Avoiding Dreadful Data Displays & Pointless Publications

Angela Henderson
Assoc. Director of Institutional Research & Effectiveness
Stetson University
ahender1@stetson.edu

Linda Rowland
Director of Institutional Research
University of North Georgia
Linda.Rowland@ung.edu

SOUTHERN ASSOCIATION FOR INSTITUTIONAL RESEARCH
SAVANNAH, GEORGIA
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Importance of Design

Why is design important?

- Campus community uses data to understand and respond to a variety of issues.
- Senior administrators use data to make important decisions.
Importance of Design

If information is misunderstood due to lack of clarity and consistency, the data are of no value.
Information Processing

Information Processing (How It Should Work)

- Exposure
- Attention
- Comprehension
- Acceptance
- Retention

Bottlenecks

- No Initiative/Motivation
- Lack of Context
- Too Many Choices
- Information is Ambiguous
- Information isn’t Comparable
- Difficult Format (Percent instead of real dollars)

Decision-Making

How can we ensure that our analyses and information are used to inform decisions?
Administrators want...

- concise and accurate analyses – a 30 second view
- clear data definitions and parameters
- conclusions and recommendations for action based on sound analysis and institutional priorities
- clear framework for decision making
- timely analyses
Make the data tell a story

- Data should show what is happening compared to a benchmark or to historical trends.

- Presenting data in isolation is generally a waste of time. Appropriate context is required to make data meaningful, but avoid giving irrelevant information.

- Use a visually appealing layout, suited for your audience.
Align data to big priorities

- Consider ways to link data to institutional planning and priorities
  - For example, include which strategic and master planning goals are supported by the data
- Consider high level initiatives on campus which might be related to data and information awareness
  - Business intelligence, data visualization, and data warehousing
Think critically

- Consider what questions are likely to be asked about the data.
- Address expected questions.
- Get input from other individuals and use multiple data sources.
- Revise data and generate new information based on changing needs of institutional leadership.
Create timely analyses

- Precision must be relative to time pressures and the magnitude of the decision.

- In many cases, a decision will be made with or without input from IR.

- To ensure data informed decision making, IR must provide reasonably accurate data that is contextually appropriate within the designated timeframe.
Putting it all together...
Provide data in a concise, easy to understand format
Example

Use graphics to enhance relevant information

UNG Admissions Funnel for Fall 2015

Prospects – 66,000
Inquiries – 16,000
Applicants – 10,900
Accepts – 7,411
Confirmed – 5,484
Enrolled – 4,881

Source: UNG Admissions

Cadet Admissions Funnel

SP 2012
209 Applicants
133 Accepts
83 Confirmed
95 Reported to FROG Week

SP 2013
143 Applicants
94 Accepts
62 Confirmed
75 Report to FROG Week

Source: UNG Admissions
Use layout to summarize data to be useful to many audiences

Quick Facts

Students (Fall 2014)
- Enrollment: 16,004
- Gender: 50% Female, 44% Male
- Full-Time: 60%
- Race/Ethnicity:
  - American Indian or Alaskan Native: 0.2%
  - Asian: 3.1%
  - Black or African American: 4.3%
  - Hispanic: 9.4%
  - Multiracial: 2.0%
  - Native Hawaiian or Pacific Islander: 0.1%
  - White: 78.7%
  - Unknown: 1.6%
- Undergraduate: 15,667 (97%)
- Associate: 6,769 (43%)
- Baccalaureate: 8,798 (57%)
- Graduate: 557 (3%)
- Countries Represented: 98
- International Students: 607
- States Represented: 46
- Georgia Counties Represented: 132

Academics
- Academic Colleges: 5
- Most Popular Majors:
  - Biology
  - Business Administration
  - Psychology
  - Criminal Justice
  - Early Childhood Education
- 6 Year Bachelor Graduation Rate (Fall 2008 cohort): 52.4%
- 3 Year Associate Graduation Rate (Fall 2011 cohort): 7.5%
- 1 Year Baccalaureate Retention (Fall 2013 cohort): 82.6%
- 1 Year Associate Retention (Fall 2013 cohort): 71.6%

Admissions
- Baccalaureate:
  - Number of Applicants: 5,570
  - Acceptance Rate: 67%
  - Percent Admitted: 54%
  - Average SAT of First-Time Freshmen: 1101
  - Average HS GPA of First-Time Freshmen: 3.54
- Associate:
  - Number of Applicants: 2,996
  - Acceptance Rate: 78%
  - Percent Admitted: 79%
  - Average SAT of First-Time Freshmen: 952
  - Average HS GPA of First-Time Freshmen: 2.99

