Honors Program Student Cohort Analysis

AY15-AY19
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Scope
This report analyses the demographic makeup, academic performance, and retention of first-year honors students from 2015 through 2019 using data from MAUI. The report also looks briefly at students’ self-reported experiences of Honors and the University from a survey conducted largely in December of 2019.

Use
As the Honors Program has transitioned to a formal application process for joining, program staff have more ability to shape the makeup of each first-year cohort. Given this, it is important to monitor the demographic makeup and academic performance of each cohort to ensure application processes are aligning with Program goals. Relevant program goals might include academic rigor, diversity and inclusion, and retention within the Honors Program. Understanding students’ self-reported experiences is especially important for shaping retention, and relevant survey results will be explored more in depth in a separate report. Retention receives a separate section in this report to analyze the relative retention of honors students by groups (ex: how many men remain members of the honors program for four years versus women, etc).

Moving Forward
Regular, systematic use of data like these can function as timely feedback for the Program. As the Program continues to make, work towards, and reach goals, data like these can provide accountability and serve as measures of success for new initiatives.
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Data Sources and Methodology

MAUI Data

Using Students by Program of Study to pull race, sex, first generation status, transfer credit, UI first session, honors first session, high school GPA, ACT composite, home county, home state, semester by semester data for enrollment, UI Cumulative GPA, and total hours for honors students for each major semesters (fall and spring) from Fall 2015 through Spring 2020. Combined these

Race broken down for purposes of this report as White, Asian, Black (or African American), Latino (and Hispanic), International Students (listed in MAUI as “nonresident alien”), and “All Others” (mostly made up of multi-racial students and those whom the University does not have race reported).

Defined first-year honors student for each fall semester as those students whose UI first session matched their Honors first session and who had less than 25sh of transfer credit (to exclude most transfer students).

Honors Community Survey 2019

Sent via email to 2,996 honors students on December 12, 2019. Follow ups sent to incompletes one week later and again in early January, during break.

8.4% full response rate, 9.5% partial response rate

330 students started the survey
- 46 blank responses
- 32 partially complete responses

252 full responses

Of those 252 full responses:

81.7% white
7.5% first generation
47% first year students
21% second year
17% third year
15% fourth year
**Student Demographics by Cohort**

**First Generation Status**

- **2015 Cohort**: First Gen, 17.27% Continuing Gen, 82.73%
- **2016 Cohort**: First Gen, 15.35% Continuing Gen, 84.65%
- **2017 Cohort**: First Gen, 15.7% Continuing Gen, 84.3%
- **2018 Cohort**: First Gen, 12.61% Continuing Gen, 87.39%
- **2019 Cohort**: First Gen, 10.28% Continuing Gen, 89.72%

**Racial Identity**

- **2015 Cohort**: White, 77%
- **2016 Cohort**: White, 79%
- **2017 Cohort**: White, 78%
- **2018 Cohort**: White, 77%
- **2019 Cohort**: White, 82%

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**TAKEAWAY:** The last two Honors first-year cohorts have seen declines in the percentage of first-generation students, with the 2019 cohort less than half the proportion of the corresponding University class.

**TAKEAWAY:** The most recent Honors first-year cohort, and the first since introducing the application, was the first cohort in five years to see a significant increase in the percentage of white students, as well as declines in Latino, Black, and international students.

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*Source: stories.uiowa.edu/class-2023-numbers, stories.uiowa.edu/class-2022-numbers*
**Urban/Rural Makeup of Student’s Home County**

**Understanding the graphs:** These graphs tell us about the urban/rural makeup of student’s home counties based on Census data. Looking at the 2016 Cohort graph below, the first bar tells us that about 38% of students in that cohort come from a county whose population the Census defined as between 0% and 10% rural, meaning between 0 and 10% of that county’s population lived in a rural area.

**Comparing the graphs:** Comparing the overall distribution or shape of the graphs between years can show us changes in the urban/rural makeup of cohorts. For example, a graph heavily weighted on the left signifies a cohort largely from more urban areas. If a later graph is less heavily weighted on the left, it means that this new cohort included students from more rural areas.

**Mean of Each Cohort**

The numbers below represent the average rural makeup of each cohort. Higher numbers represent a cohort with more students from more rural counties.

