

2008

An Evaluation of the 21st Century Workplace Skills Initiative

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Citation

Hollenbeck, Kevin, and Bridget Timmeney. 2008. "An Evaluation of the 21st Century Workplace Skills Initiative." Prepared for the Indiana Department of Workforce Development.

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January 2008

Submitted to:

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ACKNOWLEDGEMENTS

This report documents work that was supported by the Indiana Department of Workforce Development, whose support is gratefully acknowledged. Ms. Terri Schulz, of that Department, monitored the work and her gently exercised control contributed significantly to the quality and timeliness of the study. We gratefully acknowledge the openness, helpfulness, and graciousness of all the staff persons of the local demonstration sites who hosted our visits. We are also grateful for the time and openness of all of the individuals—employer representatives, instructional staff, and program participants—who we interviewed. We feel like we made many friends across the state, and we hope that we were not too burdensome on their time. We also were assisted by staff members of DWD who helped us to gain access to administrative and test score data. We are appreciative of their time and effort.

Research assistance at the Upjohn Institute was provided by Jason Preuss. Furthermore, a number of our colleagues at the Institute provided helpful comments and suggestions during the course of the work. As usual, excellent clerical and organization assistance was provided by Claire Black. The views expressed and any errors are the responsibility of the authors. The opinions expressed do not necessarily represent those of the Department of Workforce Development or the Upjohn Institute.

EXECUTIVE SUMMARY

The Indiana Department of Workforce Development (DWD) funded an innovative set of 10 projects comprising its 21st Century Workplace Skills Initiative. The Initiative had two broad goals. First and foremost, it was intended to demonstrate whether basic skills training provided to incumbent workers can translate to a stronger and more productive state economy. Second, it was intended to contribute knowledge about best practices to the field of workplace skills development. One of the underlying concerns that motivated DWD was that Indiana's economic competitiveness and growth may be constrained by a mature, incumbent workforce that has deficient basic skills. Part of what makes the program innovative and unique is that these workers are not usually served by the formal education systems or federal second-chance training programs.

The core of the 21st Century Workplace Skills Initiative was a certification system. The DWD awarded certificates to workers who achieved certain levels of proficiency in reading, math, critical thinking, problem solving, and computer literacy. Three levels of certification (gold, silver, and bronze) were based on specific achievement levels in reading and math as assessed by the Comprehensive Adult Student Assessment System (CASAS) and computer literacy as certified by Internet and Computing Core Certification (IC3). Note that problem solving and critical thinking are embedded in the CASAS reading and math assessments.

The Upjohn Institute was awarded a contract to evaluate the 21st Century Workplace Skills Initiative for the DWD. The evaluation is both qualitative and quantitative in nature. Two site visits to most of the 10 funded projects have occurred, and they are the basis of the qualitative data. In addition, learning gains and earnings histories of participants have been quantitatively analyzed.

Qualitative Findings

Upjohn Institute project staff conducted two site visits to each of the demonstration sites, save two. Our evaluation design for site visits called for us to conduct a first visit early in the Initiative's process to focus on planning and implementation, and to conduct a second site visit near the end of the Initiative to focus on outcomes and lessons learned. Of course, the exact timing depended on project staff and employer and site staff schedules, and instructional scheduling.

At one of the sites, an individual remarked that we must "get bored" by seeing the same programs over and over. Nothing could be further from the truth. No two sites were even close to being identical. In fact, probably the most striking aspect of the site visits was the tremendous variation in terms of numbers and characteristics of participants, types and characteristics of training, employer support, data collection and recordkeeping, and virtually every other dimension of program activity. Appendix A to this report contains a copy of all of the final site visit reports. This summary provides cross-cutting comments and observations.

Early implementation struggles. A common phenomenon at all of the sites was an early struggle with implementation. Almost none of the sites were experienced with CASAS nor with IC3. Because of their unfamiliarity with CASAS, many sites were unaware of the need to conduct an appraisal prior to conducting a pre-test. Most of the sites had cemented relationships with one or more employers prior to receiving their grants. But in some cases, employer relationships were strained when it was determined that two testing periods would be needed in order to do a pre-test. Furthermore, participants in some sites were surprised that they had to take another test after taking the appraisals.

The digital literacy component of the demonstration turned out to be a major part of the effort, but almost none of the sites had experience with IC3, and they struggled to find instructors and curricula. Furthermore, the three-part structure of IC3—Computing Fundamentals, Key Applications, and Living Online—was unfamiliar to the sites. Some sites started with Computing Fundamentals, but encountered considerable “pushback” from students (and employers) who felt it was too technical. Some sites started with Living Online, but that required Internet access and e.mail access, which were not always available.

Requirements for the certificates not understood. Even though DWD distributed descriptions of and clarifications about the criteria for certificates a number of times, the sites for the most part, did not understand and did not therefore clearly communicate to participants, the requirements for getting a certificate. In the end, only one of the sites seemed to have in place all of the requirements for a gold certificate. Among the confusing items that we heard about were whether sites had to use CASAS for assessments, how problem solving and critical thinking factored into the certificate process, whether appraisal scores could be used to determine reading and math levels, or whether IC3 certifications could be retaken.

Model 2 programs difficult to administer. Three of the sites were model 2 programs that involved multiple employers. All three faced many obstacles, and ultimately, all three ended up well short of their anticipated enrollments. Project staff members at one site tirelessly met with employers and provided considerable information about their program. They had success in getting employers to express interest, but ultimately the number of employees who showed up for the training was disappointing. Another site had trouble with follow through from employers. Virtually all of the employers who were expected to participate in the program backed out, so this site essentially became a single employer site. The third site conducted its program with three employers, although the enthusiasm of one of the employers flagged considerably over the course of the demonstration. The site served a substantial number of participants, but the lack of paid time for the training took its toll, so that only the most motivated employees stuck it out for the whole program.

College was a key motivator. Many of the sites promoted their programs as a chance to earn college credits or to prepare for college. In interviewing participants, this seemed to be a strong motivator. Many of the programs’ participants had not attended college, and they feared that their lack of education jeopardized their job security and/or limited their promotion potential. One individual said, “I’m tired of all of those individuals passing me by because I don’t have any college.” Clarian’s College at Work (CAW) program component was a prime example. Its objective was for employees to earn credits in Ivy Tech’s basic curriculum.

Although they were less explicit, the Vincennes University programs at Aisin and at Wishard offered participants a college credit at Vincennes. The individual participants who were interviewed placed importance on this credit and having a transcript. At St. Francis, some of the participants were motivated to attend the basic skills program because they wanted to succeed in a postsecondary technical program in a health services occupation.

Solid adult education was delivered. The instruction in this demonstration needed to be tailored by two factors: first, the learners were adults and second, the instructional setting was in the workplace. Our observation of instruction suggested that sound adult education was taking place. For the most part, the learners were serious and highly engaged. All of the interviewees felt that their colleagues were serious-minded and not just looking for a reason to avoid work. The employees participated actively in discussions. They seemed motivated. On the other hand, as with most adult education, other responsibilities got in the way of attending class. Sometimes workloads would preclude an individual's attendance. Or a family matter would need to be resolved. In short, the instructors had to be flexible because they were never quite sure about how many or which students they would have in class. An instructor at one of the programs, who was a retired high school teacher, opined that this was perhaps the most important challenge she faced.

Having the workplace as the instructional setting was also a factor that sites needed to manage. Its main advantage was convenience. Students could attend during work hours if the site's arrangement with the employer involved training with paid time while "on the clock." Students who were on their own time could easily attend if the training were scheduled right before or right after their shift. The main disadvantage was that the physical layout usually was not particularly sound for instruction or testing (some of the sites had well-designed training facilities, however). Furthermore, some of the sites struggled with adequate technology or Internet access.

Contextualization. At the onset of the initiative, the expectation had been held that the work site instruction would involve considerable contextualization. The adult education professionals all realized the importance of framing the material within a familiar context. Furthermore, the employers presumably would see the benefits of inculcating workplace materials into the training. We were therefore somewhat surprised by a relative lack of contextualization. As a generalization, we would say that the typical site had made some effort to include workplace materials, but they were generally not as central to the instructional materials as we expected.

Several reasons might explain the *relatively* low incidence of contextualization. First, in the model two programs with multiple employers, firms may have been cautious about sharing workplace materials with employees from other (sometimes competing) firms. Furthermore, with employees coming from multiple firms, it may have been difficult to find materials that would be relevant to a number of individuals. Second, the digital literacy training dominated math and reading in many sites. The IC3 certification was difficult, and so instructors felt the need to stick with textual material that was supposed to be aligned with the certification. Third, some of the sites used "off the shelf" instructional materials that had been developed for other sites, and were modified only slightly because of the lack of resources for substantial curriculum development.

Fourth, in sites that involved college courses, the postsecondary institutions could not veer from the standard curriculum much because of credit considerations. Fifth, many of the sites' employer partners were in the Human Resources department, and staff there may not have had access to or even been aware of the workplace duties or situations that employees encountered in their everyday jobs duties.

IC3; digital literacy emphasis. In the design phase, the digital literacy feature was not primary. As it turned out, this feature became one of the predominant aspects of the demonstration. However, sites struggled to find appropriate curricula and with the difficulty level of the certification itself. DWD realized that technologically-delivered instruction had pervaded basic skills instruction (as it has most levels of education and training), so it decided to include digital literacy as part of the 21st Century certificate, but found a paucity of certifications that were competency-based instead of “seat-time”-based. An investigation led to IC3 as virtually the only candidate.

As the programs unfolded at the sites, it became apparent that many employees were attracted to the digital literacy component. These employees had little computer experience, and they wanted to learn because their family members (i.e., children) were computer literate and because they saw that computers were becoming integral in the workplace. For the latter reason, many of the employer partners became enthusiastic about getting their employees the digital literacy instruction. Sites encountered many problems as they struggled to implement the digital learning/computer training, however. For example, there was no pre-test available to assess individuals' baseline skills/knowledge, so classes had very wide variation in skills—from individuals who had literally never turned on a computer to those who were quite adept, and simply wanted to further learn skills and capabilities and to get certified. A second problem area was the curriculum materials available, which turned out to be quite technical, outdated, and not well aligned with the IC3 certification.

Business return not foremost for employers. We would characterize the partnerships between programs and employers as quite solid, but we were surprised by the employers' apparent motivations. In general, employers seemed to be motivated by providing the training as a benefit for employees that would likely improve morale, as well. They seemed relatively less motivated by an expected business return. The business perspective seemed to be that if workers improved their skills and had improved morale, they were likely to be somewhat more productive, and consequently, the business will benefit. However, the workers' benefit was the primary motivation for participation, not the business' benefit.

Keys to success: Program champion and paid time. In reflecting on the various sites, it seemed to us that two characteristics were associated with the most successful outcomes. First, the program needed to have a “champion” in the business firm; a mid-level or higher manager. Because of the pilot nature of the program, many changes were made along the way, and it was important for an individual at the business to understand why the changes were made and to have enough authority to exercise the flexibility that was required to make the adjustments that were needed. The other characteristic that seemed to be associated with program success was the employer practice of fully compensating workers for their time spent in training. About half of the sites had this feature, and those sites had no difficulty in recruiting individuals, and they had

very high attendance rates. On the other hand, when the training was on employees own time, attendance faltered, and the expected number of participants lagged well behind what was expected.

Quantitative Findings

Three sources of information were analyzed: a survey of program participants that provides information about their demographic and background characteristics, test scores, and administrative earnings data. All of the sites submitted completed baseline surveys with a total of about 1,800 respondents included in the analysis. It is important to note that this response included two very large sites—Ivy Tech—Bloomington and IHIF; together they comprised two-thirds of the reported data with the former having over 50 percent of the respondents.

Demographic data. The average age of trainees at baseline was about 40; i.e., they were very much a prime age group. A majority of the respondents were white, about 60 percent were female, and nearly all were non-Hispanic whose primary language is English. Of course, there was some variation across sites in these characteristics. For example, the Steuben County site was virtually entirely of Hispanic ethnicity and had a much younger mean age. Clarian and Wishard both had a majority of participants who were African American. Although there are exceptions, the health care sites (Clarian, Wishard, St. Francis, CMH) tended to have a higher percentage of women participants, and the manufacturing sites (IHIF, Aisin, Port of Indiana, Steuben County, Ivy Tech-South Bend) more men.

Labor market and public assistance characteristics. Participants were earning an average hourly wage of \$11.42 per hour and averaged 41 hours of work per week at the time the baseline. They averaged 4.5 years of tenure with their employer. As might be expected, the manufacturing sites tended to have higher wage rates and longer hours (Aisin, Port of Indiana, and Ivy Tech-South Bend). The overall tenure average was highly skewed by the inclusion of Ivy Tech-Bloomington, where a lot of workers were new. If that site is excluded, the average tenure was 7.7 years.

A fiscal benefit of the initiative that the state hoped to achieve was a reduction in take-up of public assistance benefits. We were not able to demonstrate that sort of reduction with administrative data on public assistance, but the baseline data suggest that substantial savings could be accrued because over 17 percent of the participants reported receiving assistance from TANF, food stamps, Medicaid, child care assistance, or IMPACT participation. The largest share of the public assistance benefits were in food stamps and Medicaid eligibility.

Educational status and goals. Overall, over half (about 54 percent) of the participants had no postsecondary experience (i.e., less than a high school diploma, a high school diploma, or GED). An additional 25 percent had attended some college or tech school but had not earned a degree. The remaining approximately 20 percent of the participants had a vocational/trade certificate, associate's degree, bachelor's degree, or higher. The percentages varied substantially across sites. Two of the sites—Wishard and Steuben County—had 70 percent of their participants with less than a high school diploma. On the other hand, IHIF and Aisin had one percent or less at that level. The baseline form also asked individuals for their educational goals.

The participants could be described as a group interested in further education. Whereas only about 20 percent of the population had a postsecondary certificate or degree, over 60 percent indicated that they intended to pursue that level of education.

