To Whom It May Concern,

I received an IIG last year to study the effect of using an online hw platform to supplement classroom instruction and assigned readings and homework. There is an increasing availability of these computer platforms to help train students through the step by step process of solving problems. These platforms are essentially scaffolds for hw as there are numerous features which support the student in the work, such as links to an e-text, video animations, taped lectures and simulation models. It is not known how these platforms effect the performance of students, but it is increasingly tempting for professors to use these platforms as a substitute or supplement to collecting periodic hw assignments.

We designed a study of the first semester calculus course as there are 24 sections and nearly 1000 students and this was thought to be an excellent sample. Great pains were taken to block out other factors such as instructor, time of day, MWF v TR, etc, and the study was put in place.

The students were assessed at the beginning of the semester and half were assigned Course Compass (CC) and the other half were given regular assignments that may or may not have been collected. At the beginning of the semester a set out outcomes were established and a set of hundreds of problems were created. From that pool, an independent party wrote the final exam which was administered to all students simultaneously in fifteen locations on campus.

A brief summary of the results is that the students who had the CC performed better on the final exam despite having a slightly lower pre-test score generated upon the start of the semester. This combination supported the view that the platforms do not hurt students, and in fact prove a helpful support to their learning.

The expenses of the event were limited to the payment of a team of graders to grade the final exams. Fifteen individuals were located in a room where all the exams were delivered. The graders worked through the evening and into the night and were able to grade the exams in a fair and uniform manner. It was very helpful to have such a standardized scoring system to help ensure the validity of the data.

I am grateful for this opportunity and I believe it was a great benefit to the department to have this question answered.

Gratefully,

Douglas Dickey