Advancing to a Higher Degree

CGS MS Degree Completion and Attrition Project

December 6, 2012 Purdue University



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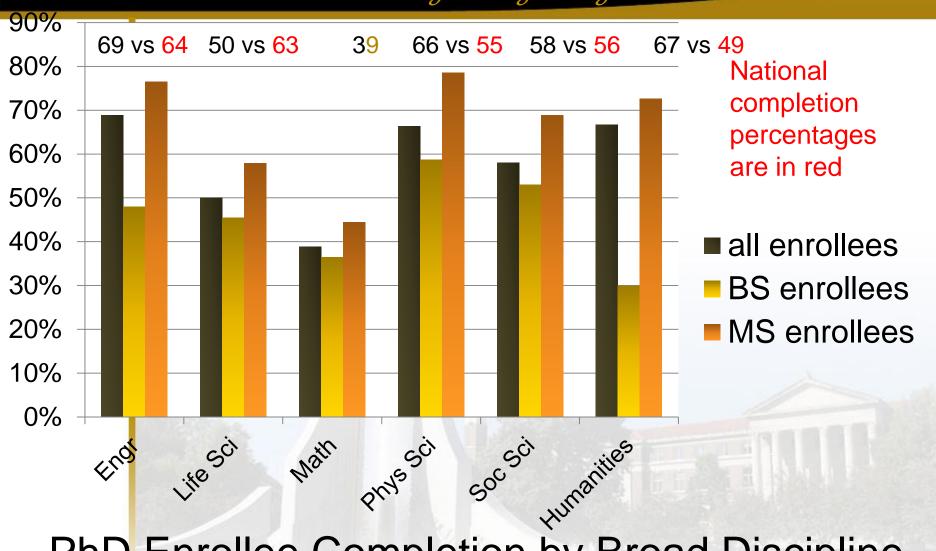
CGS Completion Projects: PhD project 2010 MS degree project 2012

- Program Survey
 - Fall 2010 Enrollments, Program Requirements
- Survey of new entering students
 - Fall 2011 new students, Why enrolled, Concerns
- Student Exit Survey
 - Fall 2011 and Spring 2012 graduates, likes, dislikes
- Completion Data
 - 2003 2011 Enrolled Students, Attrition, Prior Degree,
 UGPA

PURDUE

The Graduate School

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PhD Enrollee Completion by Broad Discipline

Average for cohorts starting 95-99, ending 2009.



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CGS Completion Projects: PhD project 2010 MS degree project 2012

- Program Survey
 - Enrollments and program data
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 - 2003 2011 Enrolled Students, Attrition, Prior Degree, UGPA



Program Survey – Demographics

| College | Program | Degree | Women | Men |
|-------------|-----------------------------------|------------|-------|-----|
| Management | Masters of Business Adminstration | M.B.A. | 47 | 165 |
| Engineering | Interdisc Engr-MSE | M.S.E. | 41 | 110 |
| Engineering | Civil Engr-MS-CE | M.S.C.E | 38 | 109 |
| Technology | Technology-MS | M.S. | 33 | 121 |
| Agriculture | Agricultural Econ-MS | M.S. | 31 | 53 |
| Technology | Wkend Masters Prg in Tech-MS | M.S. | 30 | 81 |
| Engineering | Elect Comp Engr-MS-ECE | M.S.E.C.E. | 29 | 125 |
| Engineering | Aero Astro Engr-MS-AAE | M.S.A.A.E. | 28 | 131 |
| Management | Org Behav & HR Mgmt-MS | M.S. | 26 | 17 |
| Science | Statistics-MS | M.S. | 22 | 23 |

