



Danish Agency for
International Education



TRANS-ATLANTIC
TECHNOLOGY and
TRAINING ALLIANCE

TA³ Connections

September 2010 Volume 13 No. 2

The Trans-Atlantic Technology & Training Alliance is an international network of community, technical, and further education colleges from the United States, western Europe, and South Africa dedicated to learning, innovation, and collaboration. For more information about the TA³ see <http://www.ta3online.org>.

Hold the Date: The TA³ will hold its next annual conference and meeting May 2-4, 2011 in San Sebastian in the Basque Region on the theme of fostering creativity and innovation among students and within institutions. The events are being hosted by José Luis Fernandez will be hosted by TKNIKA and will include visits to colleges and the Guggenheim in Bilbao.

Member News

TEC in Denmark, Vibeke Nørgaard reports, was awarded a two year EU-US Atlantis cooperation grant for "Enhancing Virtual Reality Training within Trans Atlantis Aviation Basic Maintenance Training." Its partners are the World Class Aviation Academy in the Netherlands, Embry-Riddle University and Iowa State university. TEC (Technical Education Copenhagen) will explore the use of virtual reality as a tool in the basic maintenance for air craft mechanics. Complying virtual reality training with the Part 66 certification is a common theme within the EU and US. The project will result in a research papers and reports on how to use Virtual Reality Maintenance Training within the curriculum of aviation basic maintenance training while complying with EU and US airworthiness regulations. In addition, the project will discuss and explore teaching and learning methods in relation to the use of virtual reality training modules.

Gateway Community and Technical College in Kentucky has opened its new 110,000 square foot Center for Advanced Manufacturing, which has already been visited by legislators, manufacturers and students. The Center houses the Integrative Manufacturing Center, furnished with state of the art equipment. That Center also has an Innovation Corner where companies can bring their "challenges" to the manufacturing floor for students to brainstorm and problem solve to help generate innovations. Also housed in the Center of Advanced Manufacturing is our Assessment Center, which provides testing to over 10,000 people annually.

In addition, the college hosted guests from Saudi Arabia interested in a partnership with Gateway to provide their technical training programs at Jazan Economic City Technical College next spring, showing them the new Integrative Manufacturing Center.

Also, Gateway's Entrepreneurial Learning College team of approximately 35 faculty and staff members have been working for the past 3 years to bring the spirit of entrepreneurship into the college. The team's accomplishments include making entrepreneurial learning language part of Gateway's vision, mission and values statements; two Spirit of Innovation Awards

featured on the League for Innovation website; a National Association of Community College Entrepreneurship Grant; a process model for "coaching" entrepreneurial learning ideas and projects; a new student organization called the Collegiate Entrepreneurship Organization; a new Entrepreneurship Certificate offered through Business Administration; and a partnership between Gateway's Student Government Association and the Entrepreneurial Learning College team to assess students' needs and deliver campus services that eventually will lead to student-run businesses.



New Center for Advanced Manufacturing, Gateway Technical and Community College, Kentucky

Culinary Bridge from Tampere to New York: Marjut Saminen from Tampere College in Finland is about to visit Kingsborough Community College in New York and EUC-Syd in Sønderborg, Denmark to initiate a collaborative project that will involve catering, business and horticulture programs. Other colleges also expected to participate are Salt Lake Community College and a college in Spain. The network plans to combine learning about consumption of healthy food, ecological farming, conservation, and knowledge of locally cultivated foods. Chefs in training, for example, will learn about the origin of foods that are served at their restaurants, business students will learn about export marketing branded goods, and horticulture students will learn about primary production and breeding for local and international markets. The underlying philosophy of the program is the slow-food movement that began in Italy in the 80s when the changing pace of work and trends towards fast food came under criticism. The program will focus on potential business opportunities associated with regional branding with agricultural producers and restaurant owners working together local food to make greater use of regional foods.

This project will produce training content focusing on international customer service skills, branding, international marketing and event promotion with core competences in customer service, branding, creativity and innovation, networking, technology, and language skills. The aim of the project is to combine good food, ecological farming and the conservation of traditional cultivated plants. The results will be saved in "Moodle" which will be accessible to all international partners. Marjut will also take two students from her food program to TA3 member Athlone Institute of Technology in Ireland who will remain there for six weeks.

Network News

The Community College Alliance for Sustainability, under a new grant from the Ford Foundation, will expand, adding new member colleges from the the Delta regions of Arkansas, Louisiana, and Mississippi. The Alliance will also co-sponsor, along with the AACC, the Association for Advancement of Sustainability in Higher Education, and Second Nature a workshop on **"Green Schools, Sustainable Communities: Growing New Opportunities"** (see below) on October 26 organized by the **Appalachian Regional Commission** and part of its annual meeting in Rome Georgia (October 25-26), which has chosen for its theme **"Investing in a Skilled Future."** See <http://www.cvent.com/EVENTS/Info/Summary.aspx?e=d5db3cec-7b88-4e77-9976-48264a370601>.



