EDU 5665: DATA ANALYSIS
Class Notes:
Jonathan Hughes

o Surveys (parents, teachers, students, community)… where have we been and where are we going.

o What is the district doing and not doing from 4 perspectives?

o What is the first thing you would do… informing the BOE?

o Tonight --- we are going to put together a survey

o Tomorrow --- looking at the data and analysis

o Next weekend… comparative and summative analysis

<u>**Survey Information:**</u>
Scale Data: Raw: Intervals (Ratio Data --- temperature or age)
Ordinal Data: Categorical Data: Group together data (e.g. 0-4 or 45-54)
Nominal Data: Occupation, School, Town, Gender, Ethnicity
First Half = demographics
Second Half = perceptions; dispositions

1. What is your age?

   a) <35

   b) 36-40

   c) 41-45

   d) >45

2. What is your annual income?

   a) <$50,000

   b) $50,000 - $75,000

   c) $75,000-$100,000

   d) >$100,000

3. Gender

   a) Female

b) Male

4. What level did (do) you teach at?

a) Elementary

b) Secondary

c) Other

5. What is your current position?

a) Teacher

b) Building Admin.

c) District Admin.

d) Other

6. What is your ethnicity?

a) African American

b) Native American

c) Asian American

d) Hispanic

e) Caucasian

f) Other

7. How long have you been an administrator?

8. How long have you been in your current position?

9. Did you vote in the last Presidential election?

    a) Yes

    b) No

10. What is your political affiliation?

    a) Democrat

    b) Independent

    c) Republican

    d) Other

11. What is your Political Leaning?

    a) Liberal

    b) Conservative

    c) Moderate

12. Did you agree with the decision to go to war?

    a) Yes

    b) No

    c) Undecided

13. Do you agree with the decision now?

    a) Yes

    b) No

    c) undecided

14. Do you agree with the death penalty?

      a) Yes

      b) no

15. NCLB is good for education?

      a) Strongly agree

      b) Agree

      c) Disagree

      d) Strongly disagree

16. What is your favorite type of music?

      a) Rock

      b) Jazz

      c) Classical

      d) Country

      e) Rap

      f) R&B

      g) Other

17. What is your favorite movie of all time?

18. Do you agree with same sex marriages?

      a) Yes

      b) No

Descriptive --- All data together; every variable in its base form
Comparative --- Combination; comparing data
Summative --- stats that tell us final thoughts; what are your recommendations
Levels of Significance
* .10 – 10%
** .05 – 5%
*** .01 – 1%
**** .001 - 0.1%
All 4 Surveys
Freq and rank order descriptors
Make comparisons (Teachers and Students; etc.)
Descriptive Comparative Summative
Frequencies Rank Lists Indices
Charts (Sub-Group of Qs)
Matrices
Tomorrow:

1) Compute

2) Recode

3) Extract a Group

4) Cross Tabs (Base behind the data ---- who was saying what)

5) Correlations (between two variables)

6) Harvard / PPT / MS Word

WHAT TO COME BACK WITH IN JANUARY:

Chapter 1: Introduction
Purpose
Significance
Methodology (How) ---- surveys with inclusion of teachers, admin., etc. using SPSS
Delimiting Factors (7th grade on field trip)
Outline of the remaining sections
* Chapter 2: Literature Review
Download the SURR material
Chapter 3: Methodology
Each Survey
Content --- what district wants to know
Structure --- Demographic, then Likert, then likes, do's
* Chapter 4: Findings
Each Survey (Descriptive)
Comparisons among surveys (Comparative)
Major Themes (Indices and subgroups of questions

Discrepancies (Disconnects)
Chapter 5: Conclusions / Recommendations
What do I see?
Set recommendations (Substance)
----
to print:(Get in)
EDDProgram --- to get one district
ProgramEDD ---- to print one district
Steps:

1. Recode the variables you choose

2. Take and describe the variables (Labels)

3. Run the cross tabs

Choose your variables

o In all/some of the other surveys

o Data Aberration

o Linking really different variables together

o New information is developed

Directional Hypothesis (where you want to go) Differences
Null Hypothesis (no direction)
Community Support – Me
Curriculum - Brigid
Technology – George
Esteem – Sue M.
Teacher Practice – Sue K.
Family - Dan
Descriptive Data (Data in 5 categories)

- Freq of questions

- Descriptive (Rank)

Comparative Data (The "so what")

- Cross Tabulations

- Re-codes

- o Puts the data into two categories (Agree / Disagree)

       SYNTAX = directions
OUTPUT ---- naming scheme

Summative Data

- Indices --- subgroups of questions (and the questions are linked some how)

- You can compare for example, the level of agreement between instruction and resources

- Be able to give first step ---- recommendations

Using table:

Students	Parents	Community	Teachers
Instruction			
Discipline			
Homework			
Resources			
Technology			

Assignment: Dr. John Hughes
12-11-05

This will be a group presentation

Introduction
Purpose
Significance
Methodology: Lay out each survey, content, structure, e.g. what do you like to do?
Delimiting Factors
Outline of the Remaining Sections

Literature Review

Methodology

Findings: USE SPSS. Each survey (descriptive), Comparisons among surveys (comparative), Major themes (indices (subgroup) Discrepancies (disconnects). <u>Only facts here</u>. Pick out the charts and graphs that are of interest to you. For example, look at the experience of teachers and student achievement. Top and bottom outliers. What are the major themes that you saw? Build tables and charts for this section. Maybe 4 charts.

Conclusions and Recommendations: What do I see? Go beyond the data here. Set of recommendations. What do these data tell us and what specifically do we need to do. E.g. restructure finances, change hiring practices, have an outside group come in and look at administrative team. What does the state do with schools under review? **www.schooldistrictalmanac.org** **or try www.almanac.cc. Passwords: Nassau 2005 to get in. To print it will be 2005 nassau. To get the the PDF files for individual districts (passwords): eddprogram to get in, and to print programedd.**

For Friday Night: Presentation on graphs related to findings. Four sets of findings, similarities and differences.