WISCONSIN REGIONAL TRAINING PARTNERSHIP

LAURA DRESSER, JOEL ROGERS & SCOTT ZDRAZIL¹

This paper examines a fairly successful effort—made in the distinctly unfavorable environment of U.S. neo-liberalism, deregulation, weak traditions of business association, and declining union power—to forge a regional, industry-based, labor-management partnership to support "high road" industrial restructuring, i.e., work practices and organization facilitative of higher productivity, higher wages, greater worker involvement in firm decision-making, more equal opportunity, and enhanced environmental sustainability. It's called the Wisconsin Regional Training Partnership (WRTP).

Our discussion has four parts. First, to situate the WRTP and motivate interest in it, we provide a background sketch of recent labor market trends in the U.S., note some of the most obvious political and institutional barriers to their improvement, and suggest some reasons to believe that consortia like it might help overcome those barriers. Second, we describe the origins of the WRTP, its governance structure, and, in broad terms, the present scope of its activity. Third, we explore three specific examples of that activity and effect. Fourth, we assess this experience through the "empowered deliberative democracy" proposed by Fung and Wright.²

RECENT U.S. LABOR MARKET TRENDS, BARRIERS TO THEIR IMPROVEMENT, AND WHY CONSORTIA LIKE THE WRTP MIGHT HELP

More than any other advanced capitalist economy, the United States relies on competitive labor markets to determine pay, employment, and other aspects of worker welfare.³ Outside the public sector, only about 9 percent of workers belong to unions. Their collective bargaining agreements generally cover individual firms or establishments, rather than entire industries or regions, and are not extended to non-union employers. Public regulation of labor markets is also minimal. The minimum wage applies to a relatively small number of workers, has no obvious spill-over on the overall level of wages, and recently fell to its lowest level in 40 years before triggering a marginal raise by Congress. Unemployment insurance is more time-limited than in other countries. Outside a cluster of "means tested" programs directed to the very poor, the

The authors are, respectively, Research Director, Director, and Research Associate at the Center on Wisconsin Strategy, University of Wisconsin-Madison. Author address: Center on Wisconsin Strategy, 7122 Social Science, University of Wisconsin-Madison, Madison, WI 53706, USA; TEL 608-263-3889; FAX 608-262-9046; INTERNET cows@ssc.wisc.edu. The authors thank the staff of the WRTP, especially Rhandi Berth, Liz Falkowski, and Joe Nicosia for their valuable contributions to this paper and access to representatives of the profiled firms. We also wish to thank the management and labor representatives who participated in interviews for this project.

² Fung and Wright (1999).

³ This section draws on joint work with Richard Freeman. See Freeman and Rogers (1996). See also Dresser and Rogers (1999).

welfare state is largely limited to old-age pensions and health insurance. Exclusive of occupational health and safety regulation and equal employment opportunity laws protecting groups from discrimination, the state has few national policies safeguarding workers. Job security, training, even provision of medical insurance are determined at the workplace through collective negotiations for a small number and through employer policy and individual negotiations for the vast majority. The bottom line is that for most Americans, how one fares in the economy depends overwhelmingly on how one fares in the labor market and thus upon the employer.

For more than two decades now, this market-driven system has led the developed world in job creation. For example, since 1983 the U.S. unemployment rate has consistently been 3-4 percentage points lower that Europe's. And from 1974 to the present the U.S. employment/population ratio has grown from 65 to 71 percent, while Europe's has fallen from 65 to 60 percent. U.S. workers also put in about 200 more hours than Europeans at their jobs annually. This difference also widened during the period, further underscoring relative U.S. success in generating work.

While the U.S. has been a top performing in generating work, however, it hasn't done well in producing equality or wages.

Given a rapid secular shift in labor demand toward more-skilled workers compared to the supply of those workers, flexibility in wage determination assures rising inequality. The college/high-school wage differential nearly doubled in the 1980s, rising from a 34 percent advantage for college graduates in 1979 to a 57 percent one in 1993; over the same period, the white-collar/blue-collar premium grew by more than 50 percent; and the pay of CEOs skyrocketed relative to that of other employees. But inequality has also increased within educational and occupational strata suggesting the increased importance of sheer luck in labor market outcomes. Over the same 1979-93 period, for example, the ratio of earnings of male high school graduates in the 90th/10th percentiles increased 25 percent; at the same time, similar changes are found within detailed occupations. Here flexibility benefited the lucky few and harmed the unlucky many.

As inequality has risen, moreover, wages have stagnated or declined for much of the U.S. working population. For example, the real hourly wages of men with less than 12 years of schooling dropped 27 percent over 1979-93; wages of high school graduates fell 20 percent; even male college graduates suffered absolute wage declines. Income erosion was especially severe among the young, with the wages of male high school graduates with 1-5 years of work experience, for example, falling 30 percent over the period. And fewer workers experienced lifecycle wage improvement earning more as they aged and advanced in their careers, gained skills, and attained seniority. In the 1970s the ratio of such life-cycle winners to losers was 4-1. In the 1980s it was halved to 2-1, meaning that one-third of workers actually lost ground as their job experience increased.

With real wage drops concentrated on young workers those most likely to be starting families poverty has increased, especially among children. For historical reasons, "poverty" in the U.S. is defined as an income below three times the cost of a minimal diet "fit only for temporary or emergency use." Over the 1979-93 period, the share of the population living below

this level rose 29 percent; among children, it rose 38 percent. At present, about one-in-four America children are growing up in such poverty.

A comparison of the earnings of the bottom decile of U.S. workers to their European counterparts may help put these trends in perspective. Within respective systems, the bottom decile of U.S. workers earn 38 percent of the U.S. median wage, while the bottom decile of European workers earn 68 percent of the European median. On a cross-system basis, using a purchasing power parity measure — contrasting the cost of a comparable basket of commodities across countries — bottom decile U.S. workers earn just 69 percent of what bottom decile European workers. Compared to their colleagues in a rich country like Germany, they earn just 45 percent.

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Stagnating wages and productivity in the U.S. have widely led mainstream policy-makers to focus on increased training as a principal cure for U.S. productivity and labor market woes. In the early 1980s, the U.S. learned that its K-12 system of primary and secondary school instruction performed more poorly than the basic school systems of leading economic rivals. More recently it has learned that its system of post-secondary vocational training, directed to incumbent workers and the "forgotten half" of youth who do not attend or finish college, does even worse. In comparative terms, the American system of college and university education remains unrivalled. But U.S. performance in facilitating the school-to-work transition for the non-college graduate, in training entry-level workers, in upgrading the skills of incumbent workers, and in retraining displaced and dislocated workers is generally conceded to be poor, and in any case substantially exceeded by the training systems of such commercial rivals as Germany and Japan. Reforming the U.S. training system here understood as the post-secondary, non-baccalaureate system of vocational instruction and job training is a major focus of current political energies.

But when all is said and done these reform efforts, however well-meaning, are also floundering. The one-stop job centers capture only a tiny portion of the actual employment flow

(listening, working with others in joint problem-solving, taking responsibility for actions) need to be advanced.

All this implies a substantially increased commitment to training.

⁴ While the importance of human capital, like any other input, can be overstated, there is fairly widespread consensus in the U.S. that substantial increases in productivity growth and product quality are unlikely without substantial changes in the organization of work, including a significant devolution of responsibility to the "frontline" workforce of production and non-supervisory workers. Effecting this transformation, however, will *inter alia* require significantly improving the skills of that workforce. Technical competencies need be to raised and generalized, as must mastery of the principles underlying different technology applications. Worker understanding of the interdependence of different corporate functions (design, production, marketing, and so on), and different parts of the production process needs to be deepened. And a variety of interactive skills and practices

Depressing assessments of the current U.S. K-12 and post-secondary vocational training systems were one of the 1980s major growth industries. On K-12, the publication of the Carnegie Commission's influential *A Nation at Risk* in 1983 (NCEE, 1983) was followed by dozens of confirming assessments. For a review, see Chubb and Moe (1990). Publication of the William T. Grant Foundation Commission's *The Forgotten Half* in the late 1980s helped bring national attention to the problems facing non-college bound youth (CWFC, 1988). On post-secondary training efforts, see DOL (1989), CSAW (1990), OTA (1990), and Carnevale (1991).

in most labor markets, and welfare reform threatens to marginalize them as places of interest only to the truly needy. School-to-work initiatives are not reaching scale, since they generally lack serious employer commitment to taking and training their young participants. Community/technical college interest in getting "close to their customer" has most commonly taken the form of tailoring programs to the needs of particular individual firms without providing workers with broader and more portable occupational skills. And the national skills standards program, while successfully piloted in a few industries, is generally a bust. In most major sectors, particularly among the larger firms, there simply is no interest in buying into job or occupational standards not set by themselves.

What explains this?

In part the problem is lack of money. Education and training reform in the U.S. is a paradigmatic case of a broader political problem: improving living standards will require substantial public investment, but the public has little confidence in government or willingness to make that investment absent very clear payoffs, which frequently cannot be demonstrated in advance of scaled investment itself. And with incomes falling, tax resistance rises.

There are also the institutional incapacities of government as an agent of change — the fact that, as emphasized throughout this volume, government is and always has been "all thumbs and no fingers," and inept at capturing the impacted information and local knowledge key to economic decision-making, particularly inside the firm. Along with budget pressures, this commonly turns reform to caricature, with local governments or educational institutions stumbling after what they take to be the latest industry "trend" without the resources to drive it, and usually finding that by the time new programming arrives, the underlying economic conditions have changed.

But by far the biggest problem is that business in the U.S. is both overwhelmingly dominant politically, but disorganized, or organized in the wrong way. On the demand side of the training equation, while U.S. labor markets have shown, since the late 1970s, a strong secular increase in relative demand for skilled as against unskilled labor, overall employer demand for skilled labor remains relatively weak. Indeed, as measured by occupational trends, business demand for more educated workers is actually projected to slow over the next decade, not increase. Such occupational measures of course do not capture intra-occupational shifts, but more nuanced investigations of such changes themselves driven by changes in work are not particularly comforting. Particularly among "foundation" organization and technology firms employing fewer than 250 workers, rates of investment in new technology are flat. And on no estimate accounting for more than 20 percent of overall only a minority of firms employment are making the broad changes in work organization that can be expected to drive longterm increases in the demand for new and deeper skills.

Much of the present U.S. labor market, instead, appears to approximate a "low-wage, low-skill" equilibrium. Given a low skill environment, and little rigidity in wages, even firms operating under increased competitive pressure have continued with low-skill forms of work

⁶ Mishel and Teixeira (1990).

organization that require little more than obedience and a good work attitude from direct production or service workers. Having chosen such a strategy, however, the skill demands of these firms are low. While they may wish to remedy deficiencies in very basic worker skills, or provide training to a few in the application of expensive new technology, they generally do not demand or promote broad and continuous skill upgrading among their frontline workforce. Such low-skill, low-wage strategies of course lower overall living standards, but that makes them no less profitable or attractive to firms, and their adoption weakens the political thrust for a stronger training effort.

