Developing Impactful Public-Facing Dashboards

South Carolina Association for Institutional Research
Charleston, SC Feb. 24th - Feb. 25th, 2022
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Session Overview

- Market Research Among Peer Institutions
- Investigating Data Available
- Creating Datasets and Data Dictionaries
- Demo of Developed Dashboards
- Improving Accessibility



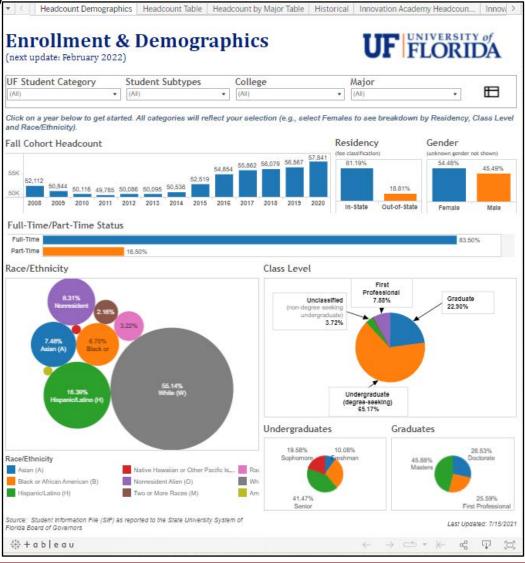
Market Research Of SEC Schools

Inconsistent among schools

- Best usability and layout within IR website
 - University of Florida
 - https://ir.aa.ufl.edu/uffacts/
 - Vanderbilt University
 - https://www.vanderbilt.edu/pie/student/

