4. All groups found that ASCE gave the U.S. infrastructure a grade of D and recommended $1.6 trillion over five years. The four criteria were condition, performance, funding vs. need, and capacity vs. need; the last two measure the funding and capacity against how much is needed. The various sources on the federal budget list about $2-3 trillion per year or $10-15 trillion in five years; the amount recommended for infrastructure is therefore 11-16% of the total. The one piece of recommended legislation that was enacted was the Water Resources Development Act, and a Google search on that name and Grassley and Harkin leads to a Project Vote Smart page that shows they voted for it. Groups gave several answers for the last part. I used the ASCE report card to find that Iowans generate 1.16 tons per capita per year, or 6.4 lbs. per day. The report card also notes that a large fraction is recycled. If your group used a different source and you would like to discuss your answer, please see me.

5. With this problem I simply wanted to see where students’ interests lie. Students earned points as long as they provided all of the requested information.

6. The point of this problem was to have you explore some of the ISU resources to help students with jobs. Just about every group defined the Career Management Service and identified February 19 as the date of the Engineering Career Fair. Several ‘O’ companies will attend the fair, but only three will hire civil engineers; learning how to refine your search can save you time at the career fair. All groups found the advice for the career fair, internships, co-ops, and résumés. The average of five salary offers for co-op civil engineers in the fall of 2006 and summer of 2007 was $2474. I now realize that the link on the full-time offers was incorrect: The button for 2006-2007 goes to 2002-2003. I will correct the grading to reflect this new finding.