In typical two semester courses in mathematics for prospective elementary teachers (MPET), the topic of statistics comprises one chapter in about fifteen, and the content in most texts is at a level that is currently being advocated as appropriate for middle school students (NCTM, 2000). It is likely that the treatment of statistics covered in this one chapter will comprise the entire preparation in statistics that these future teachers receive. This paper does not address the inadequacy of treatment of statistics for prospective elementary teachers, but instead offers 1) suggestions for in-class data collections from which basics of graphical representation and descriptive statistics emerge naturally; 2) examples of assignments that involve world wide web data collection, where different web sites contain conflicting data, in order to allow for discussion of issues relative to sampling, data sources and integrity; and 3) use of student generated questions to create performance assessment tasks and mini-projects as a means of connecting the concepts covered and bringing closure to the chapter. (Received September 12, 2000)