

Toyota / AMTEC

EMERGING BEST
PRACTICE

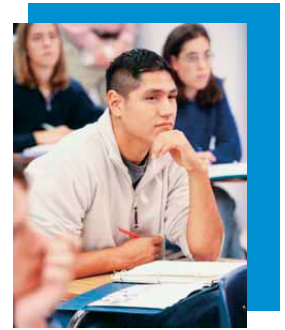


Intensive Partnering is Required to Establish Industry Certification

Toyota / AMTEC

Toyota lends leadership to community college-industry partnership in order to assure education and learning outcomes serve business needs, as well as individuals

It was 2005 when Toyota Motor Manufacturing, Kentucky (TMMK) and Toyota Motor Engineering and Manufacturing North America leaders were approached by Kentucky Community and Technical College System (KCTCS) to bring industry leadership to a nascent collaboration forming to explore the viability of a multi-state education model for automotive manufacturing. At that time, the Georgetown, KY, plant was going on twenty years old and leadership was seeking operational efficiencies in training and education. TMMK already had a strong history of partnering with Bluegrass Community and Technical College, a KCTCS college, and saw this request for deeper engagement as an opportunity to tap the college system to teach the fundamentals needed in its manufacturing maintenance workforce—math, basic electricity, hydraulics, and more. This would allow Toyota's new regional center (North American Production Support Center or NAPSC) to focus resources on advanced training specific to Toyota. Additionally, because the collaboration was to be a multi-state entity, it had the potential of creating standardized learning outcomes not only in all regions in which Toyota operates, but might also offer Toyota-level training and education to the corporation's supply chain, driving further efficiencies.



The approach taken by KCTCS of making industry partnerships an essential requirement from the beginning resonated with the Toyota philosophy of "customer first," according to Caren Caton, General Manager, Toyota NAPSC "It doesn't do any good to design a car without talking to the customers who drive them." Because the automotive manufacturers and their suppliers would be the key customers/drivers of this new automotive manufacturing technician education model, KCTCS considered it critical to gain employer participation and leadership in the collaboration. Toyota became instrumental in bringing meaningful involvement of automotive manufacturers and suppliers to the collaboration.

AMTEC is Created

In April 2005, with support of the National Science Foundation, KCTCS held a meeting to which community and technical colleges from Kentucky, Michigan, Ohio, Tennessee, Indiana, and Texas were invited with the requirement that each bring at least one automotive manufacturing employer partner. The outcome of the meeting, at which 27 college representatives and 28 business representatives were in attendance, was acknowledgement that there was a national economic imperative to cooperate to better prepare skilled workers for the automotive manufacturing sector. A core partnership was formed between 12 lead community and technical colleges and 18 automotive manufacturing companies from 8 states. By August 2005, the Automotive Manufacturing Technical Education Collaborative (AMTEC) was created with a mission and vision developed and primary goals and outcomes stated.

Partnering Deeply is Challenging

The organization began holding meetings with multiple colleges and their industry partners called "academies" at which the work of identifying a common set of competencies and a common

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Automotive Manufacturing Technical Education Collaborative (AMTEC)

- Creates operational efficiencies
- Standardizes learning outcomes endorsed by industry
- Founded in 2005
- National Science Foundation Advanced Technology Education Program
- Industry and education partnership
- Create industry-endorsed maintenance certification assessments

curriculum was undertaken. However, according to Annette Parker, AMTEC Executive Director, attendance was strongly weighted toward academics and was lowly attended by industry. Getting industrial competitors to come together and share education and training needs was a challenge. Recognizing that success was not possible without employer leadership, AMTEC approached the employer partners to exercise a stronger employer leadership position within the collaborative. Toyota accepted the challenge and in February 2007, hosted an AMTEC academy at NAPSC that became a catalyst for employer engagement. Calling on other automotive manufacturers to become part of the solution, Caton posited that, “Working together the companies could accomplish much more than any of them might do individually.”

Building trusting relationships in order to facilitate sharing among competitors is a time consuming process. Multiple academies, which continue today, were held in which employer representatives, working with academic partners, negotiated the skills and competencies required for all the employers to be able to endorse the learning outcomes. The time investment paid off as BMW, Ford, General Motors, Toyota, and many of their major suppliers agreed on fundamentals common to all automotive manufacturing that can be standardized and taught across multiple colleges, regions, and states. The process leverages curriculum development and delivery option for use across the industry including offering suppliers the same education as OEMs at reasonable costs.

Public/Private Investment

Initially, AMTEC applied for and received a planning grant from the National Science Foundation (NSF), followed by a two-year NSF project grant. Subsequently, AMTEC applied to the NSF

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Caren Caton
General Manager, NAPSC
Toyota

Advanced Technology Education (ATE) Program to become a National Center of Excellence for Automotive Manufacturing, a designation that was bestowed in September 2009 along with a \$5.5 million five-year grant. Toyota and other leading automotive manufacturers are leveraging this public investment in building a highly skilled workforce, by contributing their leadership, knowledge, expertise, education and training requirements, [and other input] to assure that learning outcomes strengthen the competency and global competitiveness of the automotive manufacturing and service industry.

As the ATE National Center for Excellence in Manufacturing, AMTEC works with colleges and industry partners to create industry-endorsed maintenance certification assessments and to validate college curriculum aligned to industry-endorsed skills standards. The collaborative promotes a flexible career pathway tied to achievement of competency-based education and certifications, sharing best practices and education models. In effect, it is building a skilled workforce pipeline that serves not only Toyota, but the entire automotive manufacturing industry.

Global Application Delivers Value

Participation in AMTEC continues to grow in value for global companies as AMTEC joined a consortium that includes automotive manufactures, educators and the German Ministry to create the Global Automotive Technical Education Network. This global structure of collaboration enables participants to benchmark against best strategies for implementation and continuous improvement of educational and credentialing processes. It provides a structure for developing research-based data to address current and future global workforce competencies. The return to Toyota, as well as other industry partners, for the significant investments it makes in AMTEC continues to grow with the expanding influence AMTEC exerts in assuring a highly-skilled technical workforce for the future of global automotive manufacturing.

For more information about Toyota, visit www.toyota.com.

For more information about AMTEC, visit www.autoworkforce.org.

About Corporate Voices

Corporate Voices is the leading national business membership organization shaping conversations and collaborations on public and corporate policy issues involving working families. A nonprofit, nonpartisan organization, we are a unique voice, and provide leading and best-practice employers a forum to improve the lives of working families, while strengthening our nation’s economy and enhancing the vitality of our communities.

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Find Out More

Corporate Voices is committed to identifying and spotlighting businesses supporting postsecondary completion while making significant contributions to internal company goals. “Best practice” talent development models that increase access to career opportunities through education and training are being examined for characteristics that are transferable and replicable to other employers. This research is being conducted with the guidance of the Corporate Voices Learn and Earn Business Leadership Team consisting of business executives leading promising models and those interested in peer-to-peer learning. If you are interested in joining, contact Peggy Walton at pwalton@corporatevoices.org
Team members include:

- Verizon Wireless
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