

EXECUTIVE SUMMARY

This report has been prepared as part of a contract awarded by the U.S. Department of Labor (DOL) to conduct an Evaluation of the School-to-Work Out-of-School Youth (OSY) Demonstration and Job Corps Model Centers. The demonstration programs and Model Centers are alike in attempting to incorporate and adapt school-to-work principles in their services to out-of-school youth. This summary reflects the findings reported in the Final Report for the component of the study focused on the Job Corps Model Centers; as such, it presents a discussion of the design and implementation of STW principles in the Job Corps context, including the Model Centers' objectives and strategies. A companion report addresses similar issues with respect to the OSY Demonstration.

BACKGROUND

School-to-work (STW) represents a potentially important improvement in the nation's efforts to fully prepare its young people for successful and productive careers. By teaching academic skills in a career context using active learning methods, youth may become more meaningfully engaged in the process of learning, develop a broader array of SCANS skills and competencies, and see how the skills they are acquiring can be applied. Moreover, including work-based activities makes it possible for them to learn skills in authentic, real-world settings, while familiarizing them with the demands and rigors of the work world. Based on this promise, STW partnerships around the nation have been responding to the challenges and opportunities afforded by the School-to-Work Opportunities Act of 1994 by revamping curricula and pedagogy. This Act authorizes the expenditure of federal dollars to support local partnerships in their efforts to promote context-rich instruction and integrate classroom with workplace learning.

Typically, the focal point for these efforts has been the secondary school. As a consequence, too often high school dropouts and recent graduates with weak skills, who are disconnected from the traditional academic environment, are left out of these emerging systems. Recognizing the promise that STW holds for invigorating learning for young people who have had difficulty in a traditional school environment, DOL's National Office of Job Corps has encouraged the adoption of STW principles throughout the Job Corps system. The Model Centers were funded to be forerunners in this effort.

THE MODEL CENTER SELECTION PROCESS

In the spring of 1997, DOL issued an announcement encouraging Job Corps Centers to submit an application for designation as a Model Center. In developing criteria to select the awards, DOL decided that the number of Model Centers it would designate within each region should be proportionate to the regions' number of Job Corps Centers in operation. Beyond that, in concert with the Job Corps National Office, DOL Regional Offices made clear that they were looking for evidence that those applying for Model Center status would implement high-quality school-to-work principles, including school-based and work-based learning, and connecting activities. After the review process, awards were made in the summer of 1997 to 30 Centers, with each receiving an increase in their operating contract of approximately \$60,000 for each of two years. The completion of the grant period was thus the summer of 1999.

To assist Centers in their ability to develop innovative designs, DOL provided a number of resources for technical assistance, including issuing a *School-to-Work Technical Assistance Guide* and making available to Model Centers on-site visits by trainers who are experts in school-to-work implementation. To clarify its expectations, the National Office also issued various discussion papers and documents, including "Characteristics of a Comprehensive STW System in Job Corps." These indicators are fully consistent with high-quality STW principles and include guidelines relating to:

- System management. All Center administration and staff should share a common understanding of STW and should participate in developing a plan that institutionalizes STW throughout Center operations.
- School-based learning (SBL). School-based instruction should emphasize the integration of curricula across academic and vocational content areas, relate classroom experiences to the realities of the workplace, emphasize problem-solving and communication skills, and make extensive use of hands-on tasks and project-based learning.
- Work-based learning (WBL). Centers should develop worksites that provide a range of quality learning experiences that are coordinated with learning that occurs on Center, worksites should be well monitored, learning gains should be documented, and qualified instructors and mentors should be available to assist students.
- Connecting activities. To help the above components cohere, Centers should provide adequate professional development and training for school-based and worksite instructional staff, involve employers in a range of activities, develop strong external partnerships (including with

State and local STW systems), and promote post-secondary education and training.

THE IMPLEMENTATION EXPERIENCE

School-to-work represents an important and bold initiative that, if carried out as the National Office envisions, can transform the way learning takes place at Job Corps Centers nationwide. However, full-scale implementation of STW principles and practices is certainly a journey rather than an event; the sorts of complex changes being undertaken surely cannot occur overnight, but will of necessity entail a strong and clear focus on goals and objectives, a commitment of adequate resources, a coherent and well developed action plan, and constant fine-tuning of efforts over an extended period of time.

As a group, the Model Centers made important progress along this path and have come about as far as might have been reasonably expected over a two-year period, given the constraints and challenges that STW implementation posed. Overall, almost all Centers that we studied made substantial changes in the way they prepare their students for work or further education or training. However, their efforts were uneven. In general, most Centers made a greater degree of progress in developing work-based learning opportunities for their students and establishing connecting activities, but made substantially less progress in transforming school-based learning.

The Starting Point for Change

In implementing STW principles, Job Corps needs to revamp some of its established practices that are to some degree inimical to STW. For example, Job Corps has traditionally been characterized by sharp divisions between academic and vocational skills instruction. Thus, in most Centers, vocations and academics constitute separate “departments,” each with a prescribed curriculum. To the extent that Centers adhere to this formula, the integration of learning is made difficult. As a consequence, academic and vocational instructors typically do not engage in joint planning, nor do they coordinate lesson plans to any appreciable degree. Indeed, following the prescribed curricula, typically no systematic effort is made to craft the youths’ academic instruction around themes drawn from career choices, nor are vocational curricula explicitly designed to teach in context an array of academic and SCANS skills that are important for young people to learn.