Test scores. Test scores, a crucial outcome for the initiative, turned out to be of limited use for analysis. Most of the sites had been unfamiliar with CASAS prior to the initiative, and there was some confusion at the sites about test administration as they traversed their learning curves. The design of the CASAS assessment system calls for an appraisal (locator) to be given to individuals in order to determine which assessments would be valid for administration of a pre-test. Then individuals should be pre-tested on an appropriate assessment. Instruction would take place, and then a post-test could be given to document learning gains. Most of the sites were unfamiliar with the CASAS system, however, so the process was rarely followed rigorously. There was confusion about why “two” pre-tests had to be taken. Furthermore, the assessments are all scaled the same, and so many scores from the appraisal were above 245 (the gold range).

Only three of the sites administered the appraisal (one of the sites had multiple employers). As might be expected, the reading scores were quite a bit higher than the math scores. The mean scaled scores for math at all of the sites was less than the mean for reading. Furthermore, the largest majority of the math scores were in the silver range (226 to 245), whereas they were in the gold range (greater than 245) for reading. About one-third of the individuals who took the assessment also took a pre-test, so we can get a sense of how well the scaled scores on the assessment align with the scaled scores on the pre-test. Of course, a simple testing effect would suggest that the second test (the pre-test) would have higher scores because of familiarity. In math, the pre-test scores were approximately two to six points higher than the assessment scores, on average. In reading, the discrepancy was greater. The scores were about six to 12 points higher, on average.

A couple of results from the total population who took the pre-test (including those just discussed who also had appraisal scores) bear noting. First, as with the appraisal data, the math scores were considerably lower than the reading scores. With just a couple of exceptions, the difference in mean scaled scores across sites between math and reading were between 12 to 20 points. Second, there is quite a bit of variation across the sites. In math, four of the sites have average math scores that were below the cutoff for silver; two of them were below the cutoff for bronze. Three of the sites had almost 90 percent of the math test takers with scores less than 226. In reading, all but three of the sites had means that were above or just below the cutoff for gold and all but two of the sites had a majority (or plurality) of participants whose scores were above 245. On the other hand, two of the sites had scores that were much lower than all of the other sites.

Only about one-third of the individuals with a pre-test had a post-test. What is perhaps most unusual is that the mean scores for the post-test are much lower than the means for the pre-test. Two reasons explain this. First, at many sites, individuals with high scores on the pre-test were not required to or were not interested in taking a post-test. Second, the post-test results exclude the IHIF sites, which tended to have high scores.

Learning gains. We ended up with pre- and post-test data for only about 140 participants, which is about six percent of the initiative’s participants (16 percent of the participants from all sites except Ivy Tech—Bloomington). In general, participants exhibited modest learning gains. For math, 70 out of 105 test-takers (67 percent) had positive gains between the highest standardized score on the pre-test to the highest standardized score on the post-test. The average gain for the entire sample (including the negative and zero gains) was 4.7 points. For reading, 79 out of 139 test-takers (57 percent) had positive gains from pre- to post-test. The average gain for the entire sample was 2.8 points. Interestingly, the Steuben County site, which had its entire program in ESL, had the most positive learning gains—over 10 points for math and 8 points for reading.

IC3. The IC3 certification was, by most accounts, a difficult assessment. As described in this report, most sites began with Living Online. The overall pass rate for that component was about 64 percent. The pass rates for Computing Fundamentals and Key Applications were somewhat higher than for Living Online, but the reason for that is partly because at some of the sites, the students were only allowed or encouraged to pursue other components if they passed the Living Online certification.

Lessons Learned

The Indiana Department of Workforce Development designed and funded the 21st Century Workplace Skills Initiative to raise the basic workplace skill levels of Indiana workers while exploring the viability and effectiveness of different models of workplace basic skills education. To use a cliché, the pilot demonstrations were intended to be win-win-win-win programs. Indiana workers would gain basic skills, which would result in more stable careers and higher wages and productivity. Employers would gain more productive workers who would exhibit better workforce attachment that would translate into business payoffs such as enhanced productivity or profitability. The field of basic skill instruction would learn from the experiences of the Indiana partnerships offering innovative programs in diverse workplace settings. The State would house more competitive employers with more productive workers and would develop a workplace basic skills training capacity. We summarize here the Initiative’s pay off to workers, the payoff to companies, the payoff to the literacy field, and the payoff to the State of Indiana.

Payoff to workers. In summary, we came away with six lessons learned about the payoff to some or all of the workers who participated in the initiative. First, most participants genuinely were appreciative of their employers for offering the opportunities. Significant morale improvements occurred in virtually every site. Second, the level of participation and excitement among many of the workers underscored a substantial demand for or interest in upgrading skills. Employees seemed to understand clearly the importance of training and skill acquisition to their own job and career prospects. The third lesson we learned was that the possibility of earning college credit was a strong motivator for workers in addition to upgrading skills for their own productivity.

Fourth, as implemented in this initiative, the opportunity to earn a skill certificate was not a strong motivator for workers. Workers seemed to understand the linkage between their own skills/knowledge and productivity, but were less clear about the value of certifying the

skills/knowledge. Workers apparently did value computer training because it became a major component of the initiative. There seemed to be two motives; some workers had absolutely no background and wanted to get very basic training and other workers were interested in upgrading their skills. Most participants, but especially the former group, found the IC3 certifications to be quite challenging. Finally, we believe that the benefits to the workers were quite variable. A few workers blossomed. Many workers had positive experiences, and some workers probably benefited only a little. Of course, when you add all of these together, you get a substantial aggregate payoff to workers.

Payoff to companies. The employers came to this initiative as voluntary partners or as grantees. None of them seemed to regret their participation. Rather they expressed appreciation for the chance to train their workforce. Whether it was the manufacturing, health care, tourism, or human service sector, all of the business owners and managers interviewed clearly noted the growing competitiveness of their markets. Attracting and retaining employees was noted as a continual issue for these businesses. Owners and managers viewed training as a key strategy for operating efficiently and as a means to grow their own workers through promotions.

Despite their understanding of the strategic nature of training, perhaps the most notable observation about employer involvement was the lack of interest in or attempt to measure potential business outcomes from the initiative. It became apparent through interviews that businesses became engaged in the initiative mainly as a benefit for employees. They saw it as a way to improve employee morale. Most of the business representatives understood and articulated the fact that if workers would improve their basic skills and exhibit higher levels of morale, then they would likely be more productive. However, virtually none of the employers attempted to measure such outcomes. In one instance, the business representative indicated that retention was a major concern in their company given the local competitive job market. The representative even commented that the company lost fewer workers during the traditional summer hiring period as a result of this training program; however, there was no formal retention tracking by position or within this training program. Interestingly, at one of the technical assistance sessions organized by DWD, one of the sites did quantify substantial reductions in turnover that they causally linked to the training program. That evidence as well as the anecdotes about employees who blossomed in their job suggest that businesses did receive payoffs, even though they were not explicitly measuring them.

Payoffs to literacy providers. While the payoffs were not of a financial nature, the initiative contributed a number of valuable lessons to the field of workplace literacy. First is an issue with which the field needs to grapple. The impetus for the Indiana initiative was a belief that the basic skills of a substantial share of workers were deficient and were jeopardizing economic growth and competitiveness. However, the scores on the CASAS appraisal and pre-test were quite high. Workers seemed to possess reasonably high levels of skills, and as a consequence, far less basic skill training was pursued by sites than planned. The question is naturally raised as to how this occurred. Was the underlying assumption of deficient basic skills in error?

A couple of hypotheses might be put forward, and the truth may lie in some combination of them. First, the initiative may not have tested the lowest functioning employees. At most of

the sites, participation was voluntary. Individuals with extremely low levels of literacy may not have wanted to be identified out of fear of being stigmatized. For sites that had a limited number of participants, only the more motivated (and more capable) employees may have volunteered. Another hypothesis is that CASAS doesn't measure the literacy and numeracy skills that are important in the workplace. That is, employers' reports of deficient basic skills may be referring to a workplace vocabulary or problem solving that is not tested by CASAS. If this hypothesis is true, then there is an imperative to contextualize the instruction in workplace learning programs.

The computer skills of participants were extremely heterogeneous. Some individuals had never turned on a machine; others used computers in their jobs on a daily basis. IC3 certification seemed difficult for the latter, and impossible for the former. There seems to be a pressing need to design a valid pre-assessment of computer skills, and to develop a training curriculum for those who have very little background or knowledge. Furthermore, there seems to be a need for an alternative assessment tool that is not as technical as IC3 for individuals who have limited expertise.

The literature on adult education notes the importance of advisory committees for programs. In this initiative, committees were often initiated at the outset, but did not continue in an oversight and advisory capacity after implementation. Furthermore, students/adult learners were not consistently represented on committees. In our interviews during site visits, we found that the student perspective was often very different from the program managers, instructors, and employer representatives. Active advisory committees with regular inclusion of students would seem to be recommended for any future initiatives.

Lessons learned from this initiative in terms of motivating participation were the not surprising finding that paid time for training was important, but perhaps more surprising was the importance that workers placed on receiving some college credit. Most of the workers who were interviewed had not attended any postsecondary institution, and they were usually quite proud of the fact that they were going to get some college credit, and a college transcript; all at the expense of their employer. This finding suggests that employers or providers interested in offering workplace basic skills instruction should try to collaborate with a postsecondary institution.

Payoff to Indiana. Ultimately, for the State, the "bottom line" for the initiative could be judged as a glass that is half full or half empty. Many potential lessons were learned, and all in all, workers and employers in the aggregate probably received significant benefit from the initiative. However, the extreme differences among the sites and the deviation in every site from the ideal program meant that there were really 10 strikingly different "treatments" and no benchmark to which they could be compared. Thus from an evaluation perspective, our ability to answer the question of what worked for whom was not possible. Instead we have offered observations and hypotheses that we hope will help tailor any future endeavors by DWD in this arena.

I. INTRODUCTION

The Indiana Department of Workforce Development (DWD) has funded an innovative set of projects comprising its 21st Century Workplace Skills Initiative. DWD funded ten projects that started in Spring 2006, and has recently extended a second round of funding to three of the projects. The Initiative has two broad goals. First and foremost, it is intended to demonstrate whether basic skills training provided to incumbent workers can translate to a stronger and more productive state economy. Second, it is intended to contribute knowledge about best practices to the field of workplace skills development. One of the underlying concerns that motivated DWD was the possibility that Indiana's economic competitiveness and growth are being somewhat constrained by a mature, incumbent workforce that has deficient basic skills. Part of what makes the program innovative is that these workers are not usually served by the formal education systems or federal second-chance training programs.

The core of the 21st Century Workplace Skills Initiative was a certification system. The DWD awarded certificates to workers who achieved certain levels of proficiency in reading, math, critical thinking, problem solving, and computer literacy. Three levels of certification (gold, silver, and bronze) were based on specific achievement levels in reading and math as assessed by the Comprehensive Adult Student Assessment System (CASAS) and computer literacy as certified by Internet and Computing Core Certification (IC3). Note that problem solving and critical thinking were embedded in the CASAS reading and math assessments.

The Upjohn Institute was awarded a contract to evaluate the 21st Century Workplace Skills Initiative for the DWD. The evaluation is both qualitative and quantitative in nature. Two site visits to most of the 10 funded projects were undertaken, and they are the basis of the qualitative data. In addition, learning gains and earnings histories of participants were quantitatively analyzed.

The Ideal Program

It is difficult, two years after the fact, to reconstruct the thought processes of the DWD staff persons and consultants as they were developing the 21st Century Workplace Skills Initiative. It is especially difficult for our evaluation team since we were not part of the planning process. Nevertheless, based on documents and interviews, we imagine that the initiative got underway as follows. State officials became aware of data that suggested that deficient basic skills of Indiana workers were constraining their employment prospects and the productivity and competitiveness of the state's businesses. To address this problem, agency decision makers thought that state funding could be used as an incentive to provide training to incumbent workers to upgrade their basic skills. It would be a positive situation for three entities. Employers would win because they would get more productive workers. Workers would win because they would be more likely to attain a sustainable career with job stability. The state would win because Indiana would become a more competitive state.

The hard part would be designing a program. The decision was made to use a certification system to motivate workers. If workers demonstrated certain levels of basic skill competencies, they would earn a state-endorsed certificate. Such a certificate would be of value

to workers if it became widely known and accepted by the employer community. Of course, as is well known in adult education, workers would also gain self-confidence boosts from improving their academic skills. But the system of certification has the added advantage of having a measurable outcome.

Even though Indiana is a “WorkKeys” state, the DWD decided to primarily base its certificates on the CASAS system. First, the agency decided that it wanted to include problem solving and critical thinking in its system; not just reading and math. CASAS has critical thinking and problem solving embedded in its Employability Competency System (ECS) and its Workforce Literacy System (WLS) assessments, and it has specific assessment forms for critical thinking/problem solving for five sectors (banking, construction, health, high-tech, and telecommunications). The DWD team did not feel that any combination of the WorkKeys eight skill areas (Reading for Information, Applied Mathematics, Locating Information, Applied Technology, Writing, Listening, Observation, and Teamwork) aligned appropriately with critical thinking/problem solving. Second, the pilot program developers were advised that WorkKeys did not do as good a job at discriminating low-end skill levels as CASAS.

Perhaps the most innovative characteristic of the Indiana initiative was its inclusion of digital literacy in the certification system. This characteristic responded to employer concerns about digital “illiteracy,” as well as the belief that it would be likely that technology would be used in providing instruction in basic skills. The DWD planning group searched for various assessments that might be used to certify computer skills, and settled on the IC3 series of certifications developed by Certiport. These were seen as the only assessments available that did not rely on “seat time.” The IC3 certifications were in the areas of Computing Fundamentals, Key Applications, and Living Online.

