The Lansing Area Manufacturing Partnership (LAMP) is an academically rigorous, business/labor-driven school-to-career program in Lansing, Michigan, that includes business, union, school, and parent partners and emphasizes work-based and project-based learning, team teaching, and opportunities for staff and high school seniors to establish close and ongoing interaction with employers. The LAMP initiative was studied in three phases as follows: (1) in April 1998-December 1998, the research team focused on identifying issues related to LAMP's implementation and operation during its pilot year; (2) in April 1998-December 1999, an outcome study examined LAMP's short-term impacts; and (3) in December 1999, a study of LAMP's long-term impacts was initiated and designed to continue through June 2004. The studies documented that, in the short term, participation in LAMP contributes to students' personal growth, enhances their employability skills, and improves their preparedness to make education and career decisions. Over the long term, LAMP students are enrolled in postsecondary programs at higher rates than nonparticipants, higher proportions of LAMP students work while enrolled in postsecondary training, and LAMP students take more tangible steps toward achieving their career goals. LAMP also provided multiple benefits to the following stakeholder groups: educators; United Auto Workers/General Motors employees; and parents. (MN)
The Lansing Area Manufacturing Partnership
A School-to-Success Story

Prepared for
The UAW-GM Center for Human Resources

January 2002

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THE LANSING AREA MANUFACTURING PARTNERSHIP

A SCHOOL-TO-SUCCESS STORY

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THE LANSING AREA MANUFACTURING PARTNERSHIP

A SCHOOL-TO-SUCCESS STORY

Launched in 1997 by the United Auto Workers-General Motors Center for Human Resources (CHR), the Lansing Area Manufacturing Partnership (LAMP) has established itself as a model school-to-career initiative. Its innovative employer-driven curriculum, emphasis on project-based learning, team teaching structure, and the opportunity for staff and students to establish close, ongoing interactions with employees distinguish LAMP among other school-to-career (STC) programs. In September 2000, LAMP received the PEPNet Award from the U.S. Department of Labor and the National Youth Employment Coalition for programmatic effectiveness.

Three local partners comprise the LAMP partnership: the Ingham Intermediate School District, the United Auto Workers, and the General Motors Corporation. These partners developed and launched a STC program designed to provide young people with exposure to “all aspects” of the automotive manufacturing industry. They are committed to improving the educational process for America’s students and have made tremendous investments in helping young people make the transition from effective education to productive employment.

A Model School-to-Career Partnership

The Ingham Intermediate School District (IISD) provides instructional staff, access to students from over 20 high schools, and pedagogical and curricular expertise. Through its Career Center, the IISD provides the materials and personnel necessary to create, refine, and implement an integrated curriculum, student materials, and teacher manuals.

The United Auto Workers (UAW) provides mentors, subject matter experts, and project advisors who interact with students in a work-based learning context. Organized labor brings a historical perspective on workforce development, a longstanding tradition of continuing education and training, and a grounded understanding of workplace culture.

The General Motors Corporation (GM) provides access to the workplace that serves as a contextual learning environment. GM creates the necessary climate and conditions that encourage employees to participate in the initiative. Like the UAW, GM provides workplace personnel who serve as mentors, subject matter experts, and project advisors for students.

An extensive research agenda has accompanied the implementation and operation of the LAMP initiative. Program designers and operators use data from the research to drive programmatic refinement and continuous improvement. Numerous technical reports have documented the benefits of LAMP for students and partnering organizations alike. An ongoing longitudinal study is tracking the educational and career trajectories of participants.
KEY FEATURES OF LAMP

The LAMP classroom is housed within the UAW-GM Training Center in Lansing, Michigan. This placement is very significant—symbolically, culturally, and educationally. It affords students easy access to various manufacturing facilities, including resources, and numerous workplace personnel. Students attend LAMP for 2½ hours every school day throughout their senior year. The LAMP classroom enrolls a diverse mix of students with different ethnic, gender, socioeconomic, and academic backgrounds representing twenty-five high schools and three different school districts.

The program is driven by an integrated curriculum, collaboratively developed by educators from the Ingham Intermediate School District and representatives from the UAW and GM. Six units of study integrate academic standards and employability skills within a manufacturing context. The curriculum is delivered through a blended combination of classroom instruction, work-based learning, hands-on experiences, team projects, and interactions with UAW-GM personnel, including mentors.

A trio of certified instructors delivers the curriculum. Drawn from the local school districts, they have academic backgrounds in math, science, communication, and business. Team teaching makes it possible for teachers to: model teamwork; offer varying perspectives on information; learn from one another; and provide better oversight on field trips to the plants.

One of the defining features of LAMP is its innovative assessment process. Throughout the year, student progress is assessed along academic dimensions as well as in employment competencies such as teamwork, problem-solving, and communication skills. The LAMP program utilizes two types of assessments, formative and summative. The former measures student understanding at incremental steps while the latter are administered after the instructors believe the students have mastered the unit. Examples of formative assessments are unannounced paper and pencil tests and written assignments, including journal entries. Summative assessments include team and individual projects, portfolios, and worksite situations.