The above highlights some of the important changes that must occur for STW to take root. However, in many ways Job Corps is a very natural context for STW

implementation, because it has long emphasized components that are considered critical elements for strong STW systems. For example, shortly after they arrive on Center, all students are provided with career assessment and counseling—explicitly identified as school-based learning activities in the STWOA—to help them identify their career interests. These efforts typically entail formal testing, but also enable new enrollees to “shadow” fellow students in their vocational classes, to help them get a real feel for what pursuing various vocational areas will be like. On-going assessment and counseling, also a school-based activity, are also long-standing hallmarks of Job Corps, as all students receive regular feedback on their progress in both academic and vocational courses and periodic formal reviews.

Job Corps also emphasizes the teaching of general employability skills, consistent with the STWOA’s mandate that instruction in general workplace competencies should not be ignored. Thus, social skills training has long been a required feature of the standard Job Corps curriculum. Other instructional strategies emphasized by STW’s proponents—such as using active learning methods, integrating academic and vocational learning, and providing exposure to the work world—also have their analogues in Job Corps. For example, vocational skills training (VST) provides an example of the way in which project-based learning can be used as an instructional tool, and Training Achievement Records (TARs), used in Job Corps to guide vocational skills training, represent an adherence to competency-based instruction that integrates (to some degree) the teaching of academic and vocational skills. Through the work experience program (WEP) Job Corps can claim a history of providing its students with exposure to the real work world, and it demonstrates as well Job Corps’s efforts to engage the employer community. Finally, Job Corps has well-developed mechanisms for providing students with placement assistance, considered by the STWOA to be an essential connecting activity.

The above observations are not meant to imply that Job Corps is “already doing STW,” a claim that some of the respondents we spoke with made a bit too freely. However, they do suggest that some component pieces are already in place. What remains is for Job Corps Centers to (1) embellish and refine these pieces so that they attain their true potential in a STW context, and (2) pull the various pieces together to form a cohesive and integrated system for learning that affects all students.

The Vision for Change

The National Office recognized that Job Corps was in some sense a natural laboratory for change, for the reasons noted above, and it is justifiably proud of the strong foundation on which STW reform can build. However, it also appreciates that modifying curricula and revamping Center-wide policies and practices consistent with STW is a tremendous challenge. Indeed, the National Office emphasized that STW should not be viewed as just another program, or something that should be “added-on” to existing Center services. Instead, it was to entail wholesale reform in the way learning takes place.

About one-third of the Centers understood this message, and in these cases Center administrators and staff came to adopt a vision of what needed to be accomplished that was fully consistent with sound STW principles and practices. This clear vision provided a steady focus that encouraged balanced development and implementation across all three STW components, although sometimes obstacles of various sorts (e.g., lack of resources, logistical difficulties) prevented progress from being as rapid as might have been desired.

Approximately 50% of the Centers demonstrated only a partial understanding of what STW should entail. In some of these cases, Center management and staff came to understand STW as consisting primarily or exclusively of work-based learning. In these instances, mobilization focused on recruiting additional employers and transforming the traditional work experience program (WEP) into enriched learning opportunities. While good quality worksite learning did often result, this approach ignored the full potential of STW as a system linking school-based and work-based learning and paid scant attention to efforts to transform school-based curricula, especially in so far as academic learning was concerned.

Another group of Centers in this category was characterized by a sharp dichotomy in the maturity of the vision across different levels of the organization. In these cases, persons in key Center leadership positions (e.g., the Center Director or the STW Coordinator) would hold a well developed sense of what STW should entail, but this view was not widely shared within the organization. This occurred either because the leaders' vision was not clearly articulated, because professional development for staff was inadequate, or because instability in key leadership positions (due to staff turnover) made it difficult for the more complete vision of STW to take root. Thus, in this variant, Center leaders would understand that STW should entail true structural

reform, but, typically, staff would hold a narrower vision of STW as consisting solely or primarily of work-based learning. Academic instructors in particular would come to feel left out or unsure of their role.

Finally, just over 15% of the Model Centers lack an understanding of STW or of the sorts of changes that they have been called on to make. Typically, these Centers recognize that Job Corps intrinsically includes components that have been identified with STW (such as career counseling and work experience), and this confuses them with respect to how STW is different. Thus, Centers in this variation often focus on expanding their work experience programs by recruiting new employers, but do not understand how work-experience should be transformed into work-based learning, let alone how it should be integrated with what goes on in the classroom.

This typology reveals that staff in very many of the Centers—in fact, the majority of those in all but the first category—implicitly or explicitly equated STW with work experience or work-based learning. This stance seemed to derive from the fact that, when they were faced with confusion or uncertainty about what STW entailed, it was easiest for them to fall back on something that was familiar.

This misunderstanding, once firmly rooted, was hard to change. Thus, there was some maturing of the Centers' vision of STW over time (e.g., between the first and second rounds of site visits), but the change was not dramatic. In fact, the proportion of Centers in the highest category—those with the most complete vision of STW—remained about the same over time. Moreover, there was quite a lot of consistency in the composition of this category over the two years of our study (although a few Centers that were initially in this category dropped into one of the lower categories, usually because of excessive staff turnover, while a few Centers in a lower category moved up as a result of a deepening understanding arrived at through technical assistance and professional development). In general, then, it could be said that Centers either got the message to begin with, or failed to ever do so. Nonetheless, there was substantial movement out of the lowest category—those without even a partial understanding of STW among either Center leaders or staff—reflecting real progress over time. In other words, many more Centers are starting to implement new practices consistent with STW, although their vision may be incomplete.

