Analysis of Differential Characteristics of Those who Leave Without a Degree and Those who Attain a Degree

Data Summit
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Purpose and context of project

- Gain insight into what happens to our students once they leave the University of Hawai‘i and enter the workforce by combining UH student data with state and federal wage data.
- Look at the impact of graduating vs not-graduating.
- Examine which factors are important in the differential in wages, and assess the statistical differences between the two groups.
Students who graduated with an undergraduate degree from UH in academic years 2008 to 2010.

- Excludes students who previously earned a higher degree.
- Excludes students who are still enrolled anytime three years after graduation.
- Excludes early admits, international exchange, and unclassified students.

One outcome per student per year. If a student earned more than one degree, the higher degree was used.
Graduates

18,426
Total Graduates

11,947
Excluding Still Enrolled, Higher Previous Degree, or No Match

3,398
Number Employed All 4 Quarters in All 5 Years

28.4%
% Employed
Leavers

- Students pursuing an undergraduate degree at UH but left the system before graduating and did not return at any later time. Last enrolled academic year was 2008 to 2010.

- Excludes students who earned a certificate of achievement or higher degree any time prior.

- Excludes students who enrolled elsewhere or earned a degree after leaving UH.

- Excludes early admits, international exchange, and unclassified students.
Leavers

21,140  
Total Leavers, Excluding Previous Degree

15,933  
Excluding Enrolled or Earned Degree Elsewhere

3,566  
Number Employed All 4 Quarters in All 5 Years

22.4%  
% Employed
Data Sources

UH student data
- Major
- Classification of instructional program (CIP) category (e.g., CIP codes beginning with 13 are education-related majors)
- Degree type (e.g., Associate, Bachelor’s, etc.)
- Selected demographics

State unemployment insurance wage data
- Use NAICS code to categorize employers into industries. e.g., Retail Trade

Federal wage data (via FEDES)
- For federal employees, we used their agency name and occupation name to categorize their employment as either Fed Public Administration, Fed Health, or Fed Education
Data limitations and assumptions

- Labor data does not include the self-employed and those with no SSN match.
- Hours worked are not available, so we do not know wage rates, just total earnings.
- Employment data is available at the industry level, not occupation or specific employer.
- If a person had more than one employer in a given time period, the NAICS code of the employer who paid the highest wages is used, and the wage is the sum of wages from all employers.
- A person is “employed” if they have wages in all four quarters of every year.
Top 4 factors affecting students’ decision to complete or not complete college degree

1. GPA 39.0%
2. Major 25.2%
3. Degree 23.7%
4. Industry 8.0%
Median Annual Earnings - Graduates vs. Leavers

Graduates vs. Leavers

Excludes Leavers who enrolled elsewhere or earned a degree elsewhere after leaving UH.
Earnings Gap

Earning Indicator’s Importance Ranking and Changes over Time

### Completers
- **Major**
- **Degree**
- **NAICS**
- **Age**

### Leavers
- **Age**
- **NAICS**
- **Degree**
- **Major**

Year 1  | Year 2  | Year 3  | Year 4  | Year 5
---|---|---|---|---
Completers | | | | |
Leavers | | | | |
Earnings Indicators

Earning Indicator’s Importance Ranking and Changes over Time
Earnings Indicators

Students’ academic major becomes the most important factor affecting their earnings starting in the second year. Healthcare related majors had the highest annual earnings, followed by STEM, Education, and Business & Communication. By controlling for other factors, Healthcare related majors can earn $11,193 more than Arts & Humanities majors on average in the first year, and the gap increased to $29,751 in the fifth year.