

Siemens Has Georgia's Schools on Its Mind

Jack McGuinn, Senior Editor

Stephan Richter, publisher of *The Globalist*, an online magazine, in a recent *New York Times* op-ed piece (Sept. 16), serves up Detroit as a national metaphor for what has happened to U.S. manufacturing — and why. Referring to the heady, post-war years of the late 1940s, early 1950s, Richter comments on the country's hard-won — but fleeting — role as the world's No. 1 economic engine.

“But that (manufacturing) dominance was, to a considerable degree, a momentary quirk of history: the absence, in the wake of World War II, of any real competition from other nations. Once foreign competition was re-established, in Europe and Asia, only the superior skills of a nation's workers and a focus on long-term workers' training would allow a country to stay ahead.”

He finishes his column with:

“Developing the necessary skills base is not a short-term project. It requires decades of concerted effort on many fronts, by many national, regional and local actors, including collaboration among companies, government, trade associations, schools, colleges and universities. Globalization, in many ways, serves as an early warning system for the changes required in a domestic society. No society should have been better prepared to utilize this tool than the United States, given its traditional — but at least for now largely lost — proclivity to embrace change. That it didn't work out that way is a tragedy of the nation's own making.”

The good news is that state legislatures around the country are getting wise to the fact that the country's future — its youngsters — is in jeopardy. For a number of reasons — societal, financial or political — too many of our kids are not learning what they need to know to be viably employable for the type of work that now defines the 21st century workplace. STEM (science, technology, engineering, and mathematics) is the

new “Three Rs,” and if that strikes dread in the hearts of former English majors, welcome to the Brave New World.

And to help get the job done, the state — behind an initiative of the non-profit Georgia Foundation for Public Education (GFPE), and supported by the Georgia Department of Education (GaDoE) — has enlisted the willing participation of Siemens USA in developing advanced educational courses for the GFPE's Career Pathways program, charged with training Georgia students using a curriculum based on the employment needs of international companies with facilities in the state.

“We are excited to assist the Georgia educational community with the launch of this educational program,” said Helmuth Ludwig, Siemens Industry Sector North America CEO at a press conference announcing the partnership. “This partnership is consistent with our values — responsible, excellent and innovative — and it will promote STEM initiatives throughout the Southeast region of the United States. Through this program, companies like Siemens will be able to identify and develop the next generation of outstanding employees.”

GFPE worked with Siemens to develop teaching curriculum for GaDoE's Manufacturing Pathway, based on training materials, manuals and other educational tools used at the company's Drive Technologies manufacturing plant in Alpharetta, Georgia. The associated training materials provided by Siemens are valued at more than \$500,000.

The pilot program has been rolled out in South Forsyth High School, where it will be delivered by a teacher that was trained at Siemens. Eventually, the program will also include internships, work-based learning projects and opportunities for overseas cultural experiences for students in Germany.

Of course programs like this don't materialize overnight. It often takes time for legislative bodies to get with the pro-



gram — like watching an aircraft carrier doing a 180° in harbor. But when a state's most important employers start chirping about not being able to fill high-tech openings, attention is paid.

“(Georgia) House Bill 186 was passed in the spring of 2011, enacting the Career Pathways as part of the state's education policy. During the time the Bill was being debated, a number of CEO's and other business leaders gave feedback to the legislature that they had job openings that were going unfilled in Georgia due to a lack of skilled workers,” says Denis Brosnan, principal consultant at Yellow Park Garden and managing director of the Global Workforce Initiative (GWI) for the Georgia Department of Education. “In the months that followed the enactment of HB 186, these business leaders also indicated to members of the legislature and to State Superintendent Dr. John Barge they were willing to assist in the construction and rollout of the Pathways by donating their time, talent and training materials. As a result, in 2012, the legislature enacted the Global Workforce Initiative (GWI) to facilitate cooperation among the business and education communities.”

Brosnan was among the many CEO's and other business leaders who worked with officials from the Department of Education, the Technical College System of Georgia, the University System of Georgia, and other governmental agencies to formulate the GWI concept.

Brosnan says “The Career Pathways concept arose out of a nationwide collaboration with other State Departments of Education. Additionally Dr. Barge and his staff further tailored the program by benchmarking innovative programs in

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*Forsyth assistant director for governance and
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other countries, most notably Germany, France, Finland, and Korea.

“The program was enacted by the Georgia General Assembly in 2011, and the Global Workforce Initiative, an outreach program of the Georgia Foundation for Public Education, a state-chartered not-for-profit corporation, was thereafter created by statute in 2012.”

