

National Visiting Committee Report for Year 2

Automotive Manufacturing Technical Education Collaborative (AMTEC) – DUE #0903193

A National Center funded by the NSF Advanced Technological Education (ATE) Program

Meeting Date and Location

- March 31 – April 01, 2011
- KCTCS District Offices – Versailles, KY

National Visiting Team Members Present

- **Marilyn Barger**, PI & Executive Director, Florida Advanced Technical Education Center (FLATE)
- **Lorna Finch**, Sr. Manager: Workforce Initiatives, Division of Workforce and Community Development, St. Louis Community College
- **Clyde Hornberger**, Executive Director, Lehigh Career and Technical Institute
- **Jorja Kimball**, Director, Strategic Research Development, Texas Engineering Experiment Station (TEES), Texas A&M University System
- **Robert Kosak**, York Technical College
- **Keenan Wage**, State of Michigan
- **Craig McAtee**, AMTEC NVC Chair, Executive Director, National Coalition of Advanced Technology Centers (NCATC)

NVC Members Excused Absent

- **Keith Bird**, Corporation for Skilled Workforce
- **Elizabeth Barnett**, Community College Research Center (CCRC)
- **Ken Carroll**, Vice President of Marketing, Kentucky Association of Mfgs.
- **Rob Knight**, Assistant General Manager, Toyota Motor Manufacturing KY
- **Roberta Teahen**, Ferris State University
- **Bonnie Tura**, Director, North American Engineering, General Motors Corp.

NSF Program Officer

- **Dr. Gerhard Salinger**, National Science Foundation

Project Overview

The AMTEC National Center is currently a collaborative effort between 12 community colleges and 14 automotive manufacturing companies / suppliers seeking to demonstrate that a diverse group of public and private entities can work together

effectively to implement innovative training solutions to assure that there is an adequate supply of skilled technicians to operate and maintain the complex and technologically advanced machinery used in today's North American automotive manufacturing facilities.

The center collaborative is currently lead by four core partners (Co-PIs): the Alamo Community College District, Henry Ford Community College, Macomb Community College, and Pellissippi State Technical Community College. The Kentucky Community and Technical College System (KCTCS) is the grantee and fiscal agent. Ms. Annette Parker of KCTCS is the principal investigator.

The AMTEC National Center intends to focus on four main goals:

Team Goal 1: AMTEC Curriculum & Course Development

Team Goal 2: AMTEC Career Pathways

Team Goal 3: Professional Development and Dissemination/Marketing

Team Goal 4: AMTEC Assessments & Continuous Improvement

Evaluation of Current Progress

The AMTEC Team has made very good progress toward achievement of the National Center goals. The NVC team found positive evidence of results. These results are included under the label of Kudos for each goal in the following pages of this report. The NVC's Questions and Recommendations follow the recognition of progress (*Kudos*) under each goal, as well.

Goal #1 – Curriculum Development

Kudos

- The progress over the past 12 months of completing 41 of the 59 course modules (70%) is quite an amazing milestone.
- The processes and procedures used in the curriculum development are very robust and vigorous.
- Sharing the total talent pool of the 4 Co-PIs and 8 partners is to be commended.
- Selecting a neutral / flexible online Learning Management System (LMS) platform (Moodle Jules) is very positive.
- Development of an AMTEC Trainer (the machine) with curriculum to match seems to be a positive approach for the industry's needs. The NVC is cautiously optimistic.

Questions

- 1) Can we see a brief demo of one (or more) of the new online course modules - live? **A) Not in current systems – templates only, currently**
- 2) How do you plan to address and potential legal issues using the AMTEC Trainer built by GM? **A) Single-source, copyright, value statements, etc.**
- 3) What is the “cost goal” for the AMTEC Trainer? **A) Approx. \$90K**

- 4) Are the hands-on labs developed with equipment needed? A) **Check-off list on competencies and metrics is ongoing work that is being done.**

Recommendations

- Define / map where all of the AMTEC sites (partners) are in the implementation process with timelines and milestones (who/what/when).
- Document and share the plan and actual timelines for implementation for all 12 partners' curriculum, course, and program rollout.
- Document and share with pictures and video the actual lab set ups for each hands-on portion of each course module.
- Document and share the progress on each online portion of each course module.
- Apprise NVC members on the schedule (who, what, when) one or more AMTEC colleges begin to offer the AMTEC Program, officially.
- Be aware of the management challenges ahead for the AMTEC Trainer (the machine) – both pilot and future needs.
- Apprise NCV members of the first available online AMTEC course and offer preview of course(s) to them, as soon as possible.
- AMTEC course module labs need to have equipment checklist coupled with the hands-on competency outcomes expected documented – visual and textual.

Goal #2 – Career Pathways

Kudos

- Established a global framework for AMTEC career pathways via literature reviews.
- Excellent models at Alamo CC (TX) – but, need documented examples.
- Excellent models at Toyota (KY) – but, need documented examples.
- Plan for collecting baseline student data is in place.

Questions

- 1) What part of the K-16 continuum is going to be tracked – impact metrics? A) **Dr. Kitty Manley is creating these tracking mechanisms for AMTEC.**
- 2) Has discussion with industry happened to formally create “kits” to help explain and excite potential students, parents, and counselors? A) **Dream It, Do It Kits along with MSSC, DOL, etc. to create an integrated approach of one common message to these stakeholders is planned.**

Recommendations

- Develop, collect and publish the impact metrics and the “*vital few metrics*” associated with goal #2.
- Develop and hold informative sessions for high school counselors.
- Leverage a four-year university partner of an AMTEC community college to integrate two-year, pilot AMTEC program.
- Document success stories with metrics from Alamo and others, and publish.

