There is an interesting parallel between teacher education programs and the history of the computer industry. In the 1970s, refrigerator-sized minicomputers were the cutting-edge machines of their time, and the companies that made them were some of the most respected companies in the world. Surprisingly, however, when the desktop computer emerged it wasn’t brought to market by Digital Equipment Corporation, Data General, or any of the other minicomputer companies. Through the 1980s as desktop computers flooded the industry, the minicomputer makers all struggled to stay afloat and many did not survive. With historical hindsight this shift seems to have been inevitable, but as it was happening the minicomputer companies just couldn’t see the sense of entering the personal computer business. The way minicomputer companies made money was by selling their machines to large corporations that were hungry for computing power. Corporations that bought minicomputers didn’t have any use for the cheap, low-performance desktop machines. Hence, minicomputer companies had no interest in making desktops.

This problem of new opportunities not making sense to established organizations is not new. It has played out over and over again throughout history. In fact, it is the root cause of the innovator’s dilemma.

Organizations are created to address jobs that people need done. Over time, as an organization works at addressing a job, it develops capabilities that are aligned with that job. These capabilities belong to one of three categories: resources, processes, or priorities. Resources are the physical capital and human capital that an organization uses to address the job. Processes are the ways in which resources come together. Priorities are the shared notions of “what matters” that the organization develops as it figures out how to do the job successfully.

Interestingly, an organization’s resources, processes, and priorities define not only its capabilities, but also its disabilities. For example, the capabilities that make McDonalds great at operating fast-food restaurants are not well suited to building highways, designing smart phones, or treating diseases. Organizations just aren’t good at doing things they weren’t built to do.

Here is where organizations often fumble: sometimes there is a shift in what matters. In such circumstances, existing organizations find themselves confronted with new jobs that are different from the ones they were built to do, and their current capabilities become debilitating. For example, in the computer industry, the performance of networked desktop computers eventually started to approach the performance of minicomputers. As a result, corporations started to value the modularity and low cost of the desktop machines over the computing power of the minicomputers. When this shift happened, desktop manufacturers stepped in to address the need. Meanwhile, the minicomputer companies continued to focus on their core business of making better minicomputers until that core business had completely evaporated.

Fortunately, the resources and processes that make up an organization’s capabilities do not have to be fixed. With time, new resources can be bought, built, or hired, and new processes can be developed through hard work and ingenuity.
Old priorities, on the other hand, are often more tenacious. Sometimes, as in the case of the minicomputer makers, deeply-held priorities can keep an organization from addressing a new challenge that is staring it in the face. When old priorities dominate, an organization can’t find the motivation to change their existing resources and processes.

This seems to be the case for teacher education programs. Just as minicomputer companies learned to succeed by prioritizing the advanced computational needs of large corporations, many of the priorities of teacher preparation programs are defined by their accrediting bodies and parent institutions. Accordingly, they place high value on priorities such as staffing their faculty with doctorate-level researchers, giving their professors academic freedom regarding how they structure their courses, expanding their course offerings, and awarding degrees based on students’ completion of seat-time-based credit hours.

In our current education landscape of high-stakes testing and teacher evaluations, the practical skills of teaching—such as classroom management, instructional delivery, coaching, and relationship building—are becoming increasingly more relevant. The existing priorities of teacher preparation programs, however, are more aligned with fostering academic knowledge and critical thinking than with teaching these practical skills. Accordingly, the job of teacher preparation programs is shifting, and new teacher training programs like Relay and Match are emerging to address this job.

Another shift is also looming on the horizon. Emerging personalized learning models are transforming the role of the teacher. Teachers in these models find themselves acting more as coach and mentor than as deliverers of direct instruction. As such, the skills they need to successfully fulfill their jobs are shifting, but many of the programs that train them remain static.

At the end of the day, preparing good teachers is the ultimate priority of all teacher preparation programs. Nonetheless, established programs face competing demands from other conflicting priorities that they have developed through years of operation in the traditional system of higher education. Whether existing teacher education programs will succeed in addressing the new jobs they are being asked to do depends on how well they are able to deliberately restructure their priorities.

-Thomas Arnett

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