On the supply side of training provision, meanwhile, most efforts suffer from a series of collective action problems. These include simple co-ordination problems for example, in matching public training efforts to private firm needs to mixed motive problems example, in getting agreement on industry-wide standards on skill credentialling. Most famously, however, they include deep cooperation problems in private firm investment in training. Even firms anxious to improve the skills of their workforce face the threat of competitors free-riding on their training efforts. Unless the training they provide is so narrow that it is only useful in their own firm, it will be marketable by the workers who receive it to other firms who do not pay for its provision; one firm's trainee may thus become another firm's asset, with the second firm advantaged by the benefits of training but not burdened by its costs. This threat of free-riders leads firms not to train at all, or to train very narrowly, in ways that are not useful for workers on the external labor market, and that may not be useful for the dynamic efficiency of the firms themselves. In classic "prisoner's dilemma" fashion, individually rational action does not aggregate to socially rational choice, nor even choice best for the individual. While the economy as a whole, and individual firms within it, would benefit from a better and broadly trained workforce, no firm may have the incentive to start providing it.

One "solution" to this problem is design around it i.e., to design a system in which firm-provided training is accepted as exiguous, or extremely narrow, and in which all broad training is provided through the public system. This, indeed, remains the general practice in the U.S. education and training system. But this is of course no solution at all at least if one favors the high road as we know that going down that road requires a substantial training effot by private firms, with at least some of that made within the workplace itself. So, the co-operation problem in private firm training remains important.

Problems on both the demand and supply side of the labor market must be solved. On the demand side, what is chiefly lacking are mechanisms to drive up the price of labor and compress wage dispersion. Unions are extremely weak, and direct regulation of labor prices is minimal. The result is that, in general, business lacks appropriate incentives to increase the productivity of labor—through, among other things, training—and that the low-wage, sweating response to competition is not effectively foreclosed. That it is not, moreover, tends to erode support for appropriate sorts of upgrading even among firms plausibly positioned to lead the way in such. Large, older, higher-wage firms in manufacturing, for example, find it more cost-effective to spin off parts of their operations to low-wage sub-contractors, and to pressure their existing higher-wage suppliers to take the same route, than to make or pressure the investments up and down the production chain needed to diffuse upgrading. The story of restructuring among the "Big 3" auto companies and their suppliers is but the best known instance of this.

On the supply side, in our highly liberal political economy, what are lacking are mechanisms of association among firms and worker organizations, or working relations between the private and public sectors, that could address the various collective action problems just noted. U.S. governance tends still to be exhausted by "live free or die" choices between command and control regulation and market exchange. Secondary associations performing economic functions are generally weak, and in any case rarely explicitly integrated into public governance. As a consequence, virtually all regulation of the kind implicated in the training case

i.e., involving the achievement of goals within diverse, dispersed, and numerous sites of economic activity—suffers from severe monitoring and enforcement problems, the expectation of which initial goal specification itself more difficult. In the U.S., we are very very far from the sorts of dense associations that drive the German training system, and that permit, for example, skills standard setting and training enforcement essentially to be almost purely private process. But we are far even from the level of private sector organization, reach, and linkage to public governance relied on in most more etatistic training systems.

It is here that a growing number of experiments with sectoral training initiatives offer an interesting base for broader system reform. These initiatives organize groups of firms within regional labor markets rather than along national product lines. The firms may compete in the same local market, or operate in entirely separate industries, or form customer-supplier relationships with one another. But what they have in common with one another in each case is the convergence of their work systems and/or skills sets. Firms are brought together by a variety of independent worker organizations responding to the unique challenges encountered by the local parties in a rapidly changing business environment. The projects are designed to advance the living standards of workers by addressing the emerging skill requirements of employers beyond the boundaries of individual firms in the sector.

A sectoral project focused on the shared labor force needs of multiple firms thrives on three key efficiencies.

First, there are economies of scale obtained by expanding the breadth of employer participation within a regional labor market. Unlike modernization, workforce development, or job connection activities that adopt a narrowly customized firm-by-firm approach, a sectoral approach makes it possible to benchmark public and private sector efforts to advanced industry practices. And information sharing and standard setting process across organizations that account for a significant share of the market enables the participants to share the cost of replenishing the skilled labor pool. With enough market share, they gain the capacity to leverage accountability from modernization and training institutions to high road production or service delivery. Instead of reinventing the wheel in one workplace after another, scaling up new programs spreads out the cost of their development and delivery.

Regulation of occupational safety and health involving the monitoring of several million heterogeneous worksites, provides a classic example of this problem in practice. While most European countries mandate some form of employee safety committees to give the state additional eyes and ears, in the U.S. enforcement still resides exclusively in government inspectorates.

Second, sectoral initiatives leverage economies of scope by extending the range of policy areas responsive to the shared needs of organized firms. The development of a diversified program aligns modernization, training, and related labor market services to the most advanced practices in the sector. Just as the scale of the initiative can capture the accumulated wisdom of learning across firms to augment common elements of curriculum and training routines, the scope of the project achieves efficiencies in program development across policy areas defined by the segment of the workforce they are intended to serve. The same set of core competencies apply whether the individual is employed, unemployed, under-employed, disadvantaged, still in school, or returning to the paid labor force. The alignment of institutional and public policy supports for skill upgrading with a progression of proficiency standards enables workers to build on what they already know to get to where they want to go throughout their careers.

Third, a successful sectoral initiative develops positive network externalities as a growing number of employers, unions, public sector and community-based partners come together and find ways to solve recurrent problems and meet convergent needs. By sharing information, identifying best practice models, conducting experiments, defining curriculum, and routinely benchmarking among themselves, the participants are able to sustain and diffuse high road production or service delivery. Legitimating and disseminating advanced practices throughout a growing share of the sector facilitates joint investments made by all the stakeholders in the formation of a skilled and committed workforce. As the sector becomes more competitive relative to the low road, the high road firms within it may become more tied into the regional economy. With the institutional and public policy supports knitted together by a successful intermediary in the regional labor market, the sector contributes to job opportunity and career security within the region.

Summarizing across these efficiency effects, successful sectoral initiatives create a "win-win" situation for firms, workers, and new labor market entrants from the community. Such initiatives may increase demand for a skilled and committed workforce; enhance learning across business, labor, and community organizations; facilitate benchmarking and standard setting across them; enable related firms to pool their investments in human capital; leverage the accountability of public institutions to the high road; realize efficiencies in the delivery of supports and services; build the capacity of a wider range of players in the labor market; clarify entry-level skill requirements and advancement opportunities; and improve the employment relations climate in the area.

ORIGINS, STRUCTURE, AND PRESENT ACTIVITY OF THE WRTP

The WRTP emerged at a time when the civilian durable goods sector of the Midwest was still recovering from the deep crisis of the 1980s. Most major employers in the area either relocated, out-sourced, or otherwise downsized their operations between 1979 and 1987, and in that period alone Milwaukee County lost almost one-third of its industrial job base, with employment droping from 166 to 102 thousand (making it one of the 16 cities that together accounted for some 70 percent of national decline in manufacturing employment in the period).

⁸ This section draws in part on Parker and Rogers (1999).

Even so, many firms remain, especially those with heavy investments in capital and a dependence on a skilled workforce.

As a shrunken employment base stabilized in the late 1980s, and exchange rates and national economic conditions turned more favorable, two sharply divergent paths of restructuring became evident: a "low road" strategy focused principally on reducing production costs for lowend industrial commodities or standardized products (commonly using residual strengths in marketing and distribution acquired during earlier periods of growth to maintain market position); and a "high road" strategy focused on more diversified quality production. Viewed as a decision about labor-management relations, the choice of strategy was "sweat" (reduce wages and benefits for the existing workforce, outsource as much production as possible to low-wage havens, etc.) or "invest" (in products, processes, technologies, skills, and cooperative labor-management relations). Although some employers continued to pursue a low-wage strategy that exacerbated conflicts with unions, others improved their relations with unions to compete on quality, productivity, and innovation. But they faced a series of barriers, principally including low skill levels in their existing labor force.

In this context, at the invitation of industry and labor, the University of Wisconsin-based Center on Wisconsin Strategy (COWS) conducted a detailed assessment of skill needs and training strategies among area manufacturing firms, focusing in the first instance on metalworking firms. At an evaluation conference on the report, with good attendance by area firms and labor leaders, as well as representatives of the state vocational training systems, COWS principals proposed a clear collective decision to seek the high road, and in its pursuit to form a multi-firm, labor-management led, training and modernization consortium. The thought was that by establishing common expectations on training among a critical mass of large area employers, the consortium would reduce free-rider threats to sustained training, thus assure industry a better-trained and more committed workforce while demarcating career ladders for workers, and thus build the capacity for industry-wide modernization. By bringing multiple employers and unions with shared interests in the industry together in ongoing collaboration, it would also add to the industry's collective intelligence and capacity to advance its interests, while improving labor-management relations.

After protracted negotiation among and between area unions and business, also largely conducted by COWS staff, this recommendation was eventually accepted and the WRTP was launched in 1992. Under the terms of its founding agreement, member firms benchmark their emerging skill needs to advanced practices and each other, conform their internal promotion and external hiring to demonstrated worker competencies, and administer their growing investments in training through joint labor-management committees.

This experiment in labor-friendly industrial governance has generally been successful. The WRTP now includes more than 50 firms, collectively employing more than 50,000 workers in the Milwaukee metro area, or about 25 percent that area's industrial workforce. ¹⁰

⁹ Rogers and Streeck (1991).

¹⁰ Firm membership is varied, but concentrated among larger manufacturers and first-tier suppliers. With an employment range in individual worksites from 100 at a tool and die shop to 3,000 at an industrial controls plant,

Improvements in quality, cycle time, productivity, and inventory management have resulted in a net increase of roughly 6,000 jobs among member firms since 1994. Both management and labor representatives the non-supervisory workforce in WRTP firms being variously represented by the UAW (autoworkers), IAM (machinists), USWA (steelworkers), UPIU (paperworkers), and other industrial unions report improved labor-management relations. Member wages are robust, averaging \$17.37 for skilled trades workers and \$14.60 for production workers. And, of standing importance to labor-community alliance, these gains have been achieved in a diverse workforce: 16 percent African-America, 7 percent Latino, almost a quarter female.

WRTP policy is set by a board consisting of equal numbers of representatives from major companies and labor representatives from the state labor federation and its industrial union affiliates. Implementation strategies are generated by managers and local union leaders, who participate in working groups formed around the policy areas of modernization, worker training, and the future workforce. This highly participatory process enables members in a variety of product markets with their own locally negotiated bargaining agreements to learn from one another, establish skills standards, develop pilot projects, and impact public agencies. Members form joint steering committees and peer adviser networks in their respective workplaces to adapt what they learn to their own production systems, organizational cultures, and bargaining relationships. These varied working groups, taskforces, and committees provide an ongoing forum for members to share their stories, identify advanced practices, develop pilot projects, benchmark skill requirements, create new tools, and advocate public policies to be pursued on a consortium-wide basis.

