TECHNICAL ASSISTANCE PROGRAM

Engaging with Indiana business to build our economic future

A Year in Review
July 2002 — June 2003

PURDUE UNIVERSITY
Working to improve the state of Indiana's economy is an important task for Purdue University in the next several years, and our Technical Assistance Program is at the heart of the effort.

Assisting in the business areas of advanced manufacturing, information technology, and life sciences, TAP has had a tremendously positive effect on the state's economy.

Every business with which TAP has worked has been helped, and many have experienced dramatic improvements. By connecting the business community to the expertise and vast resources at Purdue, TAP can greatly improve a firm's ability to compete and succeed in the global market.

The numbers are impressive. Last year, TAP engaged 200 faculty, staff, and students with 400 Indiana companies. The activities included 321 assistance projects and 10,941 information documents delivered. In addition, 46 Indiana employers and 1,200 Purdue students attended the High Tech Job Fair, which TAP conducts for Indiana companies to help increase the number of Purdue graduates who accept jobs with firms in our state.

Since its founding in 1986, TAP has worked with 4,500 companies, saving approximately 4,000 jobs, providing about $292 million in increased sales, $61 million in increased capital investment, $33 million in loss prevention, and $27 million in cost reductions.

Purdue is extremely proud of this highly successful effort. We know that providing funds for TAP is one of the best things our state can do for itself. I will continue to work hard to bring about expansion for this program in the future.

Martin C. Jischke
President, Purdue University

As a student intern at Willow Marketing, Stephanie Rhoads assisted with client interviews, pitched stories to the media, and conducted market research.

www.purdue.edu/TAP
The Technical Assistance Program connects Indiana businesses and local governments with the vast resources of Purdue University.

Our mission: To strengthen the Indiana economy and improve the quality of life for all Indiana citizens.

TAP's achievements include:

- Helping stem the “brain drain” by increasing the placement of Purdue graduates in Indiana businesses.

- Strengthening the competitiveness of Indiana businesses by assisting them in implementing state-of-the-art technologies.

- Improving and protecting Indiana's environment by working with industry and wastewater treatment plants on pollution prevention and operational efficiency.

**Economic Impact Data**
May 1986-June 2003

Since 1986, TAP has made a huge impact on Indiana business. A total of 5,378 projects have been completed with partner companies. The results of TAP's work include:

**Companies Served**
TAP faculty, graduate students, and staff worked with 396 companies in 2002-03.

**Savings and Investments**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Investments</td>
<td>$61 million</td>
</tr>
<tr>
<td>Cost Savings</td>
<td>$27 million</td>
</tr>
<tr>
<td>Increased Sales</td>
<td>$292 million</td>
</tr>
</tbody>
</table>

**Employment**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs Added</td>
<td>1,499</td>
</tr>
<tr>
<td>Jobs Saved</td>
<td>2,470</td>
</tr>
</tbody>
</table>

*Data based on client evaluations of TAP assistance*

**TAP Funding Sources, 2002-03**

- State of Indiana: $1,160,715
- Fees for Services: $420,767

Total: $1,521,482
Each year, the Technical Assistance Program provides free, confidential consulting services for hundreds of Indiana companies, local governments, and nonprofit organizations. The success stories on these pages give a few highlights from the 321 assistance projects completed in 2002-03.

Since 1986, TAP has completed more than 5,000 assistance projects.

**Suros Surgical Systems, Inc., Indianapolis**

**COMPANY** Suros Surgical Systems manufactures medical devices for minimally invasive methods of tissue excision and biopsy within multiple surgical specialties.

**CHALLENGE** As a start-up company, Suros Surgical Systems did not have the resources to conduct an analysis on how the organization could maximize the production capacity of its growing business.

**ACTION** Suros contacted TAP, which put the company in touch with Jack Posey, an advanced manufacturing projects manager at Purdue, and Pornthep Anussornittisarn, a Purdue graduate assistant. The Purdue team worked with Suros engineering and production teams to review current operations and recommend a move from batch to flow processing.

**RESULTS** The company’s production capacity more than doubled to nearly 5,000 units a month, up from an estimated 2,000 units a month. Annual cost savings exceeded $250,000 per year. The project will allow Suros to stay in its current facility for at least six months longer than anticipated, which will allow the company time to further analyze the economic impact of its growth plan.

"The availability of Purdue resources has been invaluable to Suros and has allowed us to utilize our current resources in the most effective and economic way possible. As a start-up company, we lacked the experience and resources to conduct the appropriate analysis that would allow the company to grow in a positive and upward direction. The TAP program has been a tremendous resource that has put the company on a path for continued success."

RICH RELLA
Chief Financial Officer
Suros Surgical Systems, Inc.
**R & S Welding and Fabricating, Winamac**

**COMPANY** R & S Welding specializes in stainless and aluminum small tank manufacturing and machining services. Its customers include small job shops and Fortune 500 companies.

**CHALLENGE** R & S Welding turned to TAP for assistance in making a fixture that could hold a bushing and a tube in alignment during welding.

**ACTION** TAP introduced R & S Welding to Mileta Tomovic, Purdue professor of mechanical engineering technology. The weldment that was created by the team was a success.

**RESULTS** The fixture contains a magnet that holds the bushing and tube together in perfect alignment. Without such alignment, the part would not fit into the plastic injection machine for the final process. The success of the project resulted in $150,000 in sales.

**Lear Corporation, Edinburgh**

**COMPANY** Lear Corporation, founded in 1939, is the world's largest automotive interior systems supplier. Annual net sales were $14.4 billion in 2002. With 450 employees, the Edinburgh plant focuses on plastic injection molding of interior doors and trim for the automotive industry.