According to Forsyth assistant director for governance and career development coordinator Valery Hall, “The local pilot of the manufacturing curricula developed in cooperation with Siemens began in August at South Forsyth High School. Because the Siemens GWI partnership is designed to afford students who complete the program an opportunity to become employed by Siemens following graduation, it was important to select a school district partner nearby to the Siemens factory in Alpharetta.

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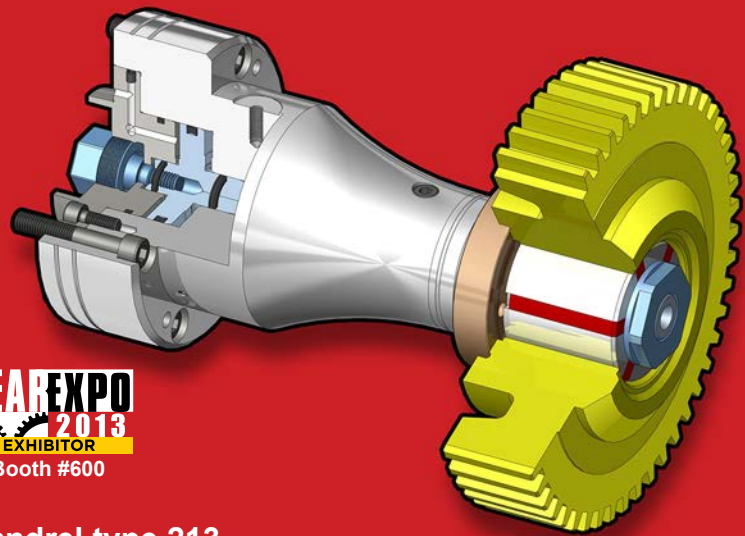
And while the program does not offer any hands-on manufacturing training on CNCs, gear grinders and the like, it will in fact offer a “manufacturing cluster” that includes a mechatronics path and the STEM cluster with “pathways” in disciplines like engineering, drafting and design.

As for admittance requirements, Hall explains that “students have self-selected, based on career interests, and are designating either engineering or integrated manufacturing, specifically. Students can begin the pathway either in 9th or 10th grade to ensure they will have a work-based learning opportunity by their senior year.”

Somewhat ironically, while the clamor for beefed up academics is growing nationally, there is at the same time a

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principal consultant at Yellow Park Garden and managing director of the Global Workforce Initiative (GWI) for the Georgia Department of Education



growing recognition that college is not for every kid — that a potentially satisfying career and quality of life awaits bright kids with special skills to match — with or without a degree.

To that point, Brosnan responds that “The Career Pathways in general — and GWI partnership programs in particular — enable participating students to graduate with a certification in the skill area of their choosing, thereby empowering these students to be immediately employable upon graduation from high school. Of course, these students may also then or thereafter continue their schooling by seeking a degree at a technical college or university in that or any other area.”


All good so far — but what about scholarships for these kids to help in advancing their budding careers? Do they exist? Whenever bright youngsters are deprived of being all they can be, money is not the root of all evil — *not having it* is what hurts. Brosnan says they are working on it.

“Our work to date in the area of scholarships has been focused on securing funding to enable professional development of teachers and overseas cultural experiences for the students, teachers and business leaders who participate in the GWI. As additional GWI partnerships are brought online, we expect to tie these to new or existing scholarship programs for students who wish to continue their post-secondary education. Our discussions with potential GWI partners have also contemplated employer-sponsored tuition reimbursement programs, and we hope that these become standard features of our GWI solutions prospectively.”

One critical positive is that the Pathways programs will soon “graduate” from the Forsyth incubator and spread throughout the Peach State. Hall explains that “Securing the assistance of Siemens in building out the manufacturing curricula is a huge benefit to Georgia. The curricula will be available through the Department of Education for all of the school districts around the state, and assistance will also be available to districts that want to participate in this and other, similar GWI partnerships.”

And the state is looking to add on. The Siemens partnership is a keystone of the program, but buy-ins from other companies with high-tech manufacturing credentials looking to give back to the community will help ensure the program’s success.

Brosnan: “Through the GFPE’s GWI, Georgia has taken the additional step of providing a true public-private partnership utility platform for interested businesses to participate in the construction and roll-out of the Pathway courses. In addition to the social benefits provided by these collaborations, these businesses will benefit by gaining access to talent pools of skilled workers, which will reduce their recruiting, training and retention costs.

“As such, the GWI program is ultimately about filling jobs and growing our communities in Georgia.” 

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