In response to the recognition that significant changes were required in service delivery approaches to meet the changing needs for workforce training, Illinois' Joliet Junior College (JJC) implemented a series of innovative training programs. The guiding philosophy behind the programs was that service delivery must correspond to shifts in focus from instructor-driven training to learner-centered training, from individual companies to cooperation and competition within industry clusters, from joint ventures to flexible business networks, and from comprehensive service providers to electronically connected networks of service delivery. The first program initiated was the Petrochemical/Refinery Process Technician Program (PRPTP), a 12-week course providing training at four company sites and at JJC facilities. JJC is also developing, with the assistance of local petrochemical companies, a parallel Associate in Applied Science program in processing technology as a career path for more traditional students. As an outgrowth of the PRPTP, the college's most significant multi-agency project was developed: the Safety Training Center of the Three Rivers Safety Council. The Council is an alliance of 13 area process manufacturers joined to improve safety awareness and performance of contractors, while the Center provides a Contractor Safety Orientation Course, serving 7,730 students in its first year. A final example of a multi-agency initiative is the ISO 9000 Registration Preparation Network, which allows companies to form partnerships to achieve shared goals. In the 4 years of the Network's existence, 31 companies have been served.
As Community colleges well know, today’s global economy has created tremendous challenges and opportunities in how colleges do business with business. The economic changes over the past decade have been so profound that traditional responses are no longer sufficient to meet the workforce preparation needs of business and industry. Significant changes to service delivery approaches are required as skilled human resources, accessible technology and quality of life become recognized as responsive economic foundations to Illinois’ new paradigm for economic development.

Service delivery must correspond to shifts in focus from instructor-driven training to learner-centered training; from individual company initiatives to competition and cooperation coexisting within industry clusters; from joint ventures to flexible business networks and virtual corporations (a temporary network of companies that come together quickly to explore changing opportunities); and from comprehensive service providers to electronically connected networks of service delivery. A review of this JJC initiative reveals a pattern of innovative leadership and change in operational philosophy toward a multi-company/multi-agency orientation in delivery of services.

The first of these new programs to emerge in response to the local needs of a changing economy and workforce was JJC’s Petrochemical/Refinery Process Technician Program. In the fall of 1990, the college’s Institute of Economic Technology (IET) invited representatives from 45 area major petrochemical companies and JJC faculty to an exploratory meeting to assess the feasibility of a training program targeted to their industry. The response was positive and enthusiastic. Companies not only...
expressed support for developing a similar program, but volunteered assistance in developing curriculum, providing instructors, offering on-site courses and assisting with job placement services.

In the spring of 1991, industry representatives and JJC faculty formed a Process Technician Training Consortium. The consortium determined what courses should be included in the program, the specific course content, the criteria for participant selection, the quality control criteria for determining participant success, the minimum requirements for attendance and grading, and most importantly, how to maximize job opportunities for program graduates.

The first training program began in the summer of 1991. Since that time, the IET has offered 16 sessions to train 223 students. The training now includes 26 separate courses totaling 206 classroom and lab hours taught over a 12-week schedule. Staff from six companies and JJC faculty teach courses at four company sites and at JJC facilities. Funding totaling almost $250,000 for students enrolled in the program was provided by the JTPA Title II and Title III programs, Prairie State 2000 Authority, company sponsorship and self-pay students. Amoco Chemical Company has contributed $8,000 in scholarship funds for this program. This program is now recognized as the regional standard for employment in the process industry and is identified as a pre-employment requirement by many of our industry partners.

Most recently the Chemical Industry Council of Illinois endorsed this program and is promoting it as a statewide curriculum model for its member companies. Their hope is that community colleges throughout the state will utilize this model to establish training for their area process industry.

Internally we are working (with the assistance of several companies) toward the development of a parallel Associate in Applied Science Degree program in Process Technology as a career path for our more traditional student population.

Companies and organizations contributing time, personnel, promotional assistance, materials and facilities include Amoco Chemical Company, Quantum Chemical, UNO-VEN, Nalco Chemical Company, Ingersoll Rand, Mobil Oil Corporation, Dow North America, Stepan Company, COMED, Joliet Valve and the Three Rivers Manufacturers' Association. Information about the program has been
shared with four community colleges interested in setting up similar training opportunities. Recognition for JJC’s Petrochemical/Refinery Process Technician Program includes articles in company newsletters and professional organization publications citing the program as a model business/education partnership.

