5-year plan for graduate programs

• In June 2012, we created a 5-year plan.
  – July 1, 2012 to June 30, 2017
• The plan was divided into 4 specific actions:
  – Recruiting, Mentoring, Management, and Funding
• My goal: Remind you what we said we would do, and give you some feedback on progress.
• Data is limited in a lot of areas, but still insightful, I think…

Recruiting

• We generally agreed we have a great program and take on as many students as money and time allow.
• We said we should increase the quality of our applicants.
  – increase applications to our graduate programs by 10%.
  – increase the diversity of students from 6%
  – increase mean incoming graduate student GPA by 0.2 points (on a 4 point scale).
  – increase inquiries about our graduate programs by 20%

We felt that GPA was a better measure of success than GRE score, and therefore made no quantitative goals for GRE scores.
Recruiting

- Increase in applicants by 10%? I don’t see an increasing trend.

2009-2011: 44/year  
2012-2016: 43/year

MS: PhD increased?  
2.9 (2009-2011) to 2.0 (2012-2016)

Recruiting

- Increase minorities by 6%? Not happening.

Minority: 17%  
Int’l: 13%  
Female: 45%

Minority: 16%  
Int’l: 13%  
Female: 48%
Recruiting

• *Increase in GPA by 0.2 points incoming students?*

Verbal: 10%
Quant: 4%

Two quant 6% in 2015

Recruiting

• Our policy is to minimize exceptions to the minimum GRE and GPA requirements set by the graduate school.

Made a strong push to reduce numbers in 2012
Recruiting

- **Increase inquiries by 20%**: We have a way to measure inquiries: WILD website, Graduate School recruitment fairs, and personal emails to our department.
- But we’ve only collected data from August 2012 to August 2013. We will continue to collect this data to see if inquiries are increasing over time.

<table>
<thead>
<tr>
<th>2012 Total # of</th>
<th>Degree of</th>
<th>Program of Interest</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>inquiry</td>
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<td>August</td>
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<tr>
<td>Word</td>
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<td>WIB</td>
</tr>
<tr>
<td>Grad School</td>
<td>1</td>
<td>MS</td>
<td>WIB</td>
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<tr>
<td>Grad School</td>
<td>1</td>
<td>MS</td>
<td>WIB</td>
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<td>September</td>
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<tr>
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<td>MS</td>
<td>WIB</td>
</tr>
<tr>
<td>Grad School</td>
<td>1</td>
<td>MS</td>
<td>WIB</td>
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<tr>
<td>Kon Magnerd</td>
<td>1</td>
<td>PhD</td>
<td>WIB</td>
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<td>October</td>
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<tr>
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<td>MS</td>
<td>WIB</td>
</tr>
<tr>
<td>Grad School</td>
<td>1</td>
<td>MS</td>
<td>WIB</td>
</tr>
<tr>
<td>Grad School</td>
<td>1</td>
<td>MS/PhD</td>
<td>WIB/ECOL</td>
</tr>
<tr>
<td>Grad School</td>
<td>1</td>
<td>MS</td>
<td>WIB</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>PhD</td>
<td>WIB</td>
</tr>
</tbody>
</table>

One more plug for recruiting

- We will use graduate fellowships to recruit high quality minority students when possible.
- We have included such a statement in our advertisement for the fellowships, and this criterion is considered by our selection committee.
  - In 2012, we gave 5 PhD fellowships, 40% were minorities (including women and international students).
  - In 2013, we gave 2 PhD fellowships, neither were minorities.
  - In 2014, we gave 2 PhD fellowships, 100% were minorities and one was female.
  - In 2015, we did not offer a PhD fellowship.
  - In 2016, we offered 3 PhD fellowships (2 accepted) 0% minorities; one was female.
Recruiting

- Other tools... we created a video to attract graduate student to our department that is linked on our website and it has been viewed on YouTube 343 times.
- We added an email form to our website. The email goes to Marsha Bailey. We are starting to record again how often this happens. From August 2012-August 2013 (the time over which we had data), we had 19 such inquiries. First 6 months of 2016, 32 inquiries...
- We have been setting aside money in the department for potential graduate student visits, and we have gotten the $1500 grant each year from the Graduate School for these visits. These trips have helped to recruit minority applicants who were also awarded fellowships.

Total Grad Enrollment Numbers
Starting Grad Students

- In general, we accept about 20 new grad students/year, 50% that apply
- MS:PhD was 3.1 and is now 1.8
Mentoring

- Measures: In general we believe we do a good job mentoring our graduate students.

- We will track the proportion of students who publish at least one peer-reviewed paper from their thesis, and the number of publications a student publishes from work done at USU.

