Is College The Answer?

Mike Collins, author of Saving American Manufacturing

For the last 20 years the government mantra has been to get a college education in order to get ahead. Shop classes that used to be in every grade school and high school were replaced by computer labs to prepare the new knowledge workers for the future.

But the big question is—are all of these educational institutions keeping up with the changing needs of the economy, and preparing the graduates for real jobs? More specifically, will kids coming out of high school or college have the basic skills to get a job?

In manufacturing, we have gone from a time when there were plenty of jobs that only required a high school degree and some on-the-job training, to an era of automation and sophistication requiring a variety of high skill sets. The people making good wages in the service industries are the people with professional degrees or very specialized training.

As the economy has changed to one that requires higher skills, more technical knowledge, and specialized training, the education system has not changed very much. I'd argue that a general degree from a 4 year college is oftentimes no better than a high school degree in terms of getting a job.

General Vs. Professional

If you go online and locate the National Center for Education Statistics website, you will find a section called "The Digest of Educational Statistics; 2007." Table 262 lists all Bachelor's degrees issued in the year 2005 to 2006 by discipline or category. These statistical tables can be divided into degrees that are academic (or general degrees) and career (professional degrees). Those with professional degrees have enough specialized information and skill to interview for a specific career job such as teaching, engineering, journalism, nursing, etc. There were 1,485,252 degrees awarded in 2005/06. In adding up the degree categories, I found that 50 to 60 percent of them were in the general category and did not include enough specific skills to be termed a professional degree.

Proof In Numbers

The problem of finding a family wage job is not limited to college students.

- In year 2007/08 there were 3,303,000 high school graduates.
- Another 25 percent, or 825,000 students, either dropped out of high school or didn't graduate on time.
- In 2005/06, approximately 713,066 students graduated from community colleges from a total enrollment of more than 6 million.
- Of this group, 314,000 had technical/professional degrees.
- About 400,000 students graduated with general degrees.
- In 2005/06, about 1,485,252 students graduated with Bachelor's degrees from a total 4 year college enrollment of 18 million.
- Of this group, 40 percent (595,000) were professional or technical degrees.
- 60 percent (890,000) were academic or general degrees.

So the big question is, what will the dropouts, high school graduates, and the general degree holders do to find a high paying job in the changing economy?

What Can Be Done?

Working with your hands: Electricians, plumbers, pipefitters, masons, maintenance technicians, machinists, and fabricators who go through apprentice programs can make more then $30 per hour and the demand for these types of workers will exceed supply by five percent in 2012. I think this makes a strong case for bringing back shop classes in grade schools and high schools, particularly for those bright students who learn by doing and not from books. Parents need to understand that working with your hands or working in a trade is a better job than 70 percent of the future service jobs.

2 year degrees: The 2 year vocational associate degree is the qualification preferred by most manufacturers, and we need to produce a lot more technical graduates than currently exist. But there are several problems. The first is that community colleges need to create more industry-specific programs.

The second problem is that state legislatures have funding formulas that limit the number of technical and vocational degrees. They favor the college prep courses to get into a 4 year college because they are easier to teach and it is easier to fill the seats. We need to change the funding formulas to educate the technical and skilled people that are needed. In manufacturing there is already a shortage of skilled workers and it will get worse as 10 million baby boomer employees retire by 2020. The training programs for manufacturing skilled workers are simply not adequate to train 10 million workers.

Add skill sets to education: 4 year colleges need to look at their general degree categories and see what kind of skill sets they can add to enhance the chances of the graduate getting a job that pays a family wage. They should also consider giving student's credit for taking technical elective courses that would allow the

student to minor in a technical vocation.

Of all the educational institutions, 4 year colleges have not adapted to the needs of the changing economy and have not taken responsibility for all of the general degree holders that need to find a decent job. I think it would help to increase the cost of general classes and lower the cost of technical or skill type classes that can help get a job.

The big dark secret is that transitioning to a service economy will provide everybody with jobs, but many people will not find family wage jobs. To get a good feel for this problem, go to the Bureau of Labor Statistics website at www.bls.gov/emp/. If you add all of the low paid (L, $21,260 to $30,560) and very low paid (VL, up to $21,220) jobs, you will find that they total 71 percent of the total jobs. This means the high paid (H, $30,630 to $46,300) and very high paid (VH, $46,360 or more) make up only 29 percent of the total. Of the high or very high paid jobs, almost all require professional degrees or degrees with specific skill sets.

These numbers do not show that the manufacturing sector is also going to need skilled people. Manufacturing jobs average over $60,000 per year but they all require some kind of skill training; even an entry level job in manufacturing will offer a better wage then 71 percent of jobs.

The operative word in this debate is "skills." Whether it is high school, community, or 4 year college, the emphasis needs to be on weaving more skill sets into education curriculums to give the emerging workforce a shot at higher paid jobs.

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