CraftNet continues to hold its monthly conference calls, share information, and look for new areas on which to collaborate. The September edition of CraftNet Sketches, which includes a profile of Northeast Wisconsin Technical College, is available at <http://rtsinc.org/>. Members are now in the midst of planning their next year's activities.

Meetings/publications/research



Secretary of Education Arne Duncan

The U.S. Department of Education along partner federal agencies held a **Sustainability Education Summit** on September 20-21 in Washington, DC to on action steps to help transition to a sustainable green economy.

Citizenship and Pathways for a Green Economy

was the theme. **Secretary of Education Arne**

Duncan addressed the group, noting that the event

marked a new milestone towards preparing students to be stewards of the

environment, started by President Clinton's 1996 Task Force on Sustainable Development. But now, for the first time, "the Department has taken a leadership role in

"We will be a committed partner in building a more environmentally literate and responsible society."

Secretary of Education Arne Duncan, 2010

educating the next generation of sustainable citizens." He promised that "we will be a committed partner in building a more environmentally literate and responsible

society" and announced the formation of a green team led to be led by UnderSecretary Martha Kantor. Environmental education, he promised, will be part of future plans for No Child Left

Behind. Earlier **Undersecretary of Energy Christina Johnson** called clean energy the “industrial revolution of our time.”

The meeting was organized by outgoing Deputy Assistant Secretary of the Office of Vocational and Adult Education Glenn Cummings, a keynote a speaker at the 2010 TA3 meeting. Many others representing community colleges, universities, government agencies, associations, and businesses contributed to the forum.

- Mary Spilde, President of Lane CC in Oregon, addressed some of the confusion about what a “green job” is, describing how green skills span many sectors and sustainability is a context for the entire curriculum.
- Bryan Albrecht, President of Gateway TC in Wisconsin, asks faculty and students to look internally first at their own efforts to be responsible and sustainable citizens. Operating in a high unemployment area with many older students, his school has to deliver programs in places and time frames that match their needs.
- Tom Kelly from the University of New Hampshire raised the issue of values and ethics, reminding participants that sustainable initially was a form of development and that sustainability is a systems approach that has to make connections across diverse populations and worlds to be effective.
- Deborah Rowe said sustainability should be addressed as a form of “literacy” that demands new habits and practices.

At the conclusion, participants, which included TA³ directors Keith Bird and Stuart Rosenfeld, recommended actions for the Department of Education. +

Appalachian Regional Commission: Green Schools, Sustainable Communities: Growing New Opportunities, October 27, 2010, 8:00 a.m. to 3:00 p.m., Rome, Georgia. <http://www.arc.gov>. This special focus session will follow the Commission’s annual meeting, October 25-26, on the topic of **Appalachia’s Educational Assets: Investing in a Skilled Future**. The Green Schools, Sustainable Communities session will bring together education and community leaders to highlight and discuss best practices in developing environmentally sustainable campuses and education-community partnerships that can support local economic growth.

ARC Federal Co-Chair Earl F. Gohl will open the session, co-sponsored the American Association of Community Colleges, the Association for the Advancement of Sustainability in Higher Education, Second Nature, and the Community College Alliance for Sustainability, with a discussion of the importance of sustainable management and practices from a policy perspective. Presenters will focus on the policies, people, and resources needed to foster a sustainable approach to campus development and management, as well as school-community partnerships that can encourage and lead local policy efforts to improve energy efficiency, boost renewable energy production, and support local job creation. Alliance for Sustainability members Joe Wakeman from **Hocking College** and Stuart Rosenfeld from RTS will be on the program.

- Register for full conference, including the special focus session (\$175).
- Register for focus session only (\$50).
- For more information or to register for either option, visit www.arc.gov

AACC's annual **Workforce Development Institute**, organized by Jim McKenney, will be held January 26-29 at the Hyatt Regency Newport Beach in California on the theme of "Keep America Working." Pre-conference workshops will include "Building a Green Workforce: Charting a Green Course for Community Colleges" and Emerging Models of Employability Credentials." Some of the speakers lined up are Jane Oates, Assistant Secretary, U.S. Department of Labor; Anthony Carnevale (speaker at past TA3 events), Director, Georgetown University Center on Education and the Workforce; John Sygielski, Chair of the AACC Board, and Walter Bumphus, AACC President. You can register on-line at <http://www.aacc.nche.edu/wdi>.

