Corporate Development Council

Spring 2011
Welcome & Introductions

Dr. Debra Robinson
Vice Chancellor for Student Affairs
Welcome & Introductions
CDC History & Activities

Sarah Bock
Chair of CDC
Missouri S&T Corporate Development Council (CDC)

Where we’ve been – a brief history
Who: The Missouri S&T Corporate Development Council is a group of representatives from organizations strategically important to the future of Missouri S&T’s success and continual improvement.
CDC - history

- Started in 1985 - Corporate Board of Visitors
- 1994 – morphed into CDC
  - Adopted 3-fold mission: consultancy, ambassadorship, and support
  - Team approach: Student Leadership, Research, Faculty Partnering, Team Co-op, Career Prep, Distance Learning
Activities have included:

- Leadership Banquets
- Resumes & Interviewing Skills
- Time Management seminars
- Open Houses
- Freshmen Orientation
- Etiquette Dinners
- Mini Career Fairs
- Speaking at Freshmen Eng classes
- Listening to student presentations
Missouri S&T CDC Today

Current Mission: To increase the meaningful interaction between corporate representatives and Missouri S&T that leads to a student who is better prepared to join “Corporate America.”
Student Leadership Development

Service – Angela Perkins
   Director for Student Affairs
Leadership – Jerri Arnold-Cook
   Director for Leadership & Cultural Programs
Wellness – Renee Parks
   Health Educator
Service at Missouri S&T

Miner Challenge Alternative Spring Break
Martin Luther King Day of Service
Miner Challenge

2008-2011

• Total Participation to date: 90 students
  – 75% of participants are engineering majors
  – 29% freshmen
  – 22% sophomores
  – 17% juniors
  – 29% seniors
  – 3% graduate students
  – Gender is evenly split

• Top three reasons why students serve over spring break
  – Desire to make a difference
  – Meet new people and make friends
  – Personal leadership development

Students report gains in the following areas:
Increased awareness of social issues
Sense of purpose within community at large
Heightened commitment towards ongoing involvement to influence change
MLK Day of Service..A day on, not a day off..

2009-11
Total Participants to date: 226

Why Students Choose to Participate in MLK Day:
• Student Organization Involvement
• Minimal commitment

Students report gains in the areas of:
Sense of social responsibility
Increased awareness of social issues

90% state that they would recommend MLK Day of Service to friends
90% plan to continue to participate while at Missouri S&T
84% plan to observe MLK Day of Service by actively engaging in their communities, regardless of where they are
Leadership & Cultural Programs
Meeting Student’s Leadership Development Needs

Plans for 2011-2012

Jerri Arnold-Cook, Director
arnoldcookj@mst.edu
Extended Educational Opportunities

Proposed for 2011-2012

• Fall Student Leadership Conference
• Spring
  • January Student Leadership Institute
  • New Spring Break Initiative: *Transition Retreat*
Proposed dates:
Saturday, October 15 or Saturday, October 22
Purpose

• To provide students with an opportunity to develop personally and professionally

• Network with other student and industry leaders

• Individualized conference

• Prepare for career fairs and job opportunities
What is it?

• Three 50-minute programming sessions
• Numerous topic areas
  – Professional Development
  – Health and Wellness
  – Student Organization Fundamentals
  – Leadership Development
• Motivational keynote Speaker
• Lunch
How can CDC become involved?

• Program Presentations!

• Door Prizes

• Sponsorship
How does your company benefit?

- Opportunities for engagement with students
  Workshops attended by 20-25 students
  Lunch tables seat 8
How does your company benefit?