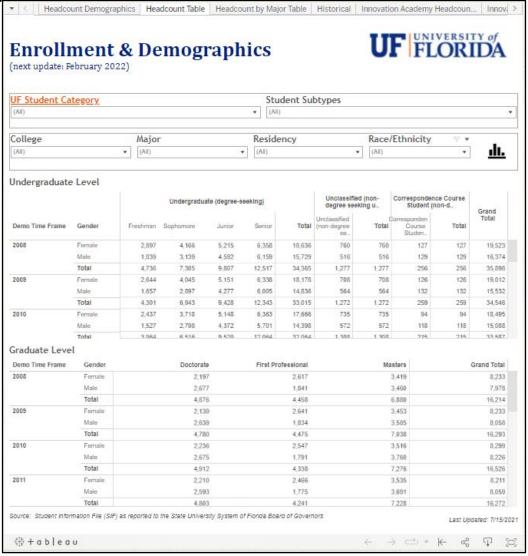


University of Florida - Enrollment



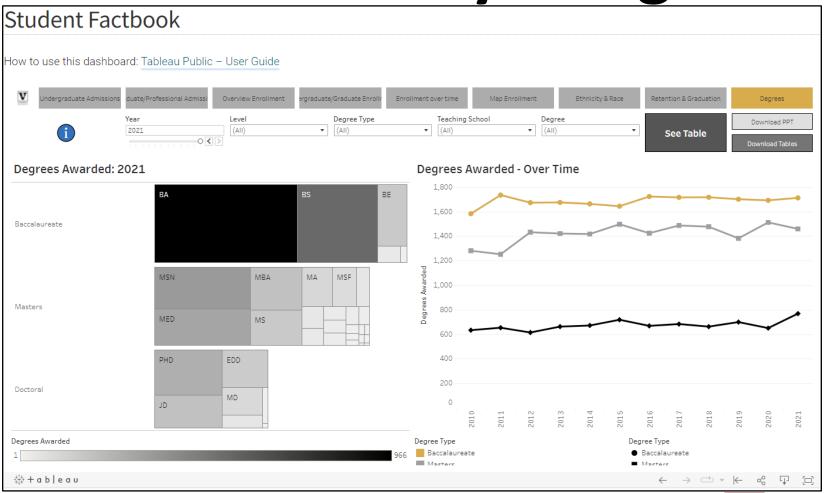


University of Florida - Enrollment

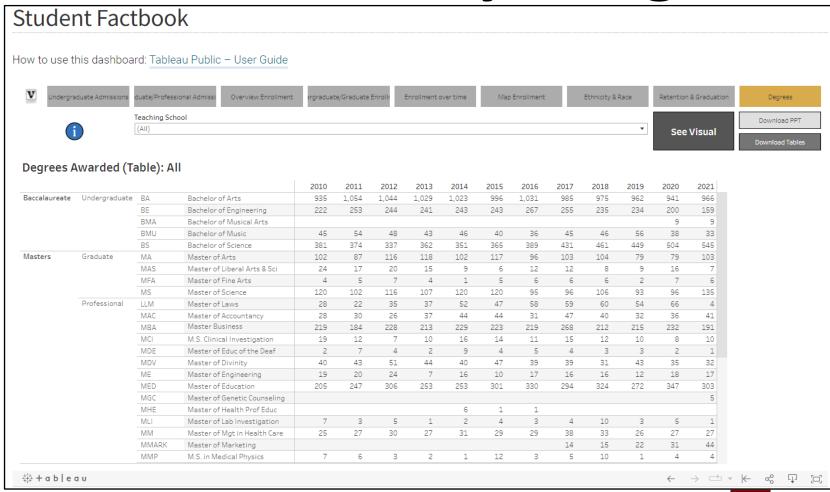




Vanderbilt University - Degrees



Vanderbilt University - Degrees





Investigating Data Available

- Current dashboard projects:
 - Student Enrollment
 - Degrees Awarded
 - Human Resources Data
- Future dashboard possibilities:
 - Admissions
 - Retention and Graduation Rates
 - Financial Aid



Student Enrollment Data Sources

Reported

• Gender, Student Level, County ID, etc.

Internal

• Student Classification, College, Program, etc.

Calculated Fields

• Race Grouping, Fall Cohort, Resident Indicator, etc.



Degrees Awarded Data Sources

Reported

• Gender, Degree Level, Race Identifiers, etc.

Internal

• College, Degree, Residency, etc.

Calculated Fields

• Academic Year, Degree Level Grouping, etc.



Human Resources Data Sources

Reported

• Rank, Primary Responsibility, Employee Status, etc.

Internal

• Department, Terminal Degree Indicator, etc.

Calculated Fields

Academic Year, Race Grouping, Term, etc.



Data Dictionaries

Public

- Inform users about variable definitions
- Dashboard variable, definition, sample value, etc.

Internal

- Inform staff about dataset development
- Original variable name, source, source dataset location, etc.



Data Dictionaries - Public

| Dashboard Variable | Definition | Data Type | Source | Sample | |
|--------------------|--|-----------|---|--------------------------------------|--|
| Academic Year | Grouping of academic terms (fall-summer) when degree was awarded | YYYY-YY | OIRAA | 2016-17 | |
| Campus | Signifies ownership by one of the eight campuses of USC. Campus is determined by the program in which the degree was awarded | Character | OIRAA defined by CHE | Aiken | |
| College | College is determined by the program in which the degree was awarded | Character | UofSC Banner ODS | College of Engineering and Computing | |
| Degree | Defines the degree that a student was awarded | Character | UofSC Banner ODS | Bachelor of Arts | |
| Degree Type | Grouping of SC Commission on Higher Education reported degree level into: Undergraduate, Masters, Professional, Specialist, Doctoral | | OIRAA | Masters | |
| Gender | Reported gender of degree recipient at time of degree awarded | Character | SC Commision on Higher Education Report | Male | |
| Race Group | Grouping of SC Commission on Higher Education reported race identifiers into Non-Resident Alien, Person of Color, White, Unknown | Character | OIRAA | White | |
| Residency | Defines a student's South Carolina legal residency status at time of degree awarded | Character | UofSC Banner ODS | Resident | |
| Semester | Semester description when degree was awarded | Character | OIRAA defined by SC Commision on Higher Education | Spring | |
| Term | Term description including semester and calendar year when degree was awarded | Character | OIRAA | Spring 2013 | |
| Year | Calendar year when degree was awarded | YYYY | SC Commision on Higher Education Report | 2014 | |
| Degrees Awarded | Count of degrees awarded | Numeric | OIRAA | 4 | |