The participatory process in which managers, union leaders, and their partners in education, government, and the community learn from one another is key to expanding the scale and scope of the consortium. What generally happens is that members of a working group identify a recurrent problem such as the inconsistency of on-the-job training or a common such as the development of a youth apprenticeship program and then develop a strategy for addressing the issue. The project is presented to the board and any member interested in working on it is invited to attend subsequent meetings and focus groups where they can participate, for example, in the development of a train-the-trainer guide or the standard for youth apprentices. Firms represented in these meetings may become pilot sites where labormanagement issues are thrashed out, and the tool or curriculum is tested. Managers and union leaders involved in these projects report on the results to the board and share their experiences with the membership as a whole, by hosting site visits, conducting workshops, and the like. These models are presented at an annual conference that is attended by current and prospective members to expand the partnership and spread its program in one policy area after another.

At its administrative core, WRTP is a very small organization. Nine full-time staff (including two effectively on loan from other organizations) are supported by a \$.5M budget variously provided by consultancies, area community colleges, and the state and federal

about half of the members have less than 500 employees. Despite differences in product, process, and technology, common core design, engineering, and manufacturing competencies in machining, electronics, and plastics define the sector on a skill basis.

departments of labor. Additional funding from participating firms or more commonly, their corporate foundations is now being sought.

WRTP program focus is regularly redirected or focused by biannual surveys of some 500 union shops across the state. Funding is provided by Among other findings, the most recent identified over half of the firms as needing assistance in improving worker training programs, and equal share needing support to identify qualified new hires, and a third requiring assistance in reorganizing work processes. Over time, the basics have settled to four:

Incumbent Working Training

Perhaps the principal commitment of WRTP firms is to the training of their existing workforce. Most members have or plan to develop an on-site or multi-worksite workplace education center (WEC) for everything from basic skills to process improvement to technical skills, such as parts programming. Employees and managers identify the firm's urgent or longterm training needs and develop programs that impart the requisite skills to employees. Over 4,500 workers attend these centers each year, which along with related programs in customized training, were supported by \$15.4 million in firm investments. While much of the training and such as assessment, counseling, and confidential testing provided by a third party, such as one of the local technical college, the WRTP has also developed new methods to train shopfloor workers to better communicate their job skills to new or transferring employees. Such programs are promoted within firms by groups of peer advisors familiar with the offerings and able to identify workers who may benefit from them. Across firms, labor and management representatives benchmark best practices and advocate for public support for expanded programming. 11 About three-fourths of the membership has also begun to revive their traditional apprenticeship programs under the revised state standards that members themselves helped upgrade. The skilled trades have customarily required the combination of training on and off the job, but this is now more the norm and less the exception for production workers as well. Skills weigh more heavily in promotion and compensation when the proficiency standards are mutually agreed upon and workers gain universal access to the necessary training through their learning centers and local educational institutions.

Future Workforce Preparation

Preparation of the future workforce is an increasingly critical issue now that significant numbers of jobs are being created once again, and an age-compressed workforce retires in huge numbers. These trends raise serious concerns about the quality of entry workers for both labor and management. But unions also identify other reasons for taking an active role in solutions to the future workforce problem, such as passing their history on to the next generation, becoming more involved with local schools, orienting new members to their organizations, supporting

¹¹ To encourage cross-site learning, the workplace education committee alternates locating meetings in each of the member firms' on-site workplace education centers. These committees enable the firms to benchmark their practices and success and then communicate the results to others. WRTP staff also provide technical assistance based on the experiences of other member firms when working with individual firms.

cultural diversity within their ranks, establishing goodwill in their communities, and showcasing alternatives to punitive welfare reforms and temporary work agencies.

The WRTP piloted the development of state's youth apprenticeship program in manufacturing three years ago. ¹² Members set high occupational standards for the state (taking the first level of voluntary national standards as their starting point), collaborated with a local technical college on the school-based curriculum, negotiated model contract language, piloted a model mentoring program, initiated take-the-teacher-to-work days, and provided technical assistance to the schools. The first graduates qualified for entry-level production jobs, apprenticeships in surrounding job shops, advanced standing in technical colleges, and admission into the university system. More than one-third the membership currently plans to take on youth apprentices and related school-to-work efforts.

The WRTP also developed a model for entry-worker training that provides jobs to successful graduates of pre-employment programs. Members identify the basic skills requirements for major occupations, approve the assessment and curriculum, and assure the participants of a living wage job. They also work together to improve hiring, mentoring, peer advising, orientation, and further training to retain and develop new workers. This "employment-linked" training model has since become the general approach adopted by the Milwaukee Jobs Initiative (MJI) which is a major community development effort funded by national and local foundations to support the expansion of pilot projects in manufacturing (with a goal of 100 entry level workers in the first year) and the development of additional sectoral initiatives first in construction and printing, and then in other sectors in the future.

The MJI leverages substantial resources for a central city workers center founded by the Campaign for a Sustainable Milwaukee (CSM) to recruit low-income residents for the projects. CSM, in turn, is a multi-issue confederation of community-based organizations that shares governance of the MJI with the Greater Milwaukee Committee, composed of leading employers in the county, and the Milwaukee County Labor Council. The past net of this cooperation is the placement of roughly 350 low-income or welfare-dependent workers in jobs paying over \$10/hour with benefits on average, roughly doubling their occupants' previous income. In an effort to force system change, WRTP is now proposing to batch, in the next month, somewhere between 500 and 1,000 workers for such transition.

Wisconsin has developed youth apprenticeship programs in financial services, printing, and other sectors by convening a focus group with employers in the target sector. The metalworking sector has the highest level of ongoing employer coordination and employee involvement due to the WRTP. The Milwaukee Graphic Arts Institute, funded by a multi-employer bargaining agreement in the printing industry, encourages firms to participate in youth apprenticeship. Fearing that an officially recognized youth apprenticeship program available to non-union contractors would dilute traditional apprenticeship standards, the Milwaukee Building Trades Council recently adopted an alternative school-to-work program (developed by the carpenters) as a model for the construction industry.

¹³ For more, see Dresser and Rogers (1997a).

Modernization

The third and most recent focus of the WRTP is on the development of the state's new manufacturing extension program for small firms. Most bargaining units are in smaller shops even though the majority of union members are in larger plants. The emergence of largely unorganized supplier networks erodes standards within union suppliers and major hub firms alike. Yet the poor performance of non-union shops might also erode the competitiveness of final products on world markets. The supplier network is a critical problem without an easy one-size-fits-all solution in a labor-management environment.

Members of the partnership are currently launching pilot projects on supplier network development. Unions will have to decide for themselves whether to participate in these types of projects based on the contract provisions they obtain on sourcing which range from decision-bargaining (where the union receives advance notice and access to information to prepare an alternative plan for in-house production) to joint decision-making (where the company and union co-determine strategic decisions about the core competencies of the enterprise). Some locals may obtain a union preference where, everything else being equal, work is kept or brought back inhouse, or is shifted from non-union to union shops.

Whatever the case may be, the pilot projects should showcase models for employers and unions to upgrade their core competencies and optimize their supply chains, and lead to the development of new policy guidelines for extension centers to follow in the future. Should these work out, the over-lapping supplier networks of larger manufacturers and first-tier suppliers would become a powerful lever for extending wage norms and skills standards to hundreds of additional shops throughout the region.

Public Advocacy

As the collective business and labor leaders of Milwaukee's manufacturing sector, the WRTP advocates for public policy reforms that advance their mission of promoting high-performance, high-skill workplaces. And it has informed and consequently reformed practices and policies of public institutions, as exemplified by a recent state-level task force initiated and driven by WRTP member firms to formulate new policies for workforce development in Wisconsin.

That happened through deliberate political effort. After announcing its most recent "needs assessment" of area manufacturers, which spotlighted the need for better training of incumbent workers and better techniques for recruiting and retaining new employees, the WRTP sponsored a forum for employers and unions to discuss the findings with state and local officials, and requested the formation of state task force. At a subsequent press conference, the governor pronounced the WRTP a model for the entire state, and appointed the current co-chairs of the Wisconsin Modernization Institute (the non-profit fiscal intermediary for the WRTP), to lead the task force on the technical skills shortage. The task force established working groups to identify best practices, barriers, and recommendations with respect to incumbent worker training, reemployment assistance for unemployed and low-income workers, and school-to-work programs for youth. Almost every recommendation has already been enacted in the new state

budget, including the Workforce Attachment and Advancement Fund for workers below 200 percent of the poverty line. Other provisions include the renewal of funding for local youth apprenticeship initiatives (now that federal funding has expired), expansion of traditional adult apprenticeship, creation of a new technical college scholarship program, and support for the manufacturing extension program. Together, these are new state commitments well in excess of \$10 million. And more is likely on its way. The leadership of the WRTP is deeply involved in current state and local policy discussions about the implementation of the Workforce Investment Act, Workforce Attachment and Advancement Fund, and other new workforce development and technical education initiatives.

SOME EXAMPLES OF WHAT HAPPENS

WRTP activities are obviously diverse and wide-ranging. The fact that they occur in the quintessentially "contested exchange" of labor-management dealings, as well as the complex political territory marked out by private firm interaction with a fractured public educational system, as well as that of often brutal market competition, as well as that of shifting firm ownerships and management, additionally multiplies the possible range and scope of examples of their effects. In this section we make no effort to capture all this complexity. Instead and simply, we give three examples of it, in the form of three abbreviated stories of what has happened at three member firms.

The cases were selected to provide more detail on how training, modernization, and work reorganization issues these training and technology transfer processes characteristically occur within member firms, how the WRTP contributes to the process, and how learning is disseminated throughout the industry. To get a sense of range, we choose cases showing different problems, different degrees of WRTP involvement in their address, and different degrees of success.

In the presentation here, we first offer the cases, and then discuss their relation to the overall work and mission of the WRTP.

Story 1: Worker Participation in Workplace Education

Our first case concerns a large engine making facility established early in the century with just under 1000 workers. With a well-established product line, the company has enjoyed modest increases in annual sales and productivity recently and last year had revenues over \$6 billion.

This company is fairly typical of many of the early members of the WRTP. The high-wage company made it through the substantial manufacturing downturn in the 1980s. But in the early 1990s, production systems "jumped to the high end" rapidly. Namely, what had at one time

¹⁴ Given the multiplicity of potential independent and dependent variables, the mass of interaction effects and vagaries of "overdetermination," and all sorts of boundary problems in definition of variables given change and interaction, even how to study such a phenomenon poses a range of hard methodological questions.

been manually-operated equipment became more complex and computer-controlled. Both labor and management leaders saw that this technological change required new skills of the workforce. At an average age of 50, and with an average of 21 years of service to the company, the workforce needed new skills to deal with the increasingly complex and increasingly computerized nature of production. Additionally, while long-termers needed computer skills, more recent hires were comfortable around computers but struggled with basic machining skills.

