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# Making the case for Technology

**In education, justifying technology means clever use of metrics, listening to teachers and earning credibility.**

Charles Flynn, information technology administrator at Lee Middle and High School, squared off on the basketball court against the school's principal, Jason McCandless. The two debated how to prove the return on technology investments in today's tough economic climate.

In business, return on investment measures how soon the organization will recoup the costs from a technology project, in terms of increases in productivity, better management or some other benefit. When making a case for new technology investments, how well a technology proves an investment return often determines whether the projects get funded. But how does this apply in an educational environment when the investment is in students' minds—not an increase in widgets produced per hour? When it comes to using technology to improve teaching tools and students' learning, what's the best way to demonstrate the return on the technology investment? *CDW•G Ed Tech* asked the experts in Lee, Mass.

**Q:** *How does education show measurable impact on the bottom line?*

**Flynn:** Education must think more like business. Businesses quantify everything they can, so that they can calculate return on investment. Businesses also assess how purchases impact their system.

I judge return by asking, "Is it doing what it's supposed to do?" With teachers, they'll try something once, maybe twice, so it must be reliable. When they log on, our network works the first time. It's doing what it's supposed to do.

We can also quantify what teachers were capable of a year ago, compared to what they can do today.

**McCandless:** We really have two bottom lines. First, the education our students receive and how technology supports that. Second, answering to the taxpayers to show we're making good use of their money.

We can measure results, using standardized tests and student satisfaction. But technology matters in other ways. For example, if a computer program can free our guidance counselors from the task of scheduling, then they can spend more time with students. Automated attendance-taking frees personnel for higher-level tasks.


**Q:** *How do you balance end technology (e.g., an educational application) versus enabling technology (e.g., a network)?*

**Flynn:** Enabling technology is key for maintenance, reliability and features. We need the right base to build on. Rather than starting a design from the desktop back, I start with the network.

For example, our new network operating system (Novell 6) and the application operating system (Windows 2000) give us the capability, flexibility, security and features we need at the best cost.

**McCandless:** There's a big dichotomy. Most users don't understand how the enabling technology works. On the other hand, that technology must work, or they're going to quit trying to use it.

**Q:** *Does using standard systems and a single platform improve ROI in education?*



**Charles Flynn**  
IT Administrator, Lee High  
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**Flynn:** Standardization is essential. I choose business-grade desktops with identical chipsets. We then build a complete setup on one machine—operating system and applications—and save that standard image centrally. We never use CDs or floppies to deploy applications, and we never visit every machine.

**McCandless:** Standardization forces a one-size-fits-all situation, which is a two-edged sword. Having one platform certainly makes things simpler. But it does lock people into the chosen applications, which they may not be familiar with. We've addressed that by giving every teacher a laptop. "I don't use that at home" is not an excuse anymore.

**Q:** *In education, how do you match technology with results in order to justify expenses?*

**Flynn:** Technology is only a tool whose purpose is to support the educational process and help ensure success. So, it should always be possible to map the technology to the outcome it supports.

**McCandless:** Here's an example: In any population of kids, a few, regardless of intelligence, don't do well in the classroom. In a large school system, you can have alternative programs, but that's not cost-effective in our small system. However, self-paced computerized high school courses that let the student work outside the normal classroom are an effective alternative. Such affordable and configurable courses keep these kids from dropping out. That technology maps to a specific result.

**Q:** *Is it realistic to expect a rapid return on technology spending?*

**Flynn:** Of course, we would always like to see the results immediately. But there's another way to look at this. Our basic network worked first, then the office applications, so now we're creating value-added applications. So, the return that you see is continual progress. The school board and superintendent see these results, and are very supportive.

**McCandless:** You have a brief window to succeed. Teachers are so busy that if the technology doesn't

perform immediately, they abandon it for other methods. We tried a gradebook program with five volunteers, and it fell on its face. We're glad we found that out before we mandated it. So testing is important, to make sure things work. Naturally, the school board likes to see results also.

**Q:** *Who initiates new technology, and how does that affect approval? How do you get buy-in on a project?*

**Flynn:** IT may initiate the underlying technology, but teachers have the ideas about new applications. Teachers are key, as well as school secretaries on the front lines. The way to get buy-in is credibility. You earn that by doing the best job you can. If you have credibility, then they know you'll do what you say, and they'll support you.

**McCandless:** We have a good mix of suggestions, from IT, the school committee, the superintendent, students, principals and so forth, but teachers are in the driver's seat. They can suggest applications, make a case and run with the idea. Buy-in is the \$64,000 question. The closest it gets to being automatic is if teachers need something. They know—they're the ones in the trenches, and people listen to them. Otherwise, it's a sales job, primarily pointing out the benefits of the idea.

**Q:** *What's been your toughest challenge making the case for technology?*

**Flynn:** Winning respect in the schools and the community. That requires trust and sincerity. Your actions are more important than your plans. Don't talk about what you're going to do. Do it.

**McCandless:** I arrived here in July to a newly renovated school. Lots of new systems—including the network and computers—had to work. Everyone had a big learning and adjustment curve. Managing that monumental amount of change is a real challenge, and it's ongoing. The teachers and students have been very graceful in dealing with it, but it's a challenge. 