College Readiness and Completion
Part III: What Can UW Do?

Offices of the President, Academic Affairs, & Student Affairs
UW Board of Trustees
July 14, 2011
Introduction

• The Center on Education and Workforce projects that by 2018, 63% of jobs will require some college education.

• Wyoming lags behind the national average in percentage of adults with an associates degree or higher.

• The University of Wyoming can help to improve Wyoming students’ college readiness and completion.

Source: Complete to Compete; Nat. Gov. Assoc.
Students do best in college when:

- They complete a rigorous high school curriculum
- Their financial aid is tied to high school preparation and college performance
- They are highly motivated to attend college ("aspirational culture")
Students do best in college when:

- Highest math taken in high school correlates with performance at college

![Bar chart showing U.S. Bachelor’s completion rates by highest level of high school math.](chart.png)

Students do best in college when:

- Highest math taken in Wyoming high schools correlates with performance at UW

![Bar chart showing ACT scores for different levels of math taken in high school]

Wyoming high school students entering UW in 2010
Data sources: WDE, UW OIA
Students do best in college when:
• Highest math taken in Wyoming high schools correlates with performance at UW

Data sources: WDE, UW OIA
Students do best in college when:

- Highest math taken in Wyoming high schools correlates with performance at UW

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Data sources: WDE, UW OIA
College completion is improved by:

• Encouraging academic performance and persistence
• Providing opportunities for student engagement
• Reducing time to degree
Standards improve college success:

**LIFE 1010: General Biology**
Prerequisites: grade of C or better in MATH 0921 (Basics of Algebra)
  or level 2 on the Math Placement Exam
  or math ACT of 21

*Prior to prerequisite of Math ACT score of 21 for LIFE 1010:*
73% of students with Math ACT of <21 earned D, F, or withdrew

*After instituting prerequisite:*
Students with Math ACT <21 take Math 921 in the fall
72% of these students earned A, B, or C in LIFE 1010 in the spring
Question: are UW admissions requirements set to maximize college success?

**Context:** Fall 2011 first-year students have completed Hathaway Success Curriculum in high school

**Task:** Set assured admission standards that challenge high school students to come well-prepared for college *and* implement strategies to encourage conditionally admitted students

**Long-term goal:** Increase academic success of UW undergraduates and elevate UW’s academic stature nationally
## UW assured admission standards proposal #1

*Raise UW admission standards to match Hathaway Success Curriculum*

<table>
<thead>
<tr>
<th></th>
<th>Wyoming HS graduation/UW admissions</th>
<th>Hathaway Success Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Math</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*4 years of Math* to include Algebra I, Algebra II, Geometry, plus an additional math course taken in grades 9 through 12

*4 years of Language Arts* taken in grades 9 through 12

*4 years of Science* taken in grades 9 through 12

*3 years of Social Studies* taken in grades 9 through 12

*2 years of the same Foreign Language*, at least 1 year of which shall be taken in grades 9 through 12
UW assured admission standards proposal #2

Consider UW admission standards that include requirements of:

• High school GPA of 3.0
College Readiness
Success is correlated with high school GPA

Source: UW OIA—Fall 2009 first-time first-year students
UW assured admission standards proposal #3

Consider UW admission standards that require:

- **ACT of 21 or higher** (or SAT > 990)
College Readiness
ACT score correlates with rigor of high school curriculum

On average, high school students who completed a core curriculum* scored **2.2 to 3.1 points higher** on the ACT than those who did not.

Students who took advanced math, biology, chemistry and physics do even better.