Labor-management relations at the plant were not good, yet typical of industrial relations in manufacturing at the time. Although the company had not experienced any strikes or substantial layoffs in years, the lines were clearly drawn and the only joint 'deliberation' occurred when the two sat across the table from each other. As one union representative notes, "After a few days on the job, you'd pick up that you weren't supposed to like management, that you weren't supposed to talk to them in the store on the corner if you ran into them." Despite having no history of working together, as the issue of training took center stage, labor and management began to find common ground.

Computerized machine controls, detailed technical manuals, and an increased emphasis of competing on quality made the training problem clear enough to both labor and management. The solution to the problem—an on-site training center—was introduced by an early organizer of the WRTP, a labor leader with the state AFL-CIO. As another plant in the area established a workplace education center (WEC), WRTP staff communicated the model and early benefits to the union president who subsequently began to strongly support the development of a similar center at the plant. Management was supportive but skeptical that production workers would really use such a resource.

The same WRTP organizer facilitated the company's first meeting on workplace education, introducing the idea of developing a workplace education and skills center at the firm. A management representative thought the meeting had a good tone and served an important purpose: "You need to get in a mode where everybody is agreeing on the mission before you can really get to the issues of the discussion." It is widely reported that the development of the WEC coincided with and contributed to increasing cooperation between labor and management at the plant. Discussions on a WEC continued through its founding in 1993.

Since 1993, the company's WEC has offered training in basic (reading and math), computer, and job skills (most importantly machining skills). Examples of courses offered include trigonometry, basic reading, machining, Spanish, American Sign Language, advanced CNC (computer numerical control), web design, geometric dimensioning and tolerancing, and blueprint reading, among others. The WEC delivers instruction through a variety of methods and media including one-on-one tutoring, small group workshops, and computer based packages. An on-site instructor from the local technical college staffs the center, teaching certain courses and assisting employees in developing additional ones. WEC participants are encouraged to bring work in from the shopfloor so that instruction can emphasize the connection to their jobs.

Through the center, \$500 per head is spent on training for frontline workers each year. In its first years, nearly 25 percent of the production workforce participated in training at the center, a share that is easily twice the industry average. The take-up rate has fallen slightly in recent

years, due in part to increased overtime and successful training in the past that has been spun-off to various training departments. Nonetheless, the participation and attendance remain well above industry norms. Summarizing, this company has a thriving and successful WEC that stands out for comprehensive programming and extensive workforce participation.

Worker participation and voice in governance has been a cornerstone of the WEC since its inception, and management along with labor agrees that that has probably been the single most important key to its success. As the human resource manager attests, "Managers tend to want to control everything. If you want your skills center to be a success, you have to turn over power to the workers." Workers are not simply enlisted to market the center to co-workers, though that is an important role. Rather, they actively participate in the development of the very structure and program of the center. Because they work throughout the plant, they are able to identify needs and resources that might otherwise go overlooked. Because they work directly on the machines, they are intimately familiar with what hands-on skills need to be developed. Because they are part of the workforce, they are able to identify and recruit workers who might benefit from training, without being managers demanding training.

Originally a "peer advisor" group directed the rollout of the program. With representatives from each part of the plant and each shift, this committee informed co-workers about the WEC and its services and helped identify and develop appropriate programming at the center. After the first six months, the peer advisors recognized the need for a second group to work with management administration of the center. A "steering committee" separate from the peer advisors was founded at that time to handle financial tracking, logistics, and negotiations between labor and management on programming at the center. The steering committee has seven members. To ensure strong workforce input, four members are from the union and three are from the company.

The peer advisor committee remains focused on marketing and program development for the center. With just over one dozen members, workers dominate this committee as well. When it meets, peer advisors review the number of hours and users at the WEC, in order to track progress on use of the center. Peer advisors also reach out to new hires, providing brochures and center tours as a part of their orientation. Additionally, at peer advisor meetings, participants discuss evolving training needs and seek to develop responses.

The structure of rules of use for the center, the evolution of the training offered, and the high rate workforce training in the center all attest to the strong role of the workforce in the WEC. Responding to management concerns that workers would not use the center, the coordinating committees developed guidelines for center use to encourage participation. Peer advisors agreed that the WEC should provide training on a confidential (the company does not have any record of who is taking what classes at the WEC), self-paced, and voluntary basis. The center is operated, in essence, on an open entry/open exit basis. Because labor representatives felt that testing would discourage attendance, the WEC does not conduct tests. ¹⁵ Moreover, a

A problem emerged with CNC training that without testing, supervisors argued that they were not able to detect whether somebody completing a workshop was actually proficient. The WEC only issues certificates of completion for workshops which detail the number of hours spent in the workshop. To be able to evaluate whether workshop participants are actually qualified, some supervisors and committee members proposed optional testing.

payment incentive encourages training. Workers receive half-pay for every hour spent at the WEC. If the company mandates the training, workers receive full pay for hours of training. This payment incentive is extended to all non-management employees of the company, including non-union clerical staff. It may be common for managers to wish for a structure of training that encourages workforce participation. It is certainly common for human resource managers to construct rules that they hope will encourage training. It is uncommon, however, to enlist the workforce in writing the rules of the center, and to follow their advice in establishing it.

In response to workforce perceptions of training needs, course offerings have evolved over time. To guide programmatic direction, the peer advisor committee occasionally surveys workers to identify interest in programs. Increasingly, the WEC offers workshops for more highly skilled jobs (e.g., inspection and CNC operation), taught by current workers. Before the CNC (computer numerical control) workshop was developed, the WEC only offered CNC training through a workbook. The peer advisor committee recommended a workshop on CNC with hands-on training. While the cost of a CNC machine (\$40,000) far outstrips the annual resource budget of the WEC, peer advisors knew where to find company support for the training. An optional six-hour one-on-one mentoring program follows the workshop. CNC workshop graduates do not have a guaranteed job, but their chances for advancement into CNC operator positions (which pay from \$15-21 per hour) improve substantially. The WEC offers three CNC workshops per shift each year and more than 50 percent of participants move up into CNC positions. ¹⁶ The WEC's Inspector Mentoring Program is another project that builds career ladders in the firm and leverages current workers' knowledge as a training resource. The success of these workshops at the WEC relies on worker insight. Workers identify skill shortages, secure resources for training, and serve as teachers and mentors for advanced skills in the shop. A traditional, management-driven training center would have neither the information nor the resources required for this success.

Workers have responded to the rules and quality of courses by showing up for classes. While the training participation rate has fallen slightly from 25 percent, it remains above industry norms. In part, the rules for the center and the quality of programming keep the training rate high. But also, peer advisors actively engage in increasing interest in programming. WECs do not always become a part of company culture. Often, WECs suffer a "center for dummies" stigma and remain marginal to training and shopfloor culture. The presence of multiple

After discussion, the committee continued to feel that any form of testing would have a chilling effect on participation in *any* WEC programs and that optional testing would send the message to supervisors that participants who don't take the test are doing so because they are likely to fail a test, thereby pressuring all participants to test. The WEC continues its policy of not testing and encourage having the workshops "stand on their own merit" – which may involve more intense input from the supervisors to ensure that they are meeting their needs. Also, the committee suggested that if the supervisors feel that the current training is not meeting their needs, perhaps that demonstrates the need for a more advanced CNC training workshop – which is already in development.

¹⁶ Another WRTP firm has had a very positive experience with a similar CNC program. Trained CNC operators can do basic programming and adjustments on their machines. The workers' control over their work increases, as do their wages while machine downtime declines. The company saves money because they no longer send highly-trained engineers out on basic tasks and they save time because the frontline workers can identify problems more rapidly on their own machine.

computers in the lab helped dispel the "center for dummies" image, so too did the active work of peer advisors in reaching out to workers, taking them on tours, explaining the range of opportunities and the rules of use.

What was the WRTP's contribution to all of this?

The company's WEC is clearly an internal initiative. Labor and management leaders inside the firm committed themselves to and carried out the project. In fact, as with many projects that the WRTP assists, the WEC has been successful because of the internal support of the effort. However, the WEC also owes substantial credit to the external assistance offered through the WRTP, which provided information on the model, technical support on securing funding, and, most importantly, access to information on best practices from similar centers. Moreover, in collaboration with other WRTP firms, the company has been able to inform policies at local technical colleges.

The WRTP's early leadership introduced the idea of a WEC to workers at the plant and facilitated the first joint labor/management meetings on developing a center for the company. Skepticism regarding workers actual use of a center tempered management interest in the project, but with strong union support, fostered by the WRTP, management agreed to the project.

Perhaps most important in the project's initiation, the WRTP provided access to information about other WECs. Both labor and management at the firm relied on these reports and models to craft their own WEC. Without the communication across the industry, common mistakes would have been repeated. And, without information on successful strategies, some elements—the peer advisor group to lead rollout of the center, for example—would never have been pursued. Additionally, WRTP staff knew and understood the rules on a federal program which funded center development. Managers inside firms generally do not have the time to figure out complex federal grant applications, an experienced ally can provide invaluable support. Helping secure initial 'seed' money to establish the center enabled the center to take root and prove itself effective. After the first two years, the company assumed full financial responsibility for the basic operations.

Since the rollout of its WEC, the company has actively participated in WRTP activities and has continued to share and learn from experiences at other firms. Managers and union representatives attend WRTP committee meetings on workplace education and the firm has also been active in school-to-work activities. Peer advisors at the plant worked with counterparts from across the industry to develop a *Peer Advisor Training Guide* and a *Shopfloor Training Guide*, both detailing methods to effectively train shopfloor workers to train each other on each other's jobs, identify further training needs, and promote participation in the WEC.

As important as networking ideas, the workplace education committee also enabled the company to collaborate with other firms and technical college representatives to advocate for and develop accredited courses and standardized skills and curricula. These programs enable workers to earn degrees through the technical college system and easily transfer skills across firms. Firms, in turn, readily recognize skill sets of job seekers and transfer tested training curricula.

Story 2: A More or Less Complete Reorganization of Work

The story of our second company is a bit more extreme. From a foundation of bad labor-management relations and enormous competitive challenges, labor and management at the plant have forged a partnership on training and work reorganization that has helped stop the company's long-term economic slide. Along the way there were many successes, but in 1997, the company was sold, the partnership dissolved, and layoffs re-emerged. This labor/management story indicates not only the importance and effectiveness of partnership approaches and worker involvement in this more volatile setting, but also their limitations.