The instructors and the students themselves jointly assess all student work. Together, they must determine if the assignment or project has met the standards of quality agreed upon at the beginning of each unit. If the instructor and student both agree that the project is quality, the student receives a grade of “A”. If either the instructor or the student believe that the work has not yet met predetermined standards, the student receives a grade of “not yet quality” and continues to work on the project until it meets the agreed upon quality standards.

The course of study culminates in a “Capstone Experience” in which teams of students research authentic workplace problems, using skills and know-how developed throughout the year. They present their findings to an audience of educators, parents, and workplace personnel, using multimedia in a simulated professional workplace presentation.
II LAMP RESEARCH STUDY INFORMATION

The UAW-GM Center for Human Resources (CHR) commissioned the Academy for Educational Development's National Institute for Work and Learning (NIWL) to conduct an extensive study of the LAMP program. At CHR's request, the study, which began in the Spring of 1998, involved examining three different phases of the LAMP initiative:

**PHASE I - IMPLEMENTATION PROCESS**    April 1998 - December 1998

During the first phase of the study, the research team focused on identifying issues related to the implementation and operation of the LAMP program during its pilot year. The research design focused on: marketing; student recruitment; curriculum design and revision; program logistics; management; and leadership. Observations and findings were used to provide internal feedback and guidance to LAMP personnel and sponsors in refining the programmatic model.

The research team quickly recognized LAMP as a highly sophisticated STC model that presented serious implementation challenges. Nevertheless, LAMP personnel worked hard to build a partnership and meet all targeted time frames. The program was up and running effectively within a short period of time. Partners were committed to continuous improvement. Collaboration and flexibility enabled instructors and administrators to address programmatic needs as they became evident. Personnel were cognizant of the fact that they were in unfamiliar educational territory. They were able to learn from their experiences and adapt the program for the benefit of the students.

**PHASE II - SHORT TERM IMPACTS**    April 1998 - December 1999

The second phase of the evaluation involved an outcome study to document LAMP's immediate impacts on the key stakeholders involved in the initiative, namely students and their parents, educational staff, and worksite personnel. The data for this second phase of the study were collected through a series of site visits and telephone surveys. A brief overview of student and key stakeholder effects is presented in Section III below.

**PHASE III - LONG TERM IMPACTS**    December 1999 - June 2004

The true test of how well LAMP prepares graduates for postsecondary education and careers in manufacturing and other industries can only be answered over time, by tracking student transitions into further education, training, and the workplace, and by assessing their performance on the job. In order to document the long term effects of student participation in the LAMP program, the third phase of the evaluation involves a five-year longitudinal study of LAMP participants.

This phase follows the educational and employment trajectories of LAMP students after their high school graduation. For analytical purposes, their progress is compared to that of a comparison group. Working with school administrators and counselors from the feeder high schools, the research team matched each LAMP student with a comparable non-LAMP student based on gender, race, age, GPA, and school attendance. The study follows three cohorts of LAMP students, the Classes of 1998, 1999 and 2000, and their respective comparison groups. To track their progress, students complete surveys in June and December of each year.
III STUDENT BENEFITS AND OUTCOMES

Students who have participated in the LAMP program are demonstrating noteworthy gains. The program contributed to students' personal growth, enhanced their employability skills, and made them feel better prepared to make career decisions. Study results show that LAMP graduates are more engaged in the learning process, have increased opportunities for career exploration, and take more concrete steps toward achieving career goals. Moreover, LAMP graduates are enrolled in post-secondary education at higher rates than their non-LAMP peers.

PERSONAL GROWTH

LAMP requires students to take initiative and responsibility. In order to participate in activities and discussions, students must commit to learning the material and following through on assignments. During exit interviews, more than two thirds of the students in the Class of 1999 indicated they were better able to take initiative as a result of LAMP. Almost as many reported that LAMP had substantially improved their ability to take responsibility.

LAMP brings together young people from very different backgrounds. In exit interviews, 82% of the students from the Class of 1999 reported that LAMP greatly improved their ability to interact with people from diverse backgrounds. Students also reported that the LAMP experience had considerably improved their ability to work well with adults. Students noted considerable gains in self-confidence as well.

ENHANCED EMPLOYABILITY SKILLS

Among the program's strengths are the lessons in and opportunities for young people to practice transferable employability skills. For example, in exit interviews with the Class of 1999, students gave LAMP a remarkable score of 9.5 out of 10 when asked to rate the program's impact on their ability to work on a team.

Over the year, students work to improve their communications skills. These efforts are evident during the end of the year Capstone Experience presentations, as students exhibit confidence, make eye contact, speak clearly, and demonstrate a command of the material by answering with thought, knowledge, and sometimes wit, impromptu questions from an audience comprised of educators, workplace personnel, plant managers, and parents.

