



Business and Education: Customer and Supplier A Model for Reform

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Customer Supplier Model

Business rhetoric is generally anathema to educational professionals; this article’s title alone may raise their hackles. Yet schools and businesses share a central problem facing the United States today – the problem of declining economic competitiveness.

For competitiveness now hinges on work force skills and organization of work. Both are driven by the training provided to workers and management alike by the country’s educational systems. A model derived from business can help us understand shortcomings of both schools and businesses, and suggests immediate and concrete steps that both school systems and private corporations can take to address them.

The customer-supplier model offers a useful way to view the problems facing educational systems. Schools, as suppliers, do not seem to know who their major customer is and what products and services it needs. Thus the schools try to offer too much, and diffuse their scarce resources without serving the key customer effectively.

Our educational system faces many different tests because it has many different constituencies, markets, and customers.

But our schools’ failures stem in part from the confusing multiplicity of tasks. One classic business blindness is too little communication with a core customer. Still another, related trap is to listen too well to what the customer asks for, without asking what might really be needed. Paradoxically, the schools have made both mistakes – with plenty of encouragement.

For most practical purposes, schools should look at the ultimate employer of their students as their key customer. As a customer, the employer represent the objective that all students be able to support themselves and to make productive contributions to society. This is the future toward which we want all students to progress, whether they become equipment operators, homemakers, food-service workers, teachers, engineers or artists. By meeting these “social contribution” objectives, schools give students an economic base for effectiveness in the broader world of their future. The objective serves not only students, but also their parents and

communities, while contributing to the economic health of the country.

Thus, schools can do justice to our broader social agendas – but they have to begin with a focus on the ultimate employers of their students. Unfortunately, our schools' attempts to satisfy their business customers have left our businesses, and our society, significantly lacking.

How It Happened In the Schools

The schools only delivered the goods their customers ordered.

From the Industrial Revolution through the development of mass production and marketing, American industry has operated on the assumptions of a shortage of educated workers, and a surplus of unskilled but motivated ones. The Taylor efficiency gospel exemplified the beliefs that drove manufacturers to reduce tasks to their simplest elements and to reserve thought and decision-making for managers.

The schools responded to the limited demands of this two-tiered industrial structure by focusing almost entirely on the decision-makers. – the college bound. The success of the G.I. bill, as well as the Sputnik scare, encouraged us to bring higher education to the entire middle class, and to dilute standards to reach that broader population.

Defining colleges as their customer, schools gave their less academically successful students a watered-down curriculum designed largely as a stopgap; at least these students would learn orderly habits of diligence and obedience until they were ready to enter the work force. Schools left these students to make their own transitions to the post-school world. Most training would come on the job.

At the same time, the liberal arts curricula of the colleges began to produce too many middle-class generalists. Instead of turning out engineers or chemists, universities produced “managers” or people ready for tertiary services like consulting, advertising and law.

The Wrong Products, The Wrong Time

The relative abundance of middle-class generalists, the accompanying shortage of trained technicians and craftspeople and the continuing availability of unskilled blue-collar works, reinforced boardroom prejudices in favor of standardized production and jobs. Cash flow, earnings and other pressures on short-term profitability further encouraged managers to

employ people as low-cost disposables, instead of investing in their potential for higher productivity.

Throughout the past two decades, global competition has increasingly necessitated cutting down on inefficiencies and luxuries – whether reducing layers of management, moving production overseas or modifying the skill mix of workers. In the resulting new world of equal access to financing, technology and cheap labor, industrialized countries have to find their competitive edge in how they organize production to capitalize on the skills of their work force.

Taken as a whole, business decisions determine the position of the United States in the world economy. If all our individual companies, rationally choosing to maximize short-term profitability, avoid long-term investment in human capital, then we will become a country of low-skill, dead-end jobs. As a country, we will not be able to maintain our standard of living; we will no longer be a good market for foreign – or our own – products; and we will lose the economic and social stability that has brought us steady, addictive doses of foreign capital. It also puts our long-term viability as a society in jeopardy.

The backbone of our economy is not a well educated elite, but a far larger set of people with a range of useful skills. More than 70% of the present jobs in the United States do not require a college education. Our economic health depends on the amount of value these jobs add to our goods and services, and on the resulting project available to investors (in good returns) and to workers (in good wages).

We would want to upgrade the majority of our jobs then, even if the world were standing still. But it isn't.

Product liens, production methods and work force composition are changing rapidly as both manufacturing and services become more complex and information –driven. Whether on the factory floor or at the bank teller's counter, jobs now demand broader work and social skills than ever before.

With roughly equal access to technology and capital, companies increasingly need to boost the productivity of their people. The answer is a high skill smart worker with wider and deeper training and with greater responsibilities.

Choosing this high-skill alternative will require an overhaul of both our schools and our businesses.

We will have to make our schools more like well run businesses, and our businesses more like good schools.

Reformed Schools

The first step for our educational system is to ask the same basic strategic questions any business in trouble has to ask:

- Who are my customers?
- What is my mission?
- What are the resources? Strengths? Weaknesses?
- How can I measure my performance?

As in a business, the answers will be customer driven.

The school's customers are the future employers of its students. Its mission is to serve these customers by increasing each student's ability to contribute economically to the short- and long-term benefit of society. The school's resources are its employees; its limited federal, state and community funds and the limited support parents can give its efforts. Finally, schools can measure their own performance by placement and performance of students in jobs or in further education programs, and by demonstrations that students have acquired specific skills clearly linked to economic performance and are developing their own human capital.