• Corporate Visibility
  Commitment by September 2 results in corporate logo on all preconference publicity including
  • Banner in Havener Student Center
  • Table Tents distributed throughout campus (150)
  • Inclusion in Freshmen Engineering Presentation (seen by roughly 1,000 students)
  • Save the date bookmarks (distribute approximately 1,500)
  • Reservation Website

Presenters Committing by September 30
  • Corporate logo and names included in conference materials distributed to estimated 200 participants,
  • Corporate logo on signage throughout conference facility

All presenters recognized during lunch.
New Spring Break 2012

Transitions Retreat
3-Day Experiential Learning Opportunity
Overview

• Off-campus interactive retreat designed for students graduating in 3 semesters.

• Focused on assisting students in
  – Understanding strengths, areas for growth and how to market abilities
  – Making transition from student to entry-level professional
Renee Parks, M.S.
Health Educator
Counseling, Disability Support, and Student Wellness
Joe’s P.E.E.R.S. provides assistance for students, and promotes healthy behaviors through interactive programming, awareness campaigns, and distribution of wellness information.
Programs and Services
• Workshops and outreach and upon request
• StressBusters Series
• Awareness Campaigns

Development
• Bacchus Network CPE Training
• Special topics trainings
• Regular team-building activities
• Leadership in motion
Joe’s P.E.E.R.S. Break Safe PSA

7 out of 10
S&T students who drink use a friend to stay safe.

Break Safe. Have Fun!
Bystander Intervention Theory

Encouraging active bystanders

– A Bystander is an individual who witnesses a problematic situation and has the opportunity to do nothing, lend assistance, OR exacerbate the problem.

Individual leadership and Shared Responsibility

Foster pro-social behavior – intervening or S&TEPing IN
S&TEPing IN

• Helping
  – **Circumstance:** Emergency or Non-emergency
  – **Assistance**
    • Now or Delayed
    • Direct or Indirect

• Bystander behavior studies
  People **help out less** than their professed attitudes, beliefs, or moral code would predict.

  So, thoughts ≠ behavior.
Path to S&TEPing IN

1) Notice
2) Interpret
3) Take Responsibility
4) Posses the Skills
5) Act
S.E.E. to Act

- SAFE
- EARLY
- EFFECTIVE
Pilot program with Greek community 2010-2011

• Goal: Decrease high risk drinking and negative consequences experienced by Greek students

• Assessment – Fall 2010

• Development of Chapter Team Training
  – Part 1: Launched in Feb/Mar 2011
  – Part 2: April 2011
CDC Strategic Plan
Emerging Trends: What Should S&T Be Teaching?

Robert W. Schwartz
Vice Provost for Academic Affairs

CDC Breakout Group Session, April 14, 2011
Emerging Trends

• Seek employer (corporate partner) input on emerging trends in industry

• What skills could we provide to students, graduates and companies to better enable:
  – Their success at your companies
  – Prepare them to address trends that are emerging in industry

• Input from committee is called for in Missouri S&T tactical plan
Emerging Trends

FY’10 Tactical plan – Action 2.4.4:

• “Report to the [university’s] strategic planning committee the results of a standing committee created to review emerging trends in industry, recommend new courses, emphasis areas and degree and certificate programs to address these trends.”
Emerging Trend Examples

• Some examples, not meant to limit the discussion
  – All students should take an engineering design course
  – All graduates should complete an MBA
  – Certificate program in systems safety engineering is needed because of new safety concerns
Emerging Trends
Framing the Discussion

- Changing business practices that impact required employee skill set, particularly for new or recent hires
- National and international drivers that suggest specific course offerings, clusters, or other educational opportunities the university should offer
- Drivers:
  - Financial
  - Competitive nature of business
  - Technology
  - Regulatory
- Do you have any concerns about the skills we provide our students that we need to know about?
- What advice can you provide us about other curricular or extra-curricular offerings we should consider?
Today’s Tasks

• Two or three breakout groups
  – Discussion led by CDC members
  – Missouri S&T personnel may ask questions but should not “steer” discussion
  – Plan
    • Review task and frame discussion (5 minutes)
    • Consider report from 2009
    • Discussion (20 minutes)
    • Report out to provide new and update 2009 recommendations as appropriate (10 – 15 minutes; 5 minutes per team)
Communication