- 2015: 17.49
- 2016: 19.97
- 2017: 18.83
- 2018: 17.64
- 2019: 17.73

**TAKEAWAY:** The 2018 and 2019 cohorts represent a slight decline in the rural makeup of Honors first-year students compared to the previous two years, but the difference in not significant.
### Home State

All percentages are of students from the United States.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage from Iowa</th>
<th>Percentage from Bordering States</th>
<th>Percentage from Out-of-State</th>
<th>States Represented</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2016 Cohort</strong></td>
<td>53.54%</td>
<td>37.44%</td>
<td>46.46%</td>
<td>31 States Represented</td>
</tr>
<tr>
<td><strong>2017 Cohort</strong></td>
<td>58.09%</td>
<td>34.77%</td>
<td>41.91%</td>
<td>28 States Represented</td>
</tr>
<tr>
<td><strong>2018 Cohort</strong></td>
<td>56.61%</td>
<td>34.49%</td>
<td>43.4%</td>
<td>27 States Represented</td>
</tr>
<tr>
<td><strong>2019 Cohort</strong></td>
<td>48.51%</td>
<td>38.29%</td>
<td>51.49%</td>
<td>32 States Represented</td>
</tr>
</tbody>
</table>

**TAKEAWAY:** The 2019 Cohort, the first to enter under the new application process, had significantly fewer students from Iowa and significantly more students from out-of-state as compared to the 2018 and 2017 cohorts.

<table>
<thead>
<tr>
<th>Year</th>
<th>Female</th>
<th>Male</th>
<th>Prefer not to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2016 Cohort</strong></td>
<td>61.29%</td>
<td>38.39%</td>
<td>0.33%</td>
</tr>
<tr>
<td><strong>2017 Cohort</strong></td>
<td>64.71%</td>
<td>35.03%</td>
<td>0.26%</td>
</tr>
<tr>
<td><strong>2018 Cohort</strong></td>
<td>65.41%</td>
<td>34.03%</td>
<td>0.56%</td>
</tr>
<tr>
<td><strong>2019 Cohort</strong></td>
<td>65.82%</td>
<td>33.97%</td>
<td>0.21%</td>
</tr>
</tbody>
</table>

**TAKEAWAY:** The proportion of women to men in each cohort has not changed substantially in several years.

Compare to University Class of 2022: 58.2% from Iowa, 43 States Represented
Compare to University Class of 2023: 55.7% from Iowa, 42 States Represented
Student Incoming Academics by Cohort

**Composite ACT Scores**

University wide average ACT has been relatively steady during this period, varying only between 25.3 and 25.6

**High School GPA**

**TAKEAWAY:**
The average ACT score **rose significantly with the 2019 Cohort** at the introduction of the application process after several years of little change in average cohort score. The range of scores also reduced, with the 25th percentile score increasing more sharply than the average.

**TAKEAWAY:**
The average high school GPA **rose significantly with the 2019 Cohort** at the introduction of the application process after several years of rising slowly.
Student Academic Performance at Iowa by Cohort

First Semester UI GPA

Proportion of Cohort with High and Low 1st UI GPA

**TAKEAWAY:**
While the 2019 Cohort’s average first semester UI GPA was similar to previous cohorts, the range of GPAs for the Cohort widened. The percentage of students with a first-semester GPA above a 3.89 increased significantly, while the percentage below 3.34 increased slightly.

**Significance of Changes**
2019’s average UI GPA is significantly larger than 2018’s, but is not significantly different from 2017’s. The significant difference between 2018 and 2019 is equal to only 0.048. Data from future cohorts might help clarify the trend in first semester UI GPA and the effect the application process might be having on shaping student academic performance.
Retention by Cohort

Interpreting the Graph
This graph displays the percentage of students in each cohort who were both marked as members of the Honors Program and marked as “Enrolled” in the university each semester. It tracks a rough percentage of how many students in each cohort persist on to each successive semester but does not tell us why students are no longer members of the Honors Program. It also does not indicate how many students graduated at any point.

Some Numbers for the 2015 Cohort:
The two largest semester-to-semester reductions in the 2015 Cohort came between the first and second year (24% reduction) and between the second and third year (31%).

33% of the 2015 Cohort were still enrolled and members of the Honors Program at the end of their fourth year.
Retention by Race

**TAKEAWAY:**
While slightly more White students than nonwhite students persist in the Honors Program from their first semester to their eighth, the overall racial makeup of the 2015 Cohort remained largely consistent across time.

*Note on Racial Groups Used*
To simplify analysis, this graph collapses all groups into White and nonwhite. While it is generally not good to lump various groups into an amorphous “other,” results do not seem to change dramatically between non-white racial groups in this case and comparing only two groups makes the results more easily digestible.