42 STEM programs
Fields: degree, men/women
domestic/int'l, credit hours
race/ethnicity.

| | NUMBER OF CREDIT HOURS REQUIRED FOR DEGREE | | | | |
|-------------------|--|----|----|----|-------|
| | 30 | 32 | 33 | 36 | Total |
| Agriculture | 4 | 0 | 3 | 1 | 8 |
| Engineering | 13 | 0 | 1 | 0 | 14 |
| Interdisciplinary | 3 | 1 | 0 | 0 | 4 |
| Liberal Arts | 1 | 0 | 0 | 2 | 3 |
| Management | 1 | 0 | 1 | 0 | 2 |
| Science | 5 | 0 | 0 | 0 | 5 |
| Technology | 3 | 0 | 2 | 0 | 5 |
| Vet Medicine | 1 | 0 | 0 | 0 | 1 |
| Total | 31 | 1 | 7 | 3 | 42 |

| College | Program | Degree | International | Domestic |
|-------------|-----------------------------------|------------|---------------|----------|
| Management | Masters of Business Adminstration | M.B.A. | 99 | 113 |
| Engineering | Elect Comp Engr-MS-ECE | M.S.E.C.E. | 89 | 65 |
| Engineering | Mech Engr-MS-ME | M.S.M.E. | 62 | 126 |
| Engineering | Civil Engr-MS-CE | M.S.C.E | 53 | 94 |
| Science | Computer Science-MS | M.S. | 49 | 8 |
| Engineering | Aero Astro Engr-MS-AAE | M.S.A.A.E. | 41 | 118 |
| Engineering | Indust Engr-MSIE | M.S.I.E. | 39 | 15 |
| Technology | Technology-MS | M.S. | 29 | 125 |
| Agriculture | Agricultural Econ-MS | M.S. | 26 | 58 |
| Science | Statistics-MS | M.S. | 25 | 20 |

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Entering Student Survey Statistics

- **73%** are Male
- 65% never married (35% married)
- **70%** have a working spouse
- **78%** have no dependents
- **56%** are under 25
- 58% are U.S Citizens
- 83% are White
- 80% are Full-time students



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Why do entering students enroll?

To meet requirements of employer

To learn more about something I'm interested in

To meet requirements of prospective employer

To facilitate a job/career change

To improve my skills and knowledge

Stepping stone for additional education

Increase opportunities for promotion

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| 8 | 7% |
|---|-----|
| 2 | 63% |
| 6 | 12% |
| 5 | 15% |
| 1 | 88% |
| 4 | 39% |
| 3 | 53% |

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New entering students

- 50% not working for pay
- 61% working 30 or more hours per week
- 33% are guaranteed support for more than one year
- 65% did not have to borrow loans for grad school
- 18% concerned about ability to finance graduate education



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New entering students Exit survey students

- **-50% 47%** not working for pay
- **-61% 57%** working 30 or more hours per week
- **-33**% are guaranteed support for more than one year
- **-65%** 57% did not have to borrow loans for grad school
- **18%** concerned about ability to finance graduate education
- 50% found financing their education challenging



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What do you most like about the Purdue programs

Location

Facilities

Faculty

Distance Learning

Reputation

Flexibility

Department Culture

Coursework



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What do you most like about the Purdue programs

| 8% | Location |
|-----|--------------------|
| 2% | Facilities |
| 9% | Faculty |
| 8% | Distance Learning |
| 8% | Reputation |
| 22% | Flexibility |
| 15% | Department Culture |
| 11% | Coursework |



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New entering students

- **74%** had no major life event in past 12 months
- 66% attended their program's orientation
- 92% were satisfied or very satisfied with teaching quality
- 77% have an advisor
- 72% expect advisor to provide regular feedback

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New entering students Exit survey students

- **-74% 30%** had no major life event in past 12 months
- **-66**% 55% attended their program's orientation
- **-92%** 94% were satisfied or very satisfied with teaching quality
- **-77% 90%** have an advisor
- **72%** expect advisor to provide regular feedback
 - 84% found advisor feedback to be useful
 - **76%** thought advisor was helpful in supporting career goals
 - 89% were satisfied with career advising



