

OIRSA



LEHIGH
UNIVERSITY

Office of Institutional Research & Strategic Analytics

Supporting Academic Departments with Custom Built Dashboards

2020 Analytics Day - June 11th 2020

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Supporting departments using Tableau

Historical context:

- Static reports designed to only address a few research questions
 - Limited follow-up analysis or exploration of the data on the requester's end
 - Limited the impact and usability of the data being presented
- Sitting on pockets of data not being fully utilized
 - Course evaluations
 - Student survey results
 - Course-level analysis
- Democratizing access to data across departments
 - Departments would be dependent on other offices to provide data for annual review process
 - Some departments would use whatever source of information they had available

Supporting departments using Tableau: Examples

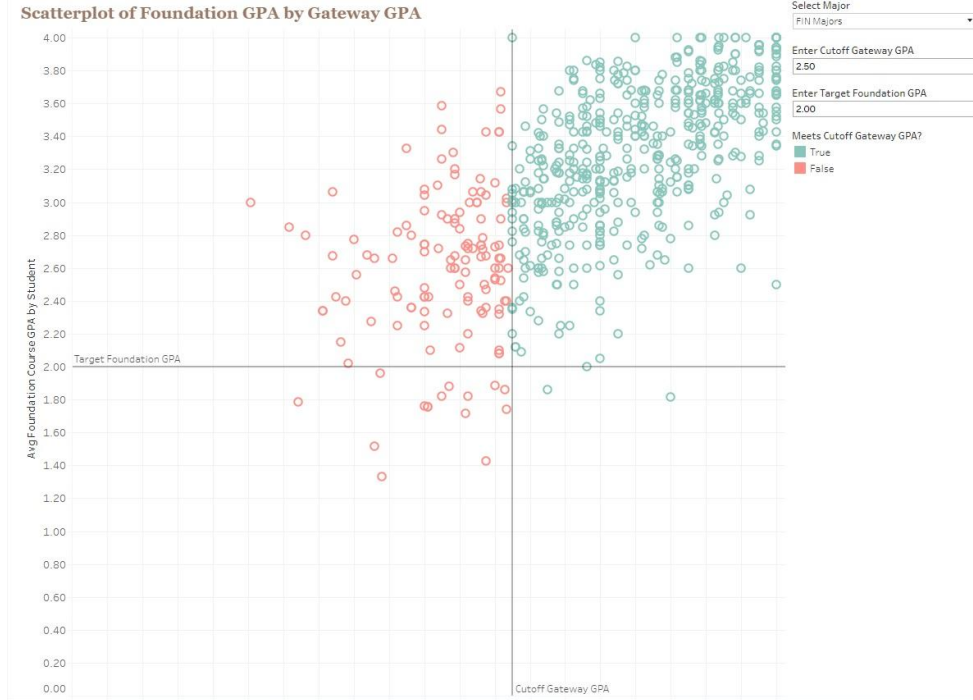
Tableau as a solution:

- Creative ways for users to ask their own follow-up questions
- Seeing new patterns in old data
- Bypassing the “data delivery middle man”

Examples: (These are sample dashboards with demonstration data)

- Entry Requirements Dashboard
- Course Evaluations Dashboard
- Department Profile Report

Entry Requirements Dashboard



Course Evaluation Dashboard

Instructor [InstructorName] Assessment:

| | (5) Agree Strongly | (4) Agree Somewhat | (3) Neutral | (2) Disagree Somewhat | (1) Disagree Strongly |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1) Instructor presented content in an organized manner. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12) The instructor's teaching methods contributed to my understanding of the course material. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13) The instructor was responsive when I had difficulties or questions. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14) The instructor gave me constructive feedback. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15) The instructor's assignments (i.e. projects, homeworks, papers, etc.) provided opportunities for participative learning within the course. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16) The course increased my knowledge of the subject matter. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1) Instructor presented content in an organized manner. | | | | | | | | |
|---|--------|-----------|---------|-------------------|------|-----|--------|---------|
| Response Option | Weight | Frequency | Percent | Percent Responses | | | | |
| Agree Strongly | (5) | 12 | 80.00% | | | | | |
| Agree Somewhat | (4) | 3 | 20.00% | | | | | |
| Neutral | (3) | 0 | 0.00% | | | | | |
| Disagree Somewhat | (2) | 0 | 0.00% | | | | | |
| Disagree Strongly | (1) | 0 | 0.00% | | | | | |
| | | | | 0 25 50 100 | | | | |
| Response Rate | Mean | STD | Median | Department | Mean | STD | Median | College |
| 15/18 (83.33%) | 4.80 | 0.41 | 5.00 | | | | | |

