EDU 5655 – Educational Research and Data Analysis Professor Jonathan Hughes, Ph. D.

Dr. Hughes enthusiasm for data and data analysis was contagious. He demonstrated that data can be a powerful tool if presented properly. The objectives of the course were to use SPSS effectively and Harvard Graphics to help compile and analyze data. Dr. Hughes demystified the notion of data collection and analysis. Using the database provided, our task was to present it in a way that people who are not familiar with statistics would understand the findings.

Through viewing the surveys, we learned that they contain two types of questions: demographic and respondent related. There are times when a survey has many questions. At times like this we apply a holistic approach by arriving at a mean for each question, putting it into rank order and doing a summative analysis. This is the part where critical analysis weaves a story. From a research point of view, educational leaders use data to provide a clear and well defined analysis of findings and implications.

Dr. Hughes went over all five chapters of a dissertation and showed us how data drive the research and then covered the following:

- Stay close to your data
- Create a story so that your introduction includes purpose, outline, and limitations
- Explain methodology up front
- Make all slides readable
- Make recommendations relating to process rather than product
- Use the language of the survey
- Create readable handouts
- Practice the presentation and narration

- Have a contingency backup plan in print and backup copy
- Don't go beyond the data
- Make global statement
- Simplicity is elegance

Efforts to improve student achievement dictate the necessary data a school should collect and convince the various stakeholders that change is necessary. Without this connection 'research and common sense' tell us that data will not automatically motivate people to change what they are doing. Change begins with the acceptance that there is a need to change. Data can serve as the basis for understanding and accepting the need.

Dr. Hughes, in this course helped all us to understand that data is important and very much needed to help weave a story of understanding to all.