Appendix 2-4: Title IV-E Research Course Outline

Title IV-E Research Course Outline

Fall Semester (14 class sessions)

Class #1: Opening class
- ✓ Introductions, expectations, discussion of syllabus
- ✓ Overcoming "practitioner alienation from research"

Class #2: The relevance of data in the current policy environment
- ✓ Understanding the policy context of administrative child welfare data (movement from process measures to outcome measures), California's AB636 accountability system and the federal CFSR process

Class #3: How data are being used to drive child welfare practice and policy
- ✓ The utilization of data to inform and improve child welfare services, *panel of agency practitioners from local child welfare agencies*

Class #4: The language of research
- ✓ Types of data, a taxonomy of study designs, strengths and weaknesses of administrative agency data, opportunities for mining case record data

Class #5: The importance of "statistical literacy"
- ✓ How data are really used in social service agencies (a.k.a. "What I wish I'd known when I took research methods"), *candid observations and Q/A with former IV-E MSW students*

Class #6: Informing agency performance goals
- ✓ Developing research projects relevant to understanding agency performance (*review of county system improvement plans*)
- ✓ Introduction to the organization of CSSR's website, overview of empirical questions that are "answerable" using CSSR data

Class #7: Data 101
- ✓ Longitudinal vs. cross-sectional data, rates, computing a percent change, entry vs. exit cohorts, point-in-time data (*all taught in the context of CSSR data*)

Class #8: Presenting tabulated and graphical data
- ✓ The intelligible presentation of quantitative child welfare data (and how to avoid "Chart Junk"), building county data charts from CSSR templates

Class #9: Placing administrative data in context
- ✓ Strategies for efficiently reviewing and concisely summarizing high-quality empirical literature, the difference between writing a term paper and an objective research report

Class #10: Lessons in using (and misusing) data
- ✓ Numbers gone wild: Selective observations, overgeneralizations, cherry picking, sampling bias, small numbers, and other things to consider

Class #11: Caseload projections from existing data
- ✓ Utilizing point-in-time CSSR data to understand declining foster care caseloads in California

Class #12: Coding data for statistical analysis
- ✓ Discussion of variables in the context of CSSR data and empirical readings

Class #13: A "behind the scenes" tour of a multivariate analysis
- ✓ Conceptual discussion and examination of (de-identified) data used for a child-level analysis

Class #14: Closing class
- ✓ Class report-back on research project topics, next steps, and next semester

Spring Semester (14 class sessions)

Class #1: Opening class
- ✓ Introductions, expectations, discussion of syllabus
- ✓ Class report-back of project status

Class #2: Descriptive statistics
- ✓ Measures of centrality & dispersion
- ✓ Introduction to the Data Analysis Pak in Excel, brief overview of Stata, exercises in computing summary statistics in both Excel and Stata

Class #3: Measures of correlation
- ✓ Discussion of correlation versus causation
- ✓ Computing and interpreting Pearson's rho and Spearman's Rank Correlation Coefficient in Excel and Stata, scatter plots as visualization tool

Class #4: Testing for group differences (1)
- ✓ Statistical measures of independence
- ✓ Computing and interpreting T-Tests and ANOVA in Excel and Stata

Class #5: Testing for group differences (2)
- ✓ Statistical measures of independence
- ✓ Computing and interpreting chi-square test for goodness of fit in Excel and Stata

Class #6: Ratio measures
- ✓ Epidemiological statistics
- ✓ Computing Risk Ratios in Excel and Stata

Class #7: Regression analysis
- ✓ Simple and multiple regression
- ✓ Becoming a knowledgeable consumer of linear, logistic, and other forms of regression

Class #8: Trend analysis
- ✓ Statistical methods for examining trends over time
- ✓ Moving average and exponential smoothing in Excel, chi-square test for trends in Stata, using time dummies in multivariate models

Class #9: Other statistical methods (a conceptual overview)
- ✓ Hierarchical / multilevel modeling
- ✓ Survival analysis

Class #10: The technicalities of data presentation
- ✓ Word, Excel, and Power Point

Class #11: Data interpretation and dissemination (1)
- ✓ Student presentations and peer feedback (*group #1*)
- ✓ Implications of data for practice, organizational change, and policy

Class #12: Data interpretation and dissemination (2)
- ✓ Student presentations and peer feedback (*group #2*)
- ✓ Implications of data for practice, organizational change, and policy

Class #13: Data interpretation and dissemination (3)
- ✓ Student presentations and peer feedback (*group #3*)
- ✓ Implications of data for practice, organizational change, and policy

