

WHY BOTHER TO CHANGE?

Voices from Teachers Who Have Done It

#1 From -Ted Fischer

“Many of the challenges for IMP (high student turnover, poor attendance/hwk, desire to have clear rules to follow) are as much of a problem in other math classes as they are in IMP. The students in the lowest level classes may "succeed" in getting passing grades for three years of "college-prep" math, however many of them **STILL** are not conversant with the slope of a line, the meaning of a negative number, or the process of plotting points to build a graph.

Students "learn" these skills just long enough to pass the test, then forget them within three weeks. (I hate myself every time I give students a passing grade when they haven't learned the material, but the primary fault lies with the system and our/my teaching rather than with the student.) Is your mathematics program **TRULY** successful? Can all of your students approach multiple-step problems without trepidation? Can they interpret word problems effectively? Do they remember the gist of what they learned last year? Do they enjoy math class? If so, I would recommend you stick with what you are doing! Why fix something that isn't broken?

More commonly, however, I see a substantial number of students who hate mathematics, are incapable of applying their knowledge, and who hate/despise/fear seeing a math problem that is not already stated as an equation. IMP addresses these issues very nicely.”

2 From Caran Resciniti:

“When you talk about changing..... I heard Beatrice Moore Harris once say "For those individuals who hang on to the 'good ole days' remind them of no microwaves, remote controls, color TV, AC, dual pane windows....." and she listed several items that were not part of the good ole' days. It really made you think that society changes and education doesn't. How smart is that?????

Caran Resciniti, Mathematics Coordinator
Fresno Unified School District
3132 E. Fairmont, IMC Bldg. 3
Fresno, CA 93720

#3 From Suzanne Slocum

“This program allows students to explore the higher level of thinking- reasoning, analyzing, synthesizing, applying, and strategizing. The students learn how to problem solve and comprehend by utilizing a variety of tools such as discussing, arguing, developing strategies, developing programs, presenting, and risk taking. They have to decide which route they should take by comparing and contrasting various methods of solutions.

Value added? If the program is effective, the students should leave with an enrichment of skills: application, problem solving, risk taking, communication savvy- oral, written, and technological, collaboration, analytical, and exploration. Yes- implementation may be challenging, but the benefits are outstanding. Teachers are learners, too. Therefore, we need to be challenged (the challenge of implementation) in order to come to a deeper understanding of this program and it's effectiveness.

However, teachers, faculty, administration, and staff need to collaborate and really define objectives/mission as a school in order to implement this program successfully. Implementation takes time, and that is something we as teachers need to remember!

Yes, I am also an engineer teaching IMP mathematics. I was amazed to see the correlation between the two! I, too, have the only school utilizing IMP, but in Alaska.

We started a math and science club this year, and the turnout was exceptional. This is our first year of implementing IMP, and the students LOVE math! I have taught traditional math - Alg I, Geometry, Alg II, Pre Calc - and I have never seen this many students in one given school year enjoy the learning process of math!

Suzanne Slocum
Pacific Northern Academy
Anchorage, Alaska

#4 From Lane Cardwell

I am also an engineer teaching IMP mathematics. I have the only IMP program in Oklahoma. I definitely prefer it to the traditional program I went through as a student. I also teach AP Calculus and Introduction to Engineering for high school juniors and seniors.

I'm curious to know how many more engineers are teaching mathematics and how many believe IMP to be more representative of mathematics used in engineering than traditional math courses.

As for reasons to change: A new history teacher at our school asked his students the first day of class what their favorite > subject was. Later we were in the hall and a mutual student of ours told him what a great teacher I was and how my math class was so wonderful. He commented "No wonder so many students said math was their favorite class.

I've never had that happen before."

When students enjoy a class, they WILL learn more. In my previous algebra 1 classes, few students enjoyed it; most just endured.

Lane Cardwell
Tulsa Memorial High School

5 From: Mike Bryant

Why bother to change? I teach at Santa Maria High school in California. Our students can choose to take IMP or a more traditional curriculum. The overwhelming majority choose the traditional curriculum, especially those who have already had algebra in 8th grade. The word is that IMP is "too much work."

From over twenty sections of Algebra-1 and additional freshmen who start in Geometry, we usually end up with three sections of Math Analysis. From six sections of IMP-1, we have two sections of IMP-4. A much higher percentage of the IMP students elect to take four years of college-preparatory math. That alone makes the program worthwhile to me.

Exposure to "real-world" math is certainly another reason to change. Our math department has four engineers among about fifteen teachers. All four have elected to teach IMP, seeing in that curriculum the kinds of things that they did in the engineering world.

Mike Bryant
voice mail: (805) 925-2567 ext 3108
Santa Maria High School
901 So. Broadway
Santa Maria, CA 93454