A union leader summed up labor-management relations, circa 1990, this way: "You haven't been our friends in the past, you aren't now, and you won't be in the future." The economic situation was equally clear and discouraging; the facility was not profitable. Overall employment had been slashed by 30 percent within five years, one major production facility had been closed, and an internal unit had dwindled to just 55 employees from a high of 300 a few years before. The firm needed to change to stay in business and that was clear to the management and the workforce.

New senior management came into the plant and a wary union president used a chance meeting to bring up the idea of implementing a workplace education center. The senior manager responded positively, mentioning his experience with such a center at his previous plant, expressing openness to keeping the union in the driver seat of the project, and offering support of the initiative. The union president sees this brief exchange, which left him with his mouth hanging open in shock, as the start of a new era of relationships at the plant.

If the union initiated the conversation around developing a skills center, management took a lead on driving work reorganization. But both projects required mutual trust and buy-in. Eventually, the union and the company developed a memorandum of understanding to make their relationship and areas of shared concern clear. The union continued to negotiate on each intervention in work organization, and though hesitant at first, leadership became increasingly convinced of the importance of their involvement.

Eventually, labor and management undertook a complete transformation of the firm. To return the facility to profitability and gain better job security for workers, the management turned to the workforce and asked, "How do we get there?" At the time, work in the plant was arranged in strictly-defined, Taylorized jobs. But in response to the invitation, labor and management flattened job hierarchies, created a culture of teamwork, and built a training system to support the new work organization.

The entire workforce was divided into separate "business units," each in charge of a specific product line. Within these units, workers performed a number of duties. The union and management dramatically reduced the number of job classifications from 30 job titles to 1 on one side of the shop and from 60 to 3 on the other. Within these categories, pay scales varied by experience, but workers were able to perform whichever duties were needed to accomplish the job. This reform vastly reduced the hierarchy within the firm, leaving only two people between the lowest worker and the CEO.

These teams operated on a JIT ("Just In Time") system of inventory control and work process that, according to the plant's quality systems manager, "gives people on the floor control over the product and quality." As a result, there were no more inspectors and each team became responsible for the quality of its own products. Each team knew the schedule of the product and developed the means of meeting its objectives on quantity and quality. In conjunction with monitoring quality and production, employees formed joint labor-management hiring committees to involve workers in selecting who would work alongside them and worker-led safety committees.

To provide the capacity to complete jobs, workers became involved in all business meetings, improving the flow of communication on new contracts and orders and other business decisions. Employees set their own schedules on their units (given arrival between 6:00 and 9:00 AM) and kept track of their own hours. Nobody punched a clock; if a person had a funeral or teacher conference, they could attend.

Such new rules and process imply the need for new skills, including the quintessential "soft skills" of embracing a firm culture more intent on worker participation and learning. Accordingly, the union and management instituted training on "teamwork" to facilitate their work reorganization. A workplace education center (similar to the one at our first company) was opened and 25 percent of the workforce started to regularly attend workshops and individual tutoring on basic and technical skills. As workers became more flexible on which jobs they could perform, labor-management teams developed a "learn and earn" system which specified which skills needed to be learned and encouraged workers to train by offering a pay increase once a worker completed a 'skills block'. In the event of a lay-off, long-term workers were guaranteed opportunities for training for other available jobs.

Although not all workers immediately embraced the changes, the entire facility shortly bought in, as coworkers gained pay increases, as layoffs subsided, and as even symbolic reforms such as taking away privileged parking for executives demonstrated a more shared status of management and labor.

As one union leader puts it: "The difference between quality circles and these team projects is that the teams' findings are most often implemented. ... It seems as though for years the hourly employees complained constantly about the company not listening to their ideas and then when they said they did want to listen... we said... wait a minute we were just kidding. We are no longer asked to leave our brains at the door and pick them up when our shift ends."

And the net result? After a heavy initial investment, the facility soon returned to profitability and became a model for high-performance manufacturing. Through the reorganization, the labor and management had identified the structure for continuous improvement and innovation. Through small, incremental changes, these process innovations made a difference. As cases in point, we describe below two examples of the reorganization.

The Machine that Smelled: In one of the business units, faced with the question of how to make a higher quality product in a more timely fashion, one employee added the question, "Is

there any way we can also keep my machine from smelling?" The company used various coolants, all of which had strong odors which only worsened as they became stale in a machine. The company occasionally replaced the coolants, using newly purchased coolant. In response to the machine operator's question, employees working with chemists at the plant identified the coolant with the least offensive odor and further improved upon the chemical balance to invent a new one. As any coolant sitting in a machine too long still stank, employees in the business unit started to change the coolant more often. Using more coolant, however, costs more money. To save on costs and reduce waste, the unit started testing the 'used' coolant to determine if it was recyclable. Recycled coolant worked well. Collectively these changes reduced waste and costs and improved the work environment for the workers. In the two years after the improvement, the amount of new coolant purchased was reduced by 60 percent, saving the company over \$100,000, the amount of waste fluid was reduced by 50 percent, and the more regular replacement of coolant reduced the wear on tooling and machinery and improved the product quality. Other manufacturers adopted the new coolant product and the method of coolant maintenance. And as a result of the innovation, the facility earned a state environmental award, with a special mention for being the first worker-led effort receiving the recognition.

Work Reorganization: Elsewhere in the plant, when another unit reorganized into a business unit, they faced a high level of customer complaints on quality, late deliveries, and unpredictable lead times in production. The team implemented "statistical process control" (SPC) to record the numerous steps of production and the time each demanded. By understanding their whole process, the workers identified areas of redundancy or idle time. The workers subsequently reorganized the layout of the production line so that the product, which had been traveling 4,000 feet around the facility in various stages of production, traveled a total of 90 feet. Various steps were performed simultaneously. And with better communication of customer complaints to production workers, new quality tests caught mistakes before the product went out the door. In the end, the team reduced production time from 255 days to 20 days. The shipping area was similarly reorganized, reducing delivery from 3 to 4 days to less than one hour (occasionally causing problems when customers called back to modify an order). With a more consistent production schedule, the lead-time was reduced from 26 weeks to 6 weeks or less. The previous 18 percent on-time delivery rate became 100 percent. Orders increased and again, the facility was awarded a product award by the state.

What was the contribution of the WRTP?

In 1994, the company started participating in WRTP committees. Through these committees, labor and management representatives offered other companies their lessons on training and industrial modernization and identified additional models for enhanced skills development. Central to the company's message to others was the joint nature of their innovations. The WRTP director reports that several companies with no history of labor-management cooperation took note of the advantages to worker involvement in better training and joined the WRTP to pursue this objective. The company offered successful models for the workplace education center, their pay incentive in skills acquisition, joint hiring practices, and production reorganization. In return, the company informed state policy recommendations in these areas and gained models for additional programs, such as a profit-sharing program.

But there are problems now.

With a profit line back in black, the facility appeared to be on the road to success. In 1995, the company was bought by a prominent multinational. The ensuing management transition was broadly successful. The union position at the time was clear. As a union representative stated at the time: "Once you give them [the workforce] the keys to the front door, it's awful hard to get them to give them up. No matter what management they bring in, I don't think you're going to find anybody wanting to give up the right to make decisions here anymore. We don't have a choice – we have to keep going in the same direction." And as the same one reported more recently, while "it took some persuasion to get the new owner to adopt [the new organization]", they did.

But two years later, yet another multinational bought the facility. This time the transition didn't proceed as smoothly; in fact, there was no transition at all. The new owner arrested the team management and re-instituted top-down control over production. Although profitable, the new owner sought higher profit. Low-yield product lines were sold off and layoffs again became *de rigeur*. Despite staunch attachment to the new models of management, the workforce lost ground. Having divided the facility into six distinct business units provided easy chopping blocks for the new ownership, which simply eradicated several. No new product lines have been introduced since the buy-out, only a third of the facility is in use, and the overall production workforce is down to 240 workers.

Story 3: Turnover, Temp Agencies, and an Open Shop

Our third case provides yet another perspective on workplace change. This metal forming shop with a workforce of around 200 is technologically modern. The work at the plant, however, is straightforward "the easiest work you'll ever have" say some and wages are relatively low. The majority of production workers are in the \$8 to \$10 per hour range and even after 15 years at the plant, many workers are still earning just over \$12 per hour. Probably related to the relatively poor wages, the plant is an open shop; just 10 percent of the workforce pays dues to the union, so it is neither a strong nor representative force.

Also noteworthy, the plant is substantially more diverse than either company mentioned above. The workforce is divided equally along gender lines, compared to the 3 to 1 male/female split that is pervasive across the industry (or the 19 to 1 split at the first two case stories). Whites and African Americans each account for just under 40 percent of the workforce, with Latinos a substantial 20 percent and Asians making up the final 5 percent (the latter largely recent immigrant populations). The diversity of the workforce is substantially recent (the Latino population was almost entirely hired within the last year) and is expected to continue to increase.

But similar to the other cases, building and maintaining a qualified workforce is a regular challenge at this company. Despite the relatively undemanding job requirements, there is substantial need for increasing basic skills among the employees, many of whom read and write below the 8th grade level. Moreover, building skills among the workforce involves retaining employees long enough to actually train them. The low wages offered at the firm restrict the

applicant pool to job seekers who readily find similar employment opportunities elsewhere. With perhaps some exaggeration, human resource staff report that for every eight employees hired, ten are lost. With equal weariness, workers regularly make jokes toward new hires: "will you be coming back after break?" In an attempt to fill vacant positions, the firm has reluctantly turned to temp agencies though they prefer permanent hires. Union leaders find the workforce turnover destructive, but they also point to the problem of high managerial turnover: "How can we do anything about retention when we don't even have the same managers or supervisors one week to the next?"

Faced with a low-skill, high-turnover, and partially temporary workforce, the company was looking for solutions. Here, the process of change really starts with WRTP staff, rather than with internal conversations based on connections with a broader WRTP network. In its own future workforce development projects, WRTP staff regularly seek out companies that are hiring. A WRTP staff member heard that this plant was hiring, and set up an appointment to assess prospects for joint work.

At the first meeting, two WRTP staff met with the plant manager and discussed not only WRTP projects to fill current vacancies, but also incumbent training and retention programming. The company agreed to join the WRTP shortly thereafter and began active work on developing a WEC and on working with the WRTP on connections for entry-level workers, with hopes of developing a better skilled, more stable workforce. Mostly still in development, these projects present the potential of the WRTP model in a different context.

With a view to providing workers opportunities to build skills, company managers quickly adopted the WRTP model for an on-site WEC. If implemented as currently planned, this will focus principally on basic skills to assist all workers, on a voluntary basis, to learn to read and compute math at a minimum 8th grade level. Additionally, the plant sees the WEC as a symbol that should impress potential customers and as a means to build the infrastructure supporting ISO certification. The firm is still in the process of considering the WEC investment and no in-firm discussions with the union or the broader workforce have yet occurred.

