Questions to answer in preparing for March 2 class and DARE #4

**The Umansky and Dumont paper**

1. Focus of the paper
   1. What is/are the authors’ central research question(s)? (again, think about the big, underlying question and the specific one the paper is able to answer)
   2. What is/are their answer(s)?
2. Data and Sample
   1. What is the source of the Umansky and Dumont data?
   2. What restrictions do Umansky and Dumont impose on their sample and why?
   3. What are the characteristics of the full ECLS-K sample and of the Umansky and Dumont sub-sample?
   4. In what ways, if any, does the restriction of the ECLS-K sample affect the generalizability of their findings?
   5. Describe the structure of the data (what does a row consist of, at what level are the variables measured, how many observations are there for each individual, etc.?). How is the content and structure of the data similar to and different from that for DARE #4?
   6. What is/are the outcome(s) of interest in the Umansky and Dumont paper? To which two outcomes does this correspond in the DARE #4 dataset?
   7. Umansky and Dumont analyze teachers’ perceptions in four subject areas. On what basis do they subset their outcome on these dimensions? Do you agree with this approach (why or why not)?
3. Methodology
   1. What is the authors’ identification strategy?
   2. Describe the mechanism by which students are identified for EL status. What parts of this process contribute to the authors’ defense of their identification strategy?
   3. Why is it important to their identification strategy that Umansky and Dumont continue to define students who were classified as ELs in kindergarten as being ELs in later grades, even if their measured ELs status actually changed in 1st or 2nd grades?
   4. What are the authors’ two primary matching variables?
   5. How do the authors coarsen these two matching variables? How does the extent to which these are coarsened support or undermine their identification approach? Will you follow the same approach or a different one in DARE #4?
   6. Why do the authors include other matching variables and on what basis do they justify their use?
   7. On which matching variables do the authors require exact matches? On which matching variables do they create coarsened “bins”?
   8. What purpose does the authors’ robustness check that uses only English proficiency and literacy assessments to match students serve?
   9. How do the authors define their *region of common support*? Describe the characteristics of students in “treatment” and “control” conditions in this region of common support.
   10. What is the “doubly-robust” method the authors describe on pg. 24? Generally, you should follow this same approach for DARE #4.
4. Results
   1. How well does the authors’ matched sample mirror the full sub-sample? What implications do these differences have for the conclusions of the paper?
   2. How similar are the kindergarteners in the matched sample classified as EL to the kindergarteners classified as non-EL?
   3. Describe the authors’ main findings with respect to RQ #1 in quantitative terms.
   4. How do the results in Table 3 vary by grade and/or subject? By how much do they vary? How do you interpret this variation?
   5. Compare your results from DARE #4, focusing on students only in their kindergarten year, to Umansky and Dumont’s results in Tables 3. How are they similar? Different? From where do these similarities/differences come?
   6. How do the authors interpret the substantive conclusions of their results? What are the two mechanisms by which the authors argue EL classification might affect teacher perceptions and later outcomes? Why is it important to know how each of these two mechanisms might be driving the authors’ results?
   7. Can the authors’ make conclusions that support causal inferences from their analyses of the effects of bilingual program participation on teacher perceptions of EL-classified students? Why or why not?
   8. Describe the results of the study as you might in a professional development session for elementary school teachers in Hillsboro School District for which you have been contracted to present evidence on how teachers can best support EL students. The teachers have all taught large numbers of EL students during their careers and are deeply committed to supporting these students’ future success. They are not researchers. What are the critical things for them to know about this study? What recommendations do/don’t you feel comfortable making?
5. Threats to validity
   1. What is the central threat to the authors’ claims that they have identified a causal effect of EL classification? How do the authors address this threat? Can you think of other strategies to do so?
   2. Footnote 1 justifies the date of EL status measurement. How does the timing of when students’ EL classification was measured pose a potential threat to validity? What evidence could Umansky and Dumont present to address this threat?
   3. Describe the robustness checks the authors conduct. Which ones did you conduct in your DARE and what were your results? What are the strengths/weaknesses of various approaches?