam, ACT scores, and high school record, are not sufficient to take either Math 2 or Math 4, which are more review than fundamental instruction. Math 3 was not offered at UMR/S&T until the late 1990s - at that time the lowest course number available was 3.

Math 2 and Math 4 are, in the end, equivalent courses, but Math 2 begins at a lower level, using the 2 extra credit hours to "catch up" with Math 4 by the end of the semester. The handling of the students who are placed in Math 4 and Math 6 may be unique in institutions such as Missouri S&T. Here is how it works.

Students placed in Math 4/6 register for linked sections of the two courses. Math 4 runs five days/week for 9 weeks, followed by Math 6 five days/week for 6 weeks. After the first 9 weeks, those students who earn a C or higher in Math 4 continue in Math 6. (Students who need Math 6, but not Math 4, take a 10-week Trig class which meets MWF beginning the fourth week of the semester.)

Those students who perform at the D or F level in Math 4 after 9 weeks are dropped from both Math 4 and Math 6 and enrolled in "dropback" sections of Math 2 (unless they choose not to do this). The total credit hours for which the student is enrolled is unchanged, and no grade of any kind in either Math 4 or Math 6 appears on these students' transcripts. In fact, the transcripts do not even show that these students were ever enrolled in Math 4 and Math 6, only in Math 2. The students in the Math 2 "dropback" sections then have 6 weeks to improve their College Algebra grade, and many do so.

The Trig Review and the Problem Solving Workshop

The Mathematics and Statistics Department conducts two academic workshops during the week before fall classes start, the Trig Review and the Problem Solving Workshop. Students are advised to enroll in one of these courses based on their Math Placement scores. Those who score well enough
on the Missouri Mathematics Placement Test (MMPT - the algebra sections of the math placement exam) to take calculus, but whose score on the Trigonometry Exam indicates that a refresher in that subject is needed, qualify to take the Trig Review. At the end of the Trig Review, a Trigonometry Placement Exam is taken and those who show sufficient improvement (usually most of the participants) thus satisfy the prerequisites for and are cleared to take calculus 1, sometimes calculus 2. Those who do not improve their Trigonometry score must take Math 6, Trigonometry. The Problem Solving Workshop (PSW) is for those incoming students for whom the Math Placement process indicates that they should start in Math 3, or Math 2. At the end of the PSW, these students are re-evaluated and can be given mathematics course placement advice based on a more thorough assessment of their readiness. Participants in the PSW, depending on their performance, are advised to take one of Math 3, Math 2, or Math 4 (this one with Math 6). Consistent with the principal goal of the Math Placement process, the Trig Review and the PSW provide a further means of determining which mathematics course is most appropriate for a successful experience in a student's initial semester at S&T. Placement both at too high a level and at too low a level should be avoided. The student should be at a level where they can succeed in the course without having the course be essentially a review of material they have already learned.

Data

The subcommittee would like to collect and analyze data in the following areas, to better assess the effectiveness of the introductory math sequence:

- Performance in Fall Semester Math 3, 2, or 4 for PSW students.
- Performance in Fall Semester calculus 1 for successful Trig Review students.
- Performance in Fall Semester calculus 1 for unsuccessful Trig Review students.
- Graduation rates for the different Fall Semester mathematics classes for freshmen.
- Correlation (if any) between MMPT scores and first mathematics class grades.
- Correlation (if any) between MMPT scores and graduation rates.
Subcommittee #2: English Performance

The English subcommittee has identified four key challenges for Missouri S&T reading and writing needs:

- Reading comprehension
  - 20-25% of English 20 students struggle with foundational reading skills
- AP/CLEP
  - Students who receive AP/CLEP Exam credit may not be prepared for S&T coursework
- Advising regarding English 20, 60, 65, 160
  - Advisors may not be aware of course content and differences
- Writing Across the Curriculum
  - Students may not have enough practice in writing in their majors

Background

Evidence from English 20 instructors and anecdotal evidence from faculty across the university consistently indicate that students increasingly lack the necessary reading and writing skills to successfully complete their coursework. To partially assess the reading skills of Missouri S&T freshman, a 20-question test was administered to all English 20 students at the beginning of the semester for the 2011-2012 and 2012-2013 academic years.

The diagnostic was intended to test students’ reading and analytical abilities in the two most fundamental reading comprehension skills, according to the Depth of Knowledge Scale (1997) developed by Norman L. Webb of the Wisconsin Center for Educational Research. Webb’s Depth of Knowledge (DOK) standards are widely used by K-12 and college assessment programs, and is the scale used by the Missouri Department of Elementary and Secondary Education (DESE) in their Show Me Standards and state assessment tests, Missouri Assessment Program (MAP). These reading comprehension skills are:

1. Recall: Find information directly in the text, or a close paraphrase of information in the text (10 questions)
2. Skill or Concept: Make simple inferences based on information about the text, or easily interpret information from the text (10 questions)

Diagnostic Results

Results indicate that perhaps 20-25% first-year students currently enrolled in English 20 may be unable to accomplish the simplest of reading comprehension tasks—locate a word, exact phrase, or close paraphrase in a passage. Nearly 60% are unable to make simple inference about a text, such as a passage’s main idea or key evidence used in an argument. Difficulty with these fundamental reading skills will undoubtedly affect a student’s entire academic career.
AP/CLEP

Although English 20 was recently redesigned to review locate/recall and skill/concept reading abilities, nearly 25% are not prepared for English 20 or college-level reading or writing coursework. And only 60% of S&T students actually enroll in and complete English 20. The other 40% gain admission credit for AP English or dual-credit courses. Some students test out of English 20 through the CLEP test. The result is an often vast disparity in reading and writing abilities among students in English 60 (Comp II). Surveys conducted by English subcommittee members indicate that reading and writing difficulties are widespread across campus, though theories of root causes are diverse. Nonetheless, student success and retention are certainly impacted by skill deficiencies in foundational coursework.

Recommendations

The English subcommittee recommends investigation and further study in the following areas:

- **Diagnostic Reading and Grammar testing for all incoming S&T students.** Subcommittee research shows little or no correlations between ACT scores and student reading and writing preparedness. Diagnostic testing will allow us to target students with reading and writing skill deficiencies, and recommend/require English 20 for those students (regardless of AP, dual-credit, or CLEP). A one-hour English 20 lab, in which students complete concurrently with English 20, could also assist students with severe reading deficiencies.

- **Review of English CLEP benchmarks.** A score of 57, the current minimum needed for English 20 credit through CLEP, may be insufficient in determining a student’s college readiness in reading and writing skills. Examination of both the multiple-choice English CLEP exam and the essay rubric reveal insufficient criteria for evaluating college readiness, based on our current English and Technical Communication reading and writing program standards.

- **English 20, 60, 65, and 160 Information Cards for advisors.** The curriculum for English 20 and 60 has changed considerably in the last two years. English 60 also differs markedly in objectives and outcomes from either English 65 or 160. An information card could be created for advisors, detailing the differences between each course, and for which students each course might be best.

- **Review of Standards for Writing Intensive (WI) Courses.** No consistency exists currently for writing intensive course standards across campus. The English retention subcommittee recommends review and updates of current guidelines, followed by consultation with department chairs on implementing these updates. Consistency across campus, with assistance for instructors in designing appropriate rubrics for assessing and evaluating writing in WI courses, may strengthen retention and student success.

- **ESL Reading and Writing Program.** The English and Technical Communication program in spring 2013 piloted an English 20 for international students section, with great success. The department and the English retention subcommittee recommends further investigation into a dedicated reading and writing program for S&T international students, whose skill needs are often quite different from those of native speakers.
Subcommittee #3: Fit in the S&T Environment

The subcommittee made the decision to continue to focus on the aspect of “fit” related to students who are from majors that have smaller enrollments on campus, in particular those that are not engineering. While the sciences are marginally more “recognized” at S&T, the students seem to feel a “difference” if they are not an engineering student just from a “critical mass” of students standpoint.

Recommendation #1:

Use results of the Diversity and Inclusion Survey to identify cultural factors that may influence persistence of students in various majors and then determine actions that might mitigate the effect of the culture or provide education to faculty & staff.

Results:

The executive summary provided to the campus at the conclusion of the Diversity survey included information on both student and faculty perceptions regarding the culture at S&T and its impact on those associated with majors outside of Engineering. The Diversity and Inclusion committee released the survey after the committee had concluded with recommendation so this recommendation has been shelved until the results are available as the “Fit” subcommittee did not feel another survey was appropriate. We may need to investigate other campus surveys to see if “fit” information might be found within them.

Recommendation #2:

Bring career information on all S&T majors to students “where they are” to encourage them to consider other majors and to feel comfortable in “non-engineering” major choice.

- **In the Residence Halls:** Develop a program to incorporate interaction between students and faculty. This could be a pilot for programs to bring faculty from under-enrolled or non-engineering fields into the Residence Halls to create bonds with the students and to publicize the accomplishments of undergraduates and alumni in those fields.

- **On Blackboard:** The subcommittee recommended working with Patti Fleck on developing a “Career Fit” Blackboard module that could be promoted via “101” classes, the Advisor Training & Advisor Handbook and through the Student Success Center.

- **Within Professional Societies and other student organizations:** Work with Student Life to identify how the strong student organizations could assist in promoting comprehensive information on majors and careers.

Recommendation #3:

Comprehensive career information on all majors made available to new and current students.
• Outreach through “New Student 101” courses within the academic departments: Larry Gragg reached out to department chairpersons about a common and comprehensive message for “101” courses. However, that was met with little or no interest among department chairs, so the subcommittee has dropped that recommendation.