Students also reported having a better sense of basic workplace expectations as a result of LAMP and a much better understanding of workplace dynamics and culture. Students gained a better sense of what "quality" means in a work context, and they feel they can take the workplace concepts learned in LAMP and apply them anywhere.
**Better Preparation for Education and Career Decisions**

Students gained valuable insights into career interests and aptitudes in the manufacturing industry. Students reported that plant tours and what they referred to as “hands-on” activities were among the most worthwhile aspects of the program. These experiences confirmed manufacturing-related career goals for some students, based on newfound knowledge of their personal interests and aptitudes. Others adjusted their career goals and refocused their ambitions on careers outside of the automotive manufacturing industry.

**The Long-Term Effects of Participation in LAMP**

The LAMP Longitudinal Study entails a comprehensive follow-up study of LAMP participants and a comparison group. The study tracks the educational and employment trajectories of LAMP students from the Classes of 1998, 1999, and 2000 following their high school graduation. Their progress is being compared to a matched group of students who have graduated from the same set of high schools.

Planned as a five-year study, exciting findings have already begun to emerge. The early results indicate that LAMP graduates have high rates of enrollment in post-secondary education, have sustained high levels of employment, and are progressing toward their career goals. Future reports will focus directly on the results of the longitudinal study.

### LAMP Longitudinal Study Findings

Significant outcomes have begun to emerge from the longitudinal study of LAMP graduates. Early findings include:

- LAMP students are enrolled in postsecondary programs at higher rates than the comparison group.
  
  100% of the Class of 1998 and 94% of the Class of 1999 have participated in postsecondary education.

- A higher proportion of LAMP students are working while also enrolled in postsecondary training.

- LAMP students consistently report that they are better prepared for postsecondary education and the workplace.

- LAMP students take more tangible steps toward achieving their career goals than their non-LAMP peers.
IV STAKEHOLDER BENEFITS AND OUTCOMES

The LAMP instructional staff, participating school districts, UAW-GM employees, and parents of LAMP students reported benefiting from their involvement with the program. Classroom teachers reported a heightened awareness of the manufacturing industry and a greater level of appreciation for the industry's complexity. LAMP instructional staff have become strong proponents of contextual teaching and learning and the benefits of an integrated curriculum. Instructors value the opportunities to learn from one another through team teaching, and rely on one another's strengths in delivering new information to students.

When asked what sets LAMP apart from other approaches to educational reform, participating educators cite structural components of the initiative as most influential. An example of this is the curriculum's project-based nature, with an emphasis on experiential and contextual learning, and a focus on developing problem-solving skills. These emerging strategies blur the lines between academic and vocational education, and are exactly the type that administrators would like to see adopted more broadly.

Workplace personnel welcome the opportunity to contribute to the education of today's students and tomorrow's workforce. They find the experience to be personally rewarding and enriching. Those with school-age children apply lessons learned to their own family situations. Participation is having positive effects on the work life of employees involved in LAMP, from improved morale and expanded networks with co-workers to influencing the way they approach their work and jobs.

Finally, LAMP has succeeded in increasing the involvement of parents with high school age children by providing the "common ground" of the workplace experience. This has served to reignite connections between parents and their children. Nine out of ten parents report that communication with their child about education and careers increased "quite a bit" or more as a result of LAMP.

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<td><strong>Educators:</strong></td>
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<td>- Educators have become strong proponents of contextual learning and integrated curriculum.</td>
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<td>- Team teaching approach has been embraced and proven effective.</td>
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<td>- LAMP helps school administrators meet broader STC and school reform goals.</td>
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<td>- Partners recognize that they achieve more when working together.</td>
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<td><strong>UAW-GM Employees:</strong></td>
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<td>- Individuals feel personally enriched by the opportunity to help young people.</td>
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<td>- LAMP produces significant impacts on employees' own careers and work life.</td>
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<td>- UAW and GM develop well-qualified workers with a good understanding of the industry.</td>
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<tr>
<td>- LAMP has begun to influence worksite practices such as training and teamwork.</td>
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<td><strong>Parents:</strong></td>
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<td>- Parents' expectations concerning their child's college and career goals became more realistic.</td>
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<td>- Parents have become more involved in their child's education.</td>
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<tr>
<td>- Parents report greater participation in their child's educational decision-making.</td>
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<tr>
<td>- Parents gained better understanding and more positive perceptions of manufacturing, the UAW, and GM.</td>
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CONCLUDING THOUGHTS

LAMP has taken on one of the thorniest issues facing the school-to-career community: building genuine, active, and collaborative relationships between the public, educational sector and the private, employment sector. While it took time to forge the necessary bonds, LAMP's partnership structure provides a dramatic example of how such relationships can be developed and the impact these relationships can have on improving outcomes for young people. Much has been learned through our extensive and on-going examination of the LAMP model. We look forward to sharing future reports with you.

FOR ADDITIONAL INFORMATION ON IMPLEMENTING INNOVATIVE SCHOOL-TO-CAREER LEARNING PROGRAMS IN YOUR COMMUNITY, PLEASE CONTACT:

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   For information regarding research activities and findings
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