In addition to the certification system based on CASAS and on IC3, the DWD planning team added two important goals to the scopes of work of grantees: first, it was expected that a sizeable share of the participants would gain a grade level between the pre- and post-tests for CASAS; second, each grantee was obligated to supply two outcome measures that employers would monitor.

Implementation of the 21st Century Workplace Skills Demonstration

Models. In its initial Request for Applications, DWD put forward a structure with three models. Model 1 would focus on a single company that provided workplace-based education to incumbent workers. Model 2 would be similar to model 1, except that it would comprise a consortium of companies that would provide workplace-based education to incumbent workers. The Request indicated that both models should contextualize instruction. In model 1, the expectation was that the education would be contextualized to the specific workplace with a curriculum that includes specific terminology, materials, and applications. In model 2, the contextualization would be more general to the workplace with specific materials used as appropriate. Model 3 projects would focus on potential new workers by embedding basic skill development into vocational training that leads to an occupational credential. Models 2 and 3 were envisioned to be more complex, and so they had higher funding levels than model 1. The initiative funded five model 1 (Aisin, Wishard, Center for Mental Health, Steuben County, and

St. Francis), three model 2 (Indiana Health Industry Forum, CWI/Port of Indiana, and Ivy Tech—South Bend), and two model 3 (Clarian Health and Ivy Tech—Bloomington) sites.

Eligible applicants. DWD placed virtually no restrictions on the entities that were eligible to receive grant monies. The agency was looking for an employer(s)/trainer collaboration, but indicated that any of the following entities would be eligible:

- Regional Workforce Board
- Employers or employer organizations
- Any of the following: local education agencies; community-based organizations; voluntary literacy organizations; institutions of higher education; public or private nonprofit agencies; libraries; public housing authorities; or other nonprofit institutions.

Note that the 10 grants that were funded went to the following: a regional workforce board, a literacy council, three employers in the health care sector, two institutions of higher education (each having two grants); and an employer organization.

Targeted populations. The Request for Applications emphasized the support for education of low-literate workers (which it defines as those who scored at or below a Level C on CASAS or a Level 3 on a WorkKeys assessment). The language in the Request is as follows: “applicants should propose a majority of funds for the purpose of educating this population. However, DWD recognizes the value in including supervisors, managers, and other employees in certain basic skill courses and in complementary courses. Therefore, applicants may use a portion of funding for this purpose.”

Anticipated outcomes. The Request for Applications emphasized the criticality of measuring success. So grantees were expected to propose outcome measures in five general areas: skill level gains in the six targeted competency areas (reading, math, communications, problem solving, critical thinking, and soft skills),¹ skill level gains in computer literacy, achievement of 21st Century Workplace Skills Certificates, customer satisfaction, and employer-specific outcomes. Note that the Request included a sixth general area—achievement of an occupational credential—but this was for model 3 grantees only.

DWD expected grantees to set targets for the percentages of worker participants who would achieve a gain of at least one level in the CASAS or WorkKeys assessments in the competency areas; who would gain a skill level each of the three areas of IC3 certification,² and who would earn the 21st Century Workplace Skills Certificate. In addition, proposals were supposed to be specific about a measurable outcome for customer, i.e., worker and employer, satisfaction, and were supposed to identify *two* (emphasis in the original) key measurable outcomes that each employer would achieve.

¹Note that in the implementation of the initiative, no assessments of communications or soft skills became available.

²Note that this measurable outcome request was not really enforceable given the fact that no pre-test existed for IC3.

21st Century Workplace Skills Certificate

Three levels of certification were offered: Bronze, Silver, and Gold. Each required both some level of IC3 certification and achievement levels on CASAS assessments. Specifically, the following criteria were used:

Bronze: An individual must pass at least one of the IC3 certification areas. If an individual has passed just one of the IC3 certification areas, then they must score at least 210 on both a CASAS Level A-C Math and Reading assessment. If the individual has passed more than one of the IC3 certification areas, they will get a Bronze if they score at least 210 on both a CASAS Level A-C Math and Reading assessment, but at least one of the scores is 225 or lower.

Silver: An individual must pass at least two of the IC3 certification areas. If they have passed exactly two of the IC3 certification areas, then they must score at least 226 on both a CASAS Level A-C Math and Reading assessment. If the individual has passed all 3 IC3 certification areas, they will get a Silver if they score at least 226 on both a CASAS Level A-C Math and Reading assessment, but at least one of the scores is 245 or less. Note that an individual will also get a Silver if they have otherwise met the requirements of a Gold Certificate, but do not take the critical thinking/problem solving test.

Gold: An individual must pass all three IC3 certification areas; they must have scored at least 246 on both a CASAS D Level Math and Reading assessment; and they must “pass” a critical thinking and problem solving assessment (in banking, construction, health, high-tech, or telecommunications).

The next section of this report describes the site visits and summarizes some of the observations that project members made from their visits to the individual sites. The following section presents analyses of the various sources of quantitative data collected as part of the project. The final section provides some preliminary findings and recommendations.

II. SITE VISITS

Project staff conducted two site visits to each of the demonstration sites, save two. We only conducted a single site visit at the Ivy Tech-Bloomington/French Lick and Steuben County/Salga sites because the activities at these sites ended prior to our second round of visits. Our evaluation design for site visits called for us to conduct a first visit early in the Initiative to focus on planning and implementation, and to conduct a second site visit near the end of the Initiative to focus on outcomes and lessons learned. Of course, the exact timing depended on project staff and employer and site staff schedules, and instructional scheduling.

The methodology that project staff used in conducting the site visits is characterized as semi-structured interviewing. The visits usually took the better part of a day, and included interviews of project director(s), employer representative(s), instructor(s), and employee participants as well as observations of instructional periods. The interviews were semi-structured; a particular set of questions were prepared ahead of time and guided the interviews, but project staff did not limit their investigations to those questions. Rather staff members felt free to explore other topics of interest as they arose during the interviews. After the site visits, project staff prepared brief reports that documented what we observed and learned at the site. The reports were sent to the project directors for review. We mainly wanted these individuals to check names and facts that were presented in the reports, but welcomed any and all comments they wished to make. Of course, all conclusions and opinions were our own. The reports were revised, if necessary, and submitted to DWD as well as to the sites. Appendix A to this report contains a copy of all of the final site visit reports. This section of the report is intended to provide cross-cutting comments and observations.

At one of the sites, an individual remarked that we must “get bored” by seeing the same programs over and over. Nothing could be further from the truth. No two sites were even close to being identical. In fact, probably the most striking aspect of the site visits was the tremendous variation in terms of numbers and characteristics of participants, types and characteristics of training, employer support, data collection and recordkeeping, and virtually every other dimension of program activity. The substantial variation has evaluative advantages and disadvantages. On the positive side, the fact that there was so much variation meant that we could observe many different approaches to the delivery of services. We could observe the training of very low functioning workers, and the training of mid-level and higher level managerial staff. We could observe training that was given on company time and training that was given after hours. We could observe highly contextualized training and off-the-shelf training with little contextualization.

The disadvantage to such great variation, however, was that we cannot draw firm conclusions about the effectiveness of the various program components. In fact, since every site deviated to a small or to a large extent from the “ideal program,” we cannot fairly evaluate the state’s initiative. Rather we report what we observed, and draw some tentative conclusions.

Early Implementation Struggles

A common phenomenon at all of the sites was an early struggle with implementation. Almost none of the sites were experienced with CASAS or with IC3. Because of their unfamiliarity with CASAS, many sites were unaware of the need to conduct an appraisal prior to conducting a pre-test. Most of the sites had cemented relationships with one or more employers prior to receiving their grants. But in some cases, employer relationships were strained when it was determined that two testing periods would be needed in order to do a pre-test. Furthermore, participants in some sites were surprised that they had to take another test after taking the appraisals.

The digital literacy component of the demonstration turned out to be a major part of the effort, but almost none of the sites had experience with IC3, and they struggled to find instructors and curricula. Furthermore, the three-part structure of IC3—Computing Fundamentals, Key Applications, and Living Online—was unfamiliar to the sites. Some sites started with Computing Fundamentals, but encountered considerable “pushback” from students (and employers) who felt it was too technical. Some sites started with Living Online, but that required Internet access and e:mail access, which were not always available at work sites.

Requirements for the Certificates Not Understood

Even though DWD distributed descriptions of and clarifications about the criteria for certificates a number of times, the sites for the most part, did not understand and did not therefore clearly communicate to participants, the requirements for getting a certificate. In the end, only one of the sites seemed to have in place all of the requirements for a gold certificate.³ Among the confusing items that we heard about were whether sites had to use CASAS for assessments, how problem solving and critical thinking factored into the certificate process, whether appraisal scores could be used to determine reading and math levels, or whether IC3 certifications could be retaken. Three of the sites had, at the time of grant application, opted out of the certificate process all together. Staff at another site reported that they didn’t know that this demonstration program would lead to a certificate; they thought that data were being collected to see if it were possible to create a certificate.

Model 2 Programs Difficult to Administer

Three of the sites were model 2 programs that involved multiple employers. All three faced many obstacles, and ultimately, all three ended up well short of their anticipated enrollments. The CWI/Port of Indiana project staff tirelessly met with employers and provided considerable information about their program. They had a lot of success in getting employers to express interest, but ultimately the number of employees who showed up for the training was disappointing. Ivy Tech-South Bend had trouble with follow through from employers. Virtually all of the employers who were expected to participate in the program backed out, so that this site essentially became a single employer site. IHIF conducted its program with three employers, although the enthusiasm of one of the employers flagged considerably over the course of the

³Two sites had gold certificates awarded to some participants. However, one of these sites, according to our information, waived the formal critical thinking and problem solving assessments.

demonstration. This site served a substantial number of participants, but the lack of paid time for the training took its toll, so that only the most motivated employees stuck it out for the whole program.

College was a Key Motivator

Many of the sites promoted their programs as a chance to earn college credits or to prepare for college. In interviewing participants, this seemed to be a strong motivator. Many of the programs' participants had not attended college and they feared that their lack of education jeopardized their job security and/or limited their promotion potential. One individual said, "I'm tired of all of those individuals passing me by because I don't have any college." Clarian's College at Work (CAW) program component was a prime example. Its objective was for employees to earn credits in Ivy Tech's basic curriculum. Although they were less explicit, the Vincennes University programs at Aisin and at Wishard offered participants a college credit at Vincennes. The individual participants who were interviewed placed importance on this credit and having a transcript. At St. Francis, some of the participants were motivated to attend the basic skills program because they wanted to succeed in a postsecondary technical program in a health services occupation.

Adult Education Characteristics

The instruction in this demonstration needed to be tailored by two factors: first, the learners were adults and second, the instructional setting was in the workplace. Our observation of instruction suggested that sound adult education was taking place. For the most part, the learners were serious and highly engaged. All of the interviewees felt that their colleagues were serious-minded and not just looking for a reason to avoid work. The employees participated actively in discussions. They seemed motivated. On the other hand, as with most adult education, other responsibilities got in the way of attending class. Sometimes workloads would preclude an individual's attendance. Or a family matter would need to be resolved. In short, the instructors had to be flexible because they were never quite sure about how many or which students they would have in class. An instructor at one of the programs, who was a retired high school teacher, opined that this was perhaps the biggest challenge she faced.

Having the workplace as the instructional setting was also a factor that sites needed to manage. Its main advantage was convenience. Students could attend during work hours if the site's arrangement with the employer involved training with paid time while "on the clock." Students who were on their own time could easily attend if the training were scheduled right before or right after their shift. The main disadvantage was that the physical layout usually was not particularly sound for instruction or testing (some of the sites had well-designed training facilities, however). Furthermore, some of the sites struggled with adequate technology or Internet access.

Contextualization

At the onset of the demonstration initiative, the expectation had been held that the work site instruction would involve considerable contextualization. The adult education professionals

all realized the importance of framing the material within a familiar context. Furthermore, the employers presumably would see the benefits of inculcating workplace materials into the training. Project staff were therefore somewhat surprised by a relative lack of contextualization. As a generalization, we would say that the typical site had made some effort to include workplace materials, but they were generally not as central to the instructional materials as we expected.

Several reasons might explain the *relatively* low incidence of contextualization. First, in the model two programs with multiple employers, firms may have been cautious about sharing workplace materials with employees from other (sometimes competing) firms. Furthermore, with employees coming from multiple firms, it may have been difficult to find materials that would be relevant to a number of individuals. Second, as noted below, the digital literacy training dominated math and reading in many sites. The IC3 certification was difficult, and so instructors felt the need to stick with textual material that was supposed to be aligned with the certification.⁴ Third, some of the sites used “off the shelf” instructional materials that had been developed for other sites, and were modified only slightly because of the lack of resources for substantial curriculum development. Fourth, in sites that involved college courses, the postsecondary institutions could not veer from the standard curriculum much because of credit considerations. Fifth, many of the sites’ employer partners were in the Human Resources department, and staff there may not have had access to or even been aware of the workplace duties or situations that employees encountered in their everyday jobs duties.

IC3; Digital Literacy Emphasis

In the design phase, the digital literacy feature was not primary. As it turned out, this feature became one of the predominant aspects of the demonstration. However, sites struggled to find appropriate curricula and with the difficulty level of the certification itself. In the planning phase of the demonstration, the DWD project planning team realized that technologically-delivered instruction had pervaded basic skills instruction (as it has most levels of education and training). So the team decided to include digital literacy as part of the 21st Century certificate, but found a paucity of certifications that were competency-based instead of “seat-time”-based. Their investigation led to IC3 as virtually the only candidate. Of the three areas that IC3 certifies, the DWD planning team thought that Living Online might be the most appropriate so that students would be able to navigate and engage in distance learning as they were upgrading their basic reading or math skills. Furthermore, in their investigation of digital literacy competency certification, the DWD planning team was pointed in the direction of ARIES as a curriculum aligned with IC3.