STW System Building

Among the steps that almost every Model Center took in launching its STW initiative was to use most of their special funding to hire a STW Coordinator, as DOL expected them to do when it awarded the special funding. Typically, these individuals devoted the major portion of their time to WBL activities, in keeping with the vision that most Centers had that equated STW with work activities. Thus, the Coordinators focused on recruiting employers to provide job shadowing or internship opportunities, matching students to the available worksites, and monitoring students' progress once they were placed in work-based learning assignments. They usually spent much less time on school-based or connecting activities, such as working to modify academic or vocational curricula. Centers also used their special funds to purchase computers or books and other resources, send staff to conferences or workshops on STW, and hire part-time drivers to transport students to their WBL worksites.

Also reflective of the vision that many Centers had of STW, the initiative was housed in either the Center's Placement or Vocations Departments in about one-half of the Model Centers. If the initiative was in Placement, it reflected the Center's conception of STW as providing a way of easing students' transition out of Job Corps, and perhaps as a vehicle for helping the Center's placement rates; if it was housed in Vocations, it often suggested the tight link drawn between STW, WBL, and vocational skills training. Other Centers placed the STW initiative within the administration department, which often (but not always) indicated that STW was given a higher priority within the Center and was viewed as representing a holistic approach to learning. Where the initiative was housed seemed to have implications for how it came to be perceived by Center staff. If it was in the Vocations Department, for example, academic instructors demonstrated less buy-in and seemed to believe that STW was something that did not apply them.

Yet achieving buy-in throughout the Center is critical, because implementing change consistent with STW requires the ability to coalesce broad internal partnerships around that goal. STW Coordinators had mixed success in forging such partnerships. Where they were successful in doing so, it proved to be critical for them to have the strong support and backing of Center leadership, especially the Center Director. In the absence of this, coordinators often had limited authority or autonomy.

Related to their efforts to establish internal partnerships, some Centers established advisory bodies to help guide the STW initiative. Usually their purview was quite

limited and involved reviewing which students were ready for WBL. However, in about one-third of the Centers other structures emerged, including STW management or steering committees or, in a few cases, curriculum development committees. The fact that these structures were not more widespread indicates how difficult it was in many places for STW to garner strong Center-wide support. Even less common were efforts to involve students in planning for STW in a formal way.

School-Based Learning

Many respondents indicated that modifying classroom-based learning represented the most challenging aspect of STW. Although many Model Centers have made efforts to introduce new classroom materials and instructional strategies to reflect STW principles, for the most part these changes have not been substantial.

Among the strategies adopted by some Centers was modifying the structure of classroom learning, by changing the normal structure of the school day. For example, a few Centers added a new class period, specifically devoted to applied academics. A small number of other Centers instituted block scheduling, which entailed lengthening the normal one-hour class periods to two hours, to facilitate the use of active teaching methods. Other Centers introduced structural changes to help break down traditional barriers between academic and vocational departments. For example, one Center adopted an “ed-tech” model, whereby academic and vocational instructors would be assigned to teams; team members would be located in a single building and would work together to provide instruction to students. Each academic instructor teaches all academic subjects to the youth in the trade to which the instructor is assigned.

A related approach to facilitating the interchange between academic and vocational instructors involved grouping staff into pods or clusters. Not as far-reaching as the approach described above, the clusters were designed as planning bodies and were given regular time each week to develop integrated curricula and discuss ways in which STW could help students.

To some degree, the content of learning was influenced by the STW initiative (as well as related initiatives promoted by the National Office of Job Corps). Thus, the development of employability skills became a major focus during the study period, and Centers were developing strategies to ensure that these skills were continually being reinforced throughout the students’ stay on-Center. As part of the new emphasis on employability skills, social skills training (SST) was taken out of the dorms, where it

had previously been taught, and was now being taught in either vocational or academic classes, or sometimes in separate class periods. A more dramatic strategy for emphasizing employability skills occurred in a few Centers that transformed one or more of their vocational classes to simulate worksites. In these settings, instructors ran their classes as a pseudo-business and students were treated like employees.

In some cases, the content of vocational skills instruction was also modified. These changes were brought about by the closer involvement of employers, either as providers of work-based learning or through their participation on employer advisory councils. Through this involvement, TARs were being updated and new equipment or techniques were introduced.

Efforts to modify teaching methods in response to STW were also very much in evidence. Although vocational instructors have traditionally used active learning methods—learning by doing, working in teams, etc.—during the study period some academic instructors also moved to use more interactive teaching styles, in contrast to the reliance on workbooks or computer-aided instruction, which had been the norm. Thus, in some cases peer teaching or team teaching was introduced. Some Centers also made greater use of project-based learning or service-learning. These can be very effective active learning methods in a STW context, although often times the connection to STW was not recognized and, hence, the learning potential of these teaching strategies was not developed to the fullest.

Centers also adopted new instructional materials, such as new applied academics exercises and workbooks. In some cases, these materials were purchased from a vendor, and in other cases they were developed by teams of instructors, such as the clusters described above. In either case, the materials usually constituted “add-ons” or supplemental materials that were used in academic classes in addition to the regular workbooks or other traditional materials.

