2020 APLU Academic Programs Staff Workshop
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UNDERSTANDING LEADERSHIP: THE INFLUENCE OF GENDER, HOME BACKGROUND AND FIRST-GENERATION STUDENTS ON THE COLLEGE CULTURE

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Our goals and objectives around this presentation...

1. Share some observations and trends around Purdue student enrollments and success (focus on Gender and 1st Gen trends);

2. Pose some questions, share concerns, and consider some opportunities;

3. Participate in post-presentation discussion and sharing amongst the session attendees.
Purdue College of Agriculture Undergraduate Student Enrollments, Fall 2001-19

2,841 TOTAL UNDERGRADUATES (Fall 2019):
Residence: 75% Indiana, 19% Out-of-State, 6% Intl.
Gender: Female 62%, Male 38%
Diversity: Majority 91%, URM 9%
Home Background

- Rural - Farm: 34%
- Rural - Non-Farm: 21%
- Town or Small City: 18%
- Suburban: 18%
- Urban: 9%

Residency

- Indiana Resident: 1995 (78.8%)
- Out of State Resident: 419 (16.5%)
- International: 107 (4.2%)

Race/Ethnicity (International not included)

- African American; Black
- Hispanic; Latino(a)
- Asian American; Pacific Islander
- Two or More Races
- Other

Gender Distribution (n=2433)

- Male: 19% (36.5%)
- Female: 62.8%
- Other: 8%
A NATIONAL VIEW AND IN THE NEWS

• In 1970, 58% of college students were men; in 2010, 57% were women, according to the National Center for Education Statistics.

• From 2006 to 2015, the number of women with college degrees rose by about 9.3 million – almost 50% more than the 6.2 million increase for men. Similarly, about 60% of the 9.1 million increase in college educated workers were women, 40% men.

Forbes -Feb 28, 2017 - The New Gender Gap From 'College For All'
Student Enrollment, Engagement & Success: Gender

Women's share of S&E bachelor's degrees, by field: 2000–15

Student Enrollment, Engagement & Success: Gender

Agricultural Sciences BS Graduates (2000 - 2015) by Gender % (NSF.gov)

## Student Enrollment, Engagement & Success: Gender

<table>
<thead>
<tr>
<th>Title</th>
<th>Source</th>
<th>Date</th>
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<tbody>
<tr>
<td>“Without any fear for the future, boys have given up their ambition.”</td>
<td><em>The Guardian</em>, 3 July 2010</td>
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<tr>
<td>“Why Do So Many Boys Not Care About School?”</td>
<td><em>PBS</em>, Jan. 2011</td>
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<td>“Boy crisis threatens America’s future with economic, health and suicide risks”</td>
<td><em>USA Today</em>, 7 Apr. 2019</td>
<td></td>
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<tr>
<td>“Concern Over Gender Gaps Shifting to Boys.”</td>
<td><em>Education Week</em>, 10 Mar. 2006</td>
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# 2019 Indiana High School Graduation Rates

### Student Demographic

<table>
<thead>
<tr>
<th>Student Demographic</th>
<th>Cohort, n</th>
<th>Graduates, n</th>
<th>Percent Graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>42,120</td>
<td>37,636</td>
<td>89.4%</td>
</tr>
<tr>
<td>Male</td>
<td>43,075</td>
<td>36,732</td>
<td>85.3%</td>
</tr>
</tbody>
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Indiana Department of Education  [www.doe.in.gov](http://www.doe.in.gov)

College Readiness Report & College Completion Report Indiana Commission of Higher Education  [www.in.gov/che/](http://www.in.gov/che/)
Student Enrollment, Engagement & Success: Gender

Indiana Secondary Ag Ed Enrollment

Year | Total Ag Education | Non-Consumed Ag Ed | Female Ag Ed | Male Ag Ed
--- | --- | --- | --- | ---
2014-15 | 20000 | 6000 | 9000 | 5000
2015-16 | 25000 | 7000 | 10000 | 8000
2016-17 | 22000 | 5000 | 9000 | 8000
2017-18 | 21000 | 4000 | 9000 | 8000

Legend:
- # Non-Consumed Ag Ed
- # Female Ag Ed
- # Male Ag Ed
- Total Ag Education
Student Enrollment, Engagement & Success: Gender

IN FFA Leadership Camp Attendance


- Female
- Male
Student Enrollment, Engagement & Success: Gender

Indiana FFA District Officers

% F  % M

04-05  05-06  06-07  07-08  09-08  10-09  11-10  12-11  13-12  13-14  14-15  15-16  16-17  17-18  18-19
In April 2019, we held the “Gender Gap Conference” and presented this data. Indiana FFA was a participant. In June 2019 they appointed the first male IN FFA State President in over a decade.
Student Enrollment, Engagement & Success: Gender

Purdue Undergraduate Enrollments, % Female

- 2013: 80%
- 2014: 82%
- 2015: 84%
- 2016: 86%
- 2017: 88%
- 2018: 90%
- 2019: 92%

Legend:
- Purdue University
- College of Agriculture
- Dept. Animal Sciences
Student Enrollment, Engagement & Success: Gender (Purdue)

