Statistics and the humanities: News and numbers in journalism as a proof of concept

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Abstract

A number of colleges and universities are embracing quantitative literacy as a core competency for undergraduates. Faculty members in the humanities often express concerns about the unfamiliarity of their students with numbers and data. In this paper, we examine the use of news in the classroom as a means to increase students' understanding of how to interpret numerical data. By using recent developments in the teaching of quantitative literacy and the emerging interest in the use of news stories for teaching purposes, we have developed a course that uses a blend of hard and soft news formats to engage students in thinking about numbers. We summarize the experiences of teaching this course at Miami University and discuss some of the challenges and changes we have encountered as we continue to refine our approach. We also share some of the lessons learned about the use of news in teaching quantitative literacy.

Outline

1) JRN/STA 380 “News & Numbers”
JRN-STA 380 explores the quality of how quantitative ideas and material are represented in daily news - useful to students in any major.

2) History and institutional context
2.1 Previous work
2.2 Current course

3) Using news in stat classes is not new
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3.2 Current course

4) Learning Objectives
4.1 Grading
4.2 Example Assignments
5) Course Logistics – visitors, example assignments, projects

6) Lessons learned (and still learning)

7) Challenges and changes

8) How might we offer this in the future?

9) How was the course received?

10) How might we offer this in the future again?

1) JRN/STA 380 “News & Numbers”

JRN-STA 380 explores the quality of how quantitative ideas and material are represented in daily news - useful to students in any major.

2) History and institutional context

2.1 Previous work

- Bernie Madison took using news to teach quantitative literacy – also recent talk http://www.ohiomsc.org/osum/PDF/OSU-Madison.pdf
- CHANCE course - http://www.dartmouth.edu/~chance/

2.2 Current course

- Not using news as a tool for learning stat concepts but to develop a sense and insight regarding application of statistics in a journalistic context
- Class designed to be holistic, integrative and current

3) Using news in stat classes is not new

3.1 Previous work

- Bernie Madison

3.2 Current course

- Not using news as a tool for learning stat concepts but to develop a sense and insight regarding application of statistics in a journalistic context
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4) Learning Objectives

4.1 Grading

- Class discussion [10%] – includes bringing news stories to class for general discussion
- Short writing exercises/Illustrations of current classroom topics from the media [10%] – includes 1-page contact report for any visitor to class
- News & numbers portfolio [25%] – reviewed at midterm at end of the class
- Major individual news stories based on faculty research projects [20%]
- Critically edit and peer review other stories [10%]
- Group project – for these we can partner with a publication [25%]

4.2 Example Assignments

- Write a story lead based on visit by external guests
- Steve Watkins - Business Courier of Cincinnati – executive compensation and changing economic landscape
- Ken McCall - Dayton Daily News – foreclosures, political donations
- Rose Marie Ward (KHM) – alcohol abuse among young adults
- Gary Scott (WMMU) director of news – radio news and numbers
- Jim Tobin (JRN) – reporting on medical and technical information

5) Course Logistics – visitors, example assignments, projects

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5.3 Projects

- Story 1: Effectiveness of alcohol programs on campus
- Story 2: Study abroad program trends
- Story 3: Recycling efforts
- Story 4: Personal finance/investing options for college students
- Story 5: Faculty residing in Oxford

5.4 Researcher's perspective

Researchers question value of AlcoholHed

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6) Lessons learned (and still learning)

Successful first pass based on quality of products and feedback

Why did it work better than we expected?

- Upper-level HONORS class populated with 6 journalism majors (including current/former editor of student paper) plus students for many divisions (A&S, Bus., Eng., Ed.)
- Two seasoned instructors who were honest about the experimental nature of the class and the students embraced the class

Challenges and changes

- Much time on reviewing story writing for journalism. This put more pressure on the JRN students in each team.
- Consuming numeric information in the media vs. producing numeric information (may did a bit better with the former vs. latter)

This class provided a great opportunity for the students to interact with faculty with different backgrounds who would often debate about story structure.

It wasn't what we anticipated; it was better.

7) Challenges and changes

News and numbers might be the key QL class for humanities students – translates to potential high demand!

Could we scale this up? Not sure.

Future offerings? capstone experience for JRN and STA students.

How do you make bigger classes feel intimate? How do you teach writing about quantitative information to larger collections of students?

8) How might we offer this in the future?

Earlier projects and external visitors.

Earlier training in writing news. “inverted pyramid” (diff. story-telling models) – "summary lead (hard news format)" vs. "feature/narrative lead (soft news format)"

Scale up with student assistants – e.g. intro class with 90 students (15 UAs-undergraduate assistants + 2 professors)- normally taught with classes of 24. UK got credit and led small discussion groups, old first read /edit of stories (look parallel capstone class)

9) How was the course received?

Would we be tempted to do this again?

Students responses

Course would help improve research and writing skills?

Either quite a bit (7/12) or a great deal (1/12)

Course rating?

very good (8/12) or excellent (3/12)

Recommend to other students? Definitively yes (5/12) or probably yes (5/12)

Engaging other learners? Excellent (8/12) or very good (3/12)

Comments

- Interesting b/c diff. bags of instructors; - STA and JRN teacher think differently but fields complement each other;
- better understanding of how look at numbers and how they are presented in the media;
- course more like a workplace than other courses;
- Students demonstrated critical review of the use of statistics in the media

- They produced quality stories with sensible graphical and tabular displays.
- Descriptive statistics was the emphasis of the stories consumed and produced (may be different if more science reporting added to the class)
- [the editor of the student paper and I discussed having a stat data practicum class serve as on-call consultants to the Miami/ Student – stay tuned].
- We strongly recommend such collaborations for the richness of the experience that will result for student and professor alike.