Email

Listerves

LinkedIn

Web
Good Morning
Thursday Recap
Hot Topics
Campus Update

John F. Carney III
April 2011
Vice Chancellor for University Advancement

Joan Nesbitt
State Appropriations per FTE Student have declined 28% over 10 years.
Value of a Missouri S&T Education

• S&T is one of the top technological research universities in the United States

• Average starting salary of an S&T bachelor’s degree graduate is the second highest of any public college or university in the United States

• The benefit/cost ratio of an S&T education is one of the highest in the United States

• QUALITY must be protected
FY12 Budget Outlook
FY12 Budget Outlook

• Meeting with the Governor (January 12)

• Special Board of Curators’ meeting to discuss tuition/fee increases (January 14)

• Governor’s State of the State Address – proposed 7% budget cut (January 19)

• Board of Curators’ meeting (January 27-28)

• Senate Appropriations Committee (April 11)
Proposed 2011-2012 Tuition and Required Fees

- University of Missouri-St. Louis 4.7%
- University of Missouri-Kansas City 4.8%
- University of Missouri-Columbia 5.8%
- Missouri S&T 6.6%
Two important capital project opportunities
Background

• Missouri S&T proposed debt financing for two major projects on campus last fall
  – Geothermal Energy Project
    • $32.4 million
  – New Construction and Renovation of Schrenk Hall
    • Biological Sciences, Chemical and Biological Engineering, and Chemistry
    • $51.2 million

• Debt financing would take advantage of the low-interest rates
Construction Project Opportunity

205,354 Gross Square Feet

- **New Construction** $22 M
  - Chemical and Biological Engineering
    - 63,500 GSF

- **Rehabilitation** $29 M
  - Schrenk Hall East
    - 58,960 GSF
  - Schrenk Hall West
    - 82,894 GSF
Chemical and Biological Engineering
Grants and Contracts

10 Year History

Awards in FY10 = $52.3M (up 22.8% from FY09)

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditures ($ millions)</th>
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<tbody>
<tr>
<td>FY01</td>
<td>22.19</td>
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<tr>
<td>FY02</td>
<td>26.53</td>
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<tr>
<td>FY03</td>
<td>28.9</td>
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<tr>
<td>FY04</td>
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<td>FY09</td>
<td>38.08</td>
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<tr>
<td>FY10</td>
<td>44.69</td>
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Career Opportunities for Students

• In 2010, over 550 different employers (over 2,000 visits) recruited at S&T for full-time, co-op, and intern positions
  – 42 states
  – 3 international locations
  – 57% were from outside Missouri

• 51% increase in the number of employer recruiting events in Fall 2010 over Fall 2009

• In Fall 2010, S&T Career Opportunities and Employer Relations has serviced over 3,100 students (48% of our on-campus enrollment)
Good News
Events
### Annual Alumni Contribution Rates