In general, new instructional materials and methods represented piecemeal efforts and almost nowhere took the form of far reaching substantive changes to classroom learning. Nonetheless, many Centers are committed to making further progress in the years ahead, and have established curriculum development committees or other bodies to lead these efforts.

Work-Based Learning

Nearly all Centers worked aggressively during the grant period to expand work-based learning (WBL) opportunities for students. Given this, a top priority was developing adequate numbers of high quality worksites. This task usually fell to the STW Coordinators, who utilized a number of strategies to recruit employers, including attending job fairs, hosting banquets or “get acquainted” meetings on Center, and drawing on the Center’s connections with One-Stop systems or local STW partnerships. Once internal partnerships around WBL had cemented, other Center staff, and especially vocational instructors, also played an important role, by drawing on their personal connections in the community.

Two types of work-based learning activities were used, exposure activities and experiential activities. Exposure activities included job shadows, company tours, guest speakers, and career fairs. Most Model Centers provided a fairly inclusive range of these activities and involved all or most students to some degree. They served the important function of providing students with an initial introduction to the opportunities, demands, and expectations of employers or particular occupations and industries, and helped prepare both them and employers for the more intensive experiential activities.

Experiential activities involved opportunities for students to practice existing skills or gain new ones by working on- or off-Center. These positions were either paid or unpaid and could involve either full- or part-time employment, but almost always related to the student’s trade. Off-Center worksites in the private sector were typically the primary setting for experiential activities, although off-Center worksites in the public or private non-profit sector and on-Center worksites were also frequently used. Vocational skills training projects (VST) also could be construed as a type of on-Center work-based learning, and involved students undertaking various projects relating to the maintenance, repair, or enhancement of Center facilities. VST can provide excellent opportunities for effective work-based learning, because the projects can require students to apply and develop a range of skills, including thinking skills, problem-solving skills, teamwork skills, and academic skills, as well as vocational skills. If specific learning objectives were articulated and the learning was documented, the VST project could be considered a quality WBL experience. However, Centers did not often make these connections and, thus, did not capitalize on this potential.

About one-half of the Centers reserved worksite placements for students who were nearing completion. However, the remaining half developed a tiered approach to WBL, with the tiers varying according to the duration or intensity of the activity, the learning objectives, whether the placement was on- or off-Center, and whether or not students were paid for their work. Where this arrangement was used, the specifics varied. However, the first tier might consist of job shadowing or other exposure activities for students who were fairly new to the Center; a second tier might then be available to students who were further along (typically they might be about half complete in their TAR) and consisted usually of unpaid part-time work in settings where more rudimentary skills were required; and a third tier might consist of full-time paid work for students who were nearing completion. Finally, a few Centers added a fourth tier that consisted of “homeplace” placements, which were used as a way of easing students into their transition out of the Center and into the workplace.

Each Center developed its own selection procedure, often involving a review panel made up of academic and vocational managers and others, to ensure that students were matched with an appropriate experiential work-based assignment. In almost all cases, it was expected that the worksite would relate to the student’s trade. Beyond that, Centers looked closely at the students’ work readiness skills, attitudes, and behaviors, to be sure they were ready for the work assignment in question. Often times, on-Center placements or placements with public or non-profit organizations were reserved for students at lower levels of readiness, since supervisors in these settings demonstrated a greater willingness to work with students with weaker skills and were more patient when errors were made.

In about one-quarter of the Centers, experiential WBL activities closely resembled traditional work experience programs (WEP). In most Centers, however, WBL was specifically viewed as an opportunity for learning and could begin earlier in the student’s Job Corps career than WEP typically would. Typically this learning focused on vocational and employability skills. Academic skills, by contrast, were rarely developed as explicit learning objectives.

In general, students were well supervised. Work supervisors were often familiar with the students’ Training Achievement Record (TAR), including where students were in their vocational training plan and what competencies they still needed to master. In some cases, supervisors could also “sign-off” to denote that a competency had been

attained at the worksite. Infrequently, the student-supervisor interaction went beyond this and took on the characteristics of a mentoring relationship.

In expanding or enhancing their WBL component, Job Corps Centers must grapple with a number of important implementation challenges. Logistics, especially transportation problems, was among the most important. Nearly all Centers remarked that getting students to and from their off-Center work assignments was a major challenge. For rural Centers, public transportation networks were non-existent; for those in urban areas, they were woefully inadequate or inconvenient. Thus, Centers needed to use the Center van and hire part-time drivers to shuttle students back and forth. This proved to be quite costly. A number of Centers noted that they could greatly expand their use of WBL if only their transportation challenges could be resolved.

Other challenges that Centers faced included the extraordinary amount of time that recruiting employers and monitoring worksites would typically take and the difficulty in ensuring that Center staff, employers, and students shared the common vision of the training potential of WBL and were ready to assume their roles.

Connecting System Components

To ensure that the various school-based and work-based activities cohere into a meaningful whole, Model Centers needed to develop strategies to connect learning at work and school. At many worksites, TARs were used to promote this connectivity. In general, STW Coordinators took the time to explain TARs with worksite supervisors, explaining the skills that the student had already learned but needed to practice and new skills that needed to be taught. In the best examples, supervisors understood the competencies being addressed by the TARs and were able to “sign off” on competencies that the student had mastered at the worksite.