As the programs unfolded at the sites, it became apparent that many employees were attracted to the digital literacy component. For the most part, these employees had little computer experience, and they wanted to learn because their family members (i.e., children) were computer literate and because they saw that computers were becoming integral in the workplace. For the latter reason, many of the employer partners became enthusiastic about getting their employees the digital literacy instruction. Furthermore, the CASAS appraisal and pre-test results

⁴Ironically, one of the major complaints about the IC3 training was that the curriculum, particularly ARIES, was not well-aligned with the certification.

showed a surprisingly high percentage of workers had scores that were high enough to meet the gold standard (especially in reading). So the need for basic skills upgrading became less than anticipated; whereas the desire for computer training was greater than anticipated.

Sites encountered many problems as they struggled to implement the digital learning/computer training, however. Stated more positively, much was learned. For example, there was no pre-test available to assess individuals' baseline skills/knowledge, so classes were comprised of students with a very wide variation in skill levels—from individuals who had literally never turned on a computer to those who were quite adept, and simply wanted to further learn skills and capabilities and to get certified. One site ended up making up its own assessment. A second problem area was the ARIES curriculum materials, which turned out to be quite technical and somewhat outdated, so that they were not well aligned with the IC3 certification. Many sites, faced with individuals who had very little computer experience and/or quite limited access to the Internet, decided to offer Computing Fundamentals instead of Living Online. However, the content of this area included quite technical details about parts of a computer. Many of the adult learners felt that these subjects were not relevant for them or their jobs, and were way too technical.

Business Return not Foremost for Employers

We would characterize the partnerships between programs and employers as quite solid, but we were surprised by the employers' apparent lack of concern about financial return. In general, employers seemed to be motivated by providing the training as a benefit for employees that would likely improve morale, as well. They seemed relatively less motivated by an expected business return. The business perspective seemed to be that if workers improved their skills and had improved morale, they were likely to be somewhat more productive, and consequently, the business will benefit. However, the workers' benefit was the primary motivation for participation, not the business' benefit.

Keys to Success: Program Champion and Paid Time

In reflecting on what we had observed at the various sites, it seemed to us that two characteristics were associated with successful outcomes. First, the program needed to have a "champion" in the business firm; a mid-level or higher manager. Because of the pilot nature of the program, many changes were made along the way, and it was important for an individual at the business to understand why the changes were made and to have enough authority to exercise the flexibility that was required to make the adjustments that were needed. Furthermore, workers needed to have a single point of contact to get information, to get questions answered, and to communicate concerns. It became clear to us that, as noted in the literature on workplace literacy, words of encouragement or support from the highest levels of management were important.

The other characteristic that seemed to be associated with program success was the employer practice of fully compensating workers for their time spent in training. About half of the sites had this feature, and those sites had no difficulty in recruiting individuals, and they had very high attendance rates. On the other hand, when the training was on employees own time,

attendance faltered, and especially noticeable at the IHIF sites, the expected number of participants lagged well behind what was expected.

III. ANALYSES OF PROGRAMMATIC DATA AND OUTCOMES

This section of the report provides a summary of statistical analyses of three sources of information: a survey of program participants that provides information about their demographic and background characteristics, test scores, and administrative earnings data.⁵ We have demographic information from all of the sites, but the test score and earnings data are incomplete. Table 1 provides approximate record counts for each of the major sources of data. The counts are approximate for several reasons. First, we encountered errors in participant ID numbers, so we may have assigned individuals erroneously, or not included them at all. Second, we received test score data for reading and math, and in some of the sites, not all individuals took both tests. Furthermore, as the note to the table indicates, we imposed some processing rules as to what constituted an appraisal, pre-test, and post-test.

The major “holes” in the data are no test score data from Ivy Tech-Bloomington or the Center for Mental Health and no wage record data for participants at Clarian, St. Francis, or Steuben County. Furthermore, only six sites supplied us with post-test data.

Table 1. Record Counts, by Data Source, Site, and Total

Site	Upjohn Baseline Form	Test Scores ^a			IC3 Scores	Wage Record Data
		Appraisal	Pre-test	Post-test		
Clarian	76	—	110	63	—	—
IHIF	476	382	171	—	157	408
Aisin	48	—	30	25	20	12
Wishard	24	—	18	11	11	10
Port of Indiana	30	7	35	7	—	28
St. Francis	24	—	26	6	12	—
Steuben Co.	30	—	33	27	—	—
Ivy Tech – Bloomington	914	—	—	—	—	907
Ivy Tech – South Bend	143	196	—	—	23	82
Center for Mental Health	32	—	—	—	—	48
TOTAL	1,797	585	423	139	243	1,495

^a When supplying us with CASAS test result data, sites sometimes did not identify and sometimes misidentified whether the test was an appraisal, pre-test, or post-test. We used the following algorithm based on test form. If scores were reported for forms 120, 130, 220, 04 230 (R or M), we categorized those results as appraisals. If an individual had more than one observation with these forms, then we used their best score as their appraisal score. All other CASAS forms (with an R or M) were assumed to be pre-tests or post-tests. We assumed that the first occurrence is a pre-test, and there is a post-test only if there is a second occurrence for that individual, and the form numbers differs. If an individual had multiple pre-tests or post-tests, we always used the highest score.

— indicates data were not supplied to us.

Baseline Information about Participants

Each 21st Century Workplace Skills Initiative site was asked to administer a baseline information form to each participant prior to the start of training. The form was intended to gather not only basic demographic information about the trainees, but also to gather basic labor

⁵Note that we also obtained administrative data on public assistance receipt. However, the number of observations for participants in the initiative was less than ten which precluded meaningful analyses.

market information about their work, their current public assistance status, educational and career aspirations, and locus of control indicators. The locus of control questions were used to address the extent to which external or internal factors could be attributed to a trainee’s career and educational aspirations.

All of the sites submitted completed baseline surveys with a total of about 1,800 respondents included in the analysis. It is important to note that this response included two very large sites—Ivy Tech-Bloomington and IHIF; together they comprised two-thirds of the reported data with the former having over 50 percent of the respondents.

The demographic data show that the average age of trainees at baseline was 39 years; i.e., they were very much a prime age group. A majority of the respondents (87%) were white, slightly over half (58%) were female, and nearly all, or 94% of the respondents, were non-Hispanic whose primary language was English. There is some variation across sites in these characteristics, however. Table 2 provides age, race/ethnicity, and sex data, by site. Note, for example, that the Steuben County site was virtually entirely of Hispanic ethnicity and had a much younger mean age. Clarian and Wishard both had a majority of participants who were African American. Although there are exceptions, the health care sites (Clarian, Wishard, St. Francis, CMH) tended to have a higher percentage of women participants, and the manufacturing sites (IHIF, Aisin, Port of Indiana, Steuben County, Ivy Tech-South Bend) more men.

Table 2. Age, Race/Ethnicity, and Sex of Participants, by Site and Total

Site	Age (average)	Sex (% female)	Ethnicity (% ethnic Hispanic)	Race			
				%White	% African American	% Hispanic	% Other
Clarian	40.1	82.4	7.5	28.4	69.3	1.1	1.1
IHIF	41.1	67.5	1.3	96.3	0.8	0.2	2.7
Aisin	40.0	48.9	2.2	100.0	0.0	0.0	0.0
Wishard	37.5	66.7	22.2	20.0	72.0	4.0	4.0
Port of Indiana	35.5	0.0	29.6	66.7	6.7	26.7	0.0
St. Francis	40.3	87.5	0.0	70.8	16.7	0.0	12.5
Steuben Co.	31.7	32.3	96.8	3.1	0.0	96.9	0.0
Ivy Tech – Bloomington	38.4	58.7	3.2	93.2	2.2	1.3	3.3
Ivy Tech – South Bend	38.5	23.0	11.1	88.2	1.3	7.2	3.3
Center for Mental Health	42.0	65.6	3.1	71.0	22.6	3.2	3.2
TOTAL	39.2	58.2	6.0	87.0	6.4	3.6	3.0

Table 3 shows the labor market characteristics of the participants. The participants were earning an average hourly wage of \$11.42 per hour and averaged 41 hours of work per week at the time the baseline information form was completed. They averaged 4.5 years of tenure with their employer. As might be expected, the manufacturing sites tended to have higher wage rates and longer hours (Aisin, Port of Indiana, and Ivy Tech-South Bend). The overall tenure average is highly skewed by the inclusion of Ivy Tech-Bloomington, where a lot of workers were newly hired. If that site is excluded, the average tenure is 7.7 years. Note that the tenure average is a rough indicator of turnover. If an employer has a lot of turnover, that average will be lower than if turnover is not so large. This suggests that CMH, St. Francis, and Wishard might have some turnover issues.

Table 3. Labor Market Characteristics of Participants, by Site and Total

Site	Labor Market Characteristics		
	Average Hourly Wage	Average Weekly Hours	Average Tenure in Job (Years)
Clarian	\$12.95	39.6	8.7
IHIF	13.38	41.3	9.2
Aisin	15.60	47.3	7.7
Wishard	10.49	40.4	4.3
Port of Indiana	15.29	46.3	5.3
St. Francis	9.58	40.3	3.7
Steuben Co.	10.57	40.0	5.1
Ivy Tech – Bloomington	9.59	39.3	0.4
Ivy Tech – South Bend	15.91	43.7	6.6
Center for Mental Health	8.55	37.6	2.2
TOTAL	\$11.42	40.5	4.1

Table 4 presents (self-reported) data on public assistance recipiency among the program participants. A fiscal benefit of the initiative that the state hoped to achieve was a reduction in take-up of these types of benefits. We were not able to demonstrate that sort of reduction with administrative data on public assistance, but the baseline data suggest that substantial savings could be accrued because over 17 percent of the participants reported receiving cash assistance from TANF, food stamps, Medicaid, child care assistance, or IMPACT participation. The largest share of the public assistance benefits were in food stamps and Medicaid eligibility. This may reflect a number of individuals who have left cash assistance and are receiving extended food stamps and Medicaid benefits as per PRWORA. In addition, it may reflect the presence of a disabled individual in the household who is eligible for SSI.

Table 4. Public Assistance Recipiency, by Site and Total

Site	TANF		Food Stamps	Medicaid	Child Care	Any Program
	Cash	IMPACT				
Clarian	3.4%	0.2%	12.6%	14.9%	3.4%	20.7%
IHIF	0.6	0.4	4.6	10.2	10.2	12.1
Aisin	0.0	0.0	4.0	6.0	6.0	8.0
Wishard	0.0	3.8	0.0	30.8	30.8	34.6
Port of Indiana	0.0	3.0	6.1	3.0	3.0	9.1
St. Francis	0.0	0.0	12.5	16.7	4.2	16.7
Steuben Co.	0.0	0.0	0.0	3.2	0.0	3.2
Ivy Tech – Bloomington	2.4	1.6	11.8	18.2	1.3	21.7
Ivy Tech – South Bend	0.6	0.0	0.0	2.5	0.6	3.2
Center for Mental Health	6.3	9.4	9.4	25.0	25.0	34.4
TOTAL	1.7	1.2	8.2	13.9	4.6	17.1

Table 5 displays educational status and goals. Overall, over half (about 54 percent) of the participants have no postsecondary experience (i.e., less than a high school diploma, a high

Table 5. Educational Status and Goals, by Site and Total

Site	Status						Goal				
	Less than high school (%)	High school diploma (%)	GED (%)	Some postsec., no degree (%)	V-T certificate or assoc. degree (%)	Bachelor's or higher (%)	No further education (%)	High school diploma (%)	GED (%)	V-T certificate or assoc. degree (%)	Bachelor's or higher (%)
Clarian	11.5	27.6	11.5	26.4	22.9	0.0	0.0	1.1	8.0	42.5	48.3
IHIF	0.8	52.0	12.5	18.9	11.3	4.6	18.3	13.6	2.1	44.5	20.4
Aisin	0.0	41.7	4.2	22.9	31.2	0.0	14.9	6.4	21.3	57.5	0.0
Wishard	68.0	12.0	8.0	12.0	0.0	0.0	13.0	0.0	56.5	21.7	8.7
Port of Indiana	3.1	43.8	15.6	28.1	6.3	3.1	9.4	6.3	0.0	65.7	18.8
St. Francis	30.4	26.1	13.0	8.7	21.7	0.0	0.0	0.0	9.1	77.3	13.6
Steuben Co.	71.0	25.8	0.0	0.0	0.0	3.2	48.4	6.5	35.5	9.7	0.0
Ivy Tech – Bloomington	6.0	29.9	10.5	27.8	17.7	8.1	23.7	13.2	6.2	28.4	28.5
Ivy Tech – South Bend	2.5	42.0	5.1	29.3	16.6	4.5	23.6	12.8	2.0	44.6	16.9
Center for Mental Health	3.1	28.1	12.5	31.3	9.4	15.6	12.5	12.5	12.5	40.6	21.9
TOTAL	6.5	36.6	10.5	24.8	15.4	6.2	20.4	11.9	5.7	36.9	25.0

school diploma, or GED). An additional 25 percent have attended some college or tech school but did not earn a degree. The remaining approximately 20 percent of the participants had a vocational/trade certificate, associate’s degree, bachelor’s degree, or higher. The percentages varied substantially across sites. Two of the sites—Wishard and Steuben County—had 70 percent of their participants with less than a high school diploma. On the other hand, IHIF and Aisin had one percent or less at that level.

The baseline form also asked individuals for their educational goals. The table entries confirm that this is a group interested in further education. Whereas only about 20 percent of the population had a postsecondary certificate or degree, over 60 percent indicated that they intended to pursue that level of education. Again, there was considerable variation across sites. For example, at both Clarian and St. Francis, more than 90 percent of the participants intended to get a postsecondary degree.

Past research has found that locus of control is an important construct in determining labor market success. The locus of control section of the baseline information form included eight questions, which served as indicators about the extent to which the respondents felt they play a role in their own employment position and whether they have some control over their future. It was also intended to gauge the respondent’s level of satisfaction with their current position. The locus of control findings, shown for the total population in Table 6, suggest that respondents have a sense of internal control with their jobs and with their employment future, and a mixed sense of satisfaction with their current jobs.

