Gerardo Emmanuele Serrano* (geprcm688@gmail.com), Street 144, Bo. Coabey, Jayuya, Puerto Rico, Jayuya, PR 00664. Improving the pyrenees probability tutor to enable comparison of pedagogical interventions.

The Pyrenees Tutor is an interactive intelligent software tutor for students to solve math probability problems, and the researchers are testing the impact of different tutor pedagogies on learning. The five different pedagogical conditions are: Worked Example, Worked Example/Problem Solving, Faded Worked Example, Problem Solving and All. Pyrenees has four different parts. First it has a textbook on the basics of solving probability problems, then a pre-test to get data about how much each student knows, then an interactive part where the conditions differ as above, and finally a post-test. The system was deployed in a discrete math course in Spring 2015, but there were several bugs in the system that prevented students from completing all four parts. The purpose of this research project is to improve the usability of the tutor by testing and documenting all conditions of the tutor using the "Github" Pyrenees project repository for bug reports and issue tracking. The bugs can include trivial things like a missing word, or an incorrectly-spelled word, or it can be something more important like logic errors. Once these bugs are repaired, future researchers on the project will be able to investigate the impact of the different pedagogies on changes between the pre and post test. (Received July 22, 2015)