At a few Centers, vocational instructors, and more rarely academic instructors, also visited worksites on a regular basis. These visits help not only to ensure that training at worksites is connected to what is occurring in the classroom, but also help instructors to modify what occurs in the classroom to better suit the demands of the workplace. Although instructors invariably report that they benefit from site visits, they do not occur as frequently as might be desirable, because instructors have full teaching loads that make it difficult for them to get out of the classroom.

Staff development and capacity-building is another important connecting activity. In about one-third of the Centers STW training was judged to be very effective, as staff were able to benefit from an array of ongoing training initiatives, including regional conferences and workshops, workshops sponsored by local or state STW partnerships, and in-house training. In the remaining Centers, by contrast, staff training in STW was either minimal or sporadic.

Despite the fact that some staff development has occurred in almost all Centers, there is a clear need to do more to foster understanding and implementation of STW approaches. Most staff we interviewed believed that they would benefit from further professional development and training in STW. The particular areas in which improvements in training are needed include curriculum development, teaching methods that emphasize active learning, and teamwork skills.

Another important connecting activity is preparing students to transition to work or further training once they graduate from Job Corps. Centers have long had mechanisms to assist students in the placement process, including by using placement contractors and through organizations such as JACS and WICS, which also provide transitional support services. Spurred by STW and other related Job Corps initiatives, many of the Model Centers have recently expanded on these mechanisms by forging connections with local One-Stop systems and developing on-site “employment offices,” with computers that link to the Internet and other resources and tools to assist students in the job search process.

Some Centers have also developed special living situations to help students adjust to off-Center living. These include transitional living programs designed to simulate the types of independent living situations that students can expect to experience after graduation. Other Centers engaged students in special courses to help them develop transition plans for the post-program period.

Finally, by way of studying connectivity, the evaluation team looked at Centers’ relationships with various stakeholders outside the Job Corps system. Although relations with local employers typically revolved around their roles as providers of work-based learning opportunities, many Centers were developing deeper relations with the surrounding business community. These included special partnerships in which businesses donate equipment, provide input into curriculum development or on-Center training, or provide permanent employment to a high proportion of students after they

complete their work-based learning internships. In some cases, employer involvement is channeled through active vocational or industry advisory councils.

In addition to employer stakeholders, other partners have made important contributions to the initiative. In some cases regional DOL representatives have been active partners. In other cases STW Coordinators have worked to expand community linkages beyond the employer community to include other public agencies such as school districts, community college, local STW partnerships, and local One-Stop systems.

Evolution and Sustainability

Even though their special STW funding has ended, the 30 Job Corps Model Centers will sustain new staffing patterns, new activities, new structures for learning, and new partnerships. With respect to staffing, nearly all Centers hired a STW Coordinator, in keeping with DOL's expectation for how the special funding would be used. All Centers but six continued to fund this position even after their special STW funding had run out. About one-third had made a firm decision to maintain this position on a permanent basis; nearly all of the others indicated that they would try to do so, but were not sure that it would be feasible from a budgeting standpoint in the long-run.

Another permanent change introduced by the STW initiative in many Centers was the sustaining of new learning activities. Along these lines, all but two of the Model Centers had indicated a commitment to continue WBL. Indeed, WBL had been steadily expanded during the two years of our study, so that Centers are now offering an array of job shadowing and on- and off-Center work-based learning experiences for students. WBL is one component of the initiative that nearly all Center administrators and instructors could support unconditionally, although logistical difficulties (such as the difficulty of transporting students to their worksites and the time it takes to develop and monitor quality worksites) remain serious impediments to further growth.

Other new learning activities included the introduction of applied academics or other classroom-based contextual learning materials. Nearly all Centers used these to some degree, but often as a result of the initiative of individual instructors rather than as a systematic Center-wide effort. Even where they were introduced systematically, applied academics was often viewed as an "add-on" that might lengthen the time it took for students to complete their training, and in no case represented a wholesale

transformation of the way that school-based learning occurred. Nonetheless, some Centers indicated that one of their primary future goals was to significantly enhance the integration of academic and vocational instruction. Staff were eager to have the opportunity for further professional development to enable them do so more effectively.

In a few cases, the STW initiative also gave rise to what seem to be permanent structural changes that Centers introduced to help break down the barriers to integrating the teaching of academic, vocational and employability skills. These included approaches that clustered vocational and academic instructors into teams, the adoption of new applied academics class periods, and transformations of physical space that put academic and vocational instructors into proximity with each other. The success of these bold moves cannot be judged for some time yet.

Finally, the strength of Centers' partnerships with employers is likely to be another important legacy of the STW initiative. These partnerships are likely to be a valuable resource for Job Corps, both in expanding and strengthening STW and more generally.

CHALLENGES AND PROMISING PRACTICES

Each of the Model Centers we studied, and indeed the Job Corps system as a whole, can be praised for its comprehensive approach to youth services. Thus, all Centers offered an array of intensive interventions that include attention to basic skills remediation, the attainment of widely recognized credentials, occupational skills training, employability and social skills development, health services, career counseling, athletics, and a host of ancillary services that, taken as a whole, could truly be expected to cause a major transformation in a young person's life. Moreover, Job Corps demonstrates attention to sound youth development principles, by providing individualized attention, fostering self-confidence, and promoting one-on-one relationships with caring adults.