Table 6. Locus of Control Responses of Participants

Confident about job performance	96%
Enjoy tasks done on the job	82%
Want more responsibility	75%
Prefer jobs with variety/not routine	68%
A job is what you make of it	93%
Promotions are given to good performers	80%
Positive attitude toward coworkers	97%
Plan, set long-range goals for self	65%

Most of the participants (97%) indicated that they have a positive attitude about their coworkers, which is a key indicator of job satisfaction. A large majority of participants (96%) also expressed confidence about their job performance, and 82% indicated that they enjoy the tasks done on the job. Seventy-five percent reported that they would like more responsibility with their job. Many (68%) of the participants prefer jobs with variety or jobs that are not routine in nature. Most respondents (93%) expressed the opinion that a job is what you make of it (internal locus of control). While the participants were confident about their own role in moving beyond their current job with 80% reporting that promotions are given to good performers, only 65% indicated that they plan or set long-range goals for themselves.

Test Score Information

CASAS

Test scores, a crucial outcome for the initiative, turned out to be of limited use for analysis. Most of the sites had been unfamiliar with CASAS prior to the initiative, and there was some confusion at the sites about test administration as they traversed their learning curves, and some sites simply refused to administer CASAS. The design of the CASAS assessment system calls for an appraisal (locator) to be given to individuals in order to determine which assessments would be valid for administration of a pre-test. Then individuals should be pre-tested on an appropriate assessment. Instruction would take place, and then a post-test could be given to document learning gains. Most of the sites were unfamiliar with the CASAS system, however, so the process was rarely followed rigorously. There was confusion about why “two” pre-tests had to be taken. Furthermore, the assessments are all scaled the same, and so many scores from the appraisal were above 245 (the gold range). In these cases, the employees, the employers, and the sites did not understand why another test was necessary. Some sites administered the appraisal form thinking it was a pre-test.

Of course, we were not familiar with CASAS either, so part of our lack of being able to say much about learning gains may stem from that unfamiliarity. When we received data from sites, it was not always clear whether the data were appraisals, pre-tests, or post-tests. Thus, we imposed some assumptions based on the test forms. Note that form numbers have an R or M attached to them to denote reading or math. But we drop those letters for this discussion. If scores were reported for forms 120, 130, 220, or 230, we categorized those results as appraisals. If an individual had more than one observation with these forms, then we used their best score as their appraisal score.

All other CASAS forms (with an R or M) were assumed to be pre-tests or post-tests. We assumed that the first occurrence is a pre-test, and there is a post-test only if there is a second occurrence for that individual, and the form number differs. So, for example, if an individual has a score for form 11R in July 2006 and a score for form 12R in July 2007, then the first score is the individual’s reading pre-test, and the second is the individual’s reading post-test. If an individual has a score for form 12R in July 2006 and 11R for July 2007, we assumed the first test was the pre-test and the second was the post-test. If an individual has a score for form 11R in July 2006 and 11R for July 2007, then we recorded the highest test score as the individual’s pre-test, and did not maintain a post-test score because the forms were identical.

Table 7 summarizes the appraisal test results. Only three of the sites administered the appraisal (one of the sites had multiple employers). As might be expected, the reading scores are quite a bit higher than the math scores. The mean scaled scores for math at all of the sites was less than the mean for reading. Furthermore, the largest majority of the math scores were in the silver range (226 to 245), whereas they were in the gold range (greater than 245) for reading. Note that the bottom row of entries in the table are from the Ivy Tech-South Bend site. This site supplied us with raw scores at first, but eventually after requests, supplied us with scaled scores. But the distribution of scores there was quite a bit lower than at other sites, so we are not sure how comparable those results are to the other sites.

Table 7. CASAS Appraisal Scores, by Site

Site	Math				Reading			
	Average score	Percentage with scores:			Average score	Percentage with scores:		
		< 226	226–245	> 245		< 226	226–245	> 245
IHIF								
Hill-Rom	236.8	13.3	66.7	20.0	247.5	0.7	29.5	69.8
Boston	235.3	17.6	61.8	20.6	247.7	1.7	28.8	70.5
Cook	231.2	32.7	48.5	18.8	245.4	1.0	42.6	56.4
Port of Indiana	230.9	28.6	71.4	0.0	249.0	0.0	20.0	80.0
Ivy Tech –South Bend ^a	228.5	21.6	78.4	0.0	231.5	5.1	94.6	0.0

^aPotential error in scaled scores at this site.

About one-third of the individuals who took the assessment also took a pre-test, so we can get a sense of how well the scaled scores on the assessment align with the scaled scores on the pre-test. Our expectation was that the pre-test scores would be higher just from a testing effect—familiarity with format, coverage, testing environment, and so forth—and, indeed, in math, the pre-test scores were approximately two to six points higher than the assessment scores, on average. In reading, the discrepancy was greater. The scores were about six to 12 points higher, on average.

Table 8 displays overall results from the pre-test (all who took a pre-test including those just discussed who also had appraisal scores.) A couple of results are notable. First, as with the appraisal data, the math scores seem to be considerably lower than the reading scores. With just a couple of exceptions, the site-by-site differences in mean scaled scores for reading and math are between 12 to 20 points. Second, there is quite a bit of variation across the sites. In math, four of the sites have average math scores that are below the cutoff for silver; two of them are below the cutoff for bronze. Three of the sites have almost 90 percent of the math test takers with scores less than 226. In reading, all but three of the sites have means that are above or just below the cutoff for gold and all but two of the sites have a majority (or plurality) of participants whose scores are above 245. On the other hand, two of the sites have scores that are much lower than all of the other sites.

Table 8. CASAS Pre-Test Scores, by Site

Site	Math				Reading			
	Average score	Percentage with scores:			Average score	Percentage with scores:		
		< 226	226–245	> 245		< 226	226–245	> 245
IHIF								
Hill-Rom	239.4	8.5	68.1	23.4	252.7	0.0	28.0	72.0
Boston	242.8	1.4	64.3	34.3	255.8	0.0	13.0	87.0
Cook	246.6	0.0	42.9	57.1	261.7	0.0	0.0	100.0
Clarian	225.3	41.7	57.4	0.9	249.4	10.0	40.9	49.1
Aisin	230.7	23.3	73.4	3.3	243.8	0.0	36.7	63.3
Wishard	209.7	88.9	11.1	0.0	227.6	44.4	50.0	5.6
Steuben County	201.3	87.5	12.5	0.0	201.3	93.9	6.1	0.0
St. Francis	219.3	83.3	16.7	0.0	240.0	11.5	42.3	46.2
Port of Indiana	238.2	20.8	58.4	20.8	244.2	14.3	25.7	60.0

Only about one-third of the individuals with a pre-test have a post-test. Note that we made it a condition of the data that only observations with a pre-test could have a post-test. Table 9 shows the summary data for the post-test. In general, we again have the result that reading scores are higher than math (at the Port site, only one individual took the math post-test, whereas seven took reading, which helps to explain the anomalous results there). What is perhaps most noticeable is that the mean scores for the post-test are much lower than the means for the pre-test. Two reasons explain this. First, at many sites, individuals with high scores on the pre-test were not required to or were not interested in taking a post-test. Second, the post-test results exclude the IHIF sites, which tended to have high scores.

Learning gains. We ended up with pre- and post-test data for only about 140 participants, which is about six percent of the initiative’s participants (16 percent of the participants from all sites except Ivy Tech—Bloomington). In general, participants exhibited modest learning gains. For math, 70 out of 105 test-takers (67 percent) had positive gains

Table 9. CASAS Post-Test Scores, by Site

Site	Math				Reading			
	Average score	Percentage with scores:			Average score	Percentage with scores:		
		< 226	226–245	> 245		< 226	226–245	> 245
Clarian	231.8	22.2	77.8	0.0	247.7	3.2	34.9	61.9
Aisin	231.4	24.0	68.0	8.0	243.0	0.0	44.0	56.0
Wishard	217.5	63.6	27.3	9.1	222.5	54.6	27.3	18.1
Port of Indiana	246.0	0.0	0.0	100.0	234.4	42.8	28.6	28.6
Steuben County	209.2	82.8	17.2	0.0	206.1	92.6	7.4	0.0
St. Francis	225.3	33.3	66.7	0.0	231.7	3.3	50.0	16.7

between the highest standardized score on the pre-test to the highest standardized score on the post-test. The average gain for the entire sample (including the negative and zero gains) as shown in Table 10 was 4.7 points. For reading, 79 out of 139 test-takers (57 percent) had positive gains from pre- to post-test. The average gain for the entire sample was 2.8 points. Interestingly, the Steuben County site, which had its entire program in ESL, had the most positive learning gains—over 10 points for math and 8 points for reading.

Table 10. CASAS Learning Gains (Post-Test Minus Pre-Test), by Site

Site	Math			Reading		
	Number of test-takers	Number with positive gain	Average gain	Number of test-takers	Number with positive gain	Average gain
Clarian	36	20	2.4	63	37	2.2
Aisin	25	13	1.2	25	10	0.2
Wishard	11	8	5.7	11	4	-0.2
St. Francis	3	2	2.7	6	1	-0.3
Port of Indiana	1	1	6.0	7	5	6.1
Steuben County	29	26	10.4	27	22	8.1
TOTAL	105	70	4.7	139	79	2.8

IC3

The IC3 certification was, by most accounts, a difficult assessment. As described in this report, most sites began with Living Online. As shown in Table 11, the overall pass rate for that component was about 64 percent. The pass rates for Computing Fundamentals and Key Applications are somewhat higher than for Living Online, but the reason for that is partly because at some of the sites, the students were only allowed or encouraged to pursue other components if they passed the Living Online certification.

Table 11. IC3 Pass Rates by Component, by Site

Site	Living Online		Computing Fundamentals		Key Applications	
	Test-takers	Passes	Test-takers	Passes	Test-takers	Passes
IHIF						
Hill-Rom	77	55	42	42	47	43
Boston	69	44	33	28	38	31
Cook	11	7	8	7	9	7
Aisin	20	13	15	1	1	0
Wishard	11	2	4	0	0	0
St. Francis	2	0	4	1	6	0
Ivy Tech – South Bend	0	0	23	8	0	0
TOTAL	190	121	129	87	101	81

Earnings and Labor Market Characteristics

The intent of our evaluation was to correlate learning gains with earnings gains, where we obtained the earnings from the quarterly wage record data. Unfortunately, there is almost no intersection between the set of individuals for whom we have learning gains and individuals for whom we have earnings. As a consequence, the only useful data that we could retrieve from the wage record data was average quarterly earnings, by site. These are presented in Table 12. In general, the average quarterly earnings for the participants in the initiative was around \$6,000 per quarter. This works out to a little under \$12.00 per hour on a full-time basis. That is very close to the self-reported average hourly wage of \$11.42 (in Table 3). The average quarterly earnings went up considerably in the first quarter of 2007;⁶ however, they dropped down again in the second quarter. Noticeable in the table is substantial variation in earnings across the sites. Manufacturing employees earned almost double what non-manufacturing employees earned. This is likely a combination of higher wages and more hours of work.

⁶This upward “blip” in quarterly earnings in the first quarter of 2007 emanates from the Ivy Tech—Bloomington/French Lick site. As seen in Table 12, the earnings at that site were considerably higher for that quarter than for any other quarter. Perhaps a year end bonus was provided to workers after the initial opening of the casino.

Table 12. Average Quarterly Earnings, by Site (in dollars)

Quarter	Site									STATE TOTAL
	IHIF			Aisin	Wishard	Port of Indiana	Ivy Tech- Bloom	Ivy Tech- SB	Center for Mental Health	
	Hill-Rom	Boston	Cook							
2004:4	9,171	6,594	4,568	8,905	5,423	9,416	5,123	10,444	4,769	6,334
2005:1	8,620	6,069	4,169	9,948	5,116	8,312	4,666	10,291	3,960	5,895
2005:2	8,475	6,026	3,934	8,193	5,499	8,701	5,924	10,074	4,837	5,965
2005:3	10,077	6,699	4,389	11,022	5,914	8,408	4,775	9,872	4,676	6,200
2005:4	8,860	6,843	4,599	9,005	5,409	9,596	5,052	10,069	4,755	6,244
2006:1	8,830	6,237	4,963	11,305	6,524	10,774	4,735	10,875	5,109	6,150
2006:2	9,060	6,984	4,758	9,165	5,433	11,123	4,573	10,022	4,345	6,060
2006:3	9,581	6,534	4,920	10,962	7,171	11,143	3,867	9,200	4,767	5,583
2006:4	9,245	6,896	5,236	9,877	6,163	11,312	4,980	9,348	4,213	6,031
2007:1	9,420	6,730	5,105	10,914	7,354	10,943	9,576	10,174	4,833	8,873
2007:2	9,568	7,729	4,985	8,830	6,623	11,135	5,867	10,975	3,849	6,783

IV. LESSONS LEARNED

The Indiana Department of Workforce Development designed and funded the 21st Century Workplace Skills Initiative to raise the basic workplace skill levels of Indiana workers while exploring the viability and effectiveness of different models of workplace basic skills education. DWD funded pilot programs throughout Indiana. To use a cliché, the pilot demonstrations were intended to be win-win-win-win programs. Indiana workers would gain basic skills, which would result in more stable careers and higher wages and productivity. Employers would gain more productive workers who would exhibit better workforce attachment that would translate into business payoffs such as enhanced productivity or profitability. The field of basic skill instruction would learn from the experiences of the Indiana partnerships offering innovative programs in diverse workplace settings. The State would house more competitive employers with more productive workers and would develop a workplace basic skills training capacity. Such an initiative starts with much planning and excitement, and it is important to review, after the fact, what lessons have been learned and benefits generated as a result of the statewide grant activities.

