



### SI-5 Refrigerator Optimization and Teaching Improvement

In 1974, the typical home refrigerator used in the neighborhood of 1800 kilowatt hours of electricity per year. Today, with 22 percent larger capacity, refrigerator's energy use has been reduced to fewer than 500 kilowatts of energy per year—a huge improvement. (*Physics for Future Presidents*, Richard A. Muller)

What happened? Spurred on by the Federal Trade Commission's energy consumption labeling requirements, manufacturers began to engineer refrigerators and other appliances for energy optimization.

Dreaming here a little, but what might happen if every college course carried an efficiency rating? Would time and cost invested versus gains in knowledge, skills, attitudes, and networks formed be a telling comparison? Would a movement to optimize every learning experience ensue?

Granted this is a pipe dream, but I think a reasonable question remains. What if teaching optimization became a daily concern of all instructors? What progress in teaching improvement might occur from optimizing mindfulness?

Just as better insulation in today's energy-efficient refrigerators plugs energy leaks, wouldn't an optimized course, through improved instructional design, offer similar energy efficiency and ultimately increase student success?

Might considerable time be saved by optimizing testing and evaluation to maximize the validity of all performance checks while folding the results into the focus areas of additional or modified instruction?

## TFS e-Mentor Success Insights

At Teaching For Success, we believe that a Critical Success Factor approach to teaching improvement will provide instructors with the knowledge and thinking skills necessary to begin better optimizing course content and the instructional process.

While teaching is not the same as manufacturing refrigerators, the positive results of optimizing a system seems worth the effort in both cases.

What can you do to optimize your work and achieve greater success?

*~John H, (Jack) Shrawder, Exec. Director  
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