

Victims of Our Own Success

Richard Erdmann
Founder and CEO, Syfr Corporation

There is a public sense that companies are great internal innovators capable of changing to meet the times. In reality, companies are no different than any organization – they become victims of their own success. The cycle is predictable: a new company with new ideas emerges to address the same market dominated by a successful older company. More often than not, the older company fails to exist either through acquisition or bankruptcy. There is a phrase used in economics to describe this process of corporate churning– creative destruction. Even when the very existence of a company is threatened, it is very, very difficult for it to successfully change to meet the challenge. The more successful the company, the more difficult it is to change because past successes validate the continued use of past practices.

American Educational Successes and the Resultant Problems

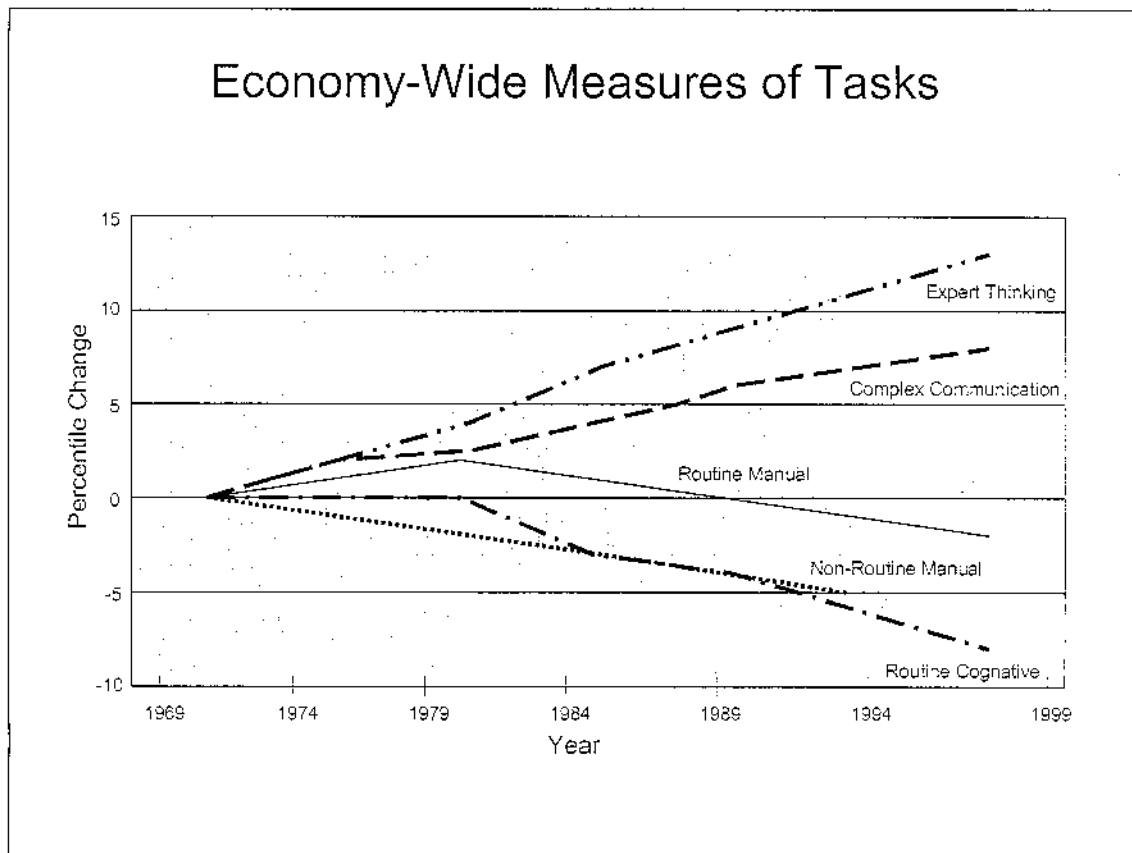
If anything, American public education has been successful. It is not an accident that the United States was one of the first knowledge economies in the world. American public education created the knowledge worker that made such an economy possible, but the result is a double-edged sword. In a knowledge economy, employers value education and are willing to pay for it in their employees. Today they pay approximately an 80% premium for a college-educated worker over a high school graduate, but cannot get them in the numbers needed – demand for college-educated workers in many fields exceeds supply.

The creative destruction process that works in market driven economies also works between countries. Other countries have seen the success of American public education and are investing in very successful education systems of their own. Their educational successes will eventually be reflected in product innovation and invention, scientific research and papers, patents and intellectual property, and accelerated economic growth. While their corporations and national economic infrastructure develop, their education system will have graduated workers competitive with our own, willing to work at a lower cost and capable of performing at the highest levels. As we have already seen, our jobs will leak overseas for as long as the supply of educated workers in America is in short supply relative to demand. We certainly will have become victims of our own success.