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Retention by First Generation Status

**TAKEAWAY:**
First-Generation students in the 2015 Cohort were significantly less likely to stay in the Honors Program through their eighth semester compared to Continuing Generation students. Across time, the Cohort included fewer and fewer first-generation students both in gross and proportionally.

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**Racial Makeup of 2015 Cohort Across Time**

- **34%** of White students in the 2015 Cohort were still members of the Honors Program at the end of their fourth year.
- **31%** of nonwhite students in the 2015 Cohort were still members of the Honors Program at the end of their fourth year.

**First-Generation Makeup of 2015 Cohort Across Time**

- **35%** of Continuing Generation students in the 2015 Cohort were still members of the Honors Program at the end of their fourth year.
- **23%** of First-Generation students in the 2015 Cohort were still members of the Honors Program at the end of their fourth year.
Retention by Sex

Sex Makeup of 2015 Cohort Across Time

29% of men in the 2015 Cohort were still members of the Honors Program at the end of their fourth year.

35% of women in the 2015 Cohort were still members of the Honors Program at the end of their fourth year.

TAKEAWAY:
The proportion of men in the 2015 Cohort shrunk slightly each year. While 35% of women in the cohort persisted in the Program through the end of their fourth year, 29% of men did the same.

Note on Sex Categories
The University’s record keeping system primarily used male and female categories over this period. For this reason, nonbinary students are not included in this analysis, as this group was recorded only sporadically and in small numbers.
**Student Experiences by Cohort**

**Interpreting Survey Results**

With only a single survey at one point in time, these survey results do not capture change over time. Therefore, we cannot differentiate between intra-Cohort change (one cohort moving from first year, to second year, and so on) and actual difference in experiences between Cohorts (ex: the 2019 Cohort is having a better experience than the 2018 Cohort).

Because of this, we should be careful to not jump to conclusions based on differences between Cohort survey results in this report. These numbers represent rough comparisons at this point, but are useful in at least two ways:

1. The numbers serve as a baseline. Future survey results, combined with these results, will be able to disambiguate between intra-cohort change and cohorts’ different experiences. This is one reason why consistent survey administration is useful.
2. The numbers still tell us something. While comparing between Cohorts within this data cannot tell us conclusively about differences between the Cohort’s experiences, the numbers do give us a general sense of honors student’s experiences.

**Sense of Community**

**2019 Cohort** (First Year)

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16%</td>
<td>13%</td>
<td>66%</td>
</tr>
</tbody>
</table>

**2018 Cohort** (Second Year)

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34%</td>
<td>12%</td>
<td>46%</td>
</tr>
</tbody>
</table>

**Survey item:**

“I feel a sense of community in the Honors Program.”

**TAKEAWAY:**

Significantly fewer second year students agree that they feel a sense of community within the Honors Program. With only these results, it is unclear if this difference is driven primarily by being a second-year student or by having generally fewer good community building experiences within Honors.
Sense of Belonging

**2019 Cohort** (First Year)

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>61%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**2018 Cohort** (Second Year)

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>63%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Survey item:
“I feel like I belong in the Honors Program.”

TAKEAWAY:
Slightly fewer second year students agreed that they feel a sense of community in the Honors Program, but the difference was not significant.

Honors Identity

**2019 Cohort** (First Year)

<table>
<thead>
<tr>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>52%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Disagree, 4%

**2018 Cohort** (Second Year)

<table>
<thead>
<tr>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>61%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Survey item:
“I identify as an Honors Student.”

TAKEAWAY:
A similar percentage of first- and second-year students say they identify as an Honors Student.
Staff Care About Success

**2019 Cohort** (First Year)
- **Agree**, 73%
- **Strongly Agree**, 18%
- **Disagree**, 10%

**2018 Cohort** (Second Year)
- **Agree**, 71%
- **Strongly Agree**, 10%
- **Disagree**, 20%

Survey item:
“The Honors Program Staff care about my success.”

**TAKEAWAY:**
Second-year students are slightly less likely to say that the Honors Program Staff care about their success, but overall high numbers of both groups agree.

Academic Advice

**2019 Cohort** (First Year)
- **Disagree**, 35%
- **Neither**, 22%
- **Agree**, 32%
- **Strongly Disagree**, 5%

**2018 Cohort** (Second Year)
- **Disagree**, 39%
- **Neither**, 20%
- **Agree**, 20%
- **Strongly Disagree**, 17%

Survey item:
“There is an Honors Staff member I feel comfortable going to for academic advice.”

**TAKEAWAY:**
Fewer than half of first- and second-year students say there is a staff member they are comfortable going to for academic advice. More first-year then second-year students say they do have a staff member to go to for academic advice.