An outgrowth of the success of the Petrochemical/Refinery Process Technician Program is JJC’s most significant multi-company, multi-agency project: the Three Rivers Safety Council (TRSC) Safety Training Center. The TRSC is an alliance of 13 area process manufacturers joined to improve safety awareness and performance of contractors working at the member companies’ sites. The IET administers the Safety Training Center and provides training through a partnership agreement with the Three Rivers Manufacturers’ Association. This program has received both statewide and national recognition through numerous articles in professional journals and publications.

The member companies of the TRSC - Akzo Chemical, Amoco Chemical Company, BASF Corporation, Dow North America, Exxon Company USA, Mobil Chemical Company, Mobil Oil Corporation, Quantum Chemical, Reichhold Chemical, Stepan Company, Unocal Chemical, UNO-VEN, and Clark Refining and Marketing - faced the challenge of providing cost-effective, quality safety training to all contractor workers. Member companies wanted to eliminate duplication of training services, standardize safety rules and standards from site to site, develop a consistent valid and reliable curriculum, and establish a benchmark standard for all member companies. One role the college played was to ensure third party objectivity in the design, delivery and evaluation of the training. The alliance provided $50,000 to fund start-up costs and entered into a lease for the facility site.

The topics covered in the training were developed with considerable input from member companies. The IET refined the “best practices” identified in the individual company programs and developed a four-hour course covering the essential topics required for a basic contractor employee safety orientation. A verification exam was developed to assess the effectiveness of training and student understanding of the material presented. Each student who passes the examination receives an identification badge.
On June 1, 1993, the IET began providing a Contractor Safety Orientation Course. During its first year the Safety Training Center served 7,730 students. As of March 1, 1996, 20,738 people received training through the program.

An analysis of pre and post OSHA Recordable Rates at 18 months into the program revealed a cumulative 31% decrease in OSHA Recordable Rate and a 44% reduction in Lost Workday Case Rate for member companies.

The IET Initially had a one-year contract to operate the center. Based on exemplary performance, the alliance extended the contract for two more years. As we approach our fourth year of operation we are expanding the scope of the center toward new mutually beneficial programs in activities such as contractor pre-qualification services, on-line safety bulletin board and additional OSHA mandated training.

The value of this program in terms of replicability has been demonstrated as we have assisted groups from the Trans Alaska Pipeline, Kankakee Community College and the Richland Community College in establishing contractor safety programs utilizing the same multi-company concept. Kankakee is now approaching the one year of operations mark with their program and Richland in Decatur hopes to be up and offering classes later this spring.

A third example of our multi-company/multi-agency orientation initiative is the ISO 9000 Registration Preparation Network. As opposed to being a trainer in a menu-driven series of workshops for multiple companies, the IET's role in this program is to serve as the flexible business network manager. In this type of network, like-minded companies form strategic partnerships to achieve a shared goal, in this case ISO registration. While advancing toward this shared goal, companies realize side benefits beyond the original scope. The collaborative process of shared experience fosters the growth of additional information sharing and inter-company cooperation. The enables companies to collectively gain competitive market advantages. It also helps companies adopt procedures and avoid pitfalls on the road to achieving the goal of registration, thus saving both time and money.
This year is the fourth year that the IET has managed this program. During this period, 31 companies have been served. Four have achieved ISO 9000 registration, 12 have completed quality manuals, 8 have selected a registrar and 5 have decided against registration. In all 22 companies continue in some phase of the registration process.

JJC's network approach already has been replicated by two Chicago area trade associations with a spin-off program in the Denver area. A key factor of our networks' successes has been internal and external utilization of resources. Registrar presentations have been donated by Det Norske Veritas, AV Qualite and Underwriters Laboratories. ISO compliant instrumentation instruction is donated by Metrum Instrumentation Services.

Company self-help and auditor training also is coordinated with JJC's Small Business Development Center to build a cadre of auditors for each company's use. This year a cost of $35,000 for registration preparation assistance and internal auditor training was shared by five companies -- Amkus, Inc., The Filtration Group, ITW Deltar, Mastermolding Inc., and Parutech Inc. Illinois Training Program funds administered through the Illinois Manufacturers' Association were utilized this year to underwrite 50% of the total network cost. Recruitment efforts are currently underway for next years network.

In our efforts to demonstrate the intrinsic value of the premise of "regional cooperation to meet global competition" to other community colleges, JJC staff proposed and presented a program on the multi-company network training concept at the national conference for the National Council for Occupational Education in Scottsdale, Arizona in November of 1995.

All of these initiatives are appropriate to serving local business and industry needs. As our efforts evolve from training for multiple companies, to customized training, to interactive, self-directed networks of companies and agencies, this is the next generation of workforce preparation services and initiatives.