The European Union's Lifelong Learning Programme has a new publication titled **Education and Training for Social Inclusion: European Success Stories**. Success stories describe how partners in Slovenia, Slovakia, Germany and Hungary use art and creativity with adult learners, the Comeius program addresses the challenges of migration and cultural diversity, and schools from five member countries educate victims and witnesses of violence. The full report can be downloaded from http://ec.europa.eu/education/pub/pdf/llp/llp10_en.pdf

TA³ member profile: Macomb Community College, Michigan

When you think about automobiles, one city and region comes immediately to mind: Detroit and Southeast Michigan. But with the recent financial troubles of the American automobile industry making headlines, you might be forgiven if you forgot about the Motor City. Macomb Community College's new Center for Advanced Automotive Technology (CAAT) is spearheading a new effort to help modernize the auto industry by embracing the electrification of the auto electronics technology.

The National Science Foundation announced that they will provide Macomb with a grant of \$1.4 million to establish the program, which builds upon a multi-year effort of the college to expand its offerings to educate technical workers in technologies that utilize more effective alternatives to fossil fuel consumption. If the college meets certain agreed upon benchmarks, NSF will fund an additional \$1.5 million.

The grant award is a recognition of the long-standing commitment of the college to working with the auto industry in general, and new types of vehicles in particular. In 2005, Macomb received another grant from NSF centered on working with hybrid vehicles. Under that grant, Macomb provided training to first responders as well as technicians servicing hybrid vehicles. In 2006, the college also entered into partnership with other educational institutions and the local air force base to develop a program to train individuals to operate as technician for a fuel cell powered vehicle.



Students look over the engine of a hybrid electric vehicles in a class taught by instructor Matt Rossow (right). Macomb offers degree and certificate programs in the automotive field, including a certificate in alternative fuels.

The college is also greatly expanding its curricular offerings around electric vehicles, partnering with Wayne State University. That university has developed a Masters and Bachelors program in electrical vehicles. Macomb is piloting three courses in electric vehicle technology that will train individuals at the technician level and also serve as feeders to the programs at Wayne State, a four year university. The pilot courses will debut in the Winter of 2011.

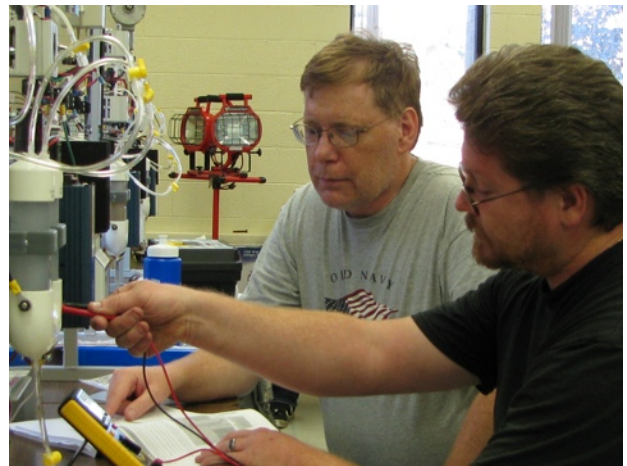
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January will also see two more courses introduced at Macomb around energy storage in vehicles. These courses at Macomb are funded through a grant from the Michigan Department of Energy.

Bill Stark, who is director of Macomb's Center for Alternative Fuels, says all these efforts are part of making Macomb a comprehensive center for advanced automobile technology.

"We wanted to make sure through our efforts, a collection of curriculum that will cover advanced automotive technology from concept to R&D to design of tooling to manufacturing of components including batteries to manufacturing processes and assembly processes associated with these specialized components to service is widely available," Stark said. "And now we are expanding into end of value stream, to reuse of batteries and reclamation of batteries at the end of their secondary usage."

The development and funding of CAAT makes that vision closer to reality. CAAT will serve as a repository of educational resources around advanced automobiles for institutions that want to access them. This could include syllabi, course descriptions and course materials. CAAT will also use the funding from NSF to offer grants to other educational institutions interested in offering training and initiatives around advanced automotive technology. Stark says the school's location and experience with the automotive industry positions the program for great success.



John Haley of Rochester (left) and Brian Rudolph of Chesterfield Township work on breaking water into hydrogen and oxygen, part of the college's Principles of Hydrogen Fuel Cell Technology class, which is one of 11 courses in Macomb's renewable energy program.

"Macomb is located in Southeast Michigan, the intellectual capital of automotive technology, and certainly the entire value stream of automotive design and manufacturing is located here," he said. "It is the natural home for this kind of center. Since we had what was a good start and very talented faculty, thought we take advantage of this opportunity to help out other institutions."

Stark says that the college and the new center will benefit from the close relationship Macomb has with local industry. They have provided training around hybrid and battery technologies to local companies, giving local industry confidence in the school's ability to deliver quality training to current and future workers.

The Macomb Community College profile was written by Dan Broun, RTS

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