*4 years English, 3 years Math, Science, Social Studies

Sources: www.act.org
College Readiness

ACT is a predictor of 1st year academic performance

UW first semester 1st year probation rates

% on Probation

ACT score

Sources: UW OIA Fall 2009 data

All students
Wyoming
Out-of-state

ACT is a predictor of 1st year academic performance
College Readiness
ACT is a predictor of 1st year academic performance

Sources: UW OIA, Fall 2009 data
College Readiness

ACT is a predictor of 1st year academic performance

Fall-to-Fall Retention

% Retained

0 20 40 60 80 100


ACT score

Sources: UW OIA, Fall 2009 data
UW assured admission standards proposal #4

Consider UW admissions standards that include:

- Conditional admission for students not meeting assured admission standard
- Offer participation in Synergy program or other support programs such as an academic transition course
- Give priority to Wyoming students for Synergy program
Synergy: an intensive college success program

Students enroll in special sections of:
- ENGL 1010: English composition
- UWYO 1450: Intellectual community
- POLS 1000: Political Science
- COJO 1010: Communications
And receive peer mentoring, supplemental instruction, cohort community

Compared to conditionally admitted students without Synergy, Synergy students demonstrate:
- higher first semester GPA (2.14 vs. 1.78),
- lower probation rates (40% vs. 60%) and
- higher fall-to-fall retention (55.6% vs. 51.8%).

The program serves 145-150 students per year.
Synergy addresses challenges typical of conditionally admitted students:

- Academic preparation and coursework habits
- Long-term goal setting
- Homesickness
- Academic and social engagement with campus and the Laramie community
- Time and activity management

A first-year academic transitions course for conditionally admitted students also could help address these needs.

Students could select between Synergy and the transitions course with the help of an advisor.
UW assured admission standards proposal #4

Consider UW admissions standards that include:

No change to UW’s admission requirements for transfer students; encourage students to complete an associates degree or ~60 credits prior to transferring to UW

Transfer students with > 30 college credits are admitted if they have a college GPA of >2.0

Transfer students with < 30 college credits and high school diploma are admitted if they also meet the requirements for 1st year, first-time student applicants.
Transfer students
Transfer students include larger numbers with low ACT

Wyoming Transfer Students entering Fall 2009

Sources: UW OIA
**Transfer students**

Transfer students with low ACT do better at UW than do students with similar ACT who start at UW

**Students entering Fall 2009**

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Sources: UW OIA
Transfer students
Transfer students with low ACT are less likely to go on probation than are students with similar ACT who start at UW.

Students entering Fall 2009

Sources: UW OIA
Transfer students
Transfer students with low ACT have similar retention rates to students with higher ACT

Sources: UW OIA
Transfer students
Transfer students who transfer 60+ hours to UW do well

Academic performance by hours transferred

Sources: UW OIA: Fall 2009 data
Transfer students: a small population

Community College enrollment: 24,056
Community College transfer students to UW: 622

Sources: UW OIA: Fall 2009 data
Implications of implementing proposed assured admission standards

What is the projected effect on:
- Number of conditionally admitted students
- Students from small vs. medium or large high schools
- Students from low-income, first-generation, or under-represented groups
- Non-traditional and outreach students
- Average UW GPA, probation rates, and retention rates
Effect on number of conditional admissions

Projected increase from ~150 to ~308 students; should drop over time as entering students become better prepared

Fall 2009 first-time 1st-year student ACT scores

Sources: UW OIA Fall 2009 data
## Effect on students from various size high schools

There would be no differential effect on students from small, medium and large Wyoming high schools

<table>
<thead>
<tr>
<th></th>
<th>Average ACT</th>
<th>Average High School GPA</th>
<th>Spring UW GPA</th>
<th>On Probation after Fall ’09</th>
<th>Fall-to-fall Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>24.0</td>
<td>3.64</td>
<td>2.82</td>
<td>14%</td>
<td>73%</td>
</tr>
<tr>
<td>Medium</td>
<td>24.1</td>
<td>3.51</td>
<td>2.68</td>
<td>21%</td>
<td>75%</td>
</tr>
<tr>
<td>Large</td>
<td>24.0</td>
<td>3.50</td>
<td>2.72</td>
<td>18%</td>
<td>74%</td>
</tr>
<tr>
<td>Average WY</td>
<td>24.0</td>
<td>3.53</td>
<td>2.72</td>
<td>19%</td>
<td>74%</td>
</tr>
</tbody>
</table>

*Large: Kelly Walsh, Jackson Hole, Natrona, Cheyenne Central, Campbell County, Cheyenne East, Laramie*  
*Small: all others*