With a view to building a less temporary and more committed workforce, WRTP staff also helped the company to develop targeted on-the-job and pre-employment training programs to reach unemployed, central city communities, equip them with the skills to land permanent jobs at the company, and increasingly reduce the proportion of temporary workers. Here again, the company benefited from models developed elsewhere through the WRTP. Directly connecting to proven recruitment agencies through the WRTP and with public funding support, the company hired 14 on-the-job trainees six-months ago, all of whom completed training and 60 percent of whom remain employed at the company in permanent positions with health benefits. While some new hires did leave, the retention rate thus far is higher than the average at the company.

The company expects to continue replacing temp workers through a new, preemployment training program developed through the committee structure of the WRTP. Also seeking to recruit job seekers, management and labor representatives from other WRTP member firms and unions on the future workforce committee designed a basic manufacturing curriculum to impart the core skills needed to work in a manufacturing job (blueprint reading, shop math and measurement, etc.). Firms prioritized shared skill sets, tapping worker insight to ensure skills' applicability and relevance, and two local technical colleges developed the appropriate curricula. Through these efforts, firms standardized the skills they expect from job applicants for entry-level positions and clarified job requirements to these job seekers. This company expects to implement an on-site training employing this curriculum within the next year. Although driven by management at the firm, these programs received substantial design input from labor at other WRTP firms.

To further secure a stable workforce and reduce turnover, WRTP staff suggested examining the ways the company oriented new hires and introduced the concept of mentors as a retention tool. Through such a program, each new hire would be matched with an experienced coworker to help the new hire acclimate, thereby providing a smooth transition to the new job and improving the drop-off rate at the company. The WRTP urged union involvement in project development and the plant manager readily agreed.

The meetings and program development on mentor networks mark the first joint labor-management initiative ever at the plant. Yet here again, despite no record of cooperation, the managers and labor representatives at the first meeting unanimously identified the problem and its effects—poor product quality, low morale, and low productivity as the fruits of high turnover—and agreed on the need to develop a devoted workforce. Despite accord on the problem, the solution was not as apparent; the union remained wary that a mentor program would be "just another program driven by management" and pointed out that the real problem could simply be wages.

Even so, labor and management moved ahead. WRTP staff assisted the company in developing a "leadership team" with managers and union representatives from each shift. In an intensive series of meetings, the leadership team collectively defined their mission and developed the mentoring program. The committee defined the appropriate role of a mentor, developed promotional materials, identified appropriate curricula, recruited and selected 35 mentors to be paired with new hires at the facility.

Presently, the committee meets with the mentors to monitor the program, assign mentors to new hires, and evaluate success. Through this forum, workers are able to bring standard questions of new hires to the attention of management. The committee and mentors have decided to hold these meeting twice per month to continue to support the program and identify lessons. In this way, the mentoring project will feed back into improved orientation at the company. At a WRTP company with a more established mentor program, not only did mentor feedback re-focus the orientation, but the company decided to involve workers in the hiring and selection process.

The extent to which the program will really succeed at the plant remains unclear. The project has clearly developed a new level of trust between managers and the workforce, but a lot of the discussion remains focused on pushing responsibility back and forth (i.e., the union leadership uses the leadership committee meetings to push HR to make policy decisions) and getting missions statements right (i.e., minutely wordsmithing documents). Union representatives alternatively complain of not being equal partners with management in the effort and shirk responsibility in areas normally relegated to union leadership. Managers and union

representatives both worry that without WRTP facilitation and support, the project would simply expire. Finally, wages offered at the plant contribute to turnover, and improved mentoring won't solve that underlying issue.

To the extent that there is some weakness in this project, one can easily identify contributors. First and foremost, the peculiarity of the union's position in not representing all workers contributes to its defensiveness while lessening the quality of its information and potential support. Second, the idea for the project did not generate from within the plant. Rather, WRTP marketed a series of ideas to managers. They picked projects that looked the best. Then WRTP staff helped lead the process inside the firm. Without the WRTP leadership, the project would never have begun, but the WRTP has played a key role in facilitating, cajoling, and encouraging. But clearly, third, at some point local leadership will need more fully to "own" the project. So the case reminds of a classic issue in social advocacy around dense institutions: how is it possible to facilitate change from outside while reassuring, and building, local ownership?

These obvious problems admitted, the company and the union both have made positive steps through this process, especially with regard to the level of discussion. Workers finally have a forum to bring up basic concerns on issues as widely ranging as diversity training for long-term staff and safety training for workers using propane. The mentor committee has begun to actively seek Latino mentors, acknowledging that efforts to date have focused too exclusively on the white and black core staff at the plant. Clearly, if the WEC plan moves forward, the cooperation and plant-wide network established through the mentor project will provide a strong base for marketing the WEC and helping ensure that it meets workers needs. And as the company continues to replace temporary workers through focused on-the-job and standardized, preemployment training, the causes impeding retention identified through the forum of the mentoring committee will continue to inform improved practice in the future.

What do the Stories Tell us?

Again, these three cases provide just a small glimpse into workplace change in Milwaukee and the WRTP's role in making that more worker-friendly. Literally dozens of similar stories develop each year. And again, within them, the role of the WRTP differs. Sometimes WRTP staff actually "market" or otherwise initiate a program, and direct its development; more often they assist a firm itself interested in taking on a problem identified with best practice solutions developed within the network. But the direction of effect, and the mechanisms, are fairly clear. The network of conversation, between unions and managers, among unions, and among managers provides the infrastructure for increasing training and worker participation on projects, and through that increased capacity, as well as the "high road" norms that govern the conversation impetus to achieve that. The political weight of the WRTP its ability to marshal public resources as well as specific staff assistance on projects contributes further, while spreading the conversation beyond already-involved firms.

One might think of the WRTP operating within firms, across them within their industry, and from that industry to the general public sphere.

Exemplary is our third case. There the WRTP clearly helped facilitate a dialogue within the firm. WRTP staff encouraged the participation of workforce representatives, coached managers and workers about the potential benefits of the programs, and facilitated the discussions that built the firm's mentoring program. Workers' increasing attention to diversity issues, the firms ability to downsize the temp workforce and increase permanent hires, and the ability of workers and managers to discuss issues of shop safety have all resulted from these discussions. The project within the firm is very deliberative, with worker and manager representatives sitting at the same table to discuss the best ways to improve retention at the plant. In general, projects to change firm practice require improved labor/management relations to start the discussion, good ideas on what programs can be developed, exposure to best practices in the area, and some support in getting the resources together to make the change in the firm possible. Much WRTP work contributes to changes at the firm level.

The WRTP also provided the forum and infrastructure for discussion within the industry that supported project development at the company. At the firm, the WRTP helped spark interest in workplace education and mentoring networks by offering evidence of success at other sites. As the mentoring program progressed, they described best practices from throughout the industry, offering model agreements and mission statements, providing evidence of the potential effects, bringing the knowledge developed other places to bear on the issues at the company. The WRTP staff helped transfer the knowledge of the network to the site.¹⁷

The WRTP also monitors success in retention of new workers at shops throughout the industry, something also applied to this firm. The future workforce committee and the staff working on disadvantaged worker projects use this evidence to advocate for new funding sources for training, more attention to workforce retention and increasing worker input to program development for disadvantaged workers. For example, when designing training for new workforce entrants, the WRTP insists that work force representatives who have held the entry-level job participate in curriculum development. While it is obvious that workers who do a job are the best source for information on content of the job and training required to do it, it is uncommon for trainers to engage workers as they develop the training; usually the task of curriculum development is left to HR managers.

And, owing to their relationship to multiple projects and consistent experience facilitating work with the public sector, WRTP leaders have become key advocates for major system changes — like the successful recommendations as leaders of the Wisconsin governor's taskforce on technical education — that will affect the capacity of this firm to implement changes.

And, as time goes by, the flow of information will reverse. The company gains from the experience of others, but its experience is increasingly informing project development and revision at other sites. Generally then, the WRTP provides an infrastructure for managers, union leaders, and, increasingly, shopfloor workers as well, to come together across the industry. In this capacity, the WRTP provides a forum for sharing of best practices, a site for the development of improved programming, a means to benchmark firm practice, and a support system for change.

¹⁸ Report of the Governor's Task Force on Industrial and Technical Education (1999).

BUT IS IT "EMPOWERED DELIBERATIVE DEMOCRACY"?

The frank answer here is "we don't know." This is both because of variation in the WRTP experience and uncertainty about the boundaries and definition of "empowered deliberative democracy" (EDD) indeed, whether it is correctly framed as a "model" with some set of distinct and internally coherent set of interactions with distinctive explanatory power.

We assume that deliberation about the latter will be a central if not *leit* motif of discussion at our conference. Entering that, we only say that (1) it is clear to us that the ability to achieve public aims commonly requires enlistment of the information, energy, trust, and deliberative capacities of private actors. So stated, in fact, this is a hoary truism of democratic governance. More pertinent, it is clear to us that (2) the definition and migration of public concerns and problems may today, more than in the past, call for a more explicit attention to the terms under which such enlistment might be achieved. And it seems clear that (3) the generally revanchist abridgement of nation state authority under force of rightist attack has made all sorts of decentralization models more attractive as political projects for progressives. The interaction of (2) and (3) remain of particular concern.

This said, we attend here to the tests of relevance and example.

Deliberation

Through name and description, Fung and Wright emphasize the centrality of *deliberation* to empowered deliberative democracy, where the key is listening and openness of participants to new ideas. Participants should not come with agendas and solutions already worked out, rather they must build solutions to concrete problems through dialogue. As the cases above should make clear, much of the positive effect of the WRTP is due to this sort of deliberation.

But the importance of true deliberation to WRTP work varies quite substantially across the three levels of WRTP work previously identified. Obviously, projects within the firm rely on increasing communication between managers and workers and increasing discussion among workers. Successful training, retention, modernization and work reorganization programs simply cannot be built without the involvement of the workforce. But at the level of the committees, where the WRTP relies on and builds the network for information sharing and industry conversation, deliberation is not the only key to success. And as a network for industry advocacy, deliberation fades even further.

Within the firm, clearly, the joint labor-management committees which oversee WECs throughout the WRTP network provide the most obvious evidence of the WRTP's influence on deliberation. Such committees forge a new relationship between managers and workers. Workers use knowledge of their jobs, relationships with other workers, and insight about training

¹⁹ See Cohen and Rogers (1995), for semi-original statements of this view..

strategies to contribute to discussions on training policy at the firm. In this manner everything from rules for use to proposed content of courses is open to discussion, and worker contributions to those discussions have an evident effect on plant policies. Nor is the deliberative committee structure is limited to WECs. Other programs also require deliberative joint committees for administration. For example, in the third case we considered, a joint leadership team developed the model for mentoring program. Managers and workers alike participated in meetings and brought ideas to the project. At the meetings, ideas were openly discussed. And as the program has developed, the committee increasingly discusses the content of ideas rather than simply responding to their source. That openness, listening, and cooperation has emerged over time; in the beginning of the process the union and managers took sides on issues in order to position themselves with regard to each other. As the program develops, those distinctions have eroded.

