**4. Data on differences in student performance that may be directly attributed to the implementation of the curriculum element**

Grades earned by “Successful Students”

i.e. students who had passed **more than 70%** of their previous math classes at PGCC

Hands-On FA13 FA13

Traditional SP11 SP11

**Note:** In the figure above, blue bars indicate the performance of students in the traditional and hands-on (where the curriculum element was implemented) Math classes.

Grades earned by “Struggling Students” i.e. students who had passed **less than 70%** of their previous math classes at PGCC

Hands-On FA13

Traditional SP11

**Conclusion**

“Successful Students” passed both Traditional and Hands-On classes.

“Struggling Students” pass rate improved significantly in the Hands-On class.

**Note:** In the figure above, pink and blue bars indicate the performance of students, who struggled in earlier Math classes, in the traditional and hands-on (where the curriculum element was implemented) Math classes.