Focusing on business as the key customer should strengthen a school's performance as a supplier. To prepare their student "products" for a supplier. To prepare their student "products" for a useful work life, schools need to create stronger ties between schooling and work. One way to do this is to design the curriculum to better reflect the content and process of work. Another is to establish a credential system that sets work-relevant standards of achievement in specific skill areas.

The first, most important change in our schools would be to create a clear link for students between present school and future work. Public schools in general offer few credible work-preparation programs.

Vocational schools and community colleges are often poorly coordinated and detached from business, resulting in outdated courses and poor matches between supply and demand. As a recent *Wall Street Journal* article showed, one community college continued to teach manual plug-in switchboard operation into the early 1980s; other colleges have produced a glut of auto mechanics, welders and computer programmers, while ignoring immediate industry needs for auto-body designers and other skilled workers.

Our school systems have to start working with businesses more closely to define work-oriented education. The wide spectrum of existing paid work systems, in which business and education

join to develop new organizational structures with part-time work and school credit, is one promising direction.

To make the value of learning clear, though, we need to return to the economic function of the diploma; to certify the graduate as one of a school's reliable, consistent "products" – a person with a known set of skills and abilities. These days, high school diplomas function too often as little more than proof of attendance.

If a uniform, national diploma system is not feasible, we could at least expand and adapt the current system of Regents diplomas in some of our large states, such as New York, Texas and California, to develop a range of certification for well-defined skills in particular trades or industries. Thus we would have sets of competing certifications – or brands – for various trades or skill and knowledge levels that are directly work-related.

Ideally, the "Regents" tests – in subjects from carpentry and restaurant cooking to history and French – would be a set of periodic, re-takeable examinations, contributing to certification in much the same way as the current tests for law, medicine, or architecture. By making tests and advancement in a subject proceed at the student's pace, we would replace our current emphasis on elapsed time with performance-based measures of our schools and students.

Such certification systems would also provide multiple opportunities to continue learning at the high school level, and to enter higher learning. To capitalize further on their resources, schools could provide incentives to teachers to "place" (and keep) their students in jobs or in higher certification levels, grades or schools.

Without lowering standards, we would make it difficult for students to fail.

Better Business

Business will benefit most if it treats the education system as it treats other suppliers: providing clear "product" specifications, while exploring ways of obtaining the needed services in house or from other suppliers. With suppliers as insulated from competition as the schools are, however, business will find it particularly worthwhile to develop a mutual understanding of customer-supplier problems, and to negotiate reasonable requirements and expectations.

How does this translate into a business agenda for improving the schools and developing work force skills? At least three actions are clear. Companies need to : redefine and make explicit their work requirements; work with schools to ensure the

supply of graduates with the needed training, and expand worksite education and training – both to supplement school efforts and to gain enough expertise in the supplier’s field to help determine an optimal mix of school-based education and company training.

The need for business to redefine and make explicit its work requirements is fundamental. Too many businesses are still structured in rigid hierarchies and segments that compartmentalize and control work for the sake of Taylorie efficiency. This pattern offers simplicity of work, but sacrifices the possibility of rapid response to market and technology changes. Today, businesses need to restructure work to encourage individual multi-task assignments, to increase responsibility at lower levels of the organizations and to reduce hierarchy.

To identify the skills and knowledge they need, companies have to ask themselves two sets of key questions:

- Is work organized in the most efficient, responsive way?? If not, how should we change it?
- What skills and knowledge are needed to accomplish each task? Each job? Each aspect of the company’s mission?

Armed with the answers to these questions, business can begin to redefine its own operations and provide the schools with clearer explanations of its needs. Schools and business can then work together to establish the structure, content, credentials and rewards that will ensure that students learn skills and acquire knowledge relevant and valuable in the world of work.

For instance, today’s flexible manufacturing techniques require machine operators who can help maintain their machines and develop changeover procedures; who take responsibility for the quality of the parts processes and who can move to other machines if necessary. In this restructured workplace, each worker, and each group of workers, is an entrepreneurial unit “selling” products to the rest of the company. The result may be greater speed and efficiency – but it requires a worker with more education, motivation and planning skills than the schools currently provide. It also requires factory and office managers who can turn their increasingly diverse work force into a team, instead of relying on the command authority of hierarchy and ownership.

The changes needed in both business and schools are radical, but they can be eased through the partial integration of customer and supplier operations. For example, students could both study and work at a business site, under both school system and

company teachers. Students would receive a salary for their work, but the salary would be contingent upon successfully completing their school requirements. In addition, they would receive a certificate upon completion that guarantees employment in the company or its industry. Aetna, IBM, and San Diego's Microelectronic Consortium Training Center have all experimented with this kind of program, with considerable success.

Yet despite some impressive examples, most private-sector training goes to managers, not workers. As with other aspects of education for generalists, purposes and expectations in management training are often poorly defined, and accountability and measurability are frequently elusive.

To attract and keep the skilled and motivated workers they need, companies will have to transform themselves, making careers at all levels resemble a progression through school. If rewarded for what they know, and can do, employees will develop their own human capital – benefiting themselves, their companies and their communities.

Again, as in the school system, the goal is to make it difficult for an employee to fail.

The Challenge

The solution proposed here is simple.

Schools need to refocus on their chief economic purpose: to be sure their student graduates are ready for the world of work. In turn, businesses need to reorganize themselves to increase productivity through the use of more broadly skilled workers. To foster these changes, we will need to change structures, incentives and working relationships in our schools, business and government – not an easy task, even without the natural resistance of vested interests.

But the first steps can be taken immediately: business and education can work together as partners, to plan for the future American work force.