• “Major of the Month” video: to focus on achievements and career outcomes for students from a variety of majors, beginning with those that are currently under-enrolled at S&T (Humanities, Social Sciences, Education, Business and Sciences). Developing this content could dovetail with the work being done by Tim Albers in Recruitment Marketing and Enrollment Development to create recruitment materials that are major-specific for prospective freshmen and transfer students. Resources would have to be identified in order to initiate this project.
Subcommittee #4: Access To Success (A2S)

By embracing our land-grant mission of providing affordable access to high-quality STEM education to the students of Missouri and beyond, the Access to Success (A2S) initiative provides S&T an opportunity to refine strategic targets for affordability and diversity, plus ensure that we are meeting the education, workforce and research needs of our state while creating a diverse student body that richly enhances the educational experience. S&T has made diversity and student success priorities for many years by including targets and metrics for success in the campus’s strategic plan and by assigning executive leadership to address issues around access and student success. The A2S initiative will reemphasize the importance of data gathering and assessment as S&T strives to achieve established targets.

This Subcommittee is a continuation of the 2011-2012 Subcommittee. The Subcommittee removed from the listing of ideas and recommendations for 2012-2013 those items that had been completed, and any items that had significant dollar amounts associated with their completion, such as “expand merit-based scholarships for all students to 10 semesters - $2.3M”.

Focus for 2012-2013:
1. Mentoring program for low-income students – Two NSF proposals were submitted that addressed funding for peer mentoring of low-income students. Both proposals were denied.

   **Recommendation:** Continue to seek funding for peer mentors to be used in the Student Success Center for low-income students.

2. Continue to improve financial literacy programming in Student Financial Assistance office.

   **Recommendation:** Support programming activities in the Student Financial Assistance office and report to Retention Committee those activities.

Current Financial Literacy and Outreach activities include:

- Each student admitted to the institution is assigned a financial aid counselor. This counselor will be their contact throughout their life as a student, as well as after graduation.
- All incoming students are required to participate in federally mandated entrance counseling. The SFA Office encourages students to complete this online, but welcomes students who
- When a student receives their financial aid award package, they receive a checklist instructing them to visit our website and review our resources. Students are also directed online to view a copy of our institution’s Shopping Sheet. The Shopping Sheet is updated any time a student accepts or declines financial aid, or as changes are made to a student’s award internally.
- The SFA Office offers presentations throughout the year, as a part of our Miner Money Matters (M³) program
- The SFA Office hosts a Financial Aid Awareness Week at the Missouri University of Science and Technology Student Success Center. 248 students attended, or 3.7% of the S&T campus.
The SFA Office maintains Twitter and Facebook accounts in an effort to provide financial literacy and outreach to today’s technologically savvy students and community members.

In May 2013, SFA submitted a proposal for the Missouri Department of Higher Education Default Prevention Grant for $25,000. (Announcement of recipients should occur in summer 2013.) In the proposal, SFA has provided the following options:

- The Assistant Director will be responsible for reviewing cohort default data, determining trends and identifying at-risk populations. Additionally, the Assistant Director will review the institution’s delinquency report on a weekly basis and will generate contact with the borrowers included in the report including, but not limited to, letters and post cards. The Assistant Director will also be responsible for reviewing draft Cohort Default Rate reports and challenging the data should inaccuracies be found. The Assistant Director will additionally be responsible for tracking student participation at programs and activities throughout the year, as well as serve as the liaison between the SFA Office and various offices on campus, in relation to providing services for at-risk students.

- The Financial Literacy Manager will be responsible for planning, developing, implementing and evaluating Miner Money Management (M³) outreach activities related to financial literacy, debt management, and default prevention as well as the impact on the retention of students.

- The SFA Office will implement the creation of four Student Peer Counselor positions to serve as a connection to students in a way professional staff simply is unable to accomplish. Student Peer Counselors will serve as relatable and trusted resources for other students. The Student Peer Counselors will assist with the M³ program by contributing to creative brainstorming, goal setting, and program or activity implementation. The Student Peer Counselors will make contact with student organizations and will work to implement financial literacy initiatives with various on campus entities. The Student Peer Counselors will make presentations for the M³ program and will assist with maintaining the financial literacy website, Facebook and Twitter pages.

- The SFA Office will collaborate with Missouri S&T faculty to increase engagement and support for financial literacy initiatives.

- The SFA Office will work in conjunction with the Missouri S&T Career Opportunities and Employee Relations Office to develop a Life after S&T program which focuses on loan repayment options, anticipated salaries, expected cost of living, and budgeting tips for students nearing graduation.

3. Website to advertise student worker positions.

**Recommendation:** Contact COER office to begin posting on-campus student positions. Communicate the available website to the campus.

4. Encourage hiring student workers across campus – Several members of the A2S Subcommittee attended a workshop through the U.S. Education Delivery Institute (who also funds A2S) where they developed a proposal for a “Privately or Institutionally Funded Work Study” program.

**Recommendation:** Propose an Institutional Work Study Program (see draft below).
Institutional Work Program Proposal

1) Introduction
The A2S subcommittee proposes an institutionally or privately funded work study program that will award work-study jobs to students who are traditionally more at-risk at Missouri S&T than the average student. The Institutional Work Program will offer these students (primarily low-income and underrepresented minority students) stronger financial aid awards, and will improve their likelihood of succeeding at S&T by developing strong academic skills and adult and peer connections on campus via additional requirements set forth in this proposal.

This proposal is based on findings of the Retention Committee and its A2S subcommittee that determined that increased financial aid is critical to the recruiting and retention of low income and underrepresented ethnic minority students. At the end of the 2011-2012 academic year, the A2S subcommittee suggested implementing a “workship program” in which students would work on campus with departments who would also help the student succeed academically.

2) The Program
Missouri S&T will raise funds to start an institutionally funded work study program targeted toward helping at-risk students succeed and graduate. Students will be selected based primarily on financial need, though other factors influencing “at-risk” status may be used. The program will create new work-study positions beyond those available through traditional state and federally-funded work study positions.

The new positions will be made available to departments as matching money, giving the hiring department the opportunity to stretch their student work budgets and allowing Missouri S&T to maximize the effect of this program. Selected students will be offered $2,500 per year, funded 50% by money raised for this program and 50% by the hiring department. There is still discussion on whether to do this as matching funds or to fully fund each student, particularly as we are asking the hiring department to do a lot of training and monitoring for student success.

Selected students will work for wages as in a standard work study program, and will have several additional required activities designed to improve the likelihood that they will succeed at and eventually graduate from Missouri S&T. These activities might include all or any combination of the following:

- Enroll in the Master Student Class (Chem 110)
- Fully participate in Opening Week programs (Academic Workshop, Mentor Group and Project X)
- Participate in Reconnection I and II Mentoring Program
- Keep a reflective journal during the first year
- Schedule at least one “in person” meeting per semester with Student Success Center Coordinator
- Participate in the On Line Student Success program
- Schedule a minimum of two meeting per semester with your academic advisor to discuss your academic progress.
• Attend LEAD Sessions for at least one course per semester (Learning Enhancement Across Discipline or LEAD sessions are available for most freshman and sophomore level courses)
• Join one campus organization of your choice during Fall 2013 semester

3) **Who is eligible**
For fall 2013, only first time new freshmen will be eligible. Students will be selected by the SFA office, which will target low-income, Pell-eligible students not receiving other work study help. Underrepresented ethnic minority students will also be targeted. The intent of the program is to assist students who are likely to be at-risk academically because of financial issues.

4) **Who will manage the program**
The Student Financial Assistance Office will implement the program as it would other work study programs. Hiring departments will be asked to monitor each student’s successful completion of work hours and expectations, as well as the additional activities required by the program. Available positions will be offered only to departments on campus that are willing to meet this requirement.

5) **Cost**
This first year pilot program will award 30 positions at $2,500 in the fall semester of 2013, with $1,250 of each position funded by the program at a cost of $37,500 for the first year. Fund raising requirements will be $75,000 for the first year, with the intent that these work positions will be continued in the second year for students selected in Fall 2013 who return for Fall 2014. Administrative costs will be absorbed within participating departments’ operating budgets.

The funds for this program will need to be raised either from any available on campus funds, or from off campus resources. It is expected that donors can be located to provide funding for the program. The Missouri S&T Development Office will be asked to help with fund raising for the program.

6) **Return on Investment**
Return on Investment more likely to be from retention rather than from new recruitment in the first year.

7) **Results Measurement**
The SFA office will monitor each student for academic progress as they do for any student receiving financial assistance. In addition, each hiring department will monitor the student’s successful completion of work hours and expectations, and will monitor the completion of the additional activities set forth in the proposal. The hiring department will report to the SFA Office on the satisfactory progress of the student.

Students must meet both the minimum requirements to show satisfactory academic progress by SFA standards and have the approval of the hiring department in order to continue in the program the following year.
8) **Defining Success**

If freshman to sophomore retention rates for this group are higher than for the Pell-eligible student group as a whole, the program will be considered a moderate success. If the retention rate for the group equals the retention rate of the freshman class as a whole, the program will be considered a complete success.
Academic Forgiveness Policy

The Missouri University of Science and Technology has an academic forgiveness policy to enable those students who did not perform adequately in their undergraduate enrollment at Missouri S&T to be given a second chance to pursue their undergraduate academic goals. Students returning to Missouri S&T to pursue an undergraduate degree after an extended absence may request permission to remove one or more complete academic terms from future degree and GPA considerations. Academic forgiveness is a policy of Missouri University of Science and Technology and as such may not be recognized by outside institutions or agencies.

To be eligible for academic forgiveness consideration, students must meet the following requirements:

- Students must have not been enrolled as degree-seeking at Missouri University of Science and Technology or any other University of Missouri System campus for four or more consecutive years.
- Students must not have graduated from Missouri University of Science and Technology.
- Students must be admitted as degree-seeking and have earned a minimum of 12.0 credits hours with at least a 2.5 GPA of record for those hours at Missouri University of Science and Technology within the past 12 months.