Building on this solid foundation, the Model Centers were called on to modify the traditional delivery of academic and vocational instruction to integrate learning and provide closely linked work-based learning activities. Doing so requires that Centers engage in system building by forging broad partnerships and engaging in staff development and other connecting activities. The effective implementation of STW is therefore a major undertaking, and accordingly, we could not have expected the Model Centers to implement coherent, well-developed STW systems in a short period of time.

Nonetheless, many of the Model Centers made substantial progress, and some implemented profound changes that, if not yet fully developed, offer the prospect when they mature of revitalizing the way learning takes place.

Some of the challenges they encountered in implementation are identified below, along with some of the promising practices that Centers undertook to overcome those challenges.

Challenge #1: Galvanizing Support Around STW

Because implementing a comprehensive STW initiative represents system-wide reform, it requires strong leadership and sound internal partnerships to bring about. Strong leadership and partnerships, in turn, require that top-level administrative staff at the Job Corps Center share a common vision around STW and believe that its implementation is a priority. Given the hierarchical nature of Job Corps Centers, gaining support of the Center Director as well as other key leaders, such as the Academic and Vocational Managers, is therefore critical to the development of a strong internal partnership and having instructors and other staff members commit their efforts to make substantial changes.

However, developing strong leadership and administrative backing for STW often proved elusive, for several reasons. To begin with, many of the Model Centers experienced *turnover, and sometimes prolonged vacancies, in key administrative positions*. For example, one-third of the Model Centers experienced turnover in the position of Center Director, one-half did so in the position of STW Coordinator, and still others saw turnover in Academic or Vocational Managers. Where this turnover occurred it was very difficult for the Center to maintain an impetus for change.

Second, *motivations for applying for Model Center funding varied*. Many Centers did so because their leaders were strongly committed to the promise that STW offered. However, in other cases, the Center was seeking access to the special funding or the prestige that winning recognition from the National Office entailed. In still other cases, the key personnel who had written the STW proposal either acted with limited input from Center leaders or were no longer at the Center when the awards were made. Thus, simply attaining Model Center status was not always evidence of administrative support and backing.

Third, the Centers' administration, including the Center Director and Vocational Manager or Academic Manager, consisted of diverse individuals with *different ideas*

and priorities regarding what was important. Some of them were highly skeptical of the promise of STW or were otherwise resistant to change.

Closely connected with the need for strong leadership is the need for a strong internal partnership supporting the STW initiative. Successful implementation of STW requires active participation from staff within several different departments, such as academics, vocations, administration, counseling, placement and residential living. Indeed, the National Office's Characteristics of a Comprehensive STW System in Job Corps emphasizes the importance of mobilizing *all* staff behind the STW initiative.

This too proved to be a challenge in many instances. To begin with, the *STW Coordinators were generally not viewed as major power figures* within the Centers, at least not in their own right. Therefore, they found it difficult to be an effective force for change without strong support from other leaders. Instructors, for example, were not inclined to revamp their curricula, engage in joint planning, etc., unless it was clear to them that doing so was a priority that was fully endorsed by their superiors. In other words, in order to galvanize support from staff within the Center's different departments, the Center Director and other key administrative staff members must take the lead role in developing and promulgating a comprehensive vision of STW for their Center. Yet, as we have discussed, STW Coordinators often proceeded without this strong backing.

In addition to leadership issues, most of the Model Centers encountered a number of additional challenges to forming a strong internal partnership, including the *lack of shared vision of STW and staff members' resistance to change.* At many of the Centers, staff members did not fully understand what STW should entail or share a common vision for its development. In some cases, they were resistant to change or resented being told that they should revamp their established teaching practices.

Concerns about performance also hampered system-building efforts. At some of the Model Centers, staff members were concerned that certain aspects of STW might detract from the Center's ability to meet performance targets. This concern generally arose when instructors were fearful that moving to applied academics would cause students to lose focus on TABE or GED attainments and was an "extra" or "add-on" that would lengthen the amount of time students spend in academics or vocations. For example, at one Center, recent emphasis on meeting performance targets has resulted in

greater reliance on the CMI and a shift away from designing new curricula that might incorporate contextual learning or project-based learning.

A high degree of staff turnover also made it difficult to galvanize support. As we noted above, turnover in key leadership positions greatly hampered efforts to maintain momentum toward change. However, turnover of staff in other positions at the Job Corps Center also negatively affected the development of the STW initiative. Several Centers experienced a high degree of turnover among instructors, particularly in the academic department, and consequently, forming a strong internal partnership became virtually impossible. At a few of the Model Centers, for example, almost all of the academic instructors were new to the Job Corps Center by the time of our second site visit. At one such Center, STW Coordinators expressed frustration that, once they developed relationships and networks within the Center, staff left the Center and these connections had to be developed all over again.

Turf issues were also important. Often times there are sharp divisions between different departments within a Job Corps Center, such as the academic and vocational departments. These divisions persist—at some Centers more than others—and often posed challenges to building an internal partnership around STW. In general, the Model Centers that made more progress implementing STW were characterized by a high degree of teamwork and camaraderie among staff from different departments.

