

Executive Summary

Cost/Benefit Question:

All things being equal, does an NSF sponsored standards-based mathematics curriculum, such as the *Interactive Mathematics Program (IMP)*, have a greater positive impact on student achievement than a “traditional” pre-standards program to such a degree as to justify the time, energy and cost of implementing it?

Conclusions:

Student Achievement. After nearly five years of collecting student achievement data in the Philadelphia public schools related to the [Interactive Mathematics Program \(IMP\)](#), the results boil down to this:

When IMP students were taught by teachers who had been properly trained, IMP students consistently outperformed similar students who were taught using a pre-NCTM standards curriculum and subjected to lecture style instruction. The superior performance results of IMP were found using a variety of measures and across different student ability levels, when measures for achievement are controlled for 8th grade cohort effects. That is, lower ability IMP students did better than their lower ability counterparts while higher ability IMP students did better than their higher ability counterparts.

Cost: The cost to properly implement IMP is approximately **21,000 dollars per teacher over four years**. This includes new textbooks, a classroom set of graphics calculators, classroom materials, an overhead projector and LCD panel, 240 hours of training per teacher, 50 hours of classroom mentoring, and on-going administrative support.