Data Dictionaries - Internal

| Dashboard Variable | Definition | Data Type | Source | Sample | Dataset Location | Original Variable |
|--------------------|---|-----------|---|--------------------------------------|---------------------|---|
| ACADEMIC_YEAR | Grouping of academic terms (fall-summer) when degree was awarded | YYYY-YY | OIRAA | 2016-17 | K:\Dept\IPA\00 Data | calculated field based on GRADUATION_TERM_CODE_DESC |
| CAMPUS | Signifies ownership by one of the eight campuses of USC. Campus is determined by the program in which the degree was awarded | Character | OIRAA defined by CHE | Aiken | K:\Dept\IPA\Sophie | CAMPUS_DESC |
| COLLEGE | College is determined by the program in which the degree was awarded | Character | UofSC Banner ODS | College of Engineering and Computing | K:\Dept\IPA\Sophie | COLLEGE_DURING_ENROLLMENT_DESC |
| DEGREE | Defines the degree that a student was awarded | Character | UofSC Banner ODS | Bachelor of Arts | K:\Dept\IPA\Sophie | DEGRE_DESC |
| DEGREE_TYPE | Grouping of SC Commision on Higher Education reported degree level into: Undergraduate, Masters, Professional, Specialist, Doctoral | Character | OIRAA | Masters | K:\Dept\IPA\00 Data | calculated field based on DEGREE_LEVEL_CODE |
| GENDER | Reported gender of degree recipient at time of degree awarded | Character | SC Commision on Higher Education Report | Male | K:\Dept\IPA\00 Data | CHE_GENDER |
| RACE_GROUP | Grouping of SC Commision on Higher Education reported race identifiers into Non-Resident Alien, Person of Color, White, Unknown | Character | OIRAA | White | K:\Dept\IPA\00 Data | calculated field based on RACE |
| RESIDENCY | Defines a student's South Carolina legal residency status at time of degree awarded | Character | UofSC Banner ODS | Resident | K:\Dept\IPA\00 Data | ODS_RESIDENCY_IND |
| SEMESTER | Semester description when degree was awarded | Character | OIRAA defined by SC Commision on Higher Education | Spring | K:\Dept\IPA\00 Data | GRADUATION_SEMESTER |
| TERM | Term description including semester and calendar year when degree was awarded | Character | OIRAA | Spring 2013 | K:\Dept\IPA\00 Data | GRADUATION_TERM_CODE_DESC |
| YEAR | Calendar year when degree was awarded | YYYY | SC Commision on Higher Education Report | 2014 | K:\Dept\IPA\00 Data | CHE_REPORT_YEAR |
| DEGREES_AWARDED | Count of degrees awarded | Numeric | OIRAA | 4 | | COUNT(USCID) |
| USCID | Unique identifier for USC students | Character | UofSC Banner ODS | X91483045 | K:\Dept\IPA\00 Data | USCID |
| DEGREE_LEVEL_CODE | The award conferred upon the student by the institution for the successful completion of a given curriculum or program. | Numeric | SC Commission on Higher Education Report | 9 | K:\Dept\IPA\00 Data | CHE_DEG_LEVEL |
| DEGREE_LEVEL | The award conferred upon the student by the institution for the successful completion of a given curriculum or program. | Character | SC Commision on Higher Education Report | Masters | K:\Dept\IPA\00 Data | calculated field based on CHE_DEG_LEVEL |



OIRAA Dashboards

Student Enrollment

- Overview
- Geographic Enrollment
- Trends

Degrees Awarded

- Overview
- Trends

• HR Data

- Workforce Trends
- Faculty
- Staff



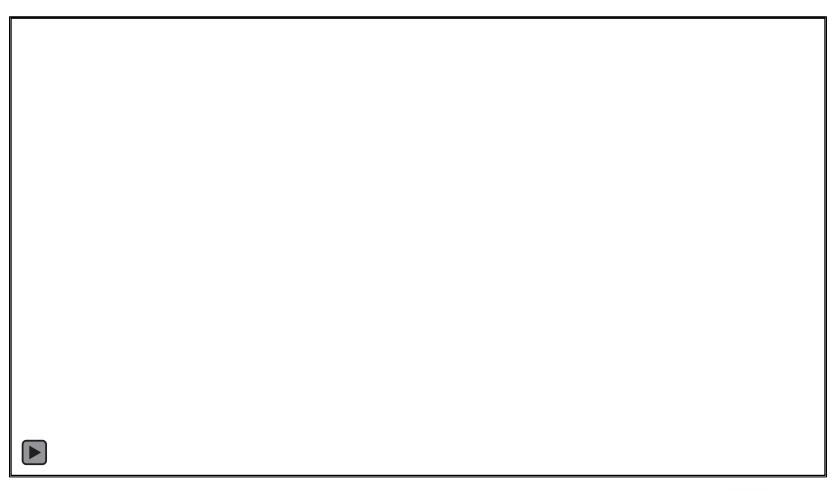
Improving Accessibility

- Web Content Accessibility Guidelines (WCAG) Principles
 - Perceivable, Operable, Understandable, Robust
- Logical and intuitive hierarchy
 - Dashboard summary
 - Clear titles and captions
 - Related items grouped together
- Collaboration across offices
 - Laurie Barnhill, Associate Director of Digital Strategy
 - Kim Hodges, Director of Digital Accessibility





Screen Reader Test - Enrollment





THANK YOU FOR YOUR TIME

Please Feel Free To Reach Out Over Email With Any Follow-up Questions

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