



**Title:** Building a Pipeline of IT-Enabled Workers for a 21st Century Workforce

**Date/Time:** Thursday, July 31, 10:00 AM – 11:00 AM

**Location:** Renaissance Austin Hotel

**Description:** “American workers at every skill level—from low-wage, low-skilled to high-wage, high-skilled—face growing competition from workers around the world.”

As the baby boomers retire, the U.S. will face growing workforce shortages in low- to middle-skilled jobs. In order for the U.S. to remain globally competitive, students entering the workforce will need more complex skill sets than ever before. One of the fundamental skill sets is computing or using basic information technology (IT) applications, not just as a tool alone, but to communicate, collaborate, access information, and innovate.

Many teachers assume that their students have these requisite skills because they're socially connected in their virtual, online worlds and seem to be able to locate whatever they need on the Web. There is, however, a difference in the skill set you need using IT in your job and generally students have not yet developed the skills they need for today's 21<sup>st</sup> century world of work.

So, how do we enable students to develop a solid grounding of basic IT skills and become innovative problem solvers while preparing them for a broad range of careers? The IT Across Careers (ITAC) Project has a web-based library of teaching resources, including authentic problem-based scenarios, assessment tools, lesson templates, and examples of what IT looks like on the job.

Attend this session and learn how you can enhance your teaching strategy with the ITAC resources and promote broader learning and implementation of IT knowledge, skills, and programs of study. These materials have been developed especially for community and technical colleges and can be easily adapted for your courses and programs of study. ITAC materials support learner-centered learning.

**Presenters:**

**Joyce Malyn-Smith, Ed.D.** is Principal Investigator for Information Technology Across Careers (ITAC), an NSF Advanced Technological Education (ATE) project which was funded to develop a common language and framework for IT applications across all careers and a web-based resource library (including rubrics, scenarios, and "IT in Action" statements) to integrate and assess core IT skills in programs and courses at community and technical colleges.

As Director of Strategic Initiatives in Workforce and Human Development at Education Development Center's Education, Employment, and Community Programs (Newton, MA), Dr. Malyn-Smith also leads several other pivotal national and international IT initiatives including NSF's ITEST Learning Resource Center and EDC's Power Users of ICT Initiative, an

international research initiative on youths who have had long-term, intensive experiences using technology tools/systems and to learn how to nurture the creativity, innovation and potential of all youth empowered with technology, especially for STEM careers.

Leading to this work, Dr. Malyn-Smith was Project Director for the Department of Education's Information Technology Career Cluster Initiative (ITCCI) that developed the national *IT Career Development Model* and curriculum/skills framework which were adopted across the U.S. in partnership with the National Alliance of Business and the Information Technology Association of America (ITAA). Dr. Malyn-Smith led the Techforce Initiative, a National School-to-Work Office-funded project, which highlighted and expanded the engagement of the IT companies in school-to-careers (STC) nationally. Dr. Malyn-Smith is EDC's skill standards development specialist having developed national voluntary skill standards for three industry sectors and implementation tools to integrate skill standards into programs and curriculum, both of which have been used across the country. Her professional interests focus on how people develop technology skills and translate those skills into intellectual pursuits and economic opportunity.

Dr. Malyn-Smith holds a BA from Universidad Interamericana in Hato Rey, Puerto Rico, an M.Ed. from Boston State Teachers College and an Ed.D. from Boston University.

**Linda Scott** is Project Manager for the National Science Foundation, Advance Technological Education (NSF-ATE) project Information Technology Across Careers (ITAC) at Education Development Center, Inc. (EDC) in Newton, MA. Working with Principal Investigator Dr. Joyce Malyn-Smith, Ms. Scott developed and designed a scenario-based lesson framework for integrating the learning and practice of core IT applications with course content. She leads the re-design and expansion of the project's web-based resource library and searchable database, provides technical assistance on problem scenario development to community and technical college faculty teams, and directs the online validation studies of how IT is used in different industries and careers. Ms. Scott coordinates the project's outreach efforts with government and private leadership organizations, partners, and advisors, which include the American Association of Community Colleges (AACC), U.S. Department of Labor, U.S. Department of Education, and the States' Career Clusters.

Previous project work includes the Department of Education/OVAE's IT Career Cluster Initiative which developed a national career cluster model and curriculum/skills framework for careers leading to the design, development, management, and support of hardware, software, multimedia and systems integration services. Prior to joining EDC, Ms. Scott held positions at MIT Sloan School of Management and UCLA Anderson School of Management.