Only a partial list of surprising initiatives generated in the committee discussion process offers powerful evidence that effective and creative deliberation occurs. In the first case we considered, the training center director was convinced CNC training exceeded the financial capacity of the firm. It was the workers on the committee who identified the department in the plant with the most interest and a budget to support it. In the third case, workforce representatives brought the issue of diversity training for long-term staff to the table. These surprises provide evidence that WECs truly engage and empower workers to develop new programs.

And the entire project of workplace redesign undertaken in our second case required a consistent commitment to deliberation, though within the firm no one would actually call it that. The company managed to undergo a transformation in which nearly every space on the shopfloor became a site for investigation, discussion, and problem solving. They spread the deliberative process throughout the plant through team systems, just in time management, and an actual willingness to turn over power to workers. In this case then, the company really sought the contribution and buy-in of the workforce; working groups, team development, early initiatives convinced workers that a new era had begun.

It is worth noting also that WRTP shopfloor initiatives are not all focused on creating deliberative space for management and labor. In some cases, peer networks actually increase discussions *within* unions. Workers who participate as peer mentors and who work together on supporting new workers may notice, as they did at one plant, that the union orientation is hopelessly out-of-date. Sitting down with elected union leadership, peer advisors and union leaders together develop improve orientation for new workers.

In these shopfloor situations and in the development of firm level initiatives to solve firm problems the WRTP has consistently disseminated and supported a model of effective deliberation. Keeping labor and management focused on those issues where both stand to gain,

Most of the members of the WRTP have their own or shared worker education facilities; currently there are now over 40 such centers in the region. Joint committees for WEC administration are acknowledged as best practice throughout the network. WRTP staff observe that WECs which develop the most active and empowered steering and peer advisor committees have achieved the most success on objective measures of WEC effectiveness such as workforce participation in training.

providing evidence that discussions can lead to real results, and helping support the early stages of conversation, the WRTP has dramatically increased the deliberative spaces available for labor and management in the Milwaukee metro area.

Deliberation on shopfloor issues does not occur in a vacuum, however; a union contract and standard grievance procedures sit behind the discussion. In participating in joint committees, labor and management agreed to leave conflict issues at the door because committees need to be focused on the areas where labor and management stand to gain together. But to forget the formal structure of negotiating contracts that have defined the labor/management relations for so many years would overlook a key element of context. Labor and management both are willing to deliberate on shared issues only if such deliberation and joint work still allows for disagreement and hard-ball at the bargaining table. Early on in WRTP work, some union leaders were suspicious of initiatives, requiring evidence that joint strategies wouldn't inevitably lead to selling members out. Even in Company B, which so dramatically empowered workers, the union and management still develop formal memoranda of understanding on each item of restructuring. Labor and management may find a new way to work together, but they don't want to give up their old ways of bargaining and negotiation.

By encouraging and facilitating networking across firms and unions, the WRTP helped union leaders share models on contract language and memoranda of understanding which preserved union power while opening joint discussion on shared issues of concern. As evidenced in Companies A and B, the informal connection of union leaders in the region helped put training and work reorganization on the table. Pushed, in some cases, by economic necessity, union leaders actively sought labor-friendly solutions to firm competitiveness problems. Employers sought new ways to work with unions and to get training and work organization in line with the bottom line.

One could simply think of the network as providing the center function identified by Fung and Wright, and we'll return to that theme below. Here, we emphasize that the network provided and supported by the WRTP was also deliberative space; labor and management leaders continue to rely on it to develop ideas and create new programs. The very development and formalization of the WRTP required extensive discussion between industry leaders from both labor and management. The foundation of the WRTP required discussions among labor leaders and among business leaders, and eventually between the groups as well. Agreeing on the common goal of using training and modernization as means to improve the competitiveness of the industry, labor and management leaders pounded out a structure for that support.

Additionally, the WRTP's program committees—overseeing modernization, incumbent training, and future workforce initiatives of the WRTP—provide a deliberative space to set WRTP priorities and develop WRTP program. In these committees, labor and management representatives from a range of companies come together to develop program goals, discuss new program development, and emerging issues in the industry. The modernization committee, for example, originally met to discuss modernization and its connection to work place organization with the goal of identifying best practices and sharing them throughout the network. Overtime, the committee identified opportunities to work with the state manufacturing extension program which provides technical assistants to small and medium companies. The modernization

committee worked with public sector partners to secure support for two WRTP staff who would serve as "labor management specialists" to for manufacturing extension. Clearly, then, even at the committee level, some deliberation occurs. The evolution in WRTP projects overtime attest to the continuing discussion and dialogue of industry leaders on committees.

A more concrete example of the network providing cross-firm deliberative space is the development of the *Shopfloor Training Manual*. As the WRTP director describes it a handful of peer advisors approached the WRTP and suggested convening a meeting of peer advisors from different companies. They pointed out that union leaders and management leaders regularly met together. They wanted equal opportunity to meet with colleagues from the industry. When pulled together, the peer advisors agreed on the common need for better tools to train shopfloor trainers. No matter how good the education center, most training happens on the floor where trainers are selected for their knowledge of the job, not their ability to communicate. They began a process of developing a training manual for shopfloor trainers. The manual emphasizes differences in learning style and barriers to communication in an attempt to improve the training skills of shopfloor trainers. No single shop could develop such a guide and, indeed, there would be little incentive to do so. The self-motivation and collective problem solving here is noteworthy. After all, no one insisted that this group come together and the WRTP certainly didn't convene it in order to develop the guide. The idea came out of the process of discussing issues and generating solutions once the committee was convened.

Results

The main advantage and in many ways the *raison d'etre* of worker involvement in training and work reorganization projects is that the people with the knowledge to identify the right solution are also the same people with clearest interest and most powerful position to implement. Other programs may face barriers implementing shared solutions; "ordinary people" may identify a problem, propose a solution, but the people positioned to follow through and take action (e.g. local government, a polluting corporation) may steer the direction of the deliberated solution elsewhere, if implement it at all. The WRTP, however, relies on its base among both workers and managers inside the industry and firms themselves to give the solution a strong chance at being fully implemented. In essence, the 'principal' and the 'agent' here are one and the same.

Workers, spending over half their waking hours of a day in the workplace, are intimately familiar with the problems they face and when given the opportunity, can not only identify the solution but also put it to work. Take, for example, the case of production reorganization at our second firm, where worker innovation led to more than a 90 percent reduction in the expected time for production and a 100 percent on-time delivery thanks to worker input and *agency* in the follow-up. As one worker attested, "The difference between 'quality circles' elsewhere and these team projects is that the teams' findings are most often implemented."

Of course, shared labor-management solutions also rely upon management insight and resources. Here again, though, managers are closely connected to the efforts and given accordance with the program objectives, are positioned to implement the solutions. Our first

company, for instance, relied upon management buy-in and resources to develop the workplace education center, providing on-site space and a share of the operating budget.

Being close to both the problem and its solution strengthens the cycle of innovation and implementation. The second firm's success stories provoked greater participation among the workforce and the early gain in training at the first company led the management there to assume full responsibility of the WEC operating budget after the initial public grant was exhausted.

Principal and agent are divided, however, when WRTP firms work with outside institutions, such as training providers and technical colleges. Technical colleges are represented on WRTP working committees and are therefore often part of the deliberative process. Their engagement in the partnership helps educate their programming as well as inform the WRTP about possible solutions through the technical college system. Occasionally, however, outside institutions may derail the implementation of agreed solutions. A company expecting one hundred entry-level workers through the WRTP's future workforce programming targeting unemployed job seekers, having worked to identify the relevant training, turned elsewhere and hired applicants with stronger credentials after the technical college failed to develop the corresponding curriculum on time. In this case, we see that managers and workers were effectively able to 'deliberate' a solution, but not implement it, thereby illustrating a limitation of the theory. In these situations, the willingness of players to exert collective pressure is part of the solution to ensuring responsive action. By and large, however, the connection between the grassroots, organic composition of the committees and the problems they address significantly increases the propensity of solutions to be translated into action.

Monitoring

With continuous change in technology demanding new skills be learned, or with the introduction of new product lines requiring a new production area be organized, targets for deliberation seem ubiquitous in the workplace. Taking these issues on through joint deliberation, Fung and Wright in the opening essay suspect that "moments leading up to decision are no doubt more exciting and visible than the long periods or execution that follow." Given opportunities to continuously mold solutions and take on new ones, however, we think the evidence from the WRTP is that in this arena, the implementation of the solution is actually *as* exciting, if not more than the initial planning.

In each of our cases, the WRTP observed some level of trepidation from one party or both in the planning phase of the project. Although supportive of training, the management at our first case doubted the workers would use a WEC. Having never been asked for input in the past, the union at our second first regarded the invitation to participate in reorganization as dubious. Seeing high turnover among management, the workers at our third felt focusing on employee turnover might be futile. But in each case, the returns to the early implementation actually strengthened the structure overseeing further planning and monitoring of the program. The peer advisor committee at our first case has now been meeting for eight years, developing additional programming as new machines are introduced (such as the CNC training and mentoring) or new worker shortages appear in certain departments (such as the inspector training). These additional programs depended on worker insight to detect emerging skill needs. They also required ongoing

monitoring of the effects of general WEC policies, such as not testing participants so as not to deter attendance in the workshops. In our second case, the ongoing monitoring of production through documentation and SPS enabled the workers to identify further improvements and implement additional changes, leading to increased job security and even new hires at the company which, in turn, promoted further attachment to the model. And in our third case, the mentor committee decided to establish bimonthly meetings not only because of the need to match new hires with new mentors on an ongoing basis, but also that to ascertain the causes for turnover. By introducing the structure through which the shifting foci are addressed, the WRTP ensures continuous monitoring, even as the target moves.

Within these structures, participants not only gain feedback and opportunity for program modification, but additional externalities such as increased accountability. Through the WRTP workplace education committee, for example, employers can demand accountability from the technical college system to provide adaptable training that is convenient and responsive to the evolving industry needs. Through the mentoring committee in our third case, the union representatives regularly use the forum to raise questions and ensure that new hires are not leaving because of poor or wrong information provided by the human resource department during the initial orientation, thus creating a more effective as well as accountable human resource operation at the plant. Through the worker teams in our second case, coworkers can demand accountability from each other on quality and timeliness. Opportunities for increased accountability, though, can also have negative consequences. In the latter example, workers may face undue pressure to increase productivity, exerting influence on each other to overwork or "sweat" their labor.

In other cases, however, the role of ongoing monitoring is minimal. At companies or cross-firm committees where new specific curricula are designed, the program may rely upon committee monitoring to evaluate effectiveness but shortly thereafter, the committee's focus may turn elsewhere or dissolve altogether.