The initiative targeted several audiences. These included, but are not limited to, business owners and managers, workers with limited basic skills, dislocated workers with low basic skills, community colleges, independent training intermediaries, employer representative groups, the workforce development system, and the State of Indiana. For the purposes of our review, we look at the Initiative's pay off to workers, the payoff to companies, the payoff to the literacy field, and the payoff to the State of Indiana.

Payoff to Workers

Employed by one of the firms in the demonstration, John (name changed) was a dependable, hard worker, but he lacked the communication and problem solving skills to progress in a career. After 10 years on the job, he still was in the same entry level position into which he was hired. After an 80-hour general, basic skills class, John blossomed. His supervisor marveled at the change, and indicated that John has recently contributed several useful suggestions for improving the work flow on his line. This is anecdotal evidence that we observed that convinced us that the 21st Century Workplace Skills Initiative had a substantial payoff for some workers. While we don't think that this type of dramatic transformation happened uniformly, it is also entirely possible that it did happen for other workers because we were only able to interact with a relatively small number of individuals. In short, since participation in a program was unlikely to have negative consequences for anyone, we hypothesize that the payoff to workers was very large for a few workers, was positive but not transformative for many workers, and was perhaps inconsequential for the remainder of the workers.

Computer literacy was an area where many workers had positive workplace or personal benefits. The initiative's definition of basic workplace education included both foundational academic skills and employability skills. The content areas included reading, math, communication, problem solving, critical thinking, and computer (digital) literacy. DWD chose IC3 certification as the assessment tool for the latter. IC3 certification assesses the three areas of Computing Fundamentals, Key Applications, and Living Online. The digital literacy component,

which became the primary focus at many sites, evoked a variety of reactions from employer partners. Most partners were supportive of the inclusion of computer training into the project. Some employers saw computer skills as an integral part of their employee's job functions, whereas others found it beneficial to employees for general personal and professional growth and development. However, it should be noted that a few employers found it incongruous to their reasons for participating in the initiative and opted to forego that portion of the training (and consequently, the chance for their employees to gain certification).

Our classroom observations and interviews with participants suggested that even when participants did not initially see the connection between computer literacy and their job functions, they were interested in digital literacy training for personal development reasons. The Initiative's planning team had correctly predicted that the participants' main interest would be in the Internet. The Aries curriculum, however, presents material in the following order: Computing Fundamentals, Key Applications, and Living Online, and some programs followed that curriculum ordering and began with Computing Fundamentals modules. Many participants, especially those with very limited computer backgrounds, found the content of Computing Fundamentals to be way too technical for their understanding. A number of participants dropped out very early in the process. However, once the IC3 training progressed to the Living Online module, the training not only sparked their interest in computer literacy, but also appeared to be a method to interest people in math, reading, and literacy. This observation appeared true with both the basic skills participants and the English as a Second Language participants. Trainees stuck with the seemingly irrelevant technical content, thought it would get better, and then were introduced to the Internet and the many resources to make literacy meaningful to their lives.

It seemed as though we heard from employees as many motives for their participation as there were students. One reason stood out, however. Many of the workers were motivated by a desire to get college credits. In interviews, we were often told that the respondent felt as though they had been bypassed for promotion or further opportunity because they did not have a college education. In addition to the chance to get some college credit, a large majority of the adult learners were appreciative of their employers giving them the opportunity to learn and grow in their jobs. It seemed like at all of the sites, the initiative was a morale booster for participants. They were well aware of the connection between increased education and future job potential and earnings growth. Of course as one would expect, those being paid for their time were the most motivated to attend and participate. They observed that their own employer was willing to invest in their development and, consequently, they reported an enhanced commitment to their job and to their employer.

It is probably the case that at the outset DWD thought there would be more sites with paid time for participants. One site had a precipitous drop off in participation when the employer(s) "backed off" from a plan to pay for participation. Another site experienced significant initial resistance from their employees who felt that they were being mandated to participate without pay. Some site coordinators suggested that participation would have been better if there had been paid time, but also if they had had more lead time for planning and implementation. More lead time would have helped in terms of preparation of their workforce for the Initiative's purpose and goals. The implications seem to be that future programs of this sort would benefit from establishing time lines that provide more planning time for employers,

and that have incentives for employers to provide paid time for training. The latter might be accomplished with grants that subsidize the wages of workers or require a 50/50 match with employers.

Interestingly, what the DWD planning team thought would be the centerpiece of the initiative—the certificate—turned out to be relatively unimportant. The Workplace Skills Certificate was awarded to participants who attained certain skill levels in math and reading (plus problem solving and critical thinking for gold) and who successfully passed one or more of the IC3 certifications. Many participants expressed little awareness about the certificate; it was clearly at best a minor motivator for participation. Some workers were not aware of the certificate at all, although most did indicate that someone had mentioned something in a formal meeting somewhere along the way. The individuals who we interviewed thought that it would be nice to get recognized for their participation with a certificate, but few interviewees thought that it would have much value for internal job promotions or as a credential in future job searching. To be fair, it is understandable that participants placed little merit on the certificate because few sites emphasized the certificate in a systematic manner. One of the sites was fairly systematic in its use of the certificates, and it was virtually the only site where trainees showed awareness and placed some importance on striving for a specific level of certification.

In summary, we came away with six lessons learned about the payoff to some or all of the workers who participated in the initiative. First, most participants genuinely were appreciative of their employers for offering the opportunities. Significant morale improvements occurred in virtually every site. Second, the level of participation and excitement among many of the workers underscored a substantial demand for or interest in upgrading skills. Employees seemed to understand clearly the importance of training and skill acquisition to their own job and career prospects. The third lesson we learned was that the possibility of earning college credit was a strong motivator for workers in addition to upgrading skills for their own productivity.

Fourth, as implemented in this initiative, the opportunity to earn a skill certificate was not a strong motivator for workers. Workers seem to understand the linkage between their own skills/knowledge and productivity, but are less clear about the value of certifying the skills/knowledge.⁷ Workers apparently did value computer training because it became a major component of the initiative. There seemed to be two motives; some workers had absolutely no background and wanted to get very basic training and other workers were interested in upgrading their skills. Most participants, but especially the former group, found the IC3 certifications to be quite challenging. Finally, we believe that the benefits to the workers were quite variable. A few workers blossomed. Many workers had positive experiences, and some workers probably benefited only a little. Of course, when you add all of these together, you get a substantial aggregate payoff to workers.

⁷Most labor economists acknowledge that there is information asymmetry in the labor market (especially for less skilled workers). Workers' current employer may be quite knowledgeable about the skills of their own workers, but if those skills are not certified, then other employers will not be aware of them. This leads to underinvestment in training and lower wages for workers.

Payoff to Companies

The employers came to this initiative as voluntary partners or as grantees. None of them seemed to regret their participation. Rather they expressed appreciation for the chance to train their workforce. Whether it was the manufacturing, health care, tourism, or human service sector, all of the business owners and managers interviewed clearly noted the growing competitiveness of their markets. Attracting and retaining employees was noted as a continual issue for these businesses. Owners and managers viewed training as a key strategy for operating efficiently and as a means to grow their own workers through promotions.

Despite their understanding of the strategic nature of training, perhaps the most notable observation about employer involvement was the lack of interest in or attempt to measure potential business outcomes from the initiative. It became apparent through interviews that businesses became engaged in the initiative mainly as a benefit for employees. They saw it as a way to improve employee morale. Most of the business representatives understood and articulated the fact that if workers would improve their basic skills and exhibit higher levels of morale, then they would likely be more productive. However, virtually none of the employers attempted to measure such outcomes. In one instance, the business representative indicated that retention was a major concern in their company given the local competitive job market. The representative even commented that the company lost fewer workers during the traditional summer hiring period as a result of this training program; however, there was no formal retention tracking by position or within this training program.

While employers who were interviewed expressed strong support for the initiative, we noted that interest and commitment did seem to ebb in some instances. Understandably, at some smaller businesses, especially in manufacturing, the involvement and participation of workers were curtailed if production demands arose. In the case of at least one site, and maybe at others, employers did not seem to follow through on enthusiastic support that was expressed in meetings to the extent that it jeopardized the viability of the site's programs.

The DWD notice of funding and RFP instructions noted that the target audience for training was low skilled workers or low skilled dislocated workers, but as noted above, DWD clearly made allowances for some training of supervisory workers. In a couple of sites, we wonder whether the companies abused these allowances. These sites included a number of supervisors among the training participants. At one site, we were told that supervisors were strategically targeted so that they could be promoted, and lower skilled workers could get promoted into the supervisory positions. This sort of trickle down approach seemed incongruous to the intent of the initiative.

In short, the payoff to employers seemed to be the least well perceived payoff of the initiative. Employers seemed to understand that they were likely to reap benefits, but they showed no proclivity to attempt to measure these benefits. They were much more likely to indicate that they became engaged in the initiative mainly to benefit their employees. Interestingly, at one of the technical assistance sessions organized by DWD, one of the sites did quantify substantial reductions in turnover that they causally linked to the training program. That

evidence as well as the anecdotes about employees who blossomed in their job suggest that businesses did receive payoffs, even though they were not explicitly looking for them.

Payoffs to Literacy Providers

While the payoffs were not of a financial nature, the initiative contributed a number of valuable lessons to the field of workplace literacy.

The first is a conundrum to consider. The impetus for the initiative was a belief that the basic skills of a substantial share of Indiana workers were deficient and were jeopardizing economic growth and competitiveness. However, the scores on the CASAS appraisal and pre-test were quite high. Workers seemed to possess reasonably high levels of skills, and as a consequence, far less basic skill training was pursued by sites than planned. The question is naturally raised as to how this occurred. Was the underlying assumption of deficient basic skills in error?

A couple of hypotheses might be put forward, and the truth may lie in some combination of them. First, the initiative may not have tested the lowest functioning employees. At most of the sites, even those with paid time for training, participation was voluntary. Individuals with extremely low levels of literacy may not have wanted to be identified out of fear of being stigmatized. For sites that had a limited number of participants, only the more motivated (and more capable) employees may have volunteered. Another hypothesis is that CASAS doesn't measure the literacy and numeracy skills that are important in the workplace. That is, employers' reports of deficient basic skills may be referring to a workplace vocabulary or problem solving that is not tested by CASAS. If this hypothesis is true, then there is an imperative to contextualize the instruction in workplace learning programs.

In designing the certificate, DWD seemed to face a dilemma; whether to set competencies based on levels of performance or based on learning gains. The certificate was ultimately based on levels, but the instructions to the grantees requested goals in terms of percentages of participants who would show learning gains. DWD made the obvious choice of certifying levels of performance. However, that choice resulted in most workers being quite satisfied with their performance levels, and therefore not opting to participate in basic skills instruction. They signed up for computer instruction instead.

As noted in this report, the computer skills of participants were extremely heterogeneous. Some individuals had never turned on a machine; others used computers in their jobs on a daily basis. IC3 certification seemed difficult for the latter, and impossible for the former. There seems to be a pressing need to design a valid pre-assessment of computer skills, and to develop a training curriculum for those who have very little background or knowledge. Furthermore, there seems to be a need for an alternative assessment tool that is not as technical as IC3 for individuals who have some expertise.

The literature on adult education notes the importance of advisory committees for programs. The Advisory Committee concept was included in each of the funded proposals. Except for two sites, this concept was not put into practice, however. Advisory committees are

intended to help design, provide oversight after implementation, and offer suggestions for improvement during the course of program operation. Committees were often initiated at the outset, but did not continue in an oversight and advisory capacity after implementation. Students/adult learners were not consistently represented on the committee. The student perspective was often very different from the program manager, instructor, and employer representative during interviews. Students were engaged in their training and earnestly sought relevance with the training to their work function. Active advisory committees with regular inclusion of students would seem to be recommended for any future initiatives.

Lessons learned from this initiative in terms of motivating participation were the not surprising finding that paid time for training was important, but perhaps more surprising was the importance that workers placed on receiving some college credit. Most of the workers who were interviewed had not attended any postsecondary institution, and they were usually quite proud of the fact that they were going to get some college credit, and a college transcript; all at the expense of their employer. This finding suggests that employers or providers interested in offering workplace basic skills instruction should try to collaborate with a postsecondary institution. Generally, the postsecondary institution will be quite interested, but we found that credit concerns sometimes reduced the flexibility that programs had to meet the needs of students or to contextualize instruction.

Finally, a disappointment from the initiative was an inability to test the effectiveness of embedding basic skills instruction into specific occupational training. The DWD planning team was hopeful that some of the sites would attempt to integrate basic skills instruction into specific occupational training. Obtaining evidence about the effectiveness of this approach would have been a significant contribution to the field of workplace literacy. The CWI program at the Port of Indiana pursued this strategy to some extent, but unfortunately, the very limited enrollment did not allow analysis of the results.

Payoff to Indiana

A goal of the initiative was to establish a pool of adult basic skills instructors and materials in the state with demonstrated effectiveness in reaching the goals of contextualized workplace basic skills training. The initiative engendered considerable effort on the behalf of providers to devise effective workplace education models, and progress was made, but key elements were not accomplished. Effective contextualization was rare. In our opinion, too much of the training material was off the shelf with very limited workplace-specific examples included in the instructional design. In the few instances where learning was more contextualized, instructors found greater learning opportunities for teachable moments. Students seemed more engaged.

For continued business buy-in as well as legislative interest, program participation benefits need to be systematically measured and promoted. Such information could significantly assist the State's larger awareness campaign. Establishing specific employer measures or developing a template of measures for employers to quantify and evaluate outcomes and business impact would greatly assist this goal. Capacity building of training intermediaries and brokers would need to include assisting businesses with collecting and internalizing these

measures as well as marketing this information once analyzed. Business to business promotion of the merits of participation will be critical to build momentum for a demand driven workplace basic skills education system that creates benefits for business owners, workers and the State.

