

Trade school, not 4-year college, is a better bet to solve the US income gap, researchers say

- Researchers are investigating how the United States can become more competitive in the manufacturing industry in the age of artificial intelligence.
- Some of their conclusions suggest that more investment is needed in vocational programs and not in large, four-year universities.
- "There are too many four-year colleges serving too many students, and too few institutions with greater focus on vocational education and training," the researchers said.

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Additional trade schools, and not four-year college degrees, may be a better bet for U.S. workers, according to new economic research.

The amount of vocational training available relative to the size of a country's manufacturing sector may reduce income inequality, and improve the fortunes of workers earning below the top 10 percent of household incomes, the data show.

"Pushing more students to B.A. granting colleges may no longer be the most efficient way to deal with the challenges caused by the decline in manufacturing employment," wrote Joshua Aizenman, the economics chair at University of Southern California. He did the research with academics at New Zealand's Victoria University of Wellington.

And declined it certainly has.

In September 1977, about 18.3 million people, or more than 18 percent of the U.S. labor force, worked in U.S. manufacturing. Forty years later, that number has since slipped to 12.4 million, or less than 8 percent, even as the general U.S. population has surged to 326 million, U.S. Census figures show.

But while one might suspect that fewer workers would mean decreased output, real gross domestic product (GDP) manufacturing has actually risen over the past two decades, leading to a popular conclusion that machines have simply replaced labor in the workplace.

Also of note: Manufacturing's share of GDP trickled downward, as automation spread and the economy shifted toward service.

No more 'College Premium'?

It has long been assumed that a college degree leads to higher average income, what some might call the college premium. But even with this hypothetical edge, some students will earn less than average. And they might even lose money if the burden of college debt undermines the income boost that comes with a bachelor's degree.

"There are serious questions about the future trends of the college premium," Aizenman told CNBC in an email. "Providing cheaper and better vocational education and re-training will provide the marginal workers with useful options."

After studying data from the World Wealth and Income Database, OECD and Eurostat, the researchers concluded: "As manufacturing sector becomes more important in a country's income, relatively unskilled laborers benefit from access to vocational education, thereby narrowing the income gap with skilled labor."

To answer how that conclusion can be applied in the U.S. given manufacturing's decline as a percentage of the labor force and share of GDP, the researchers did a case study of manufacturing industries in the U.S. and Germany.

Manufacturing employment has fallen in both countries, yet in Germany, manufacturing's value added has stayed around 22 percent in the last 20 years.

Of note: The share of workers with upper secondary education in Germany exceeds that of the U.S. by about 15 percent. However, the share of workers with post-high school education in the United States exceeds that of Germany by about 17 percent.

Germany's education system, the researchers said, better fits the needs of modern manufacturing, which requires more upper-secondary and vocationally trained labor.

In the U.S., on the other hand, "there are too many four-year colleges serving too many students, and too few institutions with greater focus on vocational education and training," Aizenman said.

"Chances are that better vocational education access and its quality in the U.S. would increase the income of the workers that are in manufacturing, and probably would reduce the overall income inequality in the US," he added.

Write a 4 to 5 sentence summary of this article:

Using evidence from the article, explain why it would be a good idea for the U. S.to focus on vocational education: