January 23, 2012 To: GEC, Andy Langewisch, Ron Bork From: Tim Ohlman Re: Poverty Simulation data from 2010-11

Andy, I'll start by pointing out that I may have botched the stats or done things in ways that you wouldn't approve. It's been several years since I took my last quantitative research course. I can send you the data and you can do with it what you wish. Since I was interested to see what came out of this, I did go ahead and pull out my old notes and run some numbers.

These are the results of the surveys given in conjunction with the 2010-11 poverty simulation conducted by the College of Education for its students each year. This activity is a key step in the College of Education's GMC curriculum, one of the activities they're to reflect on later in Educ 424 Teaching Diverse Learners, which has the GMC tag.

I had nothing to do with the simulation itself or the collection of data, but Julie Johnston-Hermann asked me last year if I'd like to do something with the surveys and I said yes. She sent them to me and I put the data entry it on the to-do list for the Jesse student workers.

A few students apparently didn't take both pre- and post-tests. (We knew this because students drew pseudonyms for the simulation and used those as their names on the surveys.) Since I was interested in the change in scores, I threw out those who didn't do both surveys. Following are stats from the 2010-11 version, both groups. The only real manipulation of data I did was to look at the mean differences in scores on the Likert scale questions. I found some encouraging results there. (I recently received data from the fall 2011 simulation but haven't had the data entered yet.)

n=113 (after tossing those who didn't answer both pre- and post-test)

Demographics:

- a1: Age 18:18, 19:64, 20:17, 21:5, 22:3, 24+:5
- a2: Gender: 42m, 70f, 1?
- a3: class: f45, s55, j6, s2, other 5
- a4: race: 1 Native American, 2 African American, 3 White NonH, 4 Asian/PI, 5 Hispanic, 6 Middle Eastern, 7 Other

## Attitudes:

Here's the best stuff from the survey. Students responded to these items using Likert scale ratings. They could use numbers 1-5, but only the poles and midpoint were labeled: 1 Strongly Disagree ... 3 Sort Of Agree ... 5 Strongly Agree. For every question, it was clear which direction we would hope the simulation exercise would move students, so I treated this as a one-tailed test. Note that most of the statements express somewhat negative views toward people in poverty, so we would hope to see lower scores in the post-test. That's just what we got for 11 of the 15 items, judging at a 90% confidence interval. The full text for each of these would be "We can say, with 90% confidence, that the change in attitudes for this item was -.584, plus or minus .235," or whatever the numbers show.

I've ranked the items here from greatest to least change. The items appeared on the survey numbered B1 to B16. The final five items listed did register a slight change, but not enough to clear a 90% confidence interval. Two of these items (B14 and B16) seem to be beyond the scope of what I would expect a simulation exercise to cover. B14 asks students to estimate whether the total number of poor people has increased in the past two years. B16 asks student to weigh in on whether or not poor people tend to have low self-esteem.

## Change in scores, Pre- to Post-test. Based on one-tailed test at 90% confidence:

B13 Poor people spend too much money on fast foods and junk foods.

-.584 +/- .235

- B12 Poor people watch more TV than other people. -.438 +/- .190
- B11 Poor people in this country have it much better compared to poor people in other countries. -.425 +/- .250
- B3 People with low income get a lot of help with rent, heating and electricity, and other things most others have to pay for. -.372 +/- .207
- B2 People with low income do not have to work as hard because of all the help they get from the government or the community.
   -.363 +/- .233
- B6 People who are poor can get ahead in life if they tried harder or worked harder. -.336 +/- .227

B10 The money difficulties that low income people have are just the same as the difficulties of others.

-.301 +/- .220

- B1 Low income families have many and enough services that can help them survive. -.274+/-.246
- B4 People probably get enough money to survive from welfare, food stamps and other programs that are designed to help poor families.
  -.248 +/- .235
- B9 Social services in American (sic) have only positive effects on people it (sic) helps. -.230 +/- .215
- B8 People who are poor have additional emotional challenges.
  +.280 +/- .269 (I assume this item was expected to result in higher scores, and it did.)
- B5 People are responsible for whether they are poor—we get to where we are in life based on our own actions.

## Insignificant

- B7 It should not be the responsibility of people like myself (sic) to improve the lives of people with low income.
   Insignificant
- B14 Over the past two years, there have been more and more people who are poor in the U.S. Insignificant
- B15 People with low income just need to learn to budget better—how to stretch a dollar. Insignificant
- B16 People with low income have low self-esteem (they don't have confidence in themselves). Insignificant

Section D asked the students: How much would you say you learned about the following? 1-I didn't learn much, 2, 3-I learned some, 4, 5-I learned a lot.

I'll give mean scores here, followed by standard deviations. I didn't do any comparisons between what they reported and their actual change in attitudes; nor did I compare the means against each other. I'd simply say that it looks like the students confirm that they're aware of some changes in attitudes, which is a good thing.

- D1 The financial challenges that low-income families face. 4.1 / 0.89
- D2 the difficulties that low-income families face in improving their own situations. 3.9 / .87
- D3 the challenges that low-income families face in meeting their basic needs. 4.1 / .92
- D4 The difficulties of assessing enough community/government resources for low-income families/individuals. 3.7 / .95
- D5 The frustrations and emotional toll that poverty can bring. 4.1 / .98

The final section of the survey asked about specific things that happened in the simulation. This didn't have much meaning for me, so I didn't run any numbers there. I'll let the Education folks play with this.