

Education Specialty: Post-Industrialism

During the last 50 years, more and more Americans have been getting undergraduate, graduate, and post-graduate degrees—but in what? Even as our population grew, the percentage of people in their twenties with college degrees has more than tripled, from 7% in 1950 to something more than 22% today. In simple totals, we have, today, about one and a half times as many doctorate and bachelor degrees conferred each year than we did in 1970. The number of masters degrees conferred each year has just about doubled since then. But, what areas of study have kept pace with these increases? And, thereby, which areas of the U.S. productive economic capacities have continued to be renewed and replenished; and which have, on a relative basis, been diminished or degraded for lack of new graduates?

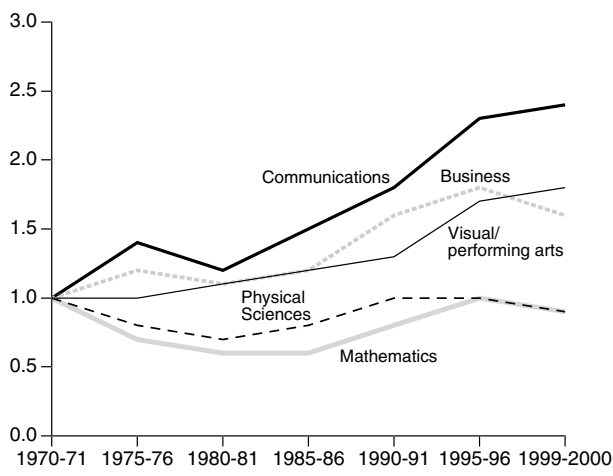
The greatest relative drop in doctoral degrees conferred since the 1920s has been, far and away, in the physical sciences. In the 1920s, '30s, and '40s, fully one-fifth to one-quarter of all doctorates conferred were in the physical sciences. By the late 1970s, only 10% were; and today, fewer than 9%. The simple numbers of master's and bachelor's degrees conferred annually in the physical sciences, from the 1970s to today, have dropped by 50-60%.

In agriculture and natural resources, doctorates conferred annually, as a percentage of the total doctorates, are now below the levels of the 1920s and '30s, having peaked in the '50s and '60s.

Engineering doctorates, overall, have increased from 1% of the total doctorates conferred annually in the early 1920s to 12% in the mid-1960s. A drop to below 8% by 1980 recovered by the 1990s and 2000 back up to mid-1960s levels. However, only half of these are U.S. citizens and can be expected to remain in the country. Also, increas-

FIGURE 1
**Doctoral Degrees Conferred in U.S.,
Changes Since 1970-71**

(Indexed to 1970-71)



Source: EIR.

ingly, engineers are being trained in business practice or in IT, rather than in areas of the physical economy.

So, what about the services and the IT sectors? These areas have either kept pace with, or far exceeded, the overall increases seen in degrees conferred. The number of business degrees conferred annually, including bachelor's, master's, and doctoral, were 2.5 times greater in 2000 than they were in 1970. Not surprisingly, the number of computer and information sciences degrees conferred in 2000 was close to 12.5 times the number in 1970. And, the armies of college graduates in the fields of parks, recreation, leisure, and fitness studies have swelled in ranks by 12 times their 1970 levels.

These figures come from the U.S. Department of Education and the National Center for Education Statistics.

—Judy DeMarco

ing collapse of a group of entities fairly described as a “General Motors Complex.” We must not be so negligent as to allow that precious productive capacity to be disassembled. Therefore, we must create a “cover” under which the complex is taken into receivership by an entity created by the Federal government, to ensure that essential productive facilities and their employees are held together as a productive capacity.

In this example, the intent will be to create certain new projects, such as in the domain of essential infrastructure requirements of the nation, which will absorb those parts of productive operating potential not presently required for cur-

rent product-lines of the combined facility taken into tow in this way. A suggested alternative for this purpose would be to create a national program for shifting current passenger and freight requirements from highway to rail, or rail-like modes. I choose this example because it is a likely prospect for very early action, which incorporates several leading features of a large category of options for bringing current national product output, in piecemeal fashion, up to the level of breakeven of the national economy on current account.

The most attractive feature of that option is that it applies essential, leading high-technology potential at the front-end