

Don't just pay lip service to making things in the USA

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In last week's Michigan presidential primary, there was just one message that united both the [Republican](#) and [Democratic](#) contenders: It's time to bring manufacturing jobs back to the United States.

It's a message that resonates. According to recent [studies](#) by Deloitte, a consulting firm, Americans prefer to see manufacturing jobs created in their communities above jobs in any other sector. Manufacturing remains one of the few bipartisan priorities in Lansing and Washington.

Yet, according to the same surveys, relatively few Americans are personally interested in entering manufacturing careers. Manufacturing ranked [dead last](#) among millennials as a preferred sector for starting a career.

Restoring American manufacturing is an intricate task that will take a profound shift in public perceptions. As presidential candidates and state policymakers think about how to renew American manufacturing, it's not only important to correctly configure taxes and regulation — it's essential to generate awareness and enthusiasm for manufacturing careers.

The manufacturing sector directly [employs](#) more than 12 million people with above-average wages and benefits. Maintaining a strong manufacturing base isn't just about jobs but also defense readiness and designing and producing the technologies that will be required to solve challenges like climate change, water scarcity and antiquated infrastructure. If we want a more prosperous, equal, and resilient economy, we can't just invent and design products and charge others for the intellectual property — we also have to build hi-tech products here.

While manufacturing has a reputation for vulnerability to offshoring, there's now a tremendous range of professional service jobs — from legal research to graphic design — that face similar foreign pressure. Much of the offshoring that can happen on the basis of cost has already happened. Most companies can't simply wait three months to ship a big ticket item or handle the mistakes and lower productivity levels that come from shifting to an all-new labor force.

The biggest long-term threat to American manufacturing isn't foreign competition. It's our own lack of interest.

While the U.S. leads the world in innovation, restoring the country's production base is a challenge because — when it comes to careers — there's a stigma. From elementary schools to TV sitcoms, Americans have been bombarded with the message that respectable and rewarding careers take place in an office setting rather than a shop floor and result from college study rather than an apprenticeship or on-the-job training. What's more, in 2009, only 18% of new college graduates [completed](#) a bachelor's degree in a technical field like engineering with relevance to manufacturing, compared to 24% two decades prior. Coupling these factors with the retirement of baby boomers, there's an urgent need for new talent and energy.

While presidential candidates talk about restoring manufacturing through [revamped tax](#)

[policy](#) or [international negotiating](#), there's also a relatively simple and straightforward task: bringing recognized best practices to scale at a national level.

For starters, it's possible to build positive perceptions of the manufacturing industry by giving young people meaningful first-hand experience visiting factories and meeting workers. While this might seem outrageously simple, it works. Michigan's Mac Arthur Corporation recently organized and implemented an innovative, low-cost "manufacturing day" field trip event, bringing dozens of students to their campus for an interactive experience with machine tools tied to their classroom curriculum.

Government agencies and businesses can similarly partner with schools to restore what could be the missing link between STEM education and practical problem-solving: Shop class. These once-universal course offerings enabled students to learn woodworking, metalworking, auto mechanics and other trades, gaining understanding and enthusiasm around manufacturing careers.

Another opportunity is to provide seed funding for the creation of new "manufacturing magnet schools" along the lines of Chicago's Austin Polytechnic, which offers a traditional high school curriculum, plus hands-on machine time, instruction on running a manufacturing business, and mentoring and job shadowing.

All of these promising ideas create pathways for the most proven means of preparing manufacturing workers: Apprenticeships. Apprenticeships offer real, bankable knowledge and skill as well as a clear pathway to a career — without the debt-load required to get a degree. While the Obama administration has prioritized apprenticeships as part of its [laudable manufacturing agenda](#) and firms like Siemens and Nissan have helped mainstream the practice, there's huge opportunity to scale up offerings — particularly among smaller firms that need help from workforce development agencies.

While many of these ideas may seem local in scope, presidential candidates can use the bully pulpit to explain their importance. Once elected, the next president can direct federal agencies under the Departments of Labor and Education to create new initiatives to seed these and other effective programs.

As the *Free Press* recently reported, industry leaders are [clamoring](#) to see candidates get serious about manufacturing. As [Building America's Tomorrow](#), a new Michigan-based initiative to restore interest in manufacturing careers, has contended, this is one of the few systemic national challenges we can fix with relatively quick and inexpensive [interventions](#). To strengthen the foundations of our economy, we need to rebuild understanding of how and why manufacturing matters.

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