Class #14: Closing class
- ✓ Semester debrief, feedback, and future plans

Appendix 2-5: Results of MSW Student Survey: Attitudes toward Research

Results of MSW student survey: Attitudes toward research

Summary

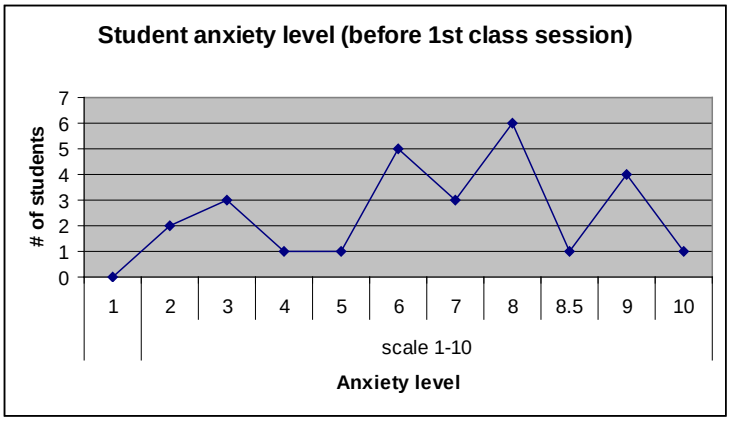
Overall, the 27 students that responded to the survey hold generally favorable views toward using data and research in practice. More than 75% of students believe that data are not a nuisance, that researchers' purposes do not conflict with clients' best interests, and using data can help increase efficiency. Yet, when asked if they personally expect to use data in their own practice either during their current field placement or their next job after graduation, an overwhelming majority indicated that they do not expect to do so. It is hoped that students' expectations toward using data in their own practice will change by the end of the research course.

Quick facts:

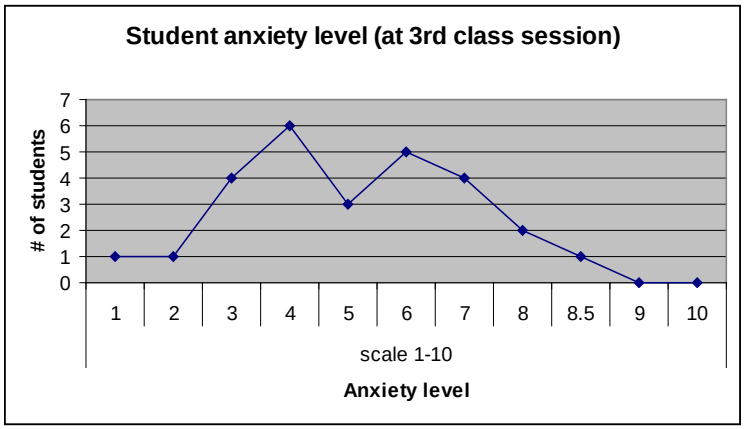
- Most students (n=17) graduated **within the last 5 years** (2005 or later)
- The top three undergraduate majors students listed include: **psychology** (n=6), **sociology** (n=3), and **social work** (n=3).
- Majority of students (78%) report having prior paid **social work practice experience**

Anxiety towards research

On average, students rated their anxiety level at **6.5** on a scale of 1 to 10 prior to starting this research course. The most frequently selected anxiety level was 8 (n=6).



By the time of survey administration (3rd class), reported anxiety levels had already decreased to an average of **5.1** on a scale of 1 to 10, with the most frequently selected anxiety level now being 4 (n=6).



Students associated their anxiety towards the class most often to: a lack of confidence in their ability to conduct research or statistical analyses; their ability to use data in meaningful ways; and the time commitment required for the course. Students' explanations for their anxiety ranged from having a "number fear" to fearing that they will be unable "understand the data" or be able "to interpret it," as well as worries about the "amount of time it will take to do all [the] work." Students also described themselves as "unfamiliar," having "discomfort" or "feeling overwhelmed" in terms of engaging in research activities.

Using Data

60% of students reported **never** using data in their first year field placements.

78% of students indicated having **none or less than one year** of experience doing applied research or evaluation.

56% of students are at current field placements that **support** direct service workers conducting evaluation or applied research.

The **majority** of students also expect to use data **infrequently or not at all** in the future, either during their current field placement, on the job after graduation or throughout their social work career.

How often do you expect to use data in your current field placement?		
	#	%
On a regular basis	5	18.5
Once in awhile	11	40.7
Only if I have to	5	18.5
Probably not	6	22.2

How often do you expect to use data on the job after graduation?		
	#	%
On a regular basis	7	25.9
Once in awhile	12	44.4
Only if I have to	6	22.2
Probably not	2	7.4

Interested in doing any research during social work career		
	#	%
Strongly disagree	3	11.1
Disagree	13	48.1
Agree	8	29.6
Strongly Agree	2	7.4

Students' less favorable attitudes toward research in general appear to carry over to their attitudes toward social work research specifically, especially in comparison to research of other related disciplines.