Conditions of Academic Forgiveness

- All courses and credits taken during the chosen terms will be removed from consideration for GPA and degree requirements. Students may not combine individual courses from multiple terms to compose the semester(s) dropped.
- All courses and grades for the chosen terms will remain on the student’s academic record with a notation showing that those hours and grades will not count toward cumulative hours, nor GPA, nor can they be used to fulfill any degree requirements.
- Forgiveness may be applied only to academic terms completed prior to the student’s extended absence.
- Students may only be granted academic forgiveness once.
- Students who choose academic forgiveness must meet the degree requirements of the Missouri University of Science and Technology undergraduate catalog at the time of their readmission.
- Degree requirements met during the dropped terms must be repeated.
- To be eligible for a degree, students must complete a minimum of 24 credits at Missouri University of Science and Technology after the granting of academic forgiveness.
- Academic forgiveness only applies to Missouri University of Science and Technology undergraduate courses and is not applicable to transfer work or graduate work.
- Only students who are readmitted to a degree program at the undergraduate level at Missouri University of Science and Technology are eligible to apply for forgiveness.
- Academic Forgiveness must be approved by the primary academic department on a case-by-case basis.

Small changes to wording are currently being administered.
Request to have student academic regulations changed to reflect some policies and procedures that are not in practice any longer. Remove the summer honor roll reference. Remove FERPA pages (include link to UM system) and delete the reference under the Deficiency Student Process regarding counseling as they no longer are a part of the process.

There are currently several policy/process change ideas being discussed.

- Reduced course load for full time status for disabled students. This would allow disabled students who cannot take a full course load, either physically or mentally, to be considered full time by Missouri S&T. This would help the students who have financial obligations, such as student loans, not have to be in repayment mode due to not being full time.

- D,W,F grades and students with over 200 hours – registration priority options. This change would consider a regulation that any student who receives an D, F or WD in a course and then reenrolls for the same course be put on the wait list until priority registration ends and open registration begins. Then, if there are seats available, they will be enrolled, but only if there is sufficient space. In other words, we give students attempting the course for the first time the chance to enroll during priority registration BEFORE students who have taken the course previously.

- Deficiency process for Second Majors – Our current process only processes for primary major and many of our students are dual or more majors. We need to evaluate and change our process to incorporate the additional majors as all departments should have the opportunity to process deficiency paperwork for their students.

- Online Grade Changes– This is something recently put into place by the other campuses and something we would like to take advantage of. The process now is a paper process in which the instructor submits the Change of Grade form to his department chair for signature then once signed, it is sent to the Registrar’s Office for processing. The online Change of Grade would allow the instructor to submit the change of grade during a specified time without the department chairs signature. A report could be generated for all department chairs notifying them of the changes.

This committee has asked for faculty senate approval for:

- Automation of add/drop process (first two weeks of classes) to eliminate the paper forms. The current PeopleSoft system will allow for this process to be easily changed but would eliminate the signatures on the form for the advisor and instructor.

- Automation of Prerequisite process. Currently we allow all students to enroll in a course in which they do not meet the prerequisite. Five times a semester a report is generated and disseminated to each academic department for which prerequisites are being checked. The departments review the report and decide if the student is allowed to remain. Our proposal is to stop enrollment into a course in which the prerequisite is not met. The issue becomes how do we allow students to enroll in a class for which they are taking the prerequisite for during the summer semester, possibly at another school. This can be satisfied by using permission
numbers. Permission numbers could be given to the student by the instructor/department to allow for enrollment into the course prior to the prerequisite being checked. There is new functionality in PeopleSoft to allow for post enrollment requisite checking. This process would allow the Registrar’s Office to drop students from courses if they did not fill the prerequisite.
Subcommittee #6: Student Success Courses

One of the first tasks of the committee was to determine what courses were already in place at S&T, and what improvements might be addressed in a restructuring or entirely new course. It was noted that the Chem 110 Master Student course would continue to be offered in the Fall semester, and that the conditionally admitted students were being required to participate in that course. The committee also discussed the programming in the On Track courses offered by the Undergraduate Advising Office. Similar courses offered elsewhere, particularly a course offered by the Univ. of Arizona (McGrath and Burd) were also discussed. Another major discussion topic was the offering of college credit for the course and thus requiring students to pay to attend. The outcome was that for-credit courses were much more effective than non-credit courses. The committee also discussed the timing of a newly created success course, and many options were offered, such as: required the semester subsequent to going on probation, an 8-week course at the start or second half of the semester, and an intersession course in early January.

The committee also discussed some other areas related to student success. Two of those were the Academic Alert system and the newly created Student Success Center. A document outlining the proposed changes to the Academic Alert webpages is attached in Appendix C.

Student Success Center
The mission of the Missouri S&T Student Success Center is to serve all Missouri S&T students as a campus resource that will provide high quality customer service, effective information and support as students persist in their journey towards their educational goals.

The Missouri S&T Student Success Center:
- Is Centrally located
- A one stop shop
- Designed for students to visit and feel comfortable about utilizing the campus resources available
- Developed as a campus wide initiative
- Foster a sense of responsibility and self-directedness to all S&T students
- Success Coaches, mentor, caring staff and faulty

The Objectives of the Success Center:
- Coordinate and support programs
- Support student success retention efforts
- Collaborate with academic and non-academic department
- Guide students on their path to success

Factors That Impact Student Success
- Disconnect on being college ready – preparedness
- Students struggle to persist to their second year
- Not fitting in
• Weak study skills, test taking skills, self-management skills, problem solving skills, communication skills, etc.
• Lack of academic and social support
• S & T needs to support the students they enroll
• Major/career options
• Employers want skilled workers who can think critically and solve non-routine problems

What is available in the Student Success Center?
• Success Coaches (friendly and welcoming staff)
• Computers
• On-line Resources (Ted Talks, Kahn Academy, Career, etc.)
• Faculty and staff interaction
• Study tables for individuals and/or groups
• White Boards (markers & erasers available)
• Success Map
• On campus resources and handouts
• Virtual Bulletin Board
• Free Coffee
• Facebook: https://www.facebook.com/mstscce (featuring live chat)
• Website: www.studentsuccess.mst.edu
• Texting Service: 573-458-9BAM

Student Success Center Activity 11/27/2012-3/8/2013
• Approximate # of students walking through center and using facility: 7982
• # of students assisted with questions and guidance by SSC staff: 163
• # of students referred to other departments: 11

Financial Aid Week
• # of students who attended: 248
• # of students who received help and filled out a survey: 49

Enrollment Management, Student Affairs and the Office of Undergraduate Studies teamed up in the fall semester to bring “Reconnect”. Reconnect is a chance for freshmen to reconnect with their opening week mentors and learn about resources on campus to help them be successful. The timing of each event was carefully considered as to when the students would be most receptive to advice.

RECONNECTION 1 (# participated: 275) – 5th Week, 1st Semester.
Student Success Secrets – Topics: Goal Setting; Time Management (self-management); Study Skills; Academic Support; Campus resources; Faculty interaction.

RECONNECTION 2 (# participated: 150) – Week after mid-term & before Advising Week.
Tools for Moving Forward – Topics: Understand, receive tips, know the processes that will help you move forward: Advising; Financial Aid, Registration, GPA’s, CAAP’s Reports, add/drop, other forms, replacement grades, scholarships/grants, appeals, COER – co-ops and internships, Study Abroad, Campus Involvement, undergraduate research. Also, information on Coping skills, Motivation, Procrastination
Recommendations:

Continued support for the Student Success Center
- Funding for success coaches
- Departmental and faculty support for Reconnection I & II

Updating and enhancing the Academic Alert System
- Revising the forms and webpages for clarity and ease of use
- Promoting the effectiveness and encouraging instructors to utilize the system

Developing a “for credit” success course
- Work with offices across the campus to develop effective content
- Initiate Faculty Senate discussion towards a mandatory course for students on probation or academic deficiency
Executive Summary

Accomplishments from the 2011-2012 Recommendations

- Restructured the summer bridge program Hit the Ground Running to include more math instruction.
- Developed Reconnection I and II to afford students more opportunities to interact with their Opening Week mentors.
- Worked with campus academic chairs to promote the importance of faculty advising particularly with freshman students.
- During the preregistration period each semester, information on the campus’s array of majors and minors were promoted in the Student E Connection distributed to Department Chairs to make available to advisors.
- A “Majors and Minors” fair was held in the fall and spring semester. The fall fair was heavily attended by current students and a bump up in major changes was noticed.
- The Student Success Center, a one-stop-shop to promote academic enhancement, has opened and assists students that need help with tutoring, advising, career counseling, student financial assistance, and general guidance.
- “Majors and Minors” was promoted in the Parent Newsletter and in the Student E Connection.
- The new scholarship and aid awarding model was approved by the Chancellor. Due to budget constraints, the need-based portion of the new model has been postponed until a later time. Need-based aid awarded to the Fall 2012 FTC students will be continued and the results will be tracked.
- Encouraged hiring student workers across campus
- Website to advertise student worker positions
- Continuously improved financial literacy programming in Student Financial Assistance
- Strengthened NSBE (National Society of Black Engineers), SHPE (Society of Hispanic Profession Engineers), AISES (American Indian Science and Engineering Society).

Challenges addressed by the Retention Committee in 2012-2013

- To collect and analyze critical data on student performance in their first mathematics courses and correlation between their placement and graduation rates.
- Determine how S&T should address the reality that nearly a quarter of the students enrolled in English 20 cannot “accomplish the simplest of reading comprehension tasks.”
- Determine how can S&T better assist students pursuing majors in degree programs other than engineering feel like they “fit” on our campus.
- Determine the most feasible strategy or strategies to provide low income and underrepresented minority students both access to S&T and to help them be successful?
• Review current policies for effectiveness and develop new policies that enable student persistence and retention.
• Determine how S&T can best utilize the new Student Success Center, the On Track Courses, and Reconnection I and II to develop student success courses.