- Document and publish best practices for AMTEC partners.
- Document more details about each/all of the 12 AMTEC partners involvement, progress, and milestones related to AMTEC goals.
- Benchmark to current national research center best practices (Louisville, etc.).
- Benchmark automotive “YES” program models for Service Technician portion of AMTEC grant (see recommended Goal 5).
- The NVC is aware of many Career Pathway resources (CORD, ACTE, etc.) that would be helpful, as well. Consider using them and benchmarking existing efforts at AMTEC community colleges.
- Consider publishing the results of the AMTEC Goal #2 literature review – citing resources used.

Goal #3 – Professional Development and Dissemination / Marketing

Kudos

- Very good promotional materials developed (trifold, banner stands, website).
- Much improve professionally developed AMTEC branding by Creative Alliance (logo, etc.)
- AMTEC Website, Facebook, Twitter, and You Tube accounts established and beginning to be updated and used by “followers”.
- Very well attended (87) AMTEC Workshop in San Antonio, TX – Feb. 2011.
- June 2011 AMTEC Academy planned in conjunction with NCATC Summer Workshop with focus on unveiling curriculum and pathway models.
- Invited CC Presidents to an AMTEC Reception at 2011 AACC Convention – April 2011.
- Other planned AMTEC Academies are in Dearborn (Feb. 2012) and Knoxville, TN (Sept. 2012).

Questions

1) Why are there no industry members of the AMTEC NVC present at this meeting? **A) They all had other commitments that conflicted with this NVC Meeting.**

Recommendations

- Document and share internal process and frequency for obtaining AMTEC related content for website, Facebook, etc. from all team members
- Document and share brief recap summaries (pre and post) from participants of academies.
- Develop and document a strategy of AMTEC Master National Partner Plan – that will proactively address the desired location and names of future industry and college partners. Need strategic criteria that maps to short, medium, and longer-term goals.

- Develop a short-term (reactive) criteria and process for addressing those industry and college partners that desire to become AMTEC partners (i.e. – what do the “bring to the table” and fit within the AMTEC model needs).
- Develop and document the tier 1 and 2 automotive suppliers to ensure the right ones are part of AMTEC.
- Develop automotive OEM support funding for AMTEC marketing needs for students, parents, and counselors.
- Match your global outreach, energy, and time to the AMTEC metrics and goals of the AMTEC Balanced Score Card.
- Plan the Year 3 (2012) NVC Meeting around the AMTEC industry NVC Members – to ensure that they are present at next year’s meeting.
- Remember each day to keep the main thing, the main thing – focus on Automotive Technicians being trained by and placed from accredited college programs to increase the quantity and quality of qualified technicians.

Goal #4 – Assessment & Continuous Improvement

Kudos

- The NVC commends AMTEC for using the *Balanced Score Card* approach to effectively articulate and direct overall efforts of the implementation of the project activities.
- Work on completed assessment is exemplary.
- Occupational analysis process and assessments are directly related to knowledge and skills.
- Alignment and support of internal and external evaluation approach is outstanding.

Recommendations

- Move objective 4.1 to Goal #3 for better alignment.
- Move objective 4.2 to Goal #1 for better alignment.
- Move objective 4.3 to Goal #1 for better alignment.
- Move objective 4.4 to Goal #1 for better alignment.
- A third-party should administer the “end of program test” for the knowledge component of the AMTEC certification – online (NOCTI, UTC, etc.)
- The hands-on performance assessment should be administered by and AMTEC industry partner.
- The third-party (neutral) assessment should provide an objective assessment and reliable data with “pre- and post- knowledge tests”.
- Consider preparing an RFP for third-party assessment providers to find the best fit for AMTEC needs – soon.
- Develop 1-3 new objectives that relate to the NVC recommendations – in order to support Goal #4.

Goal #5 – Auto Service Technician (State of KY, ONLY)

Kudos

- The ability to integrate the automotive service technician piece with value added to AMTEC project is to be commended.

Recommendations

- Formally ADD "Auto Service Technician (State of KY, ONLY) as Goal #5 for AMTEC.
- Keep this goal in a local and regional focus in the State of Kentucky, ONLY.
- Do not replicate existing programs, but identify best practices, including assessments, for benchmarking.

Summary

The NVC continues to be impressed with AMTEC's strategic planning, the overarching structure that has been put in place and many of the accomplishments and progress towards meeting and exceeding their defined goals. It is evident that every member of the AMTEC Team is contributing to the group's success.

Overall, the NVC was pleased with the progress made in the Year 2 of the AMTEC National Center, however the complete execution of the full AMTEC program is quite lofty at the time of our meeting. The positive impact for the automotive manufacturing industry and workforce education / training organizations involved in AMTEC will be unsurpassed once the program and full curriculum are deployed. All Center goals stated above have been assigned to a leader with significant tasks and timelines developed, and project management tools deployed. We find the Center in good standing, with excellent leadership and continue to see great promise in its mission and vision.

Last year the NVC made twenty-nine (29) recommendations that have all been worked on or into the future goals, outcomes, and deliverables of the AMTEC National Center. In the spirit of continuous improvement in our global marketplace – the NVC salutes the AMTEC Team for its progress, future plans, and positive impact on the automotive manufacturing industry.

Final Note and Request

The 2011 NVC would like to request that all pertinent information and materials needed for Year 3 NVC's review be available either electronically or in print - at least ten business days before the next NVC meeting.