Athletics
- Mascot: Nigel the Nighthawk
- Number of Teams: 12
- NCAA Division II
- Member of the Peachbelt Conference
- More Athletic Facilities

Corps of Cadets
- One of only 6 Senior Military Colleges in the United States
- Enrollment (Fall 2014): 796
- Gender: 13% Female, 87% Male
- Race/Ethnicity:
  - American Indian or Alaskan Native: 0.4%
  - Asian: 4.0%
  - Black or African American: 5.9%
  - Hispanic: 4.9%
  - Multiracial: 4.0%
  - Native Hawaiian or Pacific Islander: 0.1%
  - White: 80.3%
  - Unknown: 0.4%
- Acceptance Rate: 59%

Traditions
- Colors: Blue & Gold
- Bugle Calls:
  - Reveille, played every morning at 7:00am
  - Retreat to the Colors: played every afternoon at 5:00pm
- Tape: Played at midnight (2am on Fridays and Saturdays) to signal end of day
- Drill Field:
  - Located at the heart of the Dahlonega campus, the drill field plays a central role in student life.
Stetson University
2010-11 Fact Book

Full-time Undergraduates

<table>
<thead>
<tr>
<th>Age (Mean = 20.17)</th>
<th># of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 18</td>
<td>50</td>
</tr>
<tr>
<td>18 - 19</td>
<td>907</td>
</tr>
<tr>
<td>20 - 21</td>
<td>875</td>
</tr>
<tr>
<td>22 - 24</td>
<td>157</td>
</tr>
<tr>
<td>25 - 29</td>
<td>43</td>
</tr>
<tr>
<td>30 - 34</td>
<td>19</td>
</tr>
<tr>
<td>35 - 39</td>
<td>11</td>
</tr>
<tr>
<td>40 - 49</td>
<td>10</td>
</tr>
<tr>
<td>50 - 64</td>
<td>5</td>
</tr>
</tbody>
</table>

Enrollment by Class Standing

- Senior
- Junior
- Sophomore
- Freshmen

- 2002: [Colors]
- 2003: [Colors]
- 2004: [Colors]
- 2005: [Colors]
- 2006: [Colors]
- 2007: [Colors]
- 2008: [Colors]
- 2009: [Colors]
- 2010: [Colors]
2015

Combine visuals and context to create concise data displays

Pathway to Success - Fall 2008 FTIC Cohort

For every 100 entering FTIC

76 are retained to 2nd year

67 are retained to 3rd year

61 graduate within 6 years

For every 100 entering FTIC, 39 do not graduate within 6 years

21 Transfer and Graduate

12 Attain a 4 Year Degree

9 Attain a 2 Year Degree

10 Are still Enrolled

1 Enrolled at Stetson

8 Enrolled at Other 4 Year Institution

1 Enrolled at a 2 Year Institution

8 ? Are unaccounted for

The six-year completion rate for fall 2008 cohorts attending private not-for-profit institutions was 59.8%.

The overall national six-year completion rate for the fall 2008 cohort was 55%.
Use design to make data easier to use and understand.
Use infographics to relay data

Use brand colors for consistency

STETSON UNIVERSITY
FALL 2015 Census Snapshot

Student Class Level*

<table>
<thead>
<tr>
<th>Class Level</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>919 Law</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>330 Graduate</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>727 Senior</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>644 Junior</td>
<td>15%</td>
<td>85%</td>
</tr>
</tbody>
</table>

950 First Year
723 Sophomore
727 Retention of First Year to Second Year FTIC Students 77%

College/School

- Total enrollment: 4,333
- 2063 Arts & Science
- 1169 Business
- 919 Law
- 182 Music

Student Type

- All Students
- Undergraduate
- Graduate
- Law

Residency & Demographics*

- Residency:
  - 51 FL counties
  - 44 States
  - 3 Territories
  - 52 Countries

- Demographics:
  - 6% International
  - 28% Out-of-State
  - 66% In-State
  - 29% Students of color

Office of Institutional Research & Effectiveness
421 N. Woodland Blvd, Unit 8282 386.822.7255 www.stetson.edu

www.venngage.com
What **not** to do:

- Long wordy reports
- Undefined data parameters
- Output without headings, labels, or context
- Lack of context/benchmark
- Requires substantial interpretation
- Out-of-date data
- Vague
- Unformatted or inconsistent formatting
Final Thoughts

- Don’t write a lengthy narrative when a simple graph and a few bullets will suffice.
- If you had to interpret the data in one minute or less, what would be the best way?
- There is always room for improvement.
  - Perhaps document this continuous improvement for assessment and accreditation purposes. (i.e., SACS 3.3.1)
Questions and Comments