The results from the following survey were evaluated and are included as Appendix C of this report:
• Non-Returning Student Survey Results for 2008 & 2009 & 2010 & 2011 Cohorts
• Non Returning Student Survey Phone Calls
• Faculty Advising Survey
• Student Advising Survey

In addition, the Retention Committee reviewed the following documents:
• Cumulative Retention & Graduate Rates of First-Time, Full-Time Degree Seeking Freshmen (Appendix A)
• Retention Strategies & Tactics (Appendix B)
• Academic Alert proposed changes (Appendix C)
APPENDIX A
Cumulative Retention & Graduate Rates of First Time, Full Time Degree Seeking Freshmen
### Freshmen Retention & Graduation Rates

#### Class Entering % Returned or Received Degree After % Rec’d Deg After

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Female Freshmen Retention & Graduation Rates

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APPENDIX B
Retention Strategies and Tactics
2001-2013
Retention Strategies and Tactics, 2001-2013

Assessment Enhancement
- Created standardized retention and graduation reports by gender and ethnicity and began measuring stop-out rate (students who withdraw and return), 2002
- Began annual retention audit of academic (cognitive) and demographic factors, 2001
- Instituted new-student survey in freshman Preview, Registration and Orientation (PRO sessions), 2002
- Re-instituted the Hogan Personality Index (HPI) assessment to track students by non-cognitive factors, 2002
- Revised withdraw surveys and interviews, 2002
- Started follow-up telephone surveys of non-returning students, 2002
- Began collection and campus-wide distribution of freshman academic profile, specifically new-student survey data about expectations, social activities, GPA, ACT/SAT scores, 2002
- Revised student satisfaction and engagement assessments, Cooperative Institution Research Program and National Survey of Student Engagement, 2001
- Identified classes with very low student success rates, grade of D, F or Withdraw, 2001
- Revised and re-launched the faculty and student advising survey, 2012

Programming: Advising, Tutoring, Learning Communities, Faculty Training and Support
- Learning Enhancement Across Disciplines (LEAD) tutoring program expanded beyond physics classes, Fall 2002
- Joint Academic Management (JAM) sessions established, 2004
- Online tutor request program implemented, 2003
- Opening Week activities restructured around a group project activity, 2002 and 2003
- Expectations of student success addressed in all recruitment and orientation speeches, 2002
- Group building (making friends) and study skills addressed in all orientation and Opening Week activities, 2002–2003
- Advising program expanded with regular advisor training and awards, 2002
- Learning Communities and First-Year Experience Programs to address student academic skills development and social engagement through student life-oriented group events, 2002–2003
- Expanded freshman pre-college “Hit the Ground Running” program to address student academic expectations
- Created the Center for Pre-College Programs (CPCP) to expand the K-12 student workshops and science, technology, engineering, and mathematics (STEM) summer camps.
- Created the Center for Educational Research and Teaching Innovation (CERTI): to address improving the Missouri S&T learning environment and student learning outcomes through collaborative learning, experiential learning, technology enhanced learning, and educational research practices (September 4, 2003).
- Expanded experiential learning programs by promoting student engagement through student design teams, undergraduate research (OURE expansion) and service learning
• Implemented the Notification of Scholastic Probation Form, 2007
• Established the undergraduate advising office, 2007
• Developed the On-Track Academic Success Program to assist probationary and academically deficient students, 2007
• Updated the online Missouri S&T Advising Handbook, 2011
• Opened Burns and McDonnell Student Success Center, 2013

Policy Changes
• Incomplete grade time limit change, 2002
• Repeat course GPA adjustment policy, 2002
• Scholarship Reinstatement Policy, 2002
• All BS degree programs reduced to fall between 124 and 128 hours, 2002–2003
• Four degree programs most often requested by exiting students added: business, information science and technology, technical communication, and architectural engineering, 2002–2003
• Academic Forgiveness Policy, 2011-12
APPENDIX C

Evaluation of Survey Results
### FTC Non-Returning for SP2009/FS2009 - SP2012/FS2012

#### FTC Non Returning Summary

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#### Geographic Origin

<table>
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<th></th>
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<th>%</th>
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<th>%</th>
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<th>%</th>
<th>2011 Cohort</th>
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#### Academic Plan

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<th>%</th>
<th>2010 Cohort</th>
<th>%</th>
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<tbody>
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#### Ethnicity

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<th>%</th>
<th>2010 Cohort</th>
<th>%</th>
<th>2011 Cohort</th>
<th>%</th>
</tr>
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<tbody>
<tr>
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<td>129</td>
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<td>160</td>
<td>100%</td>
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<td>2</td>
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<td>2</td>
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<td>8</td>
<td>5.0%</td>
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<td>3.1%</td>
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### Cumulative GPA

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<tbody>
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<td>3.5-4.0</td>
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<td>11.6%</td>
<td>13</td>
<td>8.2%</td>
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<td>3.26-3.49</td>
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<td>4.7%</td>
<td>9</td>
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<td>11</td>
<td>7.0%</td>
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<tr>
<td>3.0-3.25</td>
<td>12</td>
<td>9.3%</td>
<td>19</td>
<td>12.0%</td>
<td>14</td>
<td>7.3%</td>
<td>15</td>
<td>9.5%</td>
</tr>
<tr>
<td>2.5-2.99</td>
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<td>17.1%</td>
<td>20</td>
<td>12.7%</td>
<td>45</td>
<td>23.3%</td>
<td>23</td>
<td>14.6%</td>
</tr>
<tr>
<td>2.0-2.49</td>
<td>20</td>
<td>15.5%</td>
<td>25</td>
<td>15.8%</td>
<td>32</td>
<td>16.6%</td>
<td>23</td>
<td>14.6%</td>
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<td>41.7%</td>
<td>72</td>
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### Composite ACT

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<th>100%</th>
<th>189</th>
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<td>22</td>
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<td>32</td>
<td>16.9%</td>
<td>21</td>
<td>13.6%</td>
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<td>27-30</td>
<td>40</td>
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<td>52</td>
<td>34.0%</td>
<td>69</td>
<td>36.5%</td>
<td>58</td>
<td>37.7%</td>
</tr>
<tr>
<td>24-26</td>
<td>33</td>
<td>26.0%</td>
<td>42</td>
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<td>66</td>
<td>34.9%</td>
<td>55</td>
<td>35.7%</td>
</tr>
<tr>
<td>&lt;24</td>
<td>29</td>
<td>22.8%</td>
<td>37</td>
<td>24.2%</td>
<td>22</td>
<td>11.6%</td>
<td>20</td>
<td>13.0%</td>
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</table>

### 2nd Year Cohort

<table>
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<tr>
<th>Fall Term</th>
<th>Cohort (First time-Full time-Degree Seeking Freshmen)</th>
<th>% non returning</th>
<th>Of non returning-# in Good Standing (GOOD/REMP/GDPR/REMD)</th>
<th>Of non returning-%in Good Standing</th>
<th>Of non returning-Ave ACT</th>
<th>Of non returning-Ave GPA</th>
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<tr>
<td>2011</td>
<td>1090</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>2010</td>
<td>285/1140</td>
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<td>10%</td>
<td>27.1</td>
<td>2.16</td>
</tr>
<tr>
<td>2009</td>
<td>242/1104</td>
<td>78%</td>
<td>25</td>
<td>10%</td>
<td>26.4</td>
<td>2.2</td>
</tr>
<tr>
<td>2008</td>
<td>231/1038</td>
<td>78%</td>
<td>29</td>
<td>13%</td>
<td>26.3</td>
<td>2.2</td>
</tr>
</tbody>
</table>
Non-returning Student Survey Phone Calls Summary

Non-returning Student Survey
89 students

Students Spoken To
66 students
Students Who Planned on Registering

- Problem navigating Joe’SS
  - Did not know where to find advisor information
  - Did not know how to find holds on the account
  - 2 thought they had registered but had only added classes to their wishlist
  - 1 student thought by meeting advisor he was registered

Students Not Returning

- 6 students indicated they were not returning
  - 1 lack of financial aid
  - 4 related to needing a break due to personal reasons
  - 1 was related to basic training (planning on returning FS2013)

Students who Transferred

- Of the students ask about involvement, 13 students were involved on campus in an organization, & 8 were not involved
- 13 transferred to a community college
- 12 transferred to another 4 year university (Mizzou, UMSL, Emporia State, Missouri Valley, Missouri State, Lincoln, Truman State, Northwest University, SEMO, University of St. Thomas)
- 15 engineering majors, 3 biology majors, 3 computer science majors, 2 chemistry majors, 1 undeclared major, & 1 economic major.
- 15 were transferring and changing majors
  - 6 of them were transferring to get general education out of the way (3 intended on returning, 1 hadn’t decided, and 2 were not returning to S&T
- 10 students were transferring and keeping the same major
- Of the engineering students transferring to 4 year universities:
  - 3 continues to major in engineering
  - 5 changed to non-engineering majors (business, chemistry, criminal law, and athletic training)
Reasons for Leaving
- Academic (overloaded with homework, low grades, lost scholarship, falling behind, no self-discipline)
- Financial aid/price (lack of financial aid, cheaper at community college)
- Closer to home (family, girlfriend)
- Connection & atmosphere (didn’t connect with people, socially awkward campus, small town)
- Problems with faculty (lack of help, communication)
- Don’t know

Recommending Missouri S&T
- 24 out of the 25 not returning stated they would recommend Missouri S&T.
  - Quality of education was good
  - Professors are knowledgeable and friendly
  - Engineering is a phenomenal program
  - It’s definitely a challenge; a challenge most students need
  - They do a lot of preparing you for real life situations and for getting jobs
  - Great engineering school with a lot to do on campus, friendly, and small
Office of Undergraduate Advising Faculty Advising Survey Results

#1 Are you a faculty member, staff member, or department chairperson?

- Faculty: 93%
- Staff: 6%
- Department Chair: 1%

#2 How long have you been advising?

- 0-1 year: 61%
- 2-3 years: 11%
- 4-5 years: 11%
- 6+ years: 17%
#3 How many advisees do you currently have?

- 0-9: 48%
- 10-20: 28%
- 21+: 24%

#4 Have you received any training regarding academic advising?

- Yes: 34
- No: 37
#5 Have you attended workshops or seminars regarding academic advising?

- Yes: 35
- No: 36

#6 If yes, was the training held on or off campus?