Social work research is more useful, compared to other social sciences		
	#	%
Strongly disagree	2	7.4
Disagree	15	55.6
Agree	6	22.2
Strongly Agree	1	3.7

93% of students **do not** think that more complicated statistics indicate better research.

82% of students **do not** think data are a nuisance.

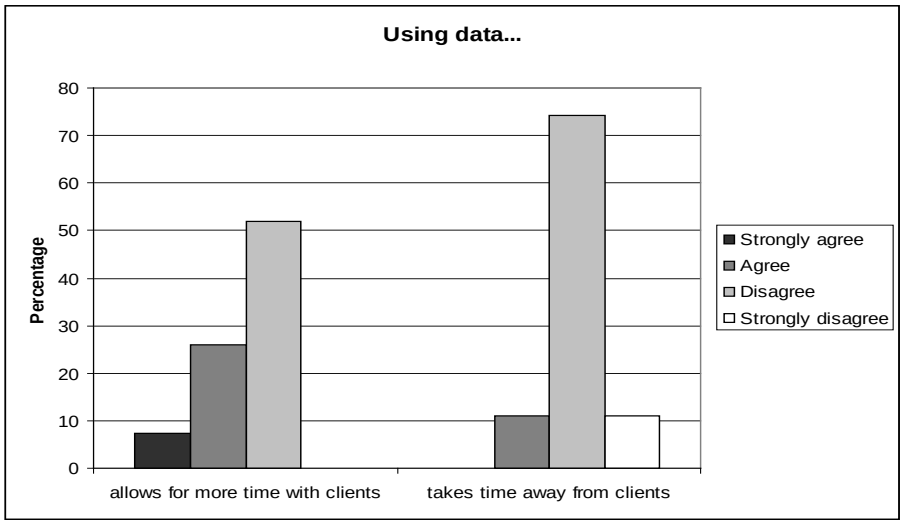
78% of students **agree** that using data increases efficiency.

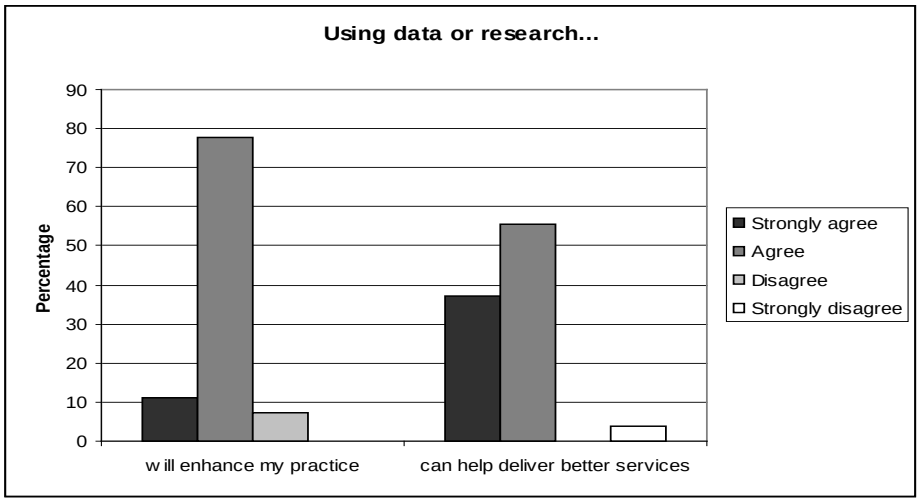
78% of students **do not** think researchers' purposes often conflict with clients' best interests.

Attitudes toward research in relation to practice

97% of students **do not** think that using data compromises client confidentiality.

96% of students **agree** that keeping up with the latest research is an integral part of practice




Using data or research...
Percentage
90
80
70
60
50
40
30
20
10
0
will enhance my practice
can help deliver better services
Strongly agree
Agree
Disagree
Strongly disagree

Appendix 2-6: Lunch Discussion Questions

Lunch Discussion Questions…

- *How can we best engage students in research and data analysis?*

- *What research and data analysis skills do child welfare workers need in the field?*

- *What research competencies do we want IV-E students to graduate with after 2.5 semesters of research coursework in an MSW program?*

- *Pros and cons of attempting to train IV-E students as "Junior Social Scientists" vs. "Consumers of Research"?*