

1096-P5-570

Vesna Kilibarda* (vkilibar@iun.edu). *Solving Applications in Business, Life Sciences, and Transportation using Excel and Java Applets.*

The goal of any mathematics class, be it online, hybrid, flipped, or traditional classroom, is to empower students to analyze and solve real-world problems and social issues using the power and rigor of mathematical and statistical models. A challenge is how to interest our students in mathematical problem solving, especially in service courses. I found that two types of written assignments, *paired* and *group projects*, enable my students to respond to these challenges. Both assignments integrate real world applications, writing, reading, technology, collaborative work, prompt feedback, and opportunities for revision.

In *paired assignments* students simulated the Birthday Problem with Excel or used Java applets to predict long term trends in transportation. Students also commented on a peer post by a due date. In *group assignments* students were solving problems, reviewing their group members' posts, revising them as necessary, and submitting one final group project containing a revised group work.

I first developed these assignments in my online class and adopted them for the face-to face class in the following semester. I received feedback from both my peers and students and will share specific assignments and feedback in my paper. (Received September 06, 2013)