- On-campus: 33
- Off-campus: 0
- Both: 5
- Does not apply: 33
#7 If yes, please rate the usefulness of the workshop.
(5 being most useful and 1 being not useful)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
</tr>
</tbody>
</table>

#8 Which of the following best describes your advising load?

- My advising load is light. I have more than enough time to meet with all of my students. 18
- My advising load is medium. I have time for all of my students. 36
- My advising load is heavy. I do not have time to meet with all of my students. 17
#9 What is your attitude about academic advising?

- Students have program information & degree audits on-line, advising is not necessary. 5
- Advising is necessary but not important to the educational process. 6
- Advising is an important component of the overall educational process. 60

#10 What are your feelings about the advising experience?

- I find advising to be a pleasant experience. 47
- I find advising to be neither a pleasant nor unpleasant experience. 20
- I find advising to be an unpleasant experience. 4
#11 Are you familiar with the concept of developmental advising?

- Yes: 17
- No: 54

#12 If yes, to what extent do you use it? If not, please respond with NA.

- NA: 55
- Where Possible: 6
- All the Time: 6
- Limited: 4
Rate your advisees on the following:

Rate yourself on the following:
Office of Undergraduate Advising Student Advising Survey Results

What we know about Advising and Retention:

- Advising is a key to student retention. The best way to keep students enrolled is to keep them stimulated, challenged and progressing toward a meaningful goal. The best way to do that—especially among new students is through informed academic advising.
  Chip Anderson, Academic Advising for Student Success and Retention (1997)

- Academic advising is the only structured service on the campus in which all students have the opportunity for on-going, one-to-one contact with a concerned representative of the institution.
  Wes Habley, Key Concepts in Academic Advising (1994)

#1 What is your overall experience with advising on the Missouri S&T campus?

- 69% Positive
- 31% Negative
#2 My advisor spends quality time getting to know me.

![Pie chart showing responses to #2 question]

- Strongly Agree: 19%
- Agree: 33%
- Neither Agree/Disagree: 20%
- Disagree: 18%
- Strongly Disagree: 10%

#3 My advisor and I discuss our expectations of advising and of each other.

![Pie chart showing responses to #3 question]

- Strongly Agree: 13%
- Agree: 24%
- Neither Agree/Disagree: 26%
- Disagree: 27%
- Strongly Disagree: 10%
#4 When I'm faced with difficult decisions, my advisor assists me in identifying alternatives and in considering the consequences of choosing each alternative.

#5 My advisor gives me tips on managing my time better and/or on studying more effectively.
#6 My advisor informs me about what I need to know regarding academic courses and programs.

![Pie Chart for #6]

#7 My advisor suggests important considerations in planning a schedule and then gives me responsibility in making the final decision.

![Pie Chart for #7]
#8 My advisor suggests steps I can take to help me decide on a major.

- Strongly Agree: 14%
- Agree: 23%
- Neither Agree/Disagree: 44%
- Disagree: 12%
- Strongly Disagree: 7%

#9 My advisor and I discuss alternative academic interests and plans.

- Strongly Agree: 9%
- Agree: 29%
- Neither Agree/Disagree: 28%
- Disagree: 14%
- Strongly Disagree: 20%
#10 My advisor is helpful in keeping me informed of my academic progress by examining my files and grades as well as discussing my classes.

#11 My advisor assists me in identifying realistic academic goals based on what I know about myself, as well as about my test scores and grades.
#12 My advisor reviews and discusses my proposed class schedule for next semester.

![Pie Chart]

#13 My advisor knows who to contact about other-than-academic problems.

![Pie Chart]
#14 My advisor is knowledgeable about academic majors and concentrations.

#15 My advisor is knowledgeable about internship and co-operative education opportunities.
#16 My advisor is knowledgeable about academic policies and procedures.
Dear Sloppy Joe Miner,

You are currently not meeting the academic requirements for Chem 1 because of:

Lack of Attendance in

- Lecture
- Recitation
- Tests or Exams
- Laboratory
- Other

You are in danger of being dropped from this course due to excessive absences.

Comments (This information will be made available to the student)

For example, refer to the syllabus drop policy

Lack of Submission of

- Homework Assignments
- Laboratory Reports
- Other

Poor Performance in

- Lecture (clicker scores, in-class quizzes)
- Recitation (group work, discussions, worksheets)
- Homework Assignments
- Laboratory Assignments (experimental work, team work participation, lab reports)
- Tests or Exams
To succeed in this course you must address the issues marked above immediately. In addition, you are strongly urged to:

- Contact your Instructor
- Contact your Teaching Assistant (TA)
- Contact your Academic Advisor
- Contact the Writing Center
- Attend LEAD Centers or Tutoring
- Visit Counseling Center

Other

Comments
Please add any additional comments here. (This information will be made available to the student)

I expect to see an improvement of your attendance and/or performance the latest by [ ]

Sincerely, Klaus H Woelk (automatically insert instructor name)
APPENDIX D
2012-2013 Meeting Minutes

Meeting Schedule
The Retention Committee meets every other Thursday, from 8:15-9:15 AM in the Silver & Gold room of the Havener Center.

August 23, 2012
September 6, 2012
September 20, 2012
October 4, 2012 (No Meeting)
October 18, 2012
November 1, 2012
November 15, 2012 (Subcommittees Meet)
November 29, 2012
December 13, 2012 (No Meeting)
December 27, 2012 (No Meeting)
January 10, 2013 (No Meeting)
January 24, 2013
February 7, 2013
February 21, 2013
March 7, 2013
March 21, 2013
April 4, 2013
April 18, 2013
May 2, 2013
May 16, 2013
May 30, 2013-Presentation to Chancellor Schrader
Missouri S&T Retention Committee Meeting  
August 23rd, 2012  
8:15-9:15 AM

Members Present: Scott Miller, Larry Gragg, Bridgette Betz, Tyrone Davidson, Cecilia Elmore, Patty Frisbee, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Daniel Reardon, Kristi Schulte, Brad Starbuck, Lynn Stichnote, Laura Stoll, Klaus Woelk, Nangai Yang.

Members Absent: Edna Grover-Bisker, Thulasi Kumar, Stephen Raper, Ramya Thiagarajan.

Guest: Harvest Collier, Adrienne Neckermann (For Edna Grover-Bisker).

I. Welcome
a. Introductions around the table
b. Dr. Collier announced the loss of the 1st and 2nd year positions in the Office of Undergraduate Studies.

II. Review and Approval of Minutes
a. There were no minutes to approve from the June 28th meeting.

III. Old Business
a. Review notes from Chancellor Schrader’s visit on June 28th.
   • Math Subcommittee
     Concerning Chem 1 and Math 2 as pre-requisites: Dr. Hall said that not having Math 4 listed as a pre-req poses a problem since at the end of both courses (Math 2 and Math 4), students should have the same knowledge.

   • Student Persistence
     “Develop a more organized mentoring program, including students, staff, and faculty as mentors. They should meet with their students two to three times a semester.” That is complete. The New Student Programs and Undergraduate Studies have teamed up to create a program called Reconnection that will reconnect the new freshmen with their Opening Week mentors two times during the fall semester and provide resources for those new students.

     “Endorse the recommendation of the Financial Assistance Sub-Committee to funding for need-based aid and student employment opportunities on campus.” All employment information is being posted in a central location called “Miner Jobs”. Based aid has been approved for FS13. There are 147 work study jobs on campus but need to have an estimated family contribution (EFC) equal to 0.

     “Support the campus’s developing “1st Year Success Course” project and the establishment of a Success Center.” There will be a “soft” launch of a student success center this fall. This will be open to all students and in a central location on campus.
• **Alternate Majors**
  “Campus resource fair (open house) to publicize diversity of majors, how to change majors, and where to obtain career testing information and/or counseling.” On October 10th, from 11:30-1:30, there will be a Majors & Minors event that will be similar to Open House, but geared toward currently enrolled students.

  “As part of 101 course, instruct students about changing majors, information that is available, alternatives to consider.” Dr. Collier suggested a Plan B for the committee to perform an assessment. Lynn asked Deanne if we could track changes in majors.

• **Fit in the S&T Environment**
  Under Career Exploration, it was discussed that we need to do a better job at promoting this and the Student Success Center will be a good place for that.

  Peer mentoring is completed with the Reconnect program.

  Under Residence Halls, the discussion revolved around LEAD sessions being available to students (specifically Chemistry and Math courses). There needs to be a seamless environment for students from campus to residence halls.

 IV. New Business

  a. None

 V. Announcements

  a. Discussion on Financial Aid and A2S will commence at the September 6th meeting.

 VI. Next Meeting: Thursday, September 5th, 2012 at 8:15 am.
  The meeting was adjourned.
Missouri S&T Retention Committee Meeting
September 6th, 2012
8:15-9:15 AM


Members Absent: Tyrone Davidson, Patty Frisbee, Thulasi Kumar, Daniel Reardon, Brad Starbuck.

Guest: Stephanie Fitch (for Leon Hall).

I. Review and Approval of Minutes
The committee members reviewed the minutes from the August 23rd, 2012 meeting. A motion was made (Stephen Raper) and seconded (Katie Jackson) to approve the minutes with 2 corrections.

II. Old Business
a. Continuation of discussion on Annual Retention Report to Chancellor Schrader
SFA Subcommittee
“The negative impact on unmet financial need on retention”, S&T is implementing (2013 AY) a full need based institutional grant called the Missouri S&T grant.

“Collaborating with other offices on campus for helping high risk students”: Kristi Schulte spoke about the sophomore experience and the reflection paper based on the Financial Aid that students turn in. Larry Gragg brought up the Student Success Center and asked if the students working in the success center will be cross-trained to answer questions to other offices on campus. Yes, they will be cross-trained.

A2S Subcommittee
S&T hit the Pell eligible goal of 30% and an under-represented minority (URM) goal of 11%.

