

An ABC Sampler of Best Practices Outline

- Introduction
- Marketing and Solicitation
- High Impact Practices
- Future Work



Intro

- NSF S-STEM Program
 - NSF awarded in 2010 for five years
 - \$3,800 renewable scholarships
 - Academically achieving/Financially needing
 - High impact practices to see students through graduation
- Programming Leadership Team
 - 4 faculty
 - 2 student assistants
 - Peer mentors



Marketing and Solicitation

- Target Populations
 - NSF: STEM, new students, talent & financial need
 - UW-Platteville: women, racial/ethnic minorities, 1st generation, rural communities



Marketing and Solicitation

- Marketing Plan
 - Collaboration and timing
 - Development of specific plan for collaboration
 - Dean's Office, Department Chairs & Faculty, Admissions and Prospective Students Services, Multicultural Student Affairs, Disabilities Office, Financial Aid, STEM Scholars, and student assistants
 - Overall marketing & targeted marketing



Marketing and Solicitation Results

Admitted Students to the College of EMS 2010-2012

	2010		2011		2012		Percent Change 2010 to 2012
Admitted Students	1005		1101		1110		10.45%
Women	121	12.04%	147	13.35%	166	14.95%	21.49%
URM	19	1.89%	23	2.09%	65	5.86%	242.11%

STEM Scholar Pool Application Demographics 2010-2012

	2010		2011		2012		Percent Change 2010 to 2012
Applications	300		101		130		-56.67%
Women	18	6.00%	30	29.70%	50	38.46%	178%
URM	1	0.03%	7	6.93%	17	13.08%	1600%



Selection Criteria & Process

- Selection Criteria
 - FAFSA score, grade point average, class rank
 - Service, Leadership, Hardship, Career Development
 - Candidate pool parameters
 - Cognitive and non-cognitive student variables (Sedlacek)
- Number of Scholarships to award
 - Attrition & major changes
 - New freshmen vs. Transfer students



Selection Process

- Program Leadership Team
 - Incomplete/Late applications, correct major, minimum grade point/class rank
 - FAFSA and GPA range
 - Affirmative actions
- Scholarship Selection Committee
 - Admissions, Financial Aid & College faculty
 - Selection Rubric – percentage weights only
- Program Leadership Team Final Selection



Selection Results

Scholarship Selection Committee Applicant Pool 2010-2012

	2010		2011		2012		Percent Change 2010 to 2012
Applications	104		47		74		-28.85%
Women	12	11.5%	18	29.7%	31	41.91%	158%
URM	2	1.9%	4	6.93%	10	13.5%	400%

New STEM Scholar Demographics 2010-2012

	2010		2011		2012 To date	
STEM Scholars	10		16		11	(17)
Women	3	30%	8	50.0%	5	45.45%
URM	1	10%	3	18.75%	2	18.18%



Retention Results

	2010		2011		2012	
2010 STEM Scholars	10	100.0%	7	70.0%	5	50.0%
Women/URM	3	1	2	1	2	0
2011 STEM Scholars			16	100.0%	11	68.8%
Women/URM			8	3	5	0
2012 STEM Scholars					17	100.0%
11 out of 17 selected Women/URM					5	2



High Impact Practices

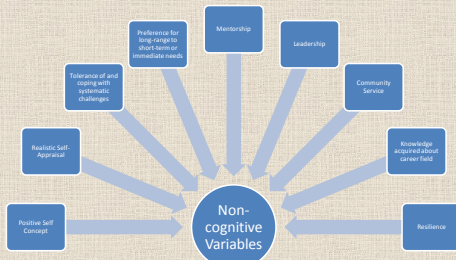
Retention

Student Development Theory Mapping

- Application of cognitive and non-cognitive variables (Sedlacek)
- Mapping of 3 environmental spheres of learning (Zander)
- Individualized Retention Plan



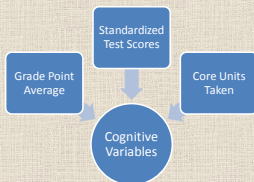
Cognitive & Non-Cognitive Variables



Sedlacek

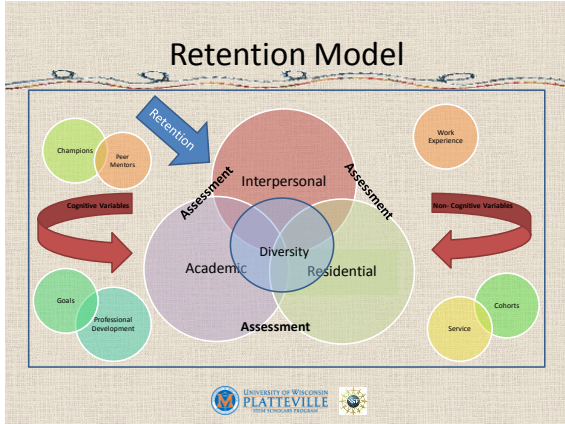


Cognitive & Non-Cognitive Variables



Sedlacek





High Impact Practices

Cohort Scheduling and Development

- Target freshmen composition, mathematics, chemistry for engineers, general engineering
- 3 – 4 students in the same section
- Encourage them to choose same sections in subsequent semesters
- Overwhelming successful in first year. Not so much in second year. But some are starting to see the value.

High Impact Practices

Professional Development

- Four programs each semester
- First semester is focused on resources and skills to be a successful student
- Subsequent semesters are career advising and personal skill development (diversity, listening skills, etc)
- The more engaging the presentation, the better. Telling them to do something does not mean they will.

High Impact Practices

Diversity

- Diversity and Inclusion are the central focus
- At least on diversity programming experience each semester
 - Tie learning experience to goals
 - Internal and external presenters
- Outcomes



High Impact Practices

Goal Setting

- Each student is asked to plan goals for short, mid and long term. Areas include academic, physical, spiritual, financial and ???
- Goals are established and reviewed at the end of the year.
- Needs work. Some students take this activity seriously and some do not.



High Impact Practices

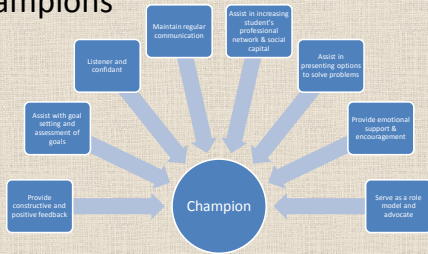
Peer Mentors

- One mentor for 2 STEM Scholars, 1 hour per week per Scholar
- Selection process and training
- Feedback and reinforcement



High Impact Practices

Champions



High Impact Practices

Service

- It is important for students to have experiences of helping others, reaching out to others.
- Students are required to give services 10 hours first year and 15 each subsequent year
- Mixed. We need to define this to be STEM Service.



High Impact Practices

Work Experience

- To help prepare students for the work world, co-ops, internships and job shadowing is important.
- Students are expected to attend the career fair as freshmen, and encouraged to job-shadow, seek internships and co-ops in subsequent years.
- Outstanding success. Freshmen actually were offered internships and co-ops.



High Impact Practices

Assessment

- Program Outcomes – data driven assessment
 - Recruitment & Retention
 - Service, professional developments, Career engagement
- Program Implementation
- Budget Analysis
- Service Outcomes: satisfaction-based
- Learning Outcomes
 - Goals & Reflection
 - Professional Developments



Future Work

- Increase diversity of applicant pool
- Cohort integration and leadership
 - Reverse cohort scheduling
- Tweak Champion and Mentoring processes
- Electronic portfolios
 - Reflection
 - Repository
 - Assessment
- Future funding & integration into other grant programs