Ultimately, for the State, the “bottom line” for the initiative could be judged as a glass that is half full or half empty. Many potential lessons were learned, and all in all, workers and employers in the aggregate probably received significant benefit from the initiative. However, the extreme differences among the sites and the deviation in every site from the ideal program meant that there were really 10 strikingly different “treatments” and no benchmark to which they could be compared. Thus from an evaluation perspective, our ability to answer the question of what worked for whom was not possible. Instead we have offered observations and hypotheses that we hope will help tailor any future endeavors by DWD in this arena.

APPENDIX
SITE VISIT REPORTS

Site Visit Report

Clarian Health Partners

Date of Visit: September 27, 2006

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the Workplace Basic Skills (WBS) program at Clarian Health Partners in Indianapolis, Indiana. He conducted a group interview with employer representatives (leadership team); a group interview with a representative from Ivy Tech Community College and staffpersons associated with Clarian's Career Quest program; and a focus group with participants in the WBS program. He also observed a class session, which happened to be IVY 101. Note that Ms. Terri Schulz, from Indiana Department of Workforce Development accompanied Dr. Hollenbeck. All together, the following individuals were interviewed:

Mr. Mark Mattes, Director, Academic Affairs, Clarian Health Partners
Dr. Sherry Makely, Manager, Employee Development, Clarian Health Partners
Mr. Don Weir, Coordinator, Employee Development, Clarian Health Partners
Ms. Jennifer Olson, CAW Coordinator, Clarian Health Partners
Ms. Joan Stewart, CAW Coach, Clarian Health Partners
Ms. Linda Kozimor, Career Quest Coordinator, Clarian Health Partners
Mr. Joe Bierce, CAW Coach, Clarian Health Partners
Ms. Angie Hornaday, Ivy Tech Community College
Gloria, Emogene, Maurice, and JoAnn, employees of Clarian and CAW participants

Background

Clarian Health Partners is the name of a consolidated health care organization resulting from the merger of three major hospitals in Indianapolis. In January 1997, Methodist, Indiana University, and Riley Hospitals were united into Clarian Health Partners. Clarian is a huge corporation with almost 12,000 employees and patient revenues of over \$2.5 billion. Clarian and the three hospitals that it united have much renown. Over the years, they have housed many medical "firsts" including the state's first kidney, liver, heart, and bone marrow transplants. Clarian Health achieved the prestigious Magnet status from the American Nurses Credentialing Center in 2004 (an honor bestowed to fewer than 3 percent of the nation's hospitals), and in 2005, U.S. News & World Report named Clarian one of the nation's top hospitals for the 8th time.

Even before the 21st Century Workplace Skills Initiative, Clarian had focused on the career development of its mid- and lower-level skilled staff. For example, it has operated an innovative career development program that it calls Career QuestTM. This program offers employees the opportunity to take career exploration and skill assessments, to develop a career

action plan, and to receive individualized guidance from a coach. In addition to Career Quest, Clarian facilitated adult basic education (ABE) opportunities so that employees could pursue a GED. Also, Clarian participated in a demonstration of School at Work (SAW), which is a basic skills enhancement course specifically targeted at health care. Finally Clarian's tuition reimbursement policy supports workers who pursue postsecondary training.

When the opportunity to apply for the 21st Century Workplace Skills Initiative came along, it was not a difficult decision for Clarian to apply. They felt it was a "perfect fit," as one respondent put it. It was seen as buttressing the ABE program, which needed support. The corporation felt participation lagged because the program was self-directed and unstructured. It required significant self-motivation to stay involved. Further Indianapolis Public Schools (IPS) had supplied an instructor for the ABE program, but had cut back on that position due to district budget problems. A second reason for Clarian's interest in applying for the 21st Century Workplace Skills Initiative funding was that it could collaborate with Ivy Tech Community College and offer a College at Work (CAW) program that expanded upon the SAW program.

The only seeming impediment to the decision to apply for funding was the corporation's tuition reimbursement policy that required students to invest in their tuition and fees, and then get reimbursed. The plan for the grant was to have the corporation cover any tuition charges from Ivy Tech, which had to be paid up front. The Education Department met with the Human Resources Department, which administered tuition reimbursement, and secured an agreement to pay the tuition on an invoice rather than reimbursement basis.

Training Description

The training curriculum that was proposed in the grant application was quite specific. The objective of the WBS program is to get employees through four "core" Ivy Tech classes—ENG 111, COM 102, PSY 101, and MAT 111. Recognizing considerable heterogeneity in employees' skills, the program has established six cohorts of participants. Members of cohorts A and B have their high school diplomas or GED and score well enough on the Ivy Tech entrance exam to be admitted. Cohort A, however, receives developmental instruction, whereas cohort B proceeds right into the core classes. Students in cohort C do not have a GED or the basic skills proficiencies to take Ivy Tech classes, so its members pursue adult education classes that will lead them to a GED.

Cohort D's program is identical to cohort A's—developmental instruction and Ivy Tech's core classes. It simply starts a few months after cohort A, and its developmental courses are timed to coincide with cohort C. Cohorts E and F are comparable to cohort C in that the participants in these cohorts will pursue skills upgrading prior to the Ivy Tech developmental courses. Cohort E is identical to cohort C; whereas cohort F pursues ESL training rather than GED preparation. (Note that the staff persons who were interviewed indicated that they had not garnered enough interest in the ESL training, so that it is unlikely to occur.)

The planned training length for GED preparation (cohorts C and E) is three months. The planned length for the ESL training (cohort F) is four months. Each of the Ivy Tech courses—

core and developmental—are eight weeks long. Note that they are condensed from the usual 16 weeks that comprise the course when it is offered on campus.

To give the participants somewhat of a break between courses and to conserve on costs, the College at Work program plan schedules four of the two-month courses in a twelve month period. In between the courses, Clarian staff offers various WorkSMARTs seminars and pathway seminars. Prior to course work, employees participate in a Get Ready seminar. For the most part, these seminars offer training in soft skills and technology.

The seminars and Ivy Tech CAW courses take place one day per week for four hours. The employees were emphatic that they would only invest a single day into the activity. The corporation has several classrooms that are used for the instruction. In addition, it has recently furnished a very nice computer laboratory with several up to date machines.

As part of each participant's orientation to taking college classes, they all take Ivy 101, which is a one-credit introduction to the community college. I sat through a portion of an Ivy 101 class, which was not at all stimulating. The instructor read from the Ivy Tech Student Handbook, and the participants seemed highly disinterested.

Accomplishments to Date

The WBS program has made considerable progress, although the program is a few weeks behind its proposed schedule. They have recruited cohorts A through C. They proposed to recruit 30 employees in a cohort, but so far, cohort A has 15, cohort B has 16, and cohort C has 12 individuals. All of these individuals went through an application process that included an essay, some personal references, interviews, and testing. The corporation's Education Department staff had anticipated that most of the participants would come from two departments: Environmental and Food Service. But in fact, the participants are coming from many different departments throughout the hospitals including secretaries, lab technicians, medical coders, and others.

As noted, the WBS program requires the participants to sign up for Career Quest. This participation entitles the workers to a \$500 scholarship to help defray costs such as reduced hours in a second job, or transportation or child care costs. The scholarship stipends should facilitate greatly the involvement of employees. The scholarship opportunities and assignment of a career coach are nice features of Career Quest that will supplement the WBS program.

The Clarian proposal noted that staff from Goodwill and the Annie B. Casey Foundation project would get involved in the effort to case manage some individuals who had significant barriers to success. I asked about their involvement, and was told that these organizations were just getting on board.

Barriers/Issues

The Clarian WBS program is being managed by Jennifer Olson. Operating within the context of a large organization and given the size of the program, Jennifer and the CAW coaches and seminar presenters have a myriad of details and collaborative partnerships to implement. They seem to be traversing their learning curve a few steps ahead of the participants and, not surprisingly, they have to deal with a number of logistical issues. A significant logistical issue that arose was finding out that Ivy Tech did not have instructors to deliver the proposed GED preparation for cohorts C and E. Jennifer needed to find an alternative instructor.

Two issues related to the content of the training might be raised. First, in its application and planning process, Clarian had not included any IC3 technology training. However, when it learned that omitting that component would preclude its employees from receiving the 21st Century Workplace Skills certificates, Clarian decided to implement the Living Online component of IC3. So the question is how and when that piece gets integrated into the overall program for participants in the (potentially) six cohorts.

The second issue was that the extent to which contextualization could occur in the in the Ivy Tech core classes. The Clarian respondents indicated that part of the role of the coaches is to help learners relate what they are learning to the workplace, and that the WBS program is using materials such as departmental and organizational newsletters, policies and procedures, and mock memos in the reading course. In the writing course, students are required to write papers relevant to the hospital setting. However, some of the Ivy Tech courses are highly programmed, which makes contextualization more difficult.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date. Respondents indicated that communications had been timely and clear, and all technical assistance activities had been useful.

Evaluation

Clarian's program is well under way, and the participants are enthusiastic about the opportunity they have been afforded. The "drawing card" here is clearly the opportunity to earn college credits and progress significantly toward a degree. The employees who were interviewed all felt like they had been stymied in their career advancement because they did not have a college degree. They thought that this program was a wonderful opportunity because the hospital was paying for it, and furthermore, paying them for their time.

The program that we observed matched well the proposed programmatic approach. So it is difficult to quibble with it. However, we wonder whether the overriding emphasis on college course taking and its concomitant secondary emphasis on upgrading basic literacy skills is

limiting the participation of low functioning individuals. Note that Clarian's response to this concern was that almost three-quarters of the individuals (29 of 41) who applied for the program did not score high enough on the Ivy Tech exam to place directly into the core courses. About half of these individuals are taking Ivy Tech developmental courses, and the other half is focusing on basic skills improvement with a basic skills instructor. They did go on to indicate that they thought that the hospital should implement and market a GED prep/basic skills improvement program to meet the needs of employees who may need that sort of training/education.

Nevertheless, it was clear from our visit that a lot of time and effort has been invested into getting this program off the ground. The payoff to date has been the considerable excitement that it has generated from the participants, who are most anxious to obtain a college degree. Whether they attain that goal or not, the participants are certain to benefit from their involvement in the Career Quest program. The participants are seriously engaged, and very appreciative of the opportunity. Given the hospital's commitment to the career development of all of its employees, it seems quite likely that the WBS will facilitate the career advancement and morale of many workers and will likely result in substantial recruitment cost savings to the corporation.

Site Visit Report

Clarian Health Partners

Date of Visit: June 26, 2007

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the College at Work and Skills Enhancement programs at Clarian Health Partners in Indianapolis, Indiana. He conducted a group interview with employer representatives; a group interview with a representative from Ivy Tech Community College, Warren Adult Education, and coaches associated with Clarian's programs; an interview with the supervisor of a CAW participant; and a focus group with three participants in the CAW program. He also observed part of a class session, which happened to be an orientation to Ivy Tech programs. This was the second site visit to Clarian; the first occurred on September 27, 2006. All together, the following individuals were interviewed during this visit:

Dr. Sherry Makely, Manager, Employee Development, Clarian Health Partners
Dr. Don Weir, Coordinator, Employee Development, Clarian Health Partners
Ms. Jennifer Olson, Senior Educator, Employee Development, Clarian Health Partners
Ms. Estela Martinez, CAW Program Coordinator, Clarian Health Partners
Mr. Joe Bierce, CAW Coach, Clarian Health Partners
Ms. Joan Stewart, Skills Enhancement Coach, Clarian Health Partners
Ms. Sally Eisbrenner, Program Manager, Corporate Training Services, Ivy Tech Community College
Ms. Shara Davis, Warren Township Public Schools
Mr. Eric Matson, Supervisor, EVS, Clarian Health Partners
Marsha, Trela, and Rebecca, employees of Clarian and CAW participants

Background

Clarian Health Partners is the name of a consolidated health care organization resulting from the merger of three major hospitals in Indianapolis. In January 1997, Methodist, Indiana University, and Riley Hospitals were united into Clarian Health Partners. Clarian is a huge corporation with almost 12,000 employees and patient revenues of over \$2.5 billion. Clarian and the three hospitals that it united have much renown. Over the years, they have housed many medical "firsts" including the state's first kidney, liver, heart, and bone marrow transplants. Clarian Health achieved the prestigious Magnet status from the American Nurses Credentialing Center in 2004 (an honor bestowed to fewer than 3 percent of the nation's hospitals), and in 2005, U.S. News & World Report named Clarian one of the nation's top hospitals for the 8th time.

Even before the 21st Century Workplace Skills Initiative, Clarian had focused on the career development of its mid- and lower-level skilled staff. For example, it has operated an

innovative career development program that it calls Career Quest™. This program offers employees the opportunity to take career exploration and skill assessments, to develop a career action plan, and to receive individualized guidance from a coach. In addition to Career Quest, Clarian facilitated adult basic education (ABE) opportunities so that employees could pursue a GED. Also, Clarian participated in a demonstration of School at Work (SAW), which is a basic skills enhancement course specifically targeted at health care. Finally Clarian's tuition reimbursement policy supports workers who pursue postsecondary training.

When the opportunity to apply for the 21st Century Workplace Skills Initiative came along, it was not a difficult decision for Clarian to apply. They felt it was a "perfect fit," as one respondent put it. It was seen as buttressing the ABE program, which needed support. A second reason was that Clarian could collaborate with Ivy Tech Community College and offer a College at Work (CAW) program that expanded upon the SAW program.

Training Description

As currently implemented, the Clarian initiative is mainly comprised of two components: College at Work and Skills Enhancement. The objective of the College at Work program is to get employees through four general education Ivy Tech classes—English (ENG 111), communications (COM 102), psychology (PSY 101), and mathematics (MAT 111) as well as Ivy Tech 101, which is a one-credit class required of all of the institution's students. These general education classes are intended to enhance employees' foundation skills and self-confidence so that they can pursue postsecondary programs in a college, vocational, or other setting.