Another type of turf issue that surfaced at some of the Model Centers stemmed from the *lack of clear supervisory authority* in some Centers, caused by the fact that instructors sometimes worked for different employers, including unions, national training contractors, local school district staff, and local community colleges. At some Centers, staff members resisted working on joint activities, such as curriculum development or team-teaching, because they believed that these activities were not part of their job responsibilities or were not necessarily endorsed by their respective employers. However, having different employers represented at the Job Corps Center did not necessarily result in a weak internal partnership. In fact, some of the Centers with several different employers also enjoyed a very strong sense of teamwork around STW. What proved critical, again, was strong leadership and having all staff embrace the vision of STW as something that was best for the students.

In overcoming these challenges, Centers needed to:

1. Work aggressively to *promote buy-in from all staff at the outset*. Concerns that staff throughout the organization might have and that prevent them from moving forward with change need to be identified and addressed, whether it be a lack of understanding, conflicting priorities, lack of clear authority structures, and the like. To address these concerns and have staff respond to their requests for assistance, STW Coordinators need to have the support of the Center Director and speak from a position of authority. Strategies that proved helpful included establishing planning bodies involving diverse staff and adopting an organizational structure that gave STW Coordinators autonomy.
2. *Articulate a clear vision* about what STW is. The National Office's Characteristics of a Comprehensive STW System makes clear that STW is about systemic reform that involves all staff and is a comprehensive transformation of the way learning takes place. Yet this understanding was not widely shared among our respondents at the Model Centers. Instead, STW is often equated with WBL or is viewed as an "add-on." As part of the process of attaining Center-wide buy-in, STW Coordinators need to establish a common vision and engage in dialogue involving *all* staff on an ongoing basis.
3. Recognize that the National Office emphasizes that affecting change consistent with *STW is a high priority*. DOL has already expressed its strong support for STW by making it a part of the RESPECT challenges. This message must be continuously reinforced. The strong support from Center Directors was absolutely essential for change to occur, so ensuring that they understand the importance that DOL attaches to this initiative is critical.

Challenge #2: Finding Adequate Resources to Support Change

Another critical challenge the Model Centers faced during the two-year study period, and will continue to face as they work to sustain their STW initiative, concerned a lack of resources to fully support the changes that were being contemplated. One manifestation of this was that most Centers felt severely constrained by a *lack of time for staff* to engage in curriculum development and joint planning or visit worksites. As it stands, all instructors at most Centers have full schedules with little or no "down time." Moreover, all classes must be "covered," to avoid having students be unsupervised. Under this circumstance, it will be a challenge to have curriculum development proceed as it needs to.

Several Centers also emphasized that the *lack of sufficient staff development and training opportunities*—particularly for academic and vocational instructors—posed a substantial barrier to the development of a more comprehensive STW initiative. Even under the best of circumstances, developing new curricula is a complex undertaking

that requires special skills. The instructors that we met are surely very capable individuals and many expressed a willingness to try something new that might energize and excite their students. However, they freely admitted that they had little experience in developing curricula and were not sure how to go about integrating the teaching of academic, vocational, and employability skills. Moreover, they generally have not been called on to do so until now, so even thinking about what needs to be done requires a substantial mental adjustment. Emphasizing the importance of staff training, one Center responded to our query about what they wish they had done differently by observing that they “would have trained all staff at the Center at the very beginning, rather than sending them off piecemeal to various training activities. Everyone needs to simultaneously launch STW if it is to be effective.”

Virtually all of the Model Centers have also been struggling with *transportation issues*, a concern that is especially acute for Centers located in rural areas. Many of the Centers scrambled to secure adequate transportation to take students to and from WBL sites (referred to by one Center as its “unfunded mandate”). One way they did so was by using a portion of their STW funds to cover transportation expenses (by hiring a part-time driver, for example). However, now that their special funding has ended, Centers will find it challenging to sustain these efforts, or expand them as the extent of work-based learning expands.

Given the Job Corps system’s limited funding, a lack of resources is not an issue to which there are easy solutions. Nonetheless, some Centers have developed strategies to overcome this limitation by taking steps to:

1. *Rearrange Center schedules or staffing.* There is simply no slack in the typical Center’s staffing or scheduling to allow instructors “free time” to engage in joint planning and curriculum development, or to visit worksites. Some Centers handle this by building regularly scheduled planning periods for instructors.
2. *Utilize a range of staff development opportunities,* and linking them so that they build on each other. Staff training cannot be a one-time event, but should be on-going and cumulative. In support of this, some Centers took advantage of local STW partnerships for staff development assistance and purchased curriculum guides and other resources.
3. *Develop a range of strategies for providing transportation* for students. Centers lack the funds to hire drivers to cover all their transportation needs as they pertain to WBL. Thus, Centers have made alternative arrangements, including providing students with transportation vouchers or bus passes and

having employers or staff assist with transporting students. On-Center WBL was also increasingly relied on to obviate transportation challenges.

Challenge #3: Changing the Way Learning Takes Place in the Classroom

A primary objective of STW is to transform school-based learning by integrating the teaching of a range of skills, including academic, vocation, and employability skills. This is intrinsically difficult, as has already been noted, and is made more so given the limited opportunities for joint staff planning and professional development and training, which were discussed above.

However, in order to make integration at all feasible, academic and vocational instructors will need to work together. The challenge in making this happen is in overcoming the usual *compartmentalization of most Job Corps Centers*, with its strict divisions between vocational and academic instructors. This means that instructors who are not used to working with each other must come to understand how their separate domains can complement each other and respect what others can bring to the table.