- We will work to *increase these figures by 10% over the next five years*. We also will maintain *nearly complete placement for our graduate students in appropriate careers or further graduate study*.

Karen’s long-winded survey

1. Did you publish at least one peer-reviewed paper from your graduate thesis? *(Yes or no)*
2. How many total peer-reviewed papers did you publish from your thesis? *(#)*
3. Were you first author, co-author, or both on peer-reviewed paper(s) published from your thesis? *(First, co-author, or both)*
4. Outside of your thesis work, were you listed as an author on any other peer-reviewed publication(s) from work conducted at USU while you were a graduate student? *(Yes or no)*
5. Outside of your thesis work, how many total peer-reviewed publications listed you as an author from work conducted at USU while you were a graduate student? *(#)*
6. When in relation to your formal graduation date did you submit the first paper from your thesis? *(While at USU, < 1 yr, 1-2 yr, 2 yrs, etc.)*
7. How long in relation to your formal graduation date until your first paper was published? *(<1 yr, 1-2 yrs, 2 yrs, etc.)*
• 2005-2012: 96% of PhD students who graduated (and provided information, 81%) has at least 1 pub for their thesis.
  – PhD students have 3.14 pubs from their theses. All were first author on at least one.
  – 68% were co-authors on pubs outside their thesis research.
• Since 2012, every single PhD students who has graduated (and provided information, 95%), has published at least 1 pub for their thesis; average is 3.1 publications.

• 2005-2015, 68% of our MS students who graduated (and provided information, 61%), has published at least 1 pub from their thesis.
  – MS students have 1.03 pubs from their theses. All were first author on at least one.
  – 35% were co-authors on pubs outside their thesis research.
• Since 2012, 56% of our MS students who graduated (and provided information, 65%), has published at least 1 pub from their thesis.

Have 100% placement

• We have better records of placement for PhD students than for MS students. All of our PhD students have gone on to find employment in their field. 12 are working for federal and state governmental agencies, 6 are faculty at universities and colleges, 5 are postdocs, 4 are with NGOs, 4 are staff at universities, and two are with businesses.
Management

• Our graduate programs could use some simplification and condensation.
  – We reduced credit requirements for PhD students and got rid of specializations.

• One way in which we will assess the effectiveness will be to monitor the time it takes students to finish their degrees.
  – On average, MS students take 3.67 years to complete their degrees and PhD students take 5.8 years.
  – We seek to reduce the MS time to graduation to 3 years. We seek to reduce the PhD time to graduation to less than 5 years for those students starting with an MS degree.

• Also where appropriate we will convert graduate course offerings to espresso courses.

Years to Earn Degree – Goal: 3 MS, 5 PhD

<table>
<thead>
<tr>
<th></th>
<th>MS Deleting &gt; 7 yrs</th>
<th>MS All data</th>
<th>PhD Deleting &gt;10 years</th>
<th>PhD All data</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Deleting &gt; 7 yrs</td>
<td>3.4 years</td>
<td>3.6 years</td>
<td>5.3 years</td>
<td>5.9 years</td>
</tr>
<tr>
<td>MS All data</td>
<td>3.4 years</td>
<td>3.7 years</td>
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<td>PhD Deleting &gt;10 yrs</td>
<td>4.8 years</td>
<td>5.1 years</td>
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</table>
Funding

- Grant funding per faculty member and stipend levels are fairly good (stipends are about $15K for MS and $21K for PhD). A specific funding-related measure is that we will at least maintain our current level of grant funding per faculty member and student stipend levels, corrected for inflation.

- We have increased MS assistantship amounts over the past 7 years. PhD assistantships have not increased.

- Averaging over this time $16K for MS and $19K for PhD. Are we competitive???

<table>
<thead>
<tr>
<th>Year</th>
<th>MS</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$14,880.98</td>
<td>$19,118.60</td>
</tr>
<tr>
<td>2010</td>
<td>$15,111.92</td>
<td>$19,838.60</td>
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<td>2011</td>
<td>$15,782.51</td>
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</tr>
<tr>
<td>2012</td>
<td>$16,113.34</td>
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<td>2013</td>
<td>$15,754.56</td>
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<td>2014</td>
<td>$16,201.43</td>
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<tr>
<td>2015</td>
<td>$17,572.39</td>
<td>$18,726.72</td>
</tr>
</tbody>
</table>

Funding for meetings

Funding and Mentoring

- PhD-level graduate students will be encouraged to prepare and submit one proposal for external funding during their time with us, which should improve both mentoring and funding.

- We have no way currently to track this, but have added this requirement to our handbook and will ask about this when we implement a departmental exit survey for graduate students.