#### Technological Research Universities

<table>
<thead>
<tr>
<th>Institution</th>
<th>FY07</th>
<th>FY09</th>
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</thead>
<tbody>
<tr>
<td>California Institute of Technology</td>
<td>29.0%</td>
<td>DNR</td>
</tr>
<tr>
<td>Massachusetts Institute of Technology</td>
<td>36.0%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Georgia Institute of Technology</td>
<td>25.6%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Rensselaer Polytechnic Institute</td>
<td>16.9%</td>
<td>DNR</td>
</tr>
<tr>
<td><strong>Missouri S&amp;T</strong></td>
<td><strong>18.1%</strong></td>
<td><strong>19.1%</strong></td>
</tr>
<tr>
<td>Colorado School of Mines</td>
<td>14.1%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Michigan Technological University</td>
<td>15.9%</td>
<td>15.7%</td>
</tr>
<tr>
<td>New Mexico Institute of Mining &amp; Technology</td>
<td>DNR</td>
<td>DNR</td>
</tr>
<tr>
<td>Clarkson University</td>
<td>16.7%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Stevens Institute of Technology</td>
<td>29.6%</td>
<td>DNR</td>
</tr>
<tr>
<td>Illinois Institute of Technology</td>
<td>8.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Worcester Polytechnic Institute</td>
<td>17.0%</td>
<td>16.7%</td>
</tr>
<tr>
<td>New Jersey Institute of Technology</td>
<td>11.3%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Florida Institute of Technology</td>
<td>7.6%</td>
<td>7.1%</td>
</tr>
<tr>
<td>University of Alabama – Huntsville</td>
<td>5.8%</td>
<td>3.2%</td>
</tr>
<tr>
<td>South Dakota School of Mines</td>
<td>DNR</td>
<td>DNR</td>
</tr>
</tbody>
</table>
Council for the Advancement and Support of Education Competition

- S&T received 15 awards for excellence in alumni relations, fundraising, media relations, advertising, graphic design, and student recruitment marketing

- S&T won the Sweepstakes Award for best overall institutional advancement program in the enrollment category of 5,000 – 7,499 students for the 5th year in a row
The Undergraduate Pipeline
Student Funnel for Engineering
Missouri 2010

- High School Seniors: 74,681
- High School Graduates: 64,009
- ACT Testers/College Bound: 48,290
- Any Engineering Interest (all testers): 1,836
- Any Engineering Interest (+21 testers): 1,299
  \[ (21 = \text{MO average score} / 50\%) \]
- Engineering Interest (+24 comp. score): 969
- Missouri S&T Freshman Engineers: 721

SOURCES: MODESE 2010, ACT EIS 2010, PeopleSoft
Where does S&T rank in the production of engineers and scientists?
Tops in Awarding Engineering Degrees

American Society for Engineering Education, 2010

• S&T ranks 19\textsuperscript{th} in the nation in the number of engineering bachelor’s degrees awarded

• S&T ranks 16\textsuperscript{th} in the nation in the number of engineering bachelor’s degrees awarded to women

• S&T ranks 17\textsuperscript{th} in the number of engineering bachelor’s degrees awarded to African-Americans
Recent Campus Construction
Kummer Student Design Center
Kummer Student Design Center
Indoor Practice Facility
Indoor Practice Facility
Hasselman Alumni House
Hasselmann Alumni House

Total naming opportunities:

$3,090,000

Total amount pledged to date:

$1,014,000
Examples of Naming Opportunities

- Grand Hall: $600,000
- Alumni Lounge or Patio, Living Room: $250,000
- Party Plaza, Hall of Honor, Gazebo: $100,000
- Office Hub, Plaza Exterior: $75,000
- Historic Emblem, Archive Cases: $50,000
- Major Offices: $40,000
- Staff Office, Welcome Center: $25,000
- Bar Stools: $15,000
- Restroom stalls and urinals: $5,000
- Parking spaces: $5,000
Vision 2020

Future of S&T
Fall 2011, Spring 2012 Planning

• Open House:
  – Friday, April 22, 2011
  – Saturday, October 1, 2011
  – Saturday, November 12, 2011

• Mini Career Fair during Orientation Week
  – Tuesday, August 16, 2011
  – Wednesday, August 17, 2011
  – Thursday, August 18, 2011

• CDC Meeting & Student Leadership Conference
  – Friday, October 14, 2011, and Saturday, October 15, 2011
  – Friday, October 21, 2011, and Saturday, October 22, 2011

• Freshmen Engineering Professionalism Presentation
  – Weeks of November 1-3, 2011, and November 4-6, 2011

• CDC Meeting with Etiquette Dinner

• Spring Break Opportunities for Externships and Transitions Retreat
  – March 25-April 1, 2012

• Later April 2012 – Student Leadership Banquet