An additional challenge is in *changing the content and structure of learning*. The National Office has taken an important step by modifying the Policy and Requirements Handbook to allow Centers more flexibility in classroom instructional methods and materials, including by encouraging departures from the CMI system. Centers must use this new-found freedom to change the way that learning takes place on Center. However, some elements of Job Corps' usual structure make innovative instructional techniques difficult. For example, because of its open-entry/open-exit format, students in any one class are likely to be at greatly varying levels of competencies. This can be a real strength, from the standpoint of encouraging peer-to-peer learning, but makes it more difficult for instructors to design lesson plans that speak to the needs of all students simultaneously. Similarly, the fact that students in any given academic class are typically drawn from multiple trades makes it difficult to utilize contextual learning that appeals to all students equally.

Among the ways that some Centers have overcome these challenges were to:

1. *Break down barriers between academic and vocational departments.* Once they began working with each other, instructors from various departments realized that they could complement each other's efforts very nicely, and that they each had something to offer the other. Centers undertook various strategies to break down barriers, including building regular planning periods

into each instructor's schedule, assigning academic and vocational instructors to teams that were to work together, and institutionalizing team-teaching.

2. *Develop new ways of teaching students*, including by developing new teaching methods and curricula, such as applied academics, or enhancing the learning potential of existing methods, such as by transforming classrooms into simulated worksites, or using vocational skills training projects or service learning.

Challenge #4: Ensuring that Work-based Learning is Content Rich and is Linked to School-based Learning

Almost uniformly, respondents at the Model Centers reported that the expansion of work-based learning as part of the STW initiative represented a major advance. Not only was it felt that students needed and greatly benefited from the first-hand exposure to the work world as part of their preparation for eventual full-time employment, but WBL was recognized for the powerful training tool that it can be if done well. Moreover, students were almost unanimously pleased with their work experience assignments, welcoming the chance to test themselves in the “real world.”

Nonetheless, the Model Centers did encounter the usual challenges that have been reported by state and local STW partnerships in their similar efforts. These included the *difficulty of ensuring that good quality training is occurring* at all worksites. Many employers take their responsibility to be providers of training seriously, but not all do; similarly, some employers know what it means to develop a training plan for students, but Centers cannot assume this will be the case. Ensuring that good quality training is occurring will thus entail substantial effort on the Centers' part.

Another challenge was the *difficulty in ensuring that learning that occurred at the worksite was closely linked with what occurred in the classroom*. One way in which WBL under STW differed from traditional WEP was that WBL worksites almost invariably related to the students' trade. To this degree, school-based and work-based learning were almost always linked. Nonetheless, good quality WBL requires something more—some measure of coordination between work supervisors and classroom instructors to be sure that learning is mutually reinforcing and that problems that students are encountering in one setting are being addressed in the other.

Efforts that Model Centers made to address these challenges included their steps to:

1. *Monitor worksites for their quality*. Monitoring worksites for quality turned out to be enormously burdensome, especially as Centers expanded their WBL

component to place increasing numbers of students at sometimes far-flung worksites. Strategies that Centers adopted to overcome this challenge were to assign one person solely to this task, or to have the burden shared among vocational instructors.

2. *Develop a variety of worksites geared to different students' needs.* The Centers with high quality WBL recognized that a variety of different worksites were needed to meet the needs of students at different stages of their development. To reflect this, students were rotated across various worksites during their time at the Center, and assigned to the worksite that best met their needs at a particular moment. As it was implemented, this practice meant that Centers were developing tiers of WBL assignments that varied with respect to skill demands and duration or intensity and using combinations of job shadowing, on-Center placements, off-Center placements with non-profit organizations, and off-Center placements in the private sector.
3. *Foster linkages between school-based and work-based learning.* One way in which school-based learning can be better linked to work-based learning is to ensure that instructors and work supervisors have the opportunity to meet periodically or otherwise coordinate their efforts. Ways that Model Centers did this included having academic and vocational instructors visit worksites periodically, having employers visit the Center, and using the Training Achievement Record as a common currency for monitoring learning gains.

A FRAMEWORK FOR UNDERSTANDING CHANGE

Despite all of the challenges noted above, many of the Model Centers made considerable progress in galvanizing greater support for STW among staff and implementing new activities or strategies, using some of the promising practices we noted above. And yet, none of the Centers could really be said to have put it all together, by developing a well-functioning, fully integrated STW system. The biggest reason why none did so is that the complex changes that are envisioned simply take time. Thus, undoubtedly many of the Model Centers will continue to make steady progress towards achieving their objectives, if they keep themselves focused on the comprehensive STW vision.

Additionally, the innovative practices that some Centers implemented were sometimes less successful than they might have been because some critical piece of the puzzle was missing. For example, staff might have been given time for joint planning and curriculum development, but maybe were not provided with the training that they needed to make their efforts fully bear fruit. Or an energetic STW Coordinator might have been successful at mobilizing support and resources, but his or her vision of STW might have been flawed from the beginning.

This lesson is made clearer by recognizing that successful sustainable change is a function of vision, skills, incentive, resources, action planning, and evaluation to affect continuous improvement. Each of these must be present for effective change to occur. The National Office of Job Corps might further support sustainable change by continuing to reinforce the STW vision and message, encouraging coordination of professional development around STW across Center operators, developing additional technical assistance materials that Centers can use to guide change, and supporting a small number of pilot sites that would be expected to build on the work of the Model Centers to serve as national learning laboratories.