Sources: UW OIA, Fall 2009 data
Effect on low-income, first generation and under-represented groups

<table>
<thead>
<tr>
<th>2009 Cohort</th>
<th>Head count</th>
<th>% of cohort</th>
<th>Average ACT</th>
<th>% with ACT&gt;21</th>
<th># with ACT &lt;21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1594</td>
<td>100%</td>
<td>23.9</td>
<td>80%</td>
<td>308</td>
</tr>
<tr>
<td>Caucasian</td>
<td>1350</td>
<td>85%</td>
<td>24.1</td>
<td>83%</td>
<td>232</td>
</tr>
<tr>
<td>Pell-eligible</td>
<td>288</td>
<td>18%</td>
<td>23.0</td>
<td>73%</td>
<td>75</td>
</tr>
<tr>
<td>First generation</td>
<td>519</td>
<td>33%</td>
<td>22.8</td>
<td>72%</td>
<td>141</td>
</tr>
<tr>
<td>Under-represented*</td>
<td>109</td>
<td>6.8%</td>
<td>21.9</td>
<td>56%</td>
<td>48</td>
</tr>
</tbody>
</table>

*Black, Native American, Hispanic

Source: UW OIA Fall 2009 data
Effect on non-traditional and outreach students

Outreach enrollments: almost no 1st time first year students are outreach students

Non-traditional students: in Fall 2009, only 12 of 1594 first-year students were > 25 y.
  157 were re-enrolling
  352 were transfer students
**Regauging average UW GPA, probation rates, and retention rates**

*Assuming students meet new curriculum, ACT and GPA standards:*

<table>
<thead>
<tr>
<th>Students</th>
<th>UW students 2009</th>
<th>WY students future</th>
<th>Non-resident 2009</th>
<th>Non-resident future</th>
<th>All students 2009</th>
<th>All students future</th>
</tr>
</thead>
<tbody>
<tr>
<td>UW cumulative GPA</td>
<td>2.72</td>
<td>2.90</td>
<td>2.68</td>
<td>2.79</td>
<td>2.70</td>
<td>2.85</td>
</tr>
<tr>
<td>% on probation</td>
<td>19%</td>
<td>13%</td>
<td>19%</td>
<td>15%</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>Fall-to-fall retention</td>
<td>74%</td>
<td>81%</td>
<td>71%</td>
<td>73%</td>
<td>73%</td>
<td>77%</td>
</tr>
</tbody>
</table>

*Source: OIA, calculations based on Fall 2009 data*
Effect on average UW GPA, probation rates, and retention rates

Assuming students meet new curriculum, ACT and GPA standards, **Wyoming will join the more successful states**

<table>
<thead>
<tr>
<th>State</th>
<th>Enter college</th>
<th>Full-time students still enrolled sophomore yr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>100</td>
<td>78</td>
</tr>
<tr>
<td>North Dakota</td>
<td>100</td>
<td>79</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>100</td>
<td>83</td>
</tr>
<tr>
<td>Wyoming-2009 status quo</td>
<td>100</td>
<td>72</td>
</tr>
<tr>
<td>Wyoming-future-all students</td>
<td>100</td>
<td>77</td>
</tr>
<tr>
<td>Wyoming-future-WY students</td>
<td>100</td>
<td>81</td>
</tr>
</tbody>
</table>

Source: UW OIA, calculations based on Fall 2009 data
Proposed admission standards:

1. Raise UW admission standards to 4 years of English, Math (including Algebra I, Algebra II, and Geometry), Science, 3 years of Social Studies, and 2 years of a single Foreign Language.

2. Include minimum high school GPA requirements of 3.0.

3. Include ACT requirement of 21 or higher (SAT ≥ 990).

4. Conditional admission for those not meeting assured standards, require participation in Synergy or other transition program.

5. No change in transfer student admission requirements, encourage completion of associates degree or ~60 credits prior to transfer.
UW’s Long-term Goal

By adopting higher assured admissions standards we encourage better college readiness

Better-prepared UW students persist and complete degrees at a higher rate

UW raises its national stature for excellence in undergraduate education and joins the ranks of the best state universities in the nation