SOC 301: Social Statistics

Course content
- Descriptive Statistics
- Hypothesis Testing
- Measures of Association

Purpose of Using Strange News in Social Statistics
- Engage students by selecting topics that are relevant
- Class Generates Data
- Calculates appropriate statistic
- Compares and Interprets
- Increase the knowledge of and application of statistics
- Students learn the appropriate use of statistical procedures
- Decrease fear and anxiety

Students are engaged
- Attend class and participate in class discussion
- Utilize the Language
- Discussion of Course Content Continues Outside of the Classroom

When Strange News is Used, Students remark:
- Examples aid in learning
- Process of identifying a problem solving helps in other courses
- Social statistics is not terrifying

Researcher is currently gathering quantitative data
- [Test and Homework Scores]

Humor
- Use the jokes and witticisms related to Statistics
- The Internet is the primary resource
- Categorize the humor by material taught in class
- Jokes for General Statistics class
- Witticisms for Descriptive Statistics
- Co-relational humor
- Make the humor relevant to the material taught in the class

CIS 435: Data Mining

Course content
- Descriptive Statistics & Hypothesis Testing
- Correlation & Regression
- Visualization tools: Charts, Graphs, Scatter Plots

Purpose of Using Humor in Statistics Course for Computer Scientists
- Reduce Stress that is associated with learning new concept not directly related to major
- Makes the course more interesting
- Create positive learning environment
- Improve communication between students and teachers

Anecdotal Observations in CIS 435

Here are a few anecdotal observations concerning the experience of using humor in teaching statistics:
- Students attended class regularly
- Students were more apt to ask questions and interact with faculty during class as well as SPSS-lab sessions
- Humor in classroom seemed to help students getting out of the boredom and pay more attention to class presentations and lab work

References

The purpose of this poster is to illustrate the use of humor
and strange news used in two undergraduate statistics courses
at SUNY Buffalo State College. As the largest comprehensive
college located in an urban setting, Buffalo State College tends
to attract non-traditional commuters. Majority of the students
work full-time and raise a family while attending school on a full-
time basis. Time constraints, influence of gender, and fear about
the subject matter of statistics require teaching strategies that
engage and motivate students. Two departments, Sociology,
where statistics is a required course for students in the major,
and Computer Information Systems, where statistics is optional,
will be used as case studies. The poster will depict examples
used in SOC 301: Social Statistics and in CIS 435: Data Mining.

Strange News
- Identify a (strange) news story in class
- Make the story relevant to students
  - Tie content of story to sociology and criminal justice
  - Personalize story by asking pointed questions
- Introduce statistical procedures by asking research-focused questions
- Illustrate procedures
- Reinforce procedure with other examples

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Two Examples of Strange News

**WALKESHA, Wisc. (AP) - A man pleaded guilty to stealing
more than 2,500 pairs of girls’ shoes from area schools in a
deal that calls for prosecutors to recommend probation.
Erik D. Heinrich, 26, of Kenosha pleaded guilty to three
counts of burglary and was scheduled for sentencing Oct.
23. He was arrested May 24 after a security video showed
him entering North High School and leaving with some
items. Police tracked him through his vehicle registration,
searched his home and a rented storage unit and found the
shoes. Heinrich has a previous shoe-stealing conviction, in
2005, that was dismissed at prosecutors’ request after he
completed a year of probation, counseling and 50 hours of
community service.

You are interested in the types of shoes found in a typical closet. Class discussion
on conspicuous consumption, fashion, and deviance. According to Shopsmart Shoe
Poll, women owns an average of 19 pairs of shoes. Class is charged with solving the
average and standard deviation. The overall scores for BSC are shown below. Based
solely on your relative standing, which type of shoe do you prefer?

```
Responses    | f   |
-------------|-----|
Strongly agree| 17  |
Agree         | 23  |
Disagree      | 1   |
Strongly disagree | 8  |
```

**VIENNA, Austria (AP) - He’s now got a human name - Matthew Hiasl Pan -
but he’s having trouble getting his day in court. Animal rights activists
complaining to get Pan, a 26-year-old chimpzee, legally declared a
person vowed to take their challenge to Austria’s Supreme Court after a
lower court threw out their latest appeal. A provincial judge in the city
of Wiener Neustadt dismissed the case earlier this week, ruling that the
Vienna-based Association against Animal Factories had no legal standing
to argue on the chimp’s behalf. The association, which worries the shelter
caring for the chimp might close, has been pressing to get Pan declared
a “person” so a guardian can be appointed to look out for his interests
and provide him with a home. Group president Martin Balluch insists that
Pan is “a being with interests” and accuses the Austrian judicial system of
monkeying around.

Class discussion on beliefs and values. The class became concerned about
the animal rights activists’ intent on declaring a chimpanzee a person.
The class polls students, at BSC, to see if they agree with the provincial
judge and the responses are below. Students identified levels of measurement and calculate the
appropriate statistics to answer the two questions: What is the average response? How stable
are the responses?

```
Animal Preference
Animal Lover  Non-Animal Lover
Support        | Agree | Disagree |
---------------|-------|----------|
Animal Lover   | 14    | 7        |
Non-Animal Lover| 8     | 16       |
```

Concerns: Using Strange News
- **Faculty**
  - Need to be familiar with current events
  - Need to be flexible and willing to discuss students’ interests
  - Need to trust students to collect data
  - Need to tie the process of statistics with the learning of statistics
    - Go beyond traditional ways of assessing students knowledge by
    allowing students to identify current events design exam and
    homework questions [per unit]
  - Require students to apply, compare, and interpret their preferences
    with collected data

- **Students**
  - Need to realize that identifying a ‘class’ strange-news
    can be time consuming
  - Need to integrate other courses can be a challenge.
    This method is interdisciplinary
  - Need to let go of pre-conceived notions of how social statistics
    is taught and how social statistics should be learned

**Abstract**

The purpose of this poster is to illustrate the use of humor
and strange news used in two undergraduate statistics courses
at SUNY Buffalo State College. As the largest comprehensive
college located in an urban setting, Buffalo State College tends
to attract non-traditional commuters. Majority of the students
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used in SOC 301: Social Statistics and in CIS 435: Data Mining.

**Literature Review Highlights**

- **Research tends to focus on Humor**
  - Researchers recognize the use of humor as an effective
teaching strategy. Humor
    - strengthens the relationships between student and teacher
    - reduces stress and fear for both teachers and students
    - makes a course more interesting
    - enhances the absorption and recall of material
    - creates a positive learning environment
    - improves communication between students and the teacher
  - Important tool in areas of statistics, law, biology and
computer information systems
  - Jokes, riddles, puns, cartoons. and funny (strange) stories
  - ways to utilize humor in the classroom

- **Gender matters**
  - Males can use all types of humor to increase
evaluation ratings whereas females decrease
evaluation ratings if they use puns
  - Male instructors can use topic-related
  - humor that distracts students from the lecture
  - topic and still achieve high ratings; females who
do so will receive low ratings.

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**Illustration of Humor and ‘Strange News’ Used in Two Statistics Courses**

Dr. Amitra Wall and Dr. Sarbani Banerjee