**CHALLENGE** To ensure the safety of end-of-line inspectors in a work area where there is forklift traffic.

**ACTION** Lear contacted TAP for its perspective on workplace safety. Jack Posey of the Schools of Engineering and Pornthep Anussornkitisarn, a Purdue graduate student, met with Lear operations and traffic management to discuss safety improvements. Lear implemented some of the suggestions, including the use of orange safety flags that communicate hazard areas to forklift drivers. Lear is also considering designating specific areas on the plant floor for walking and others for forklift traffic.

**RESULTS** Lear has had no accidents in the production area since the implementation of the Purdue recommendations and employees feel safer.

**EXPERTISE FOR ANY NEED**

TAP provides up to five days of free consulting on the full range of technical issues, including:

- Advanced Manufacturing: Lean manufacturing, Facility planning, Process improvements, Quality management, Environmental issues
- Business Management: Growth strategies, Financial evaluation, Costing systems, Marketing options
- Information Technology: Networking, programming, and parallel processing, Hardware, software, and ISP assessments, Broadband infrastructure for communities, Management of the information technology function
- Product Development and Engineering: Design input and review, Rapid prototyping, Design method selection, Problem solving, Product evaluation and testing

*TAP does not support projects involving litigation or projects geared toward developing patented technologies. Contact us for expert referrals.*

www.purdue.edu/TAP (765) 494-6258
TAP is committed to helping Indiana employers connect with Purdue’s talented, hardworking, and highly skilled student body — and to making Purdue students aware of the many career opportunities available right here in Indiana.

HIGH TECH JOB FAIR FOR INDIANA COMPANIES

At TAP’s annual job fair, Indiana employers meet hundreds of Purdue students studying technology, engineering, management, science, and agriculture. Approximately 1,200 undergraduate and graduate students and 46 businesses attended the 2002 job fair.

Cornerstone Controls Inc., based in Indianapolis, Cincinnati, and Louisville, provides process control equipment, instrumentation, and services as a manufacturer’s representative for Emerson Process Management. Cornerstone has hired multiple Purdue graduates through the High Tech Job Fair because Purdue’s engineering and technology schools are well known and well regarded among the company’s client base.

"The standards maintained by Purdue for curricula and grades let us rest assured that a Purdue graduate will know how to work hard, be organized, and understand what it takes to set and meet goals. These are all critical things in our project engineering business."

LARRY FRECHIN
Group Manager
Cornerstone Controls, Indianapolis

2002 JOB FAIR DATA

<table>
<thead>
<tr>
<th>Businesses in attendance</th>
<th>46</th>
</tr>
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<tbody>
<tr>
<td>Students in attendance</td>
<td>1,200</td>
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</table>

FUTURE JOB FAIR DATES

<table>
<thead>
<tr>
<th>Date</th>
<th></th>
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<tbody>
<tr>
<td>October 27, 2004</td>
<td></td>
</tr>
<tr>
<td>October 26, 2005</td>
<td></td>
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www.purdue.edu/jobfair

ADDITIONAL STUDENT RECRUITMENT RESOURCES

Purdue Center for Career Opportunities
Phone: (765) 494-3981
www.cco.purdue.edu
careersINsite
Phone: (317) 275-2030
www.careersINsite.com
SUMMER INTERN PROGRAM

Through the Summer Intern Program, TAP helps Indiana companies connect with innovative, technically savvy, and cost-effective assistance for summer projects. The intern program is also a great way to find future employees.

Fanger Communications, Indianapolis

At Fanger Communications, intern Patricia Wiyono performed a variety of duties ranging from data entry and letter composition to creating a business directory.

"Patty was essential in moving our main database project ahead of schedule. She helped build a database that exceeds over 75,000 members of a target market. Without her assistance, this number would have undoubtedly been much lower."

ROBERT FANGER
President
Fanger Communications

McCoy Miller, Elkhart

During his internship at McCoy Miller, an ambulance manufacturer, Kevin Jant was a lead engineer on projects including analysis of the company’s bill of materials and the redesign of fiberglass van caps for ambulances.

"Purdue student interns have a strong problem-solving background that allows them to contribute to the organization immediately. The employer obligation is to present them with a clear challenge, and the intern provides a different perspective to the challenge."

JAMES KEOUGH
Engineering Manager
McCoy Miller

As an intern, sometimes the most valuable qualities you can bring to a company are your availability, your willingness to do whatever needs to be done, and your ability to solve problems.

PATRICIA WIYONO
Management
Also pictured: Intern FeFe Jin

Purdue student interns have a strong problem-solving background that allows them to contribute to the organization immediately. The employer obligation is to present them with a clear challenge, and the intern provides a different perspective to the challenge.

KEVIN JANT
Mechanical Engineering

"My internship was very helpful in seeing how classroom materials could be applied in the real world. It also gave me insight into aspects of the workplace that are not taught in the classroom."

JAMES KEOUGH
Engineering Manager
McCoy Miller

2003 SUMMER INTERN DATA

<table>
<thead>
<tr>
<th>Participating businesses</th>
<th>27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating students</td>
<td>33</td>
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</tbody>
</table>
PARTNER CONTACTS

Workforce Development, Education, and Training
Office for Continuing Education and Conferences
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Technology Transfer – Patents and Licensing of Intellectual Property
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Community Service Student Grant Program
Office of Engagement
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Purdue Office of Engagement
Don K. Gentry, Vice Provost for Engagement, is leading Purdue’s efforts to form partnerships with Indiana businesses, leaders, and citizens.
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CONTACT US

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