Exit Survey – Completion Factors

| What Helped You Complete the Program | Not At All | Small Extent | Moderate Extent | Great Extent |
|---|------------|--------------|--------------------|--------------|
| Financial support from the institution or program | 32% | 13% | 6% | 39% |
| Supportive faculty | 11% | 20% | 41% | 27% |
| Student loans | 44% | 5% | 7% | 22% |
| My advisor | 20% | 23% | 25% | 29% |
| Program structure | 9% | 29% | 41% | 20% |
| Motivation and determination | 1% | 5% | 23% | 70% |
| Family support (non-financial) | 7% | 15% | 23% | 52% |
| Peer Support | 14% | 22% | 33% | 28% |
| Institutional or program support | 30% | 32% | 22% | 7% |
| Financial support from employer | 23% | 7% | 8% | 21% |
| Supportive employer | 17% | 15% | 14% | 17% |
| Quality of teaching | 3% | 28% | 44% | 24% |
| Being a full-time student | 8% | 6% | 21% | 48% |
| Other (N = 101) | 4% | 1% | 1% | 5% |
| Ns ranged from 149 - 151 | | | | |



Entering/Exit Survey – Concerns

Entering Student Survey

| Have Concerns | Frequency | Percent |
|-------------------|-----------|---------|
| No | 144 | 71% |
| Yes, occassionaly | 47 | 23% |
| Yes, frequently | 12 | 6% |
| Total | 203 | |

Exit Student Survey

| Concern | Frequency | Percent |
|-------------------|-----------|---------|
| Yes, frequently | 17 | 11% |
| Yes, occassionaly | 56 | 37% |
| No | 80 | 52% |
| Total | 153 | |



Exit Survey – Financial Loans

| Loans Borrowed For Undergraduate Degree | Frequency | Percent |
|--|-----------|---------|
| None | 88 | 56% |
| \$1 - \$5,000 | 12 | 8% |
| \$5,001 - \$20,000 | 20 | 13% |
| \$20,001 - \$50,000 | 28 | 18% |
| \$50,000 and above | 9 | 6% |
| Total | 157 | |

| Loans Borrowed For Graduate Degree | Frequency | Percent |
|---------------------------------------|-----------|---------|
| None | 90 | 57% |
| \$1 - \$5,000 | 9 | 6% |
| \$5,001 - \$20,000 | 25 | 16% |
| \$20,001 - \$50,000 | 19 | 12% |
| \$50,000 and above | 15 | 10% |
| Total | 158 | |