Larry Gragg asked why S&T had a big drop in student diversity numbers in 2008-2009. Laura Stoll said that funding for that group ended, the 2008-2009 cohort was smaller (which leads to a greater percentage drop if you lose a few students) and it was the year after the economic downturn which affected the URM group the most.

Lynn Stichnote stated that we need to have a strong retention plan in place to help the URM population. Klaus Woelk asked if we had data on these cohorts in Missouri. The committee will look into that.

III. New Business
a. Summary of 2 week discussion:
**Math:** Scott Miller stated that the problem with Math 2 being a pre-requisite for Chemistry 1 is that there is not enough time to complete the courses for a degree in a reasonable timeframe.

Klaus Woelk said that there are 40-50 Math 2/3 students in the class of 800 Chemistry 1 are tracking those students and held a help session for those 40-50 and only 3 showed up.

Stichnote suggested a 2 week math enhancement program before the spring semester and Stephanie Fitch said that students won’t come and Bridgette Betz said there would be no financial assistance available to them.

**Student Persistence:** All completed.

**Alternate Majors:** No changes from previous notes.

**Fit in the S&T Environment:** Residence Hall recommendation is in progress.

**Financial Aid:** No change from previous notes.

**A2S:** Take off “Repeat course policy option”

b. Homework: Larry Gragg and Scott Miller asked the committee to review the recommendations and make a case for the items still needing to be addressed and send the summary to the committee. Also, it was asked if anyone was considering a larger issue that needs to be addressed by the committee not stated in our subcommittees.

**IV. Announcements**

a. Homework: Larry Gragg and Scott Miller asked the committee to review the recommendations and make a case for the items still needing to be addressed and send to the committee. Also, it was asked if anyone was considering a larger issue that needs to be addressed by the committee not stated in our subcommittees.

**V. Next Meeting:** Thursday, September 20, 2012 at 8:15 am.

The meeting was adjourned.
Missouri S&T Retention Committee Meeting
September 20th, 2012
8:15-9:15 AM

Members Present: Scott Miller, Bridgette Betz, Tyrone Davidson, Cecilia Elmore, Patty Frisbee, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Daniel Reardon, Kristi Schulte, Brad Starbuck, Lynn Stichnote, Laura Stoll, Nangai Yang.

Members Absent: Larry Gragg, Edna Grover-Bisker, Thulasi Kumar, Stephen Raper, Ramya Thiagarajan, Klaus Woelk.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the September 6th, 2012 meeting. A motion was made (Laura Stoll) and seconded (Cecilia Elmore) to approve the minutes with no corrections.

II. Old Business
a. None

III. New Business
a. Discussion on what subcommittee recommendations need to be on-going (the incomplete items) for 2012-13.
   • Math Performance
     Continue:
     ➢ Contact students placing into Math 2 & 3, encourage summer mathematics experiences.
     ➢ Encourage incoming students to prepare for the placement exam (rename: placement tool-per Leon Hall) more strongly than we currently do (per Patty Frisbee, we are doing all we can)
     ➢ Officially make math 2 a prerequisite for Chem 1. Not complete as previously stated. Logistically will not happen-will have to continue the communication through advising.
   • Fit in the S&T Environment
     Continue:
     ➢ Career Exploration. Lynn stated that a common message needs to be created to hand out to students.
     ➢ Residence Halls. UGS and Res Life are partnering together to see what is and is not working.
   • Financial Aid
     Continue:
- Goals for private fundraising to provide funding in the future for additional merit aid and two key institutional need-based awards. Laura Stoll stated that there is a group that will work with Joan Nisbett (through the Strategic Planning Committee) on this to also include unrestricted aid.

- **A2S**
  This subcommittee has not had a chance to meet to revisit the recommendation slide. It was recommended by the Retention Committee that the A2S subcommittee narrow down its recommendations (i.e. remove recommendations that are not practical and that we know we will not be able to accomplish).

b. Additional issues the committee needs to address for this academic year.

- Review of academic policies (per Laura Stoll)
  - FERPA
  - Advisors signing add/drop slips the first two weeks of the semester.
- Student Success Courses (per Scott Miller)
  - Career Explorations, S&T 110

IV. Announcements

  a. None.

V. Next Meeting: Thursday, October 18th, 2012 at 8:15 am.
The meeting was adjourned.
Missouri S&T Retention Committee Meeting
October 18th, 2012
8:15-9:15 AM

Members Present: Larry Gragg, Scott Miller, Bridgette Betz, Tyrone Davidson, Patty Frisbee, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Stephen Raper, Daniel Reardon, Laura Stoll, Klaus Woelk, Nangai Yang.


I. Review and Approval of Minutes
The committee members reviewed the minutes from the September 20th, 2012 meeting. A motion was made (Tyrone Davidson) and seconded (Bridgette Betz) to approve the minutes with one correction.

II. Old Business
a. None

III. New Business
a. English Diagnostics presentation by Dan Reardon
   • From the Missouri S&T Assessment report of 2010, it was found that students need help in reading, writing and math.
   • Dan found that the S&T English reading comprehension diagnostic test is a much better predictor than the ACT English test.
   • The purpose of the diagnostic test is to test students’ reading and analytical abilities.
   • Depth of knowledge (DOK) standards are widely used by K-12 and college assessment programs.
     ➢ Level One: Recall
     ➢ Level Two: Skill or Concept
     ➢ Levels Three (Strategic Thinking) and Four (Extended Thinking) are not tested.
   • There are 1076 students (since summer 2010) that have taken the S&T English diagnostic test.
     ➢ Average reading level was what a mid-level high school junior should be able to comprehend.
     ➢ 20-25% of first year students currently enrolled in English 20 may be unable to accomplish the simplest of reading comprehension tasks.
     ➢ The results here at S&T are consistent with national averages
       ▪ 20% of college freshmen may need remedial instruction or other intervention in reading skills.
       ▪ 60% of S&T students enroll in English 20 (the other 40% receive AP, transfer, or CLEP credit).
• After the presentation, Dan requested a motion to add a subcommittee for the 2012-13 year focused on English. The motion was passed unanimously.

b. Subcommittee assignments.

IV. Announcements

a. None.

V. Next Meeting: Thursday, November 1\textsuperscript{st}, 2012 at 8:15 am.
The meeting was adjourned.
**Missouri S&T Retention Committee Meeting**
November 1st, 2012
8:15-9:15 AM

**Members Present:** Larry Gragg, Scott Miller, Bridgette Betz, Tyrone Davidson, Cecilia Elmore, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Stephen Raper, Daniel Reardon, Lynn Stichnote, Laura Stoll, Nangai Yang.

**Members Absent:** Patty Frisbee, Thulasi Kumar, Kristi Schulte, Brad Starbuck, Ramya Thiagarajan, Klaus Woelk.

**Guests:** Trish Watson (for Patty Frisbee), Tina Sheppard (for Kristi Schulte).

I. **Review and Approval of Minutes**
   The committee members reviewed the minutes from the October 18, 2012 meeting. A motion was made (Tyrone Davidson) and seconded (Bridgette Betz) to approve the minutes with no corrections.

II. **Old Business**
   a. None

III. **New Business**
   a. Residential Life presentation by Kristi Schulte (Tina Sheppard presented in Kristi’s absence). Rachel has requested a copy of the presentation and will send it to the committee once she receives it.

IV. **Announcements**
   a. None.

V. **Next Meeting:** Thursday, November 29th, 2012 at 8:15 am.
   The meeting was adjourned.
MINUTES

Missouri S&T Retention Committee Meeting
November 29th, 2012
8:15-9:15 AM

Members Present: Larry Gragg, Scott Miller, Tyrone Davidson, Cecilia Elmore, Patty Frisbee, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Daniel Reardon, Kristi Schulte, Lynn Stichnote, Laura Stoll, Klaus Woelk, Nangai Yang.


Guests: Tara Stone (Student Success Center).

I. Review and Approval of Minutes
The committee members reviewed the minutes from the November 1st, 2012 meeting. A motion was made (Laura Stoll) and seconded (Lynn Stichnote) to approve the minutes with no corrections.

II. Old Business
a. None

III. New Business
a. Patty Frisbee introduced Tara Stone who is the new Student Success Center Advisor.
b. Larry Gragg announced that there is an undergraduate group for the Strategic Planning Committee and that the Retention Committee will be involved in the process. More information to come. Larry Gragg, Laura Stoll and/or Klaus Woelk will give updates to the Retention Committee as they become available.
c. Subcommittee Introductions/Overview for 2012-13
   • Academic Policies-Deanne Jackson, chair
     The subcommittee has committed to meet on the second Tuesday of every month with ideation sessions on Academic Forgiveness, FERPA, summer Honor Roll and Add/Drop Policy.
   • Access to Success (A2S)-Laura Stoll, chair
     The first plan of action was to narrow down the previous year list of items to work on. The subcommittee is focusing on two items.
     1. Low income priority focus
        - Mentor Program
        - Hire student workers
        - Website to hire students
        - Financial Aid literacy
     2. Improve Academic Advising
        - Schedule a telepresence with UDirect.
Larry Gragg asked Tyrone Davidson if the Advising Survey has been completed. Tyrone reported that 957 students and 71 faculty/staff completed the survey. He will compile the data and share with the committee.

- **English Performance**-Dan Reardon, chair
  There are 4 challenges
  1. Reading comprehension
  2. English 20 AP Clep
  3. Advising awareness regarding English 20 and 60
  4. Writing across the Curriculum

- **Fit in S&T Environment**-Lynn Stichnote, chair
  The subcommittee is looking to get data from the campus climate survey. All that is currently available is a summary. The subcommittee is looking to see if any of the data from that survey would be valuable. Tyrone thought there might be a hard copy of the survey in the library.
  Lynn asked the group when a good time to schedule the Majors/Minors event in the spring. The group thought the first week of March fit into the schedule.