The escalation in income for the educated worker comes at a particularly tough time for students from low-income families. For decades we have witnessed the narrowing of education gaps based on income, race and ethnicity. About 15 years ago that narrowing stopped. Just at the time when educational attainment pays a hefty premium, success with the continual improvement of our most vulnerable students stops and the penalty paid by them as adults is substantial.

The Curriculum Challenges

To further complicate the issue, the very substance of what we are teaching is being challenged. The computer now allows individuals to work with far more data than ever before, to analyze data with tools never before available, and to communicate to a wider audience with more sophisticated tools than ever before. Frank Levy, an economist at MIT, and Richard Murnane, an economist at Harvard, wrote a book, The New Division of Labor, in which they predict shifting rewards in the form of personal income based on the skill sets required by computers. The graph below illustrates the percentage change in income over the years based on the skill set of the employee. In this analysis earnings from complex communication and expert thinking have substantially outgrown earnings from anything routine (which is increasingly done by computers), as well as anything manual.



The New Division of Labor: Frank Levy and Richard Murnane

Murnane and Levy believe that technology will compete with labor for routine and manual jobs resulting in lower wages, while at the same time expanding the demand for more the complex jobs requiring a college degree or higher. This enhanced demand will continue to drive wages for those jobs higher. Another economist, Alan Krueger of

Princeton, believes that already the premium paid for an educated worker with computer skills is about 15% higher than the same worker without computer skills.

While technology is competing for time and resources in our curriculum offering, our traditional courses are also under scrutiny in part because of technology, in part because we are competing globally and in part because they are out of date. Comparisons on international tests indicate that science instruction in the United States is lacking. An analysis of our science content indicates that our failure is one of students not having the "opportunity to learn." When our students take the tested science content, our students do reasonably well, but they simply don't get sufficient exposure—physics being a good case in point. Math scores result in similar accusations about math curriculum. Even social studies are not exempt and a simple example suffices: the four largest countries in the world are China, India, the United States and Indonesia. To what extent does our social studies curriculum reflect that the two largest of these countries comprise over one-third of the world's population while the United States contains less than 5%? In addition, Indonesia probably does not even make the course of study at all.

Learning to Change

Our challenge is substantial. We are expected to raise the standard and performance level for all students, close equity gaps, and modify our curriculum all at the same time. How will we do it?

Measurement

I am an avid listener of National Public Radio and a few weeks before Thanksgiving I was listening to a conversation on the radio about the nutritional value of vegetables – for me, not a riveting subject. My attention changed when they began to discuss how little research has been done on the nutritional value of vegetables. It turns out that the difference in nutritional value between two heads of broccoli sitting in the same grocery bin can be quite substantial. One head of broccoli can be full of nutrition while the other can be virtually void of it. How can this be? Apparently almost all of the research on growing vegetables has focused on crop yield and physical appearance because those two variables have economic value. Very little research has focused on developing broccoli with better nutrition because the nutritional value of broccoli was always assumed. As I sat in the driveway, my mind wandered and I thought about the lessons from this story for education.

First, we cannot expect to change things without measuring them. Measurement is a necessary step in both beginning the change and evaluating the end result. I do some work with the College Board and understanding Advanced Placement™ participation provides a good example of using measurement to both begin change and evaluate results. Assume that a district wants to improve the number of students successfully taking Advanced Placement™ courses. Measuring students in their freshman or sophomore year with something like the PSAT or PSSS almost always results in substantially higher numbers of successful Advanced Placement™ students in their junior

and senior years. The measurement more easily creates change because it provides evidence of additional students having the ability to succeed. Simply asking teachers and counselors to recommend more students without any supportive evidence is justifiably an uphill battle. Obviously the end measurement is the actual test result at the end of the course.

Second, we need to be careful to ensure that we measure the right things, the right way, and use multiple metrics. Doing any one of these three things wrong can lead to disastrous consequences.

Third, we need to be more careful with our assumptions. We know that there are students in our schools who do not value learning, will not work toward college and, in fact, do not ever see themselves in college. We cannot assume that simply going to school will change their attitude, so we need to work at it intentionally. We know that there are some very bright students in our schools who are not challenged. We cannot assume that they will somehow take care of themselves.

People

A few years ago I listened to Jim Collins at an AASA convention as he went through his characteristics of successful organizations. He said that if he could bet on only one thing in an organization to create change, it would be people. An organization needs to have the right people.

In general, our leadership comes from the ranks of classroom teachers and our student performance is dependent on the teacher still in the classroom. Getting the right people in the classroom has a three-part answer. The first, and probably easiest, is recruitment. We recruit between 3% and 7% of our teaching staff every year. Over a five-year period we can make a profound difference in our teaching staff by creating a better teacher prospect.