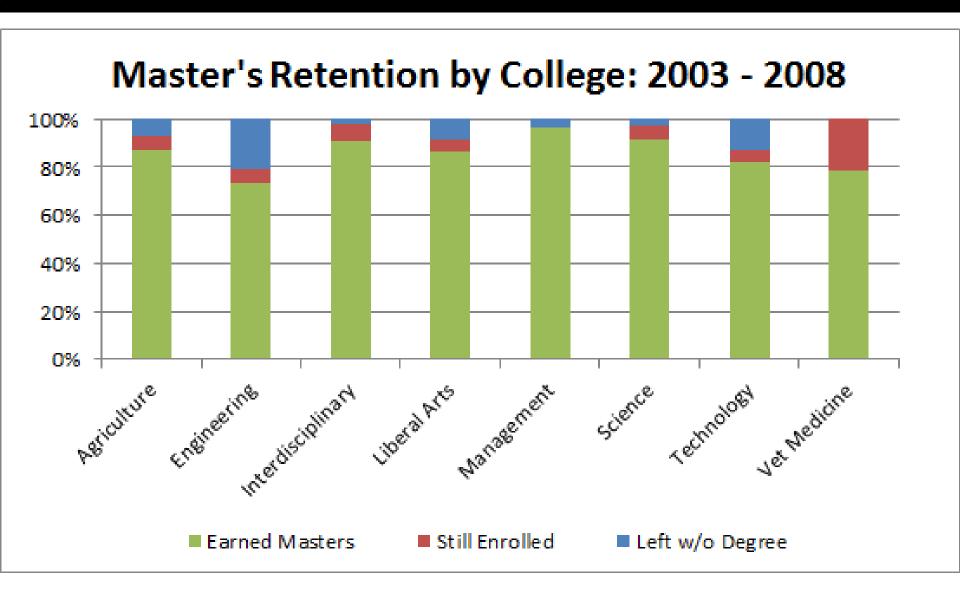


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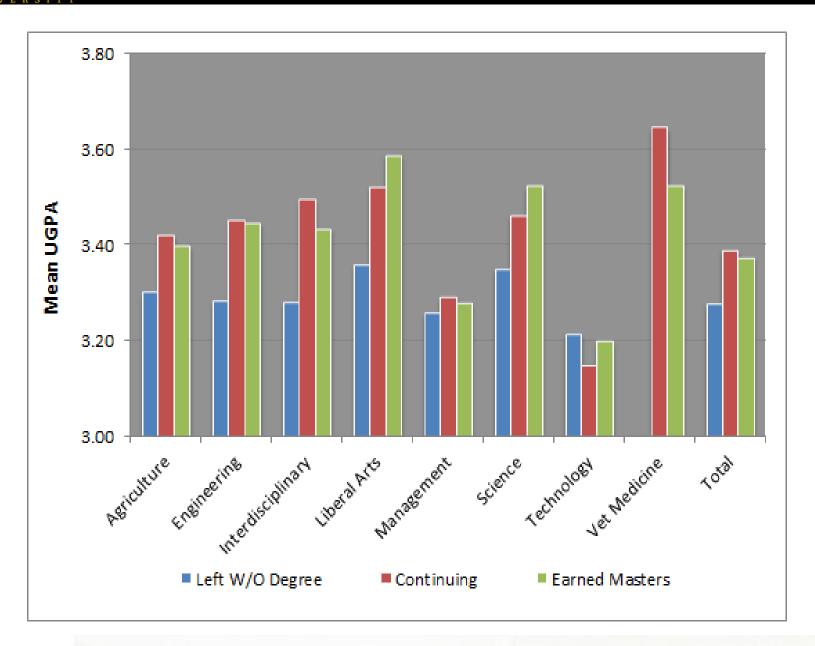
Completion Data



Student Level Survey – Status



Average Undergraduate GPA



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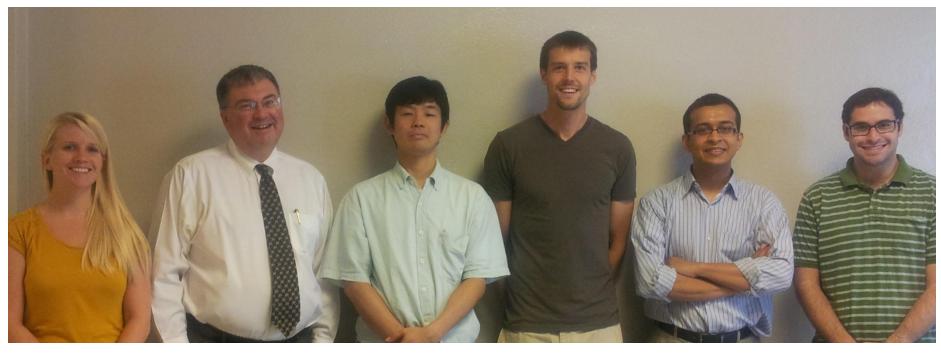
Interventions

Mentoring Workshop

- Overview of the Graduate School
- The role of a mentor
- •Helping students become good teachers
- Graduate student success
- •Helping students become good scholars
 Report completion data to dept heads
 and deans



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Rebecca Logsdon (ABE, ESE-IGP) Tom Atkinson Assoc. Dean

Masaki Kakoi (AAE) Mark Haugen (ENGL)

Reazur Rahman (Comp. Biol.., PULSe) Steve Lieb (Aviation TECH)

Peer Ombudsman Program