- **Math Performance**-Leon Hall, chair
  Leon asked is everyone on the subcommittee wanted to take the exam. There was not a full consensus. Leon remembers there was a section in the old course catalog on “The importance of mathematics” that seemed to address the questions we all receive from students about why they have to take the different math courses. He asked the committee if this needed to be readdressed. Patty Frisbee said that she will try and promote the message of the importance of math in the Student Success Center. Klaus Woelk stated that many faculty members don’t have a thorough understanding either.
  Leon asked the committee what the subcommittee should focus on and some ideas were data from Opening Week, data from Transfer Workshop and Stephanie Fitch’s analysis on the math placement exam.

- **Student Success Courses**-Scott Miller, chair
  Student Success “program” should not be just a course.
  Would like for the courses to be for credit
  Substitute of Chem 110?
  The class size needs to be small for student connection.
  A couple of ideas of a midterm start to the class or a course during intersessions were brought up. There is financial aid concern if a class starts midterm.

**IV. Announcements**

  a. We will not meet as a committee until classes resume in spring 2013. Please take this opportunity to meet with your subcommittees.

**V. Next Meeting**: Thursday, January 24th, 2012 at 8:15 am. The meeting was adjourned.
**MINUTES**

**Missouri S&T Retention Committee Meeting**
January 24th, 2013
8:15-9:15 AM

**Members Present:** Larry Gragg, Scott Miller, Tim Albers, Bridgette Betz, Tyrone Davidson, Cecilia Elmore, Patty Frisbee, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Stephen Raper, Daniel Reardon, Kristi Schulte, Lynn Stichnote, Laura Stoll, Klaus Woelk.

**Members Absent:** Edna Grover-Bisker, Thulasi Kumar, Ramya Thiagarajan, Nangai Yang.

**Guests:** Samantha Dean (Undergraduate Advising Office).

I. Review and Approval of Minutes
The committee members reviewed the minutes from the November 29th, 2012 meeting. A motion was made (Laura Stoll) and seconded (Cecilia Elmore) to approve the minutes with 3 corrections.

II. Old Business
a. None

III. New Business
a. Laura introduced Tim Albers, Interim Director of Marketing and Enrollment Development in the Enrollment Management Division.

b. Larry Gragg gave a Strategic Planning update. The word “Ideation” is gone and has been replaced with “Targeted Brainstorming”. There will be 6 Targeted Brainstorming sessions. The Undergraduate Student session will be held January 31st from 12:30-4:00. If you are planning to attend, you must RSVP to Krista Chambers in the Provost’s office. Laura Stoll commented that there have been a lot of hours put into the profiles and that the campus should come to these sessions and bring their expertise. Lynn Stichnote asked if there are specific action items being generated towards a goal. Larry Gragg said yes, the questions/ideas are submitted “themes” that will be discussed. Bridgette Betz asked if there was a reason all this was being done “by the end of February”. Larry Gragg shared that the timeline for this project was imposed by the president of the system.

c. Topics/areas of concern for future Retention Committee meetings.
  - English presentation follow up by Dan Reardon
  - Common CORE presentation by Jeff Cawlfield
  - Alcohol presentation by Katie Jackson
  - Non returning student phone call presentation by Tara Stone
  - Subcommittee presentations
  - Reconnect data/Conditional admit presentation by Tara Stone
  - Advising Survey results presentation by Tyrone Davidson
  - Hogan Data presentation by Patty Frisbee
IV. Announcements
   a. Klaus Woelk announced that initial findings for the Chem 1 redesign are positive. There are not more A’s and B’s, but there are significantly more C’s and less D’s and F’s than in the previous year.
   b. Per Deanne Jackson, the return rate (FS12-SP13) for first time college students is at 94%.

V. Next Meeting: Thursday, February 7th, 2012 at 8:15 am.
   The meeting was adjourned.
Missouri S&T Retention Committee Meeting
February 7th, 2013
8:15-9:15 AM

Members Present: Larry Gragg, Scott Miller, Tim Albers, Bridgette Betz, Tyrone Davidson, Patty Frisbee, Edna Grover-Bisker, Leon Hall, Katie Jackson, Rachel Morris, Daniel Reardon, Kristi Schulte, Lynn Stichnote, Laura Stoll, Klaus Woelk, Nangai Yang.

Members Absent: Cecilia Elmore, Deanne Jackson, Thulasi Kumar, Stephen Raper Ramya Thiagarajan.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the January 23, 2013 meeting. A motion was made (Laura Stoll) and seconded (Patty Frisbee) to approve the minutes with 2 corrections.

II. Old Business
a. None

III. New Business
a. Discussion of Retention Committee meeting calendar. We have been put on the chancellor's calendar for May 30th to present the Retention Committee's annual report. The meeting will be 1 ½ hours instead of the 1 hour slot.

b. Review of English Diagnostic presentation (Part 1) by Dan Reardon. PowerPoint is available upon request.
The goal of the diagnostic was to partially assess the reading skills of Missouri S&T English 20 Students by administering a 20 question reading comprehension test. In the Fall of 2012, there were 439 English 20 students that took the test. The average reading level was 11.65 (midway through junior year in high school). After reviewing the data, a big concern is that 19-20% of students have trouble with “Level I” skills.

c. English Diagnostic presentation (Part 2) by Dan Reardon. PowerPoint is available upon request.
ACT-English 20 Final Grad Alignment Study. The registrars helped in aligning 370 English 20 students from FY12 by looking at their reading diagnostic level I and II scores, their ACT English, Reading and OVR scores and the Final English 20 course grade. The results found no predictable pattern in English 20 grades of those students that scored above a 24 on the ACT (Composite, English or Reading).
Implications:
- Difficulty with basic reading skills may be one predictor of ability to pass English 20
- English 20 reading diagnostic may be one predictor of potential student success in English 20
- AP/CLEP students may not be prepared for reading/writing demands in other courses
We face several challenges. A few of those are: advising, writing across the curriculum, AP/CLEP testing and reading comprehension.

IV. Announcements
   a. None.

V. Next Meeting: Thursday, February 21st, 2012 at 8:15 am.
   The meeting was adjourned.
Missouri S&T Retention Committee Meeting
February 21st, 2013
8:15-9:15 AM

Members Present: Larry Gragg, Scott Miller, Tim Albers, Bridgette Betz, Cecilia Elmore, Leon Hall, Katie Jackson, Daniel Reardon, Kristi Schulte, Lynn Stichnote, Laura Stoll, Nangai Yang.

Members Absent: Tyrone Davidson, Patty Frisbee, Edna Grover-Bisker, Deanne Jackson, Thulasi Kumar, Rachel Morris, Stephen Raper, Ramya Thiagarajan, Klaus Woelk.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the February 7th, 2013 meeting. A motion was made (Laura Stoll) and seconded (Kristi Schulte) to approve the minutes with 1 correction.

II. Old Business
a. None

III. New Business
a. Common Core State Standards (CCSS) and Smarter Balanced Assessment Consortium presentation by Dr. Jeff Cawlfield.
Missouri Core State Standards adopted in 2010 for Math and English Language Arts. Standards will go into effect for 2014-15 aid year.
The No Child Left Behind Act of 2001 was heavily criticized because of its emphasis on sanctions for poor performance. Federal funding was low and current administration has granted waivers to many states beginning in 2012.
Motivation for CCSS
- Politically, there seems to be great antagonism toward any national school requirements for specific curriculum or teaching methods.
- There is a recognized need that states need to have commonality so that students moving to/from different locales can be in a consistent system.
- Higher Ed would like to see more consistency so that students from different states would come from similar K-12 experiences.

Current Status of CCSS
- 45 states have signed on
- Sciences, Art, etc. are being developed
- Action is focused on developing assessments

- 26 states are in the Smarter Balanced Assessment Consortium (SBAC)

SBAC
The goal of SBAC is to develop a common assessment instrument for math and ELA that will align with the CCSS and will be administered for grades 3-8 and 11. Each assessment will place the student in Level 1-4 (1-minimal command, 4-deep command). The concern for higher education is that the grade 11 assessment will certify a student as “college ready” or not. If a student achieves a level 3 or 4, they will be deemed “college ready” and means a student will be exempt from taking remedial work at college Math or ELA.
Missouri S&T
University of Missouri is officially prohibited from offering remedial courses (MDHE policy). There are several questions: What if a student is deemed “college ready” in math but not ELA? Do we offer remediation prior to English 20? What if a student pursuing a BA in History enrolls at S&T and is ready in ELA but not math? What are the consequences if we deny admission to a student who is deemed “college ready”?

S&T wants to ensure that we can still carry out our math placement testing to place students in our math sequence (and we can according to SBAC policy). Dr. Reardon estimates that maybe 5-10% of our current incoming freshmen will test at level 3/4 on the grade 11 ELA standards as they are currently written. Stephanie Fitch and Dr. Morgan would be very happy to receive math students who test at a level 3/4.

IV. Announcements
   a. None.

V. Next Meeting: Thursday, March 7th, 2012 at 8:15 am.
   The meeting was adjourned.
Missouri S&T Retention Committee Meeting
March 7th, 2013
8:15-9:15 AM

Members Present: Scott Miller, Tyrone Davidson, Patty Frisbee, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Stephen Raper, Daniel Reardon, Kristi Schulte, Klaus Woelk, Nangai Yang.

Members Absent: Larry Gragg, Tim Albers, Bridgette Betz, Cecilia Elmore, Edna Grover-Bisker, Thulasi Kumar, Lynn Stichnote, Laura Stoll, Ramya Thiagarajan.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the February 7th, 2013 meeting. A motion was made (Kristi Schulte) and seconded (Deanne Jackson) to approve the minutes with 1 correction.

II. Old Business
a. None.

III. New Business
a. Academic Policy Subcommittee Presentation (Deanne Jackson)
This subcommittee meets the second Tuesday of each month.

   Academic Forgiveness Policy
The Academic Forgiveness Policy allows students to remove one or more complete academic terms from future degree and GPA considerations. Academic forgiveness is a policy of Missouri University of Science and Technology and as such may not be recognized by outside institutions or agencies. The subcommittee doesn’t suspect this policy will help a lot of students, but will reach some. For a student to be eligible they may not be enrolled at any UM institution in a degree seeking plan for the past four years. They cannot have graduated from any institution. The student must be admitted as degree seeking and earned at least 12 credit hours with a GPA of 2.5 or better.