Any given district tends to recruit from a limited number of colleges. We have the ultimate incentive with which to influence their decision-making. We have the job. What if we contacted students when they declared their majors? We could inform them that we want them as our employees but we have certain expectations. We want them to take certain courses, have certain work experiences and make certain grades. We can influence our own destiny by creating our applicants while they are still students.

The second, and perhaps most difficult step, is to improve the overall quality of teaching in our classrooms by improving the performance of our existing staff. I am not certain that we know the answer to this question. It will certainly be impossible without measuring both the process of teaching and the process of improving teaching. If the process is right and implemented correctly, the outcome is predictable. We need to look at the process of teaching from lesson plans to delivery to student evaluation. Then we can respond some of the more promising practices such as coaching, professional learning communities or improved content knowledge.

Unfortunately, the third step is to eliminate those teachers who clearly are not making the grade. When our efforts to improve a specific teacher's performance fail and that teacher's performance is inadequate, it is unfair to other staff and students to retain them yet our tendency is to move them.

Technology

Another intervention strategy for change is the introduction of technology. Technology is a powerful tool for creating and sustaining change but we tend not to be very strategic in its use. Levy and Murnane contend that technology replaces routine work. In education we engaged in a great debate about using technology to assist with the routine work associated with teaching and learning. Without much in the way of good evaluation, we came down against it. Yet, we continue to value outcomes in education that require practice, routine practice. Technology should provide a good tool for even guided practice. We need to experiment again but this time measure the results to evaluate technology's contribution at this level.

Levy and Murnane also believe that the use of technology tools elevates the level of thinking and the complexity of communication in the work place. It involves the increased use of data and more sophisticated means of communication. This use of technology should influence both our work with each other as educators and the work of students as learners – meaning our courses should require students to also manipulate and analyze data and communicate through an increased use of media.

Time, Size, Relevance and Influencing Stakeholders

Creating more time is also a very successful strategy for change. High schools that are successful with underachieving students share at least one characteristic: buying time. They provide additional time for students to catch up in the core competencies of reading and math. They may double block periods, provide longer hours, or have summer school but they definitely buy time. Another variation of buying time at a different level is pre-school. There may be variations in success between pre-school models but we know that pre-schools designed for learning can make a substantial differences for students from low-income families.

Size is another characteristic often found in change models. Corporations tend to create innovation centers staffed with a small group of entrepreneurial persons. Small seems to be more responsive and creative. We find the same thing in schools whether in the form of small, professional learning communities, small high schools or small class sizes. Small works.

Relevance is another attribute generally included in change strategies. In a corporation it takes the form of goal setting. In education for students it has at least three dimensions. The first is vertical – how does what I am doing impact what I will be doing in the future.

This focus tends to look at college or work and then drive reform back into lower grades and the result closely resembles goal setting. The other two dimensions are horizontal – they impact the student today and result more in creating interest. One of these horizontal dimensions is defined completely within the school. It makes courses relevant in terms of each other – interdisciplinary in a sense. The other horizontal dimension relates the course inside the school to the student’s world outside the school.

In the end, the ability to change always depends on our ability to influence stakeholders. An example from several successful secondary reform models is the relationship between a school adult, the student, and the family. Sometimes this is accomplished with a person specifically assigned to this task, like a counselor. Sometimes all adults in the school have a small group of students and families for whom they are responsible. Regardless of the tactic used, the strategy of influencing stakeholders, in this case the student’s family, is always involved.

Change is the Constant – Success is the Variable

One thing we absolutely know is that the world around us will continue to change. We need to do the same. We need to value change, allow failure and publicize successes. In 1955, Time magazine recognized Harlow Curtis, the CEO of General Motors, as their Man of the Year. GM had about 50% of the American auto market. Practically before the ink had dried, Toyota US was established (1957). Either this year or next, Toyota will pass GM as the largest automobile manufacturer in the world. Over the course of 50 years GM was unable to change sufficiently to meet the challenge. Their failure to change was a function of their own success. They knew how to profit from big cars and they chose to stick with that strategy but energy prices and environmental concerns changed and their strategy, though successful in the past, proved to be the wrong one. Change is tough and success spoils but we cannot afford to sit still. We cannot get change wrong or worse still, not change at all.

Biography: Richard Erdmann has worked in education since 1971. He started four education companies, taken one public and currently owns and operates Syfr Corporation. Each summer Syfr hosts a retreat for superintendents, chief academic officers, accompanying teams and their spouses. The 2007 retreat will take place in Santa Fe, NM on July 8 – 11. It will focus on science education reform. Syfr will also offer six *Women in Leadership* conferences in 2007 and work with AASA to deliver on-going services to the registrants. He can be reached at derdmann@syfrcorp.com, 360-335-0352 or Syfr Corporation, P O Box 1218, Washougal, WA, 98671. Syfr’s website is www.syfrcorp.com. It contains information about the company’s conferences and retreats as well as other articles and presentations by Mr. Erdmann.