Purdue Agriculture: Study Abroad Participation (40% Sr)

- **2011-12**: 64% Male, 36% Female
- **2012-13**: 64% Male, 36% Female
- **2013-14**: 64% Male, 36% Female
- **2014-15**: 64% Male, 36% Female
- **2015-16**: 64% Male, 36% Female
- **2016-17**: 77% Male, 23% Female
- **2017-18**: 77% Male, 23% Female

Legend:
- **Male**
- **Female**
**Student Enrollment, Engagement & Success: Gender (Purdue)**

**Purdue Agriculture: 4- and 6-Year Graduation Rates**

<table>
<thead>
<tr>
<th>Year</th>
<th>4-Year, %</th>
<th>6-Year, %</th>
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<tbody>
<tr>
<td>Fall 08</td>
<td>52.0</td>
<td>75.7</td>
</tr>
<tr>
<td>Fall 09</td>
<td>53.7</td>
<td>76.1</td>
</tr>
<tr>
<td>Fall 10</td>
<td>55.8</td>
<td>77.3</td>
</tr>
<tr>
<td>Fall 11</td>
<td>59.5</td>
<td>79.0</td>
</tr>
<tr>
<td>Fall 12</td>
<td>66.0</td>
<td>80.8</td>
</tr>
<tr>
<td>Fall 13</td>
<td>65.5</td>
<td>82.8</td>
</tr>
<tr>
<td>Fall 14</td>
<td>70.3</td>
<td></td>
</tr>
<tr>
<td>Fall 15</td>
<td>71.8</td>
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**College of Agriculture Overall**
Challenges Facing First-Generation Student Success

“Often, first-generation (FG) students begin their college journey without the same support and preparedness that their continuing generation (CG) peers have, leading to lower success rates on a number of scales. In fact, according to a recent study by ACT (2018), only 56% of FG students had earned a degree or were still enrolled in college six years after beginning their advanced education, compared to 74% of students who had at least one parent with at least a bachelor’s degree.

“In addition, FG students often attend college in a manner that puts them at a higher risk of not persisting or completing a degree. For example, full-time and residential students at four-year institutions have higher degree completion and persistence rates compared to part-time and commuter students respectively. FG students are both less likely to live on campus than their continuing-generation peers and nearly half of FG students enroll part-time a rate 10 percentage points higher than their CG counterparts. This higher likelihood of non-academic risk factors for FG students suggests lower engagement and continuance when completing a degree.”

Percentage First-Generation Undergraduates, Fall 2019

Purdue University: 20%
Student Enrollment, Engagement & Success: Purdue 1st-Gen

Purdue Undergraduate Enrollments, % First Generation

- 2013: Purdue University - 20, College of Agriculture - 25, Dept. Animal Sciences - 30
- 2014: Purdue University - 20, College of Agriculture - 30, Dept. Animal Sciences - 35
- 2015: Purdue University - 25, College of Agriculture - 30, Dept. Animal Sciences - 35
- 2016: Purdue University - 25, College of Agriculture - 30, Dept. Animal Sciences - 35
- 2017: Purdue University - 25, College of Agriculture - 30, Dept. Animal Sciences - 40
- 2018: Purdue University - 25, College of Agriculture - 30, Dept. Animal Sciences - 35
First-Gen Students are more likely...

- To have Purdue as their first choice institution (85.8% vs. 78.2%);
- To commute regularly to campus (13.6% vs. 5.7%);
- To work 20-plus hours per week (11% vs 4.4%);
- To complete an academic experience with a diversity focus (51.8% vs. 43.8%);
- To increase their student loan amount to meet expenses (30.5% vs. 16.7%);
- To be concerned about accumulated educational debt (53.1% vs. 34.3%).
First-Gen Students are less likely...

- To take AP Exams (67.9% vs. 77.3%);
- To join Campus Organizations (72.2% vs. 82.6%);
- To be involved in Student Organizations (77.7% vs. 83.3%);
- To live in Residence Halls (69.8% vs. 86.5%);
- To complete a Living-Learning Community (13.3% vs. 21.6%);
- Complete an Honors Program (5.9% vs. 17.2%);
- To assist faculty with Research (19.9% vs. 25.2%).
Compared with their Continuing-Gen Peers, First-Gen Students...

- Lower Average Semester GPA (2.96 vs. 3.15, Fall 2018);
- Lower Average Cumulative GPA (3.01 vs 3.20, Fall 2018);
- Earn on average less credit hours/semester (14.5 vs. 14.8; Fall 2018);
- Have higher % DFW grades (11.1% vs. 6.7%, Fall 2018);
- Less likely to Study Abroad (18.8 vs. 21.6%, 2017-18 Academic Year);
- Underrepresented in Organization Leadership Roles (approx. 16.2% when they make up 20% of Purdue student body);
- Less likely to participate in an Internship (23.1% vs. 27.5%);
- As an alum, more likely to stay and work in Indiana (65.7% vs. 57.1%);
- Have lower adjusted starting salary ($51,854 vs. $57,840);
- Less likely to seek post-graduate education (19.6% vs. 21.3%).

First-Gen and Continuing-Gen students are almost equally satisfied, and feel that they belong at Purdue University.
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