Recombination

At the same time that the WRTP decentralizes power within firms by empowering workers, it also organizes the industry to increase its own power. In doing so, the WRTP has found a way to promote both local control and industry-wide authority. Due to their own autonomy on internal program development, firms have nothing to fear from a strong center. The local units look to the center for information on what works, connections to experienced players, technical assistance in dealing with public programs, and others supports for internal programs. But they also expect the center to increase their leverage on public systems. For this reason, since its inception, labor and management leaders have prioritized WRTP work that builds cross-firm industry conversation and increases the infrastructure devoted to industry concerns. The WRTP's facilitation of an industry-wide conversation on pressing issues provides one of its strongest sources of identity.

This central function of coordinating across local units is identification and diffusion of best practices. The formal mechanisms of the recombination for this purpose include joint committees overseeing WRTP program areas and workshops and conferences for members and

others. WRTP staff also provides descriptions of successful initiatives and reaches out to industry leaders to market WRTP projects and the WRTP approach. Attendance at best practice sessions makes the interest in this sort of networking clear. For example, the Incumbent Worker Training Committee regularly attracts more than 40 participants to committee meetings. Labor and management representatives in attendance discuss the structure and use of WECs, seeking new ways to improve their own centers. A 1997 WRTP conference on workplace education, modernization, and future workforce development attracted more than 200 participants.

A second coordinating role played by the WRTP is industry benchmarking. Through its staff, the WRTP also studies the industry and systematically assesses needs, not just the WRTP's 54 member companies, but the training practices and emerging problems across the industry. The WRTP "Needs Assessment" of more than 400 firms provides members with information on changes in the industry. Additionally, the results of that survey bolster the advocacy of the WRTP for improved public sector programming. The WRTP consistently leverages the power of its member firms and knowledge base to move unresponsive public systems and advocate for new program funding.

Through its staff, the WRTP facilitates industry access to public programs. The range of public programs which can be marshaled in support of industry—customized skills training funding for disadvantaged workers, modernization advice, TANF tax breaks, Basic Skill grants, and business expansion loans, to name just a few—can overwhelm almost any company. WRTP staff understand the programs and their rules and have worked with multiple companies to secure support. In this role, the help connect the industry to potential resources for training and upgrading.

The WRTP offers a fairly successful model for developing empowered local units while increasing knowledge and political clout of the industry. These processes are simultaneous and reinforcing. Without strong local programs, there would be little interest in the industry conversation; equally, without an infrastructure for discussing and improving practices, withinfirm projects may not get off the ground.

Teaching Democracy

Beyond outcome effectiveness and equity, Fung and Wright emphasize EDD's power to develop the process components of civic consciousness and democratic competence. How does the WRTP stack up here?

In one arena the workplace with traditionally very clearly defined and undemocratic lines of authority and power, it obviously does. The WRTP undeniably broadens worker reach into additional realms by convening managers and workers and developing shared agendas and programs to address shared problems, and in the process develops them as more confident and competent industrial citizens. Not having to "leave [your] brains at the door" is a wonderful inducement to personal growth. More basically still, opening the invitation to participate in discussions of real moment, or widening the range of "citizens" recognized as in some sense equal within those discussions both of which are things the WRTP routinely does have similar effects. WRTP staff play a substantial role in facilitating initial meetings,

breaking down barriers to their happening, and providing ongoing support for dialogue from trainings on "workplace culture change" to the basics of peer advisor and mentor training. Through this infrastructure support, the program further develops worker participation.

And does participation actually grow democracy? Yes, when as here it's connected to real power in decision making, and active learning. What started out as the reorganization of one aspect of the work in our second case led to further involvement of workers in other areas to the point that workers and managers defined a program enabling workers to specify the steps they need to take to earn new skills and gain corresponding wage increases. Building on the early programs, the workers even developed a program enabling them access to the profits the company started making again. In the third case, where the programs started out with the mentoring programs and some targeted hiring and training, early collaborative efforts are likely to build enhanced participation as the company incorporates the workplace education center.

Across our cases, it is also apparent that participants' capacity to participate in the planning and implementation sessions is heightened in workplaces with strong, built-in mechanisms for collective worker voice and representation, viz. unions. Accustomed to having a say in negotiations over wages and working conditions has invariably increased the disposition to "deliberate" in these shops. With a weak union, as in our third case, the company has struggled to achieve the same level of involvement among workers and managers at committee meetings.

And beyond the workplace, the WRTP expands the participation of workers and their representatives into additional realms usually reserved for business-dominated "experts." Through the WECs and other means, shopfloor workers and even managers play a crucial role in defining actions of public policies. And with involvement on these committees, participants often become involved in designated regional or statewide task forces planning and supporting workforce development initiatives.²¹

Equity and Efficiency

Has the WRTP offered better results than Milwaukee's manufacturing industry may otherwise have expected? Absolutely. The alternative is management-led initiatives at the firm level and no real industry infrastructure for conversation, benchmarking, or program development. Positive outcomes can be measured by specific workers, firms, and by the industry at large. We believe that the WRTP contributes to the efficiency of both production and training delivery within the manufacturing industry, while increasing equity within plants and in the labor market.

The best evidence on the efficiency front is simply the increase in firm expenditures on the programs sponsored by the WRTP. The ramped up and continuing industry support for WECs and other joint initiatives at a firm level suggests that WECs benefit the bottom-line and the efficiency of training delivered inside firms. WECs were again initially supported by public

²¹ For example, WRTP staff have actively participated in the Workforce Investment Act implementation work groups and the co-chairs of the partnership were the co-chairs of the Governor's Task Force on Technical Training and Education.

dollars. That firms have continued to maintain them after their withdrawal should prove their prudential payoff. And the effects of work reorganization sponsored or supported by the WRTP are evident enough. In our first case, the evidence of increased training efficiency includes the relatively rapid development of classes, increasing reliance on workers as instructors, and high take-up rates at the WEC. In our second, cycle times fell dramatically, product quality rose, and productivity increased as a result of implementation of its initiatives.

WRTP firms also enjoy the increased efficiency offered by economies of scale within the network. For example, the WRTP's disadvantaged worker project relied on entry-level training that was customized for each participating firm. As more and more firms participated in customized skills training initiatives, shared needs emerged. The WRTP helped the industry see the similarities in requirements. As a result the industry agreed that on a standard package of training for entry-level training. The WRTP then used political clout provided by employer buyin to encourage the development of a "basic manufacturing curriculum" designed to prepare disadvantaged workers for most industry jobs. Because the curriculum is standardized, the technical college has been able to reduce costs of customized training. Firms consistently rely on the WRTP develop programs and improve efficiency by leveraging the economy of scale provided by member firms. And the achievement of the basic initial point of the consortium to reduce suckering of those who embarked on the high road obviously reduces waste.

The equity outcomes of the WRTP are no less substantial. To the extent that WRTP projects increase worker voice inside the firm, they tend to equalize power between managers and the workforce. Moreover, as WRTP projects engage a broad spectrum of workers from throughout the firm, and those workers develop new strategies for the workforce, it helps increase equity within the workforce. Participants in shopfloor program committees develop a stronger sense of their own role and contribution to the firm. In the process, contributors to the committees are more likely to be measured on the basis of their contribution than on traditional measures of prestige like seniority at the job. Likewise, mentoring projects for new workers are explicitly designed to provide to new workers orientation to and methods for dealing with the culture of the shopfloor. In the past, a homogenous workforce could rely on informal networks to supply such information. By formalizing the process, the WRTP helps shops become more welcoming for new and increasingly diverse entry-level workers.

Finally, and most important, WRTP projects have created standard pathways into and up through the industry where old systems provided these things informally, if at all. In doing so, the WRTP has dramatically increased the equity of the labor market in manufacturing. For example, working with the Milwaukee Jobs Initiative, local manufacturers, and the technical colleges, the WRTP has placed more than 300 central city residents in union manufacturing jobs over the last 3 years. In the next year, they intend to place another 500 workers through similar projects. In some companies, these projects have radically changed the face of the workforce. An early participant in the MJI model, a company just north of Milwaukee, hired their first 12 African American workers just over two years ago. The firm began to hire through the networks of their new employees and now the company is over 12 percent African American. And increasingly, the growing diversity of the workforce introduced by WRTP programming has begun to alter the leadership structure within the firm, as demonstrated by the recent election of an African American to the union shop committee at the firm.

Is that all there is?

In these ways and others, we can fit our experience with the WRTP into the EDD model. Ultimately, however, there are important aspects of the WRTP experience that are not well captured by EDD.

Perhaps the most important has to do with power and advocacy vs. deliberation.

In ways just evidenced, deliberation is of course important to the WRTP. It is of course the basic way in which it fashions program. But initial vision and power are finally far more important.

The WRTP would not have happened without union leadership committed to making it happen, for reasons which by this point should be obvious. Industrial relations in the U.S. are essentially a war. The WRTP exemplifies advanced union practice in that war — one which selectively offers cooperation, but with a threat of its withdrawal, on condition of management commitment to the high road. We cannot overstate the difficulties of even maintaining the credible threat of this withdrawal, much less the initial promise of what is offered, under current conditions of union decline, technical incompetence, management attack, and the ceaseless reordering of managements and ownership positions. Little of this friction and pressure is captured in the EDD model.

But neither can we overstate the importance of some agreement on initial strategy itself. The problem to which the WRTP successfully offered itself in response was emphatically not a problem that defined itself, or its obvious solution. It needed to be defined by someone in this case COWS . More attention might be paid in EDD to the role of such intermediaries or entrepreneurs.

Of the same piece, more or less equally, the ability of union leadership to engage in advocacy on behalf of the industry, the effect of that on resource flows, and the effect of that on industry calculation to engage in cooperation, seems underappreciated in EDD. The real success of the WRTP in changing public training provision or funding for programs that might better serve workers depends in the end on political muscle departing from cold hard political deals, inside the firm and without.

How to put this? Maybe this way:

The "What's in it for me?" and "Whom can you really hurt?" questions together comprising the familiar conversation of almost all but the most abstract or ennobled politics seem less clearly recognized in EDD's elaboration than they might usefully be. In our own experience, at least, those are the questions most commonly asked.

We finally believe that these latter issues, which we hope will be discussed at the conference, are actually motivated substantially less by the basic claims of EDD model (though we do really long for another name, contest its novelty, and welcome, in reformulation, less

doctrinaire conditions on inclusion in it) than to the failure of public authority in the U.S. to embrace the obvious gains that could come of pursuing some of its terms. To return to an earlier point, or recitation of position, we certainly think it important to pay more attention to the background conditions of citizen association, and certainly think the state's help in that could expand the space of democratic experiment and achievement. In the WRTP's case, however, and America's generally today, we have not had that upward lift of statist legitimacy and sanctioning power. The WRTP is widely doing the work of the state, but without the state's support. And so the politics have been much harder and more dirty.

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