   Student Academic Regulation Changes
The Student Academic Regulations will have some small wording changes. Here is a list of items that will be removed from the regulations: Summer Honor Roll reference, FERPA pages - include link to UM system, and Deficiency Student Process – Counseling is mentioned and they no longer are part of the process.

   Policy change ideas
   – Automate the add/drop process - We are the only UM campus that still uses paper add/drop forms instead of an automated process. Mizzou will not allow students to add classes after 10 days.
   – Reduce course load for full-time status for disabled students.
   – D, W, F grades and students with over 200 hours registration process.
   – Deficiency process for second majors - How is the process done for secondary majors? Should the secondary department be able to change status for students? Klaus Woelk stated that in their department (Chemistry) they treat secondary majors as primary majors.
Process Changes

- Automation of prerequisite process.
- Online grade changes.
- Use of permission numbers.

b. Math Performance Subcommittee Presentation (Leon Hall)
Dr. Hall feels that some of the things that need to be done are track student performance from before school starts, collect the data on math placement exams, and discuss the structure of pre-calculus courses.

As far back as 60-70’s we have had Math 2, Math 4, and Math 6. Math 2 & 4 has been designed to be the equivalent (in terms of content) by the end of the semester. Students who were placed Math 2 were always “at risk.” The technical departments on campus require 2 years of math and nothing below calculus counts towards this requirement. In the 90’s, the university thought there was a problem with how many days there were between the classes for trigonometry. The students would meet on Tuesday and Thursday, but with the gap between the Thursday class to Tuesday class they felt the students were losing focus (over the weekend). The math department changed how the algebra and trigonometry courses were offered: 9 (out of 15) weeks for algebra and 6 weeks (out of 15) for trigonometry. If a student didn’t succeed in algebra, the math department felt the student really shouldn’t go on to trigonometry, but back into algebra for the last 6 weeks. The students wouldn’t take trigonometry that semester. The algebra grades increased. The problem then became, was, what to do with the students that take trigonometry without college algebra. They decided to run trigonometry over 10 weeks (3 days a week). Some students would take calculus the same semester they were taking trigonometry. The problem then became, that students that were taking Math 2 the first semester to get back “on track” then took calculus, trigonometry, and chemistry the second semester (which is too much for the student).

Math 3 was established in the late 90’s. There was a need to have a math course lower than Math 2, but there were not any course numbers available lower than Math 2. There are 3 sections of Math 3, Fundamentals of Algebra, offered every fall.

IV. Announcements

a. None.

V. Next Meeting: Thursday, March 21st, 2013 at 8:15 am.
The meeting was adjourned.
Missouri S&T Retention Committee Meeting
March 21st, 2013
8:15-9:15 AM


Members Absent: Tim Albers, Patty Frisbee, Edna Grover-Bisker, Leon Hall, Thulasi Kumar, Laura Stoll, Ramya Thiagarajan.

Guest: Adrienne Neckermann

I. Review and Approval of Minutes
The committee members reviewed the minutes from the March 7th, 2013 meeting. A motion was made (Stephen Raper) and seconded (Klaus Woelk) to approve the minutes with no corrections.

II. Old Business
a. None.

III. New Business
a. English Performance Subcommittee Presentation
4 reading and writing challenges with subcommittee recommendations are:
   - Reading comprehension
     Recommendation: Diagnostic Reading and Grammar Testing for all incoming students. English 20 lab for those that fall below Level 1 benchmark.
   - AP/CLEP
     Recommendation: Greater Scrutiny/Revisit Criteria regarding AP acceptance and CLEP benchmarks.
   - Advising regarding English 20, 60, 65 & 160
     Recommendation: Information cards detailing course content, intended students, prerequisites.
   - Writing Across the Curriculum
     Recommendation: 3 semester reading and writing course sequence.

IV. Announcements
a. None.

V. Next Meeting: Thursday, April 4th, 2013 at 8:15 am.
The meeting was adjourned.
Missouri S&T Retention Committee Meeting
April 4th, 2013
8:15-9:15 AM


Members Absent: Larry Gragg, Edna Grover-Bisker, Thulasi Kumar, Dan Reardon, Kristi Schulte, Ramya Thiagarajan.

Guest: Adrienne Neckermann for Edna Grover-Bisker.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the March 21st, 2013 meeting. A motion was made (Stephen Raper) and seconded (Tyrone Davidson) to approve the minutes with no corrections.

II. Old Business
a. None.

III. New Business
a. Fit in the S&T Environment Subcommittee Presentation
   • PowerPoint presentation will be sent to committee members.
b. Student Success Courses Presentation
   • PowerPoint presentation will be sent to committee members.

IV. Announcements
a. None.

V. Next Meeting: Thursday, April 18th, 2013 at 8:15 am.
The meeting was adjourned.
Missouri S&T Retention Committee Meeting
April 18th, 2013
8:15-9:15 AM

Members Present: Scott Miller, Larry Gragg, Tim Albers, Tyrone Davidson, Cecilia Elmore, Patty Frisbee, Leon Hall, Deanne Jackson, Rachel Morris, Daniel Reardon, Kristi Schulte, Nangai Yang.

Members Absent: Bridgette Betz, Edna Grover-Bisker, Katie Jackson, Thulasi Kumar, Lynn Stichnote, Laura Stoll, Ramya Thiagarajan, Klaus Woelk.

Guest: Adrienne Neckermann for Edna Grover-Bisker.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the April 4th, 2013 meeting. A motion was made (Kristi Schulte) and seconded (Patty Frisbee) to approve the minutes with no corrections.

II. Old Business
a. None.

III. New Business
a. Alcohol Awareness Presentation
   • A. T.E.A.M is Missouri S&T’s alcohol coalition which strives to Talk, Educate and Advocate for Miners
   • Mission: To create a campus and community environment that supports responsible decision making regarding alcohol use among Missouri S&T students.
   • An alcohol awareness survey was sent to 1450 students and 450 responded.
     ➢ When compared to students across the state of Missouri, S&T students are more likely to abstain from alcohol.
     ➢ When S&T drinkers are compared to all Missouri college drinkers, S&T drinkers are more likely to engage in binge consumption.
     ➢ It appears S&T students consume more than the average Missouri college student.
       ▪ Heavy drinking is associated with lower GPA
       ▪ Students at research universities who are heavy episodic drinkers are less likely to be engaged in interactions with faculty (Porter & Prior, 2007)
       ▪ Frequency of binge drinking associated with lower grades in college setting (Pascarella, et al., 2007)
   • Strategic Plan for A. T.E.A.M.
     ➢ Provide alcohol awareness programs to student organizations, Greek chapters, athletic community
- Fund non-alcoholic late-night events
- Provide alcohol screenings
- Provide B.A.S.I.C.S.
- Support GAMMA
- Utilize Joe’s PEERS
- Social Norming Campaigns

- Data Comparison between 2008 & 2012 at Missouri S&T is less alcohol consumed in the last year, less average # of drinks per week, fewer binge drinkers, fewer missed classes and better tests and assignments

b. Access to Success Presentation
- PowerPoint presentation will be sent to committee members.

IV. Announcements

a. None.

V. Next Meeting: Thursday, May 2<sup>nd</sup>, 2013 at 8:15 am.
The meeting was adjourned.
Missouri S&T Retention Committee Meeting
May 2nd, 2013
8:15-9:15 AM

Members Present: Scott Miller, Larry Gragg, Tim Albers, Bridgette Betz, Cecilia Elmore, Patty Frisbee, Leon Hall, Deanne Jackson, Katie Jackson, Rachel Morris, Daniel Reardon, Kristi Schulte, Lynn Stichnote, Klaus Woelk, Nangai Yang.

Members Absent: Tyrone Davidson, Edna Grover-Bisker, Thulasi Kumar, Stephen Raper, Laura Stoll, Ramya Thiagarajan.

Guests: Samantha Dean, Adrienne Neckermann, Tara Stone.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the April 18th, 2013 meeting. A motion was made (Kristi Schulte) and seconded (Tim Albers) to approve the minutes with one correction.

II. Old Business
a. None.

III. New Business
a. Advising Survey Presentation
   • PowerPoint will be sent to the committee
b. Non-Returning Student Survey Presentation
   • PowerPoint will be sent to the committee

IV. Announcements
a. The Retention Committee was originally scheduled to NOT meet on the 16th of May but due to presenting to Chancellor Schrader on the 30th, we will use the time on the 16th for review of the annual report.

V. Next Meeting: Thursday, May 16th, 2013 at 8:15 am.
The meeting was adjourned.
Missouri S&T Retention Committee Meeting
May 16th, 2013
8:15-9:15 AM

Members Present: Scott Miller, Larry Gragg, Tim Albers, Bridgette Betz, Tyrone Davidson, Cecilia Elmore, Leon Hall, DeAnne Jackson, Katie Jackson, Rachel Morris, Stephen Raper, Daniel Reardon, Kristi Schulte, Lynn Stichnote, Laura Stoll, Klaus Woelk, Nangai Yang.

Members Absent: Edna Grover-Bisker, Thulasi Kumar, Ramya Thiagarajan.

Guests: Jeff Cawlfield, Adrienne Neckermann.

I. Review and Approval of Minutes
The committee members reviewed the minutes from the May 2nd, 2013 meeting. A motion was made (Klaus Woelk) and seconded (Kristi Schulte) to approve the minutes with two corrections.

II. Old Business
a. None.

III. New Business
a. Review draft of annual report.
   A copy of the final draft will be sent to Chancellor Schrader by Thursday, 5-21-13 for her review.

IV. Announcements
a. The subcommittee chairs have been asked to send Rachel 2-3 summary slides (within the week) of their subcommittee for the presentation to the chancellor on the 30th.

V. Next Meeting: Thursday, May 30th, 2013 at 8:15 am.
The meeting was adjourned.