Twenty-four St. Louis area employers from Illinois and Missouri participated in September focus groups to discuss the training needs of both incumbent and future manufacturing employees. These company representatives shared their thoughts and insights and expressed a willingness to explore the creation of an organization that could collectively address the St. Louis region manufacturing sector’s training needs like other similar groups in the region.

The focus groups expressed a commonality of training needs and a general agreement that local manufacturing employers must work together to educate and inform area community colleges and vocational and technical educators about regional workforce training needs. They must also work with educators to build academic capacity to meet current training needs and help prepare the next generation workforce. The following sections summarize many of the agreed points.

1) Incumbent Worker Training Needs

Focus group participants noted the significant challenges they face in improving the quality and productivity of their current workforce. These are grouped into three areas:

- Basic skill deficiencies among current employees in key areas such as math (particularly applied and shop math), basic computer literacy and reading (particularly blueprint reading and specifications).

- Interpersonal and job readiness skills in such areas as knowledge of how business works (including how employees fit into the scheme of total operations), team building to create greater integration and fewer silos, problem-solving and trouble-shooting, supervisor training (particularly getting a group of people to focus on a task and leading former coworkers as a new supervisor), conflict resolution, and quality assurance.

- Higher end technical skills such as robotics, hydraulics/pneumatics, CNC maintenance & operation, industrial electronics, sheet metal fabrication, 2D/3D CAD, technical mechanical and electrical maintenance, ISO, PLC programming, and national electrical code (NEC).

2) Future Worker Needs and Requirements

Focus group participants stressed the challenges they have in replacing their skilled and experience staff who will be retiring. Young people are not looking to manufacturing as a career and school counselors and parents continue to have outdated views of the manufacturing industry and assume that manufacturing jobs are or will soon all be outsourced overseas.
This has created a very competitive market for new skilled employees, particularly in specialized areas such as high end manufacturing, chemical and food industries. In addition, many secondary educational providers are not providing their students with the motivation or skills they need. Educational providers also do not have the equipment needed by today’s industry and/or utilize multiple software programs and different systems than those used by many employers.

Greatest needs identified included:

- Getting the story out through joint action and collaboration that emphasizes the need for a highly skilled labor force, the skilled training needed and the financial and personal rewards that careers in industry offer.

- Secondary and post secondary educators' understanding of industry demand for sound preparation in key areas such as basic (applied) math, reading and computer literacy as well as communications skills (including bi-lingual) and building a strong work ethic.

- A growing demand for CNC programmers, PLC operators, software developers, 2/3 D CAD, National Electrical Code, safety standards and computer integrated manufacturing.

3. Working with Educational Providers and Training Organizations

Focus group participants noted the many training related challenges they face are in recruiting, retaining and sustaining a productive workforce. These include finding qualified trainers who have both technical expertise and teaching skills, scheduling training due to 24/7 crossover schedules, work ethic/attendance and providing release time during work hours for employees to attend training.

At the secondary level employers noted that high school industrial arts programs are closing at a time when there is a growing need for technical high school education. In addition, many of the schools that offer vocational training need to upgrade their curriculum. The biggest challenges are in making the linkage between industry and educational providers. While some positive trends were noted such as SLCC working with high schools to inform them of technical professions, these efforts are limited at this time.

The real challenge is to make the connection between companies and schools. One need is to create the critical mass of people to make it work. Several successful models were noted including:

- Manufacturing Skills Institute through which manufactures work to identify needs and match them with St Charles Community College and other area training providers
Center for Training Innovations – affiliated with SWIC; distribution and warehousing; companies won’t discuss processing because of competitive advantage issues

SLCC Customized Training – to get trained employees

Local colleges generally have the infrastructure but need to develop partnerships with other groups to meet the dynamic training needs of local manufacturers. This will require a critical mass of students to make it work and a delivery system that is accountable to smaller companies who cannot afford or qualify for customized training.

One key to addressing this is identifying training resources. Focus Group participants mentioned several including the public employment and training system (SLATE and the system of Workforce Investment Boards (WIB). These have not been utilized, particularly by smaller employers because they are often not aware of available resources and how to access them.

A Regional Industry Training Group (RITG) could play an important and effective role in organizing local training. Such an effort would include industry leaders and representatives of community colleges and tech schools. Some areas that such a group could address include:

- Define and organize training need of its members and link them to flexible education and training resources that are accessible by participating employers.
- Identify and leverage matching funds to support training efforts.
- Identify and coordinate basic industry certification programs and work with area community colleges to integrate developed industry certification courses and skill content into their curriculum.
- Provide on-line training programs based on the Tooling University model.
- Distribute employer training needs so colleges and other training providers can respond.
- Industry must commit to sending people to fill classes.
- Create a marketplace for colleges to inform manufacturers about their capabilities.
- Establish mechanisms to provide incentive of college credit.
- Coordinate the provision of organizing feasible, multiple employer trainings at employer facilities.
- Work with community colleges to design training specific to company needs (e.g. Relay techs & electricians) and then opening training opportunities to other employers in the community.
- Work to create on-site training with participating organizations.
- Develop train the trainer trainings that would build employer internal training capacity. Serve as a mechanism for sharing best practices in training and managing staff needs.
- Help setup mentoring program – boot camp for new college grads – supposed to be six months of training – trained to learn business and management skills.
- Review other training models and share information with the membership.
• Evaluate program regularly to ensure that it is meeting needs in a cost effective manner.
• Work with employer members to identity potential instructors and colleges to employ them.

The St Louis region has an opportunity to effectively undertake a Regional Industrial Training Group like other employer-driven RITGs in the region. Like these other RITGs, success of a St. Louis RITG will depend upon businesses taking the lead.

4. Action Steps (Target Date):

(Nov 26, 2007) Assign responsibility of drafting business plan for Jan. 9th meeting, Finalize Action Steps and Jan. 14th invitation/agenda and submit a funding request to Pathways to cover startup administrative costs of the RITG including:

• member communications,
• meeting facilities,
• new member recruiting,
• training coordination (facilities and trainers as applicable), and
• grant writing.

(Dec 15, 2008) Distribute draft of a basic and advanced skills curriculum for new and incumbent workers to encompass:

(Dec 31, 2007) Completed a review draft with Pathways to validate general curriculum and verify funding levels.

(Jan 9, 2008) Finalize business plan (organizational structure and member fees, etc.) and core curriculum with leadership group in preparation for presentation (business case) at Jan 14th meeting.

(Jan 14, 2008) Present business plan and initial skill offering to interested companies and ask for Jan 23 commitment.

(Jan 23, 2008) Distribute membership list to member companies and support organizations and meet with colleges to develop course schedule for initial offerings.