A STUDENT-CENTERED APPROACH TO HIGHER EDUCATION

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Senior Vice Provost
Professor of Chemistry
UT AUSTIN
FOUR-YEAR GRADUATION RATES

2013: 52%
2014: 55%
2015: 58%
2016: 61%
2017: 70%
A Student-Centered Classroom: Every Student Earns an A
A Student-Centered Classroom:
Every Student Earns an A

A Student-Centered Campus:
Every Student Graduates
An Incompatibility

- UT Austin agrees to increase 4-year graduation rates from 51% in 2013 to 70% by 2017.

- Introductory courses historically have non-passing rates exceeding 30% as recently as 10 years ago, and in excess of 20% in 2010.
An Incompatibility

- UT Austin agrees to increase 4-year graduation rates from 51% in 2013 to 70% by 2017.
- Introductory courses historically have non-passing rates exceeding 30% as recently as 10 years ago, and in excess of 20% in 2010.

The Solution

- Student-centered instruction.
Laude’s General Chemistry Course

From traditional instruction to…..
DATA INFORMS EVERY DECISION

I know each student’s most likely grade before class begins.
STUDENTS ARE SCHOLARS FIRST

I tell students on the first day that each of them should earn an A in my class.
COMMUNITY BUILDING

500 students = 500 teachers
ENGAGEMENT WITH TECHNOLOGY

Hybrid Learning Means 24/7 Learning
CRACKING THE ACADEMIC CALENDAR

Rigid grading structures disincentivize learning
Killing the Grading Curve

CH301 Grades 2005 to 2014

-社区学习
-翻转教室
-数量学生

图例:
A
B
C
DFW

年份:
UT Austin Course Transformation Projects (CTP):

- Three-year awards
- Grounded in technological and pedagogical innovations
- Department-level rather than individual faculty commitment
- First CTP awards given in 2011 to Biology, Chemistry and Statistics
- Cross-discipline best practices disseminated through Center for Teaching and Learning
- Mandated accountability and sustainability components
General Chemistry DFW Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>DFW Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>18.88%</td>
</tr>
<tr>
<td>2011</td>
<td>12.87%</td>
</tr>
<tr>
<td>2012</td>
<td>11.65%</td>
</tr>
<tr>
<td>2013</td>
<td>12.56%</td>
</tr>
<tr>
<td>2014</td>
<td>8.08%</td>
</tr>
<tr>
<td>2015</td>
<td>9.62%</td>
</tr>
</tbody>
</table>

General Chemistry Sequence DFW Rates
## Introductory Biology DFW Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>DFW Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>20.15%</td>
</tr>
<tr>
<td>2011</td>
<td>16.80%</td>
</tr>
<tr>
<td>2012</td>
<td>10.29%</td>
</tr>
<tr>
<td>2013</td>
<td>13.64%</td>
</tr>
<tr>
<td>2014</td>
<td>5.70%</td>
</tr>
<tr>
<td>2015</td>
<td>6.79%</td>
</tr>
</tbody>
</table>

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![](chart.png)

The chart above shows the DFW (Drop, Withdraw, Failure) rates for Introductory Biology from 2009 to 2016. The rates have generally decreased over the years, with the lowest rate occurring in 2015 at 6.79%.
### Introductory Statistics DFW Rates

<table>
<thead>
<tr>
<th>Year</th>
<th>DFW Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>20.11%</td>
</tr>
<tr>
<td>2011</td>
<td>15.60%</td>
</tr>
<tr>
<td>2012</td>
<td>12.80%</td>
</tr>
<tr>
<td>2013</td>
<td>8.95%</td>
</tr>
<tr>
<td>2014</td>
<td>4.20%</td>
</tr>
<tr>
<td>2015</td>
<td>5.25%</td>
</tr>
</tbody>
</table>

![Graph showing the decline in Introductory Statistics DFW Rates from 2010 to 2016](image-url)
FALL 2016 RESULTS FOR CLASS OF 2017

HIGHEST IN UT HISTORY
13.0 Avg Hours Passed
3.35 Avg GPA

LOWEST IN UT HISTORY
1.4% Hours Failed
4.1% Students on Probation
RECONSIDERING THE INSTITUTIONAL MESSAGE:
EVERY STUDENT EARNs AN A
A STRATEGY FOR IMPROVING GRADUATION RATES:
FOCUS ON BELONGING
BUILDING COMMUNITY

All 8,000 freshmen are placed in a 360 Connections small community
ENGAGEMENT WITH TECHNOLOGY

Hybrid & Online Course Experience
EXPERIENTIAL LEARNING OPPORTUNITIES

Freshman Research Initiative
PREDICTIVE ANALYTICS INFORMS EVERY DECISION

2,000 Freshman with Lowest Predicted Four-Year Graduation Rates are placed in Freshman Year Success Programs
STUDENT SUCCESS PROGRAM COMPONENTS

Freshman Year Experience:
• Inspired Teaching
• Supplemental Instruction and Advising
• Peer Mentoring
• Community Building
Student Success Programs: Closing the Persistence Gap

Top Quartile: 1500 SAT  Bottom Quartile: 1050 SAT
CHANGING THE EQUATION
Incentive-based Scholarships for Economically Disadvantaged Students
UNIVERSITY LEADERSHIP NETWORK

500 Students Started With Predicted 33% Four-Year Graduation Rate
UNIVERSITY LEADERSHIP NETWORK
Leadership Training & Internships
UNIVERSITY LEADERSHIP NETWORK
Campus & Community Partners
UNIVERSITY LEADERSHIP NETWORK

92% Persisted to Sophomore Year
82% Persisted to Junior Year
65% Expected to Graduate in 4 years
UT AUSTIN
FOUR-YEAR GRADUATION RATE

51% 61% 70%

2010 2015 2017
RECONSIDERING THE INSTITUTIONAL MESSAGE:
EVERY STUDENT GRADUATES
QUESTIONS?