Department Profile Report

Instructional Credit Hours by Faculty Rank by Academic Departments

| Course Level | Faculty Type | Faculty Rank | Academic Year | | | | | | | | | |
|--------------------|-------------------------|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | | 2010-2011 | 2011-2012 | 2012-2013 | 2013-2014 | 2014-2015 | 2015-20.. | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 |
| Lower Level | Tenured or Tenure Track | Professor | 7,864 | 8,944 | 8,150 | 7,089 | 8,546 | 7,575 | 7,906 | 7,666 | 8,571 | 7,829 |
| | | Associate Professor | 5,125 | 6,499 | 5,899 | 6,393 | 5,607 | 5,582 | 5,565 | 6,219 | 5,943 | 5,515 |
| | | Assistant Professor | 3,567 | 2,410 | 2,806 | 2,917 | 2,285 | 3,216 | 1,991 | 2,164 | 3,562 | 3,268 |
| | Non-Tenure Track | Professor of Practice | 3,989 | 3,858 | 2,985 | 3,299 | 4,136 | 3,832 | 3,057 | 2,938 | 4,307 | 3,346 |
| | | Adjunct Faculty | 6,864 | 5,128 | 4,296 | 5,270 | 5,194 | 6,094 | 7,167 | 5,258 | 6,452 | 5,359 |
| | | Others | 3,634 | 3,906 | 2,363 | 2,580 | 2,780 | 3,547 | 3,059 | 2,140 | 3,412 | 2,714 |
| Total | | | 31,043 | 30,745 | 26,499 | 27,548 | 28,548 | 29,846 | 28,745 | 26,385 | 32,247 | 28,031 |
| Upper Level | Tenured or Tenure Track | Professor | 7,189 | 7,444 | 8,153 | 9,189 | 8,251 | 8,105 | 8,312 | 8,309 | 9,203 | 9,699 |
| | | Associate Professor | 4,067 | 4,970 | 5,952 | 4,446 | 4,849 | 5,728 | 4,592 | 4,250 | 4,882 | 6,321 |
| | | Assistant Professor | 3,604 | 4,227 | 3,527 | 3,818 | 2,835 | 4,394 | 3,673 | 3,290 | 4,586 | 3,173 |
| | Non-Tenure Track | Professor of Practice | 2,721 | 1,947 | 2,027 | 1,645 | 1,846 | 1,519 | 2,575 | 2,017 | 1,970 | 2,401 |
| | | Adjunct Faculty | 1,742 | 1,417 | 1,704 | 1,207 | 1,075 | 2,809 | 1,921 | 2,329 | 2,670 | 1,709 |
| | | Others | 876 | 835 | 462 | 502 | 534 | 684 | 130 | 214 | 762 | 523 |
| Total | | | 20,199 | 20,840 | 21,825 | 20,807 | 19,390 | 23,239 | 21,203 | 20,409 | 24,073 | 23,826 |
| Graduate | Tenured or Tenure Track | Professor | 6,710 | 6,265 | 5,400 | 7,363 | 5,707 | 5,186 | 7,933 | 7,555 | 4,626 | 6,942 |
| | | Associate Professor | 4,309 | 5,415 | 4,061 | 3,878 | 5,012 | 5,390 | 4,185 | 4,100 | 4,509 | 6,296 |
| | | Assistant Professor | 2,801 | 2,296 | 2,628 | 3,186 | 3,228 | 3,120 | 3,195 | 3,928 | 3,830 | 3,831 |
| | Non-Tenure Track | Professor of Practice | 1,920 | 1,455 | 1,982 | 1,739 | 3,358 | 1,564 | 1,590 | 3,030 | 2,213 | 2,864 |
| | | Adjunct Faculty | 1,866 | 1,771 | 2,986 | 1,966 | 2,042 | 2,537 | 3,002 | 3,087 | 1,864 | 2,980 |
| | | Others | 305 | 663 | 625 | 279 | 835 | 593 | 695 | 294 | 152 | 996 |
| Total | | | 17,911 | 17,865 | 17,682 | 18,411 | 20,182 | 18,390 | 20,600 | 21,994 | 17,194 | 23,909 |
| Grand Total | | | 69,153 | 69,450 | 66,006 | 66,766 | 68,120 | 71,475 | 70,548 | 68,788 | 73,514 | 75,766 |

Select Semester:
 Spring

Select a College:
 (All)

Select a Division:
 (All)

Select a Department/Program:
 (All)

Select a Course Level:
 (All)

Select a Faculty Type:
 (All)

Select a Faculty Rank:
 (All)

Note: All Spring 2020 data are preliminary numbers.

Getting these tools adopted

- Department profile example:
 - Getting buy-in from Provost Office into our office being the single source of data.
 - Budget Office recognizing our ability to greatly reduce their workload
 - Decision-makers asked to use Tableau Dashboards as primary source of information for completing annual budget requests

Contact us!



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