Using Data Visualizations to Tell your Student Engagement Story

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Using Data Visualizations to Tell your Student Engagement Story

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Overview

- Introductions
- Plan ahead
- Resources
- Examples of data visualizations
Outcomes

• As a result of this presentation, participants will be able to:
  • Summarize data using Pivot Tables
  • Select appropriate data visualizations
  • Describe resources for creating data visualizations
Avoiding bad visualizations:

- Is there too much information?
- Can constituents comprehend the data?
- What do I want people to know?
Chart Suggestions—A Thought-Starter

Comparison

What would you like to show?

Relationship

Composition

Distribution

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Changes in Risk Rating

Pre-survey risk

Post-survey risk

End of fall risk

High
Moderate
Low

High
Moderate
Low

100%
92%
72%
15%
85%
77%
76%
59%
16%
0%

High
Moderate
Low

#NASPA17  📩  📸  @NASPATWEETS
Plan Ahead

1. Identify Research Questions
2. Identify Data Sources
3. Merge and Clean Data
4. Identify Appropriate Data Visualization
5. Create Data Visualization
6. Solicit Feedback and Revise the Visualization
Aggregating your Data

- Select your data
- Insert > PivotTable

Creating grade reports using PivotTables:
bitly.com/weightGPA
To build a report, choose fields from the PivotTable Field List.
<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Count of ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts and Letters</td>
<td>201</td>
</tr>
<tr>
<td>Business</td>
<td>1599</td>
</tr>
<tr>
<td>Education</td>
<td>404</td>
</tr>
<tr>
<td>Engineering</td>
<td>1297</td>
</tr>
<tr>
<td>Natural Science</td>
<td>896</td>
</tr>
<tr>
<td>Social Science</td>
<td>546</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>4943</strong></td>
</tr>
</tbody>
</table>
Use **Field Settings** to change your measurement.

Creating grade reports using PivotTables: bitly.com/weightGPA
Resources

Free or inexpensive:
• MS Excel or Access
• R (rstudio.com)
• Google Drive

Vendor:
• Campus Labs
• Tableau
• IBM Cognos
• IBM Watson Analytics

Questions to consider:
• Is it ok if the raw data is public?
• Is it ok if the results are public?
• Where should the data be stored?
• How much of a learning curve is there?
Sankey Diagram

https://msu.edu/~ldlong/sankey.htm
http://bitly.com/LiveOnBeFit1415
Creating a Dashboard in MS Excel

- Select your data
- Insert > Press drop-down arrow under PivotTable > Select PivotChart
- Insert “slicers” to filter the data

Video demonstration: bitly.com/MSExcelDB
Dashboards in R

https://ldlong.shinyapps.io/Grade_Distribution/
Dashboards in R

Tutorial on using Shiny App:
http://shiny.rstudio.com/
Eight Essential Elements for Effective Information-Sharing

1. Authenticity
2. Know Your Audience
3. Present User-Friendly Information
4. Use High-Quality Visuals
5. Choose Your Outlets Wisely
6. Do not become “stale”; Nobody likes “Old News”
7. Make information actionable
8. Appreciate the importance of following up.

The University of Albany

THE UALBANY STUDENT AT A GLANCE

WHAT STUDENTS SAY

Lack of sleep is one of their major stressors.

If you could start over again, would you still choose UAlbany?

65% said YES

WHO OUR STUDENTS ARE

- 2% are veterans.
- 9% identify as LGBT.
- 30% of students say they are responsible for 76-100% of their college expenses.
- 23% of students are first generation college students.

WHAT STUDENTS DO

- 50% study more than 10 hours per week.
- 60% live on campus.
- 95% use their UAlbany email account.
- 80% prefer to study alone.
- 63% are a member of at least one student group.
- 48% change their major at least once.

THE UALBANY STUDENT AT A GLANCE

WHAT STUDENTS PLAN FOR THE FUTURE

32% of students plan to work in the private sector while 10% plan to work for non-profits.

- 48% of Seniors are actively seeking employment.
- 60% of seniors have had either an internship or employment in their field of interest prior to graduating.
- 30% have utilized on-campus job fairs.
- 42% of students expect to earn between $30-50K their first year of employment.
- 56% of students plan to attend graduate or professional school immediately.

DATA SOURCES

EIR: respondents to the NASPA Consortium-Campus Center & Programming: Student Survey administered electronically through Campus Labs between February 13 and April 16, 2013. 67% respondents to the NASPA Consortium: Campus Recreation: Student Survey administered electronically through Campus Labs between February 13 and April 26, 2013. LIR: respondents to the NASPA Consortium: Career and Personal Fulfillment: Student Survey administered electronically through Campus Labs between February 13 and April 26, 2013.
What’s your Story?

• What story would you like to tell?
• What data is available?
• What technical expertise is available in your office?
• Who is your audience?
• Is the information sensitive?
Thank you for joining us today!

Please remember to complete your customized online evaluation following the conference.

See you in Philly in 2018!