1. Read the following article.


Abstract:
Two curricula designed to enhance the early literacy skills of 4-year-old preschool children were evaluated against a third, comparison condition. Thirty-five Head Start preschool classrooms were assigned randomly to incorporate one of two early literacy curricular approaches, *Let's Begin with the Letter People®* or *Waterford Early Reading Program® Level 1*, into their current curriculum, the High/Scope® Educational Approach, or to use the High/Scope method alone. Results indicated that children in the literacy intervention classrooms demonstrated significantly stronger outcomes in the areas of emergent writing, book and print knowledge, and general reading readiness skills. Minority language status also played a significant role in outcome, regardless of intervention condition. Implications for early childhood literacy interventions, especially important for children of low-income families, are discussed.

2. In your own words, summarize the article according to the following criteria.
   a. Statement the problem – What is the research focus of the article?
   b. Trace the evidentiary logic of the problem – How do the authors build a case for the study of the problem?
   c. Identify and describe independent variables in the study.
   d. Identify and describe dependent variables in the study.
   e. What population is associated with this study? – To whom will the authors be able to generalize findings from this study?
   f. Do the authors include any control variables in the study? Explain.
   g. Briefly, what findings do the authors report?

3. Using the Data Generator from the website, create data to mimic the pre and post distributional characteristics of the *Let's Begin* Group for the Peabody Picture Vocabulary Test (Table 2, p. 487 of the manuscript). Assume that the distributions are positively skewed (~ .7 to 1.2). Note. Data on skew is not presented in the table and standard scores on the PPVT effectively range from 40 to 140. For the standardization sample, the mean on the PPVT is 100 and the standard deviation is 15.
4. Import the data you created in #3 into MS Excel and into SPSS.
   a. In MS Excel:
      i. Create frequency distributions (histograms) for the pre and posttest scores using an interval width of 5.
      ii. Compute summary statistics (mean, standard deviation) for each of the distributions. Show calculations for both the definitional and computational formulas for the standard deviation (pp. 44 to 46 in your text).
      iii. In the distribution, identify the interquartile range values.
   b. In SPSS:
      i. Run the **Frequencies** program and report summary statistics.
      ii. Generate a histogram. Edit the histogram to reflect an interval width of 5.
      iii. Add lines indicating the cut points for the 25th and 75th percentiles
      iv. Generate boxplots for each of the two variables.
      v. Interpret your output – What do the statistics tell you about student performance?
   c. In MS Excel:
      i. Compare the two distributions by putting both histograms (pre and post) on one X-axis.
      ii. Change the distributions from histograms to frequency polygons to aid in the comparison.
      iii. Describe the change in performance from pre- to post-test by referring to the distributions.