The Skills Enhancement half of the program is aimed at improving the basic skills of participants so that they might be able to participate in the College at Work program. For individuals with a high school diploma or GED, the skills enhancement instruction provides Adult Basic Education to provide extra help in reading, writing, and math. For individuals who have not attained a high school diploma or its equivalence, the skills enhancement class has included GED preparation as an objective in addition to the upgrading in reading, writing, and math.

Clarian's efforts in the area of digital or computer literacy have stopped and started a couple of times. In its initial letter of intent in early 2006, Clarian indicated that it would include IC3 certification in its program. In its revised proposal submitted in May, 2006, Clarian indicated that it intended to eliminate the IC3 computer skills assessments. A progress narrative written in January 2007 indicated that the program was attempting to get participants to pass the Living Online IC3 certification, although it was having difficulty. During this site visit, respondents suggested that the program was not pursuing IC3 certification, but that it had piloted computer classes delivered by staff from the hospital's Informatics Department.

Starting in July, a fourth component of the initiative will begin. The program coordinator has identified 25 individuals in the hospital whose primary language is other than English. As a consequence, an English as Second Language class is scheduled to begin on July 9th.

In the College at Work program, Ivy Tech has concentrated courses that are typically 16 weeks in length times three hours per week (48 contact hours) into 8 week sessions of four hours each (32 contact hours). Note that the math class will require 12 weeks to complete. For employees who do not score well enough on the Ivy Tech placement test for English or Math, the College at Work program offers college prep (i.e., remedial) classes. For example, seven individuals took ENG 031 in Fall 2006 and 10 individuals took ENG 032 in April to June, 2007. Furthermore, the CAW program has plans to enroll 54 students in MAT 040, MAT 044, or MAT 050 in Summer. These courses are not credit-bearing, but they still meet for 8 weeks and 32 contact hours. To give the participants somewhat of a break between courses and to conserve on costs, the College at Work program schedules four of the two-month courses in a twelve month period. In between the courses, Clarian staff offers various Pathway seminars.

During our first site visit, we were told that the Pathway seminars would focus on training in soft skills and technology. The second site visit took place right at the end of a second set of Pathway seminars, which had a different focus/structure. This set was comprised of sessions on critical thinking, emotional intelligence, language registry, and Ivy Tech program orientation.

The instructor for the skills enhancement classes has 12 hours of formal instruction each week: 1:00 – 3:00 and 4:00 – 8:00 on Tuesdays and Thursdays. The instruction is apparently quite individualized and also technology-based; students are supposed to commit to 4 hours per week (second shift employees typically come on the two afternoons per week before work, and 1st shift employees come on either Tuesday or Thursday evening.) The seminars and Ivy Tech CAW courses take place one evening per for four hours from 4:00 to 8:00. The employees were emphatic that they would only invest a single day into the activity. The corporation has several classrooms that are used for the instruction. In addition, it has recently furnished a nice computer laboratory, which will begin to house instruction this Summer.

With a few exceptions, the Clarian participants are not paid while they are attending training. In one case that we learned about, an individual on the second shift was allowed to take the CAW classes while he was on the clock. This arrangement was worked out between the participant and his supervisor.

Accomplishments

Jennifer Olson, who was the program coordinator prior to her maternity leave, and Estela Martinez, the current program coordinator, each wrote thorough progress reports that documented well the accomplishments of the Clarian programs through January, and through June, respectively. The bottom line seems to be that participation in the programs has progressed nicely after a relatively slow start. They seem to be a solid part of the hospital's education department's offerings.

The numbers of participants who completed the program components, by quarter, follow:

	<u>Fall</u>	<u>Winter</u>	<u>Spring</u>	<u>Summer (planned)</u>
Skills Enhancement	13	30	44	36
ESL				25
CAW				
English				
College Prep	13	0	10	0
ENG111	10	0	19	0
COM101	0	21	0	0
PSY101	0	0	10	0
Math				
College Prep	0	0	0	54
Computer Class	0	75*		18

Note: Fall is Sept. through Dec., 2006; Winter is January through March, 2007; Spring is April through June, 2007; and Summer is July to September, 2007. Data for Fall come from Progress Narrative prepared in January 2007; data for other quarters come from Progress Narrative prepared in June 2007.

*Progress Narrative indicates that 75 individuals were trained between February and June, 2007.

From the numbers, we can surmise that about 10 individuals (might be less) have completed three of the general education classes (ENG111 then COM101 then PSY101), and that approximately 20 individuals have completed two of the classes (COM101 and then ENG111). Since it is apparently the case that none of the participants placed into the Math111 course, it will be until at least December 2007 before any students meet the program's objective of getting through all four general education classes, and that would occur only if some of the individuals who have completed three classes are successful in the college prep math this Summer and then Math111 in the fall. It is more likely that it will be well into 2008 before individuals get through all four classes.

The enrollments noted above are "completions" for the first three columns and planned enrollment for Summer. That is, the latter column is not quite consistent with the other columns. Nevertheless, comparing the counts of participants across the columns suggests substantial growth in program enrollments over time. The counts increase from 36 to 51 to over 80 from Fall 2006 to Spring 2007.

A significant characteristic of the Clarian program is the use of coaches. Many of the program's participants sign up for Career Quest, which is Clarian's employee development program.⁸ If an individual participates in Career Quest, they are assigned a career coach. If the individual earns less than \$12.00 per hour, they are entitled to a \$500 scholarship to help defray costs such as reduced hours in a second job, or transportation or child care costs. In addition to

⁸Our earlier site visit report and literature from Clarian seemed to indicate that all participants in the Skills Enhancement or CAW components of the program would be required to sign up for Career Quest, but in conversations that occurred during this site visit, program officials indicated that Career Quest was voluntary.

coaches available to employees through Career Quest, Clarian also has a staff of individuals who are coaches for the Skills Enhancement and for the College at Work program. These coaches are responsible for supporting students by helping them to resolve issues/barriers that arise. These coaches are essentially resources that students can rely on as they navigate through the classes. The coordinator of the program from Ivy Tech indicated that the College at Work program at Clarian was likely far more effective than similar programs at other firms because of these coaches.

Barriers/Issues

Clarian appears to be quite pleased with the programs it has implemented and supports them accordingly. It has in place at least three major resources that are intended to overcome participants' barriers. Career Quest resources help employees assess their own skills and interests, and this program matches employees with a mentor. This is a resource that helps employees overcome a lack of information about career prospects within the hospital. For employees who earn below \$12 an hour, Career Quest provides a Budget Buster scholarship of \$500 to overcome issues that might arise that would hinder individuals from completing their participation. Finally, as noted above, Clarian provides program coaches to facilitate individuals' progress through the Skills Enhancement or College at Work programs.

Respondents from Clarian did list a few issues that they wish they had anticipated better—costs of books/consumables, difficulties in implementing TopsPro, and difficulties in implementing IC3 certification. However, it seems as though the Clarian program has come to grips with these items, and that none of them have been serious enough to constrain the delivery of education. For the most part, the participants who were interviewed felt that there were no barriers; however they felt that one of the Ivy Tech instructors had had difficulty with classroom management (time was getting monopolized by one or a small number of students.)

Based on our observation, we would raise two issues that might be affecting the efficacy of the Clarian program. The first is the extent to which contextualization is occurring in the Ivy Tech classes. As mentioned in our previous site report and buttressed by the comments of one of the Clarian program administrators during this site visit, our sense is that Ivy Tech has set curricula for their courses that get telescoped or concentrated for the CAW program. It is not clear to us whether there is an opportunity to insert health-related vocabulary, math, or problem solving into the course content during this process of concentration, but our sense is that such contextualization does not occur. To be fair, we should report that one of the respondents from Clarian indicated that they thought that the Ivy Tech instructors did a good job of contextualizing their instruction. In any case, there were nothing but glowing opinions about the extent to which the skills enhancement instructor contextualized her instruction.

The second issue that we raise is whether the time at which the CAW courses are offered precludes participation by second or third shift personnel. As noted above, the CAW courses are offered on Tuesday evenings from 4 to 8. The general policy of the hospital is that individuals should participate in the CAW or skills enhancement classes on their own time. We did learn of

an exception being made for one individual, but having second shift staff members participate in CAW was the exception; not the rule.

Evaluation

Clarian's program is solid. Participants are enthusiastic about the opportunity they have been afforded, and the program seems to be getting institutionalized into the hospital's education offerings. The number of participants has grown substantially over time. The "drawing card" here is clearly the opportunity for individuals to earn college credits and progress significantly toward a degree. The employees who were interviewed all felt like they had been stymied in their career advancement because they did not have a college degree. They thought that this program was a wonderful opportunity to gain college credits and, to top it off, the classes were on site and the hospital was paying the tuition.

Clarian is an excellent site for the state's workplace skills demonstration program because it provides information about program implementation in a mega-corporation. There are certainly advantages and disadvantages. Among the advantages is a large, diverse work force from which it is fairly easy to scale up the size of a program. Furthermore, the corporation has the resources and experience to provide coaches to the Skills Enhancement and CAW programs. Also, Clarian deals with vendors and suppliers all of the time so the business practices and infrastructure needed to contract with program vendors is easily available and accessible. The disadvantages of being housed in a huge corporation include the logistics of marketing the program to all of the employees; the bureaucracy necessary to navigate in a large organization; the logistics of establishing a time and place for the classes; and the vicissitudes of being caught in general policy initiatives (such as budget reductions).

The computer instruction/digital literacy part of the Clarian programs has been a struggle, although the hospital now seems settled on an initiative in which staff from Clarian's Informatics Department (IT) are providing instruction in several software applications. Joe Bierce has designed a digital literacy pre-assessment that he shared, and the latest progress report notes that since February, computer classes were conducted with 75 employees. The progress report goes on to note that during this month (July 2007), Clarian is going to offer computer classes to eighteen individuals from its Nutrition and Dietetics department. Notable is that the latter class will be "on the clock." Upon learning about the extent and content of the computer literacy training, it seemed to us that it would not be much of a stretch to give individuals the opportunity to become IC3 certified in Key Applications, and to be eligible for a Bronze certificate (assuming that DWD would allow the substitution of Key Applications for Living Online.)

The payoff to date for Clarian has been the considerable excitement that the Skills Enhancement and College at Work programs have generated from the participants, who are most anxious to obtain a college degree. There has been a noticeable improvement in morale, and greater interest in progressing through meaningful careers. The hospital seems quite confident that the programs will result in employees pursuing technical training and entering the occupations that have been identified as having critical shortages.

Site Visit Report

Indiana Health Industry Forum

Date of Visit: December 13, 2006

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the Indiana Health Industry Forum (IHIF) workplace skills initiative, Critical Skills, at the IHIF headquarters in Indianapolis and at Hill-Rom, one of the participating companies in Batesville. Dr. Hollenbeck interviewed the CEO of IHIF and the Critical Skills program manager and staff, Dr. B. J. Bischoff and Ms. Jean Eisaman; attended a steering committee meeting; interviewed an IC3 instructor; interviewed eight employees who were participating in IC3 training; interviewed two representatives of the participating company that was visited; and observed an IC3 preparation class. Note that Ms. Terri Schulz, from Indiana Department of Workforce Development accompanied Dr. Hollenbeck. All together, the following individuals were interviewed:

Mr. Mike Brooks, President/CEO, Indiana Health Industry Forum,
Indianapolis
Dr. B. J. Bischoff, Owner, Bischoff Performance Improvement
Consulting, Indianapolis
Ms. Jean Eisaman, Critical Skills Project staff member
Ms. Diane Reihle, Manager of Human Relations, Hill-Rom, Batesville
Ms. Cindy Weiler, HR Administrative Assistant, Hill-Rom, Batesville
Ms. Bonnie Holaday, computer teacher at Hill-Rom, Batesville
Angie, Janet, Rob, Jackie, Devota, Wanda, Margaret, and Linda, Hill-Rom
employees

Background

The Indiana Health Industry Forum (IHIF) is a small, not-for-profit, private sector membership organization. Its goals are to advance Indiana's health-related businesses and contribute to the economic development success of the state. Its members represent a private/public alliance of manufacturers, suppliers, educational institutions, health care providers, service providers, and government. In its umbrella role, the organization serves as a clearinghouse and broker of resources and information, as well as a spokesman on issues facing the industry.

IHIF has only two staff persons, so the organization leverages its operations through collaboration and partnerships. It had worked with Dr. Bischoff on a prior project, so when she became aware of the 21st Century Workplace Skills Initiative and brought it to Mike Brooks' attention, he readily agreed to pursue it. In its letter of intent, IHIF had proposed working with four organizations, three health care equipment manufacturers and a hospital. However, in its proposal, IHIF indicated that it had decided to work solely with the three health care product

manufacturers. This decision made sense because it scaled back an already-sizeable project, and it made development of contextualized materials easier.

Training Description

The Critical Skills project has assessed the basic skills of a large number of employees and completed the development of an Individual Critical Skills Plan for all of them.⁹ In particular, the number of assessments done at Boston Scientific, Hill-Rom, and Cook Urological were 158, 153, and 103, respectively. Note that 240 employees at Hill-Rom had been assessed prior to the deletion of the computer records. The assessments were voluntary at Boston Scientific and Hill-Rom, but they were mandatory for employees hired within the last 18 months for Cook. The employees were, however, paid for their time to complete the assessment (and re-assessment at Hill-Rom) at all three companies.

An individual Critical Skills plan was developed for all individuals who were assessed, and incredibly, Ms. Eisaman has conferenced with all 415 employees on an individual basis. The project's plan is to provide IC3 computer training to most of the employees immediately, and to develop customized math and reading curricula that will be delivered to individuals who tested low on the assessment. At the time of the site visit, IC3 training had begun at Hill-Rom and at Boston Scientific, and was about to begin at Cook. The training is on site at the former two companies with classes offered for two hours per week. It will be held in a high school setting for Cook.

Reading, math, critical thinking, and problem-solving training is scheduled to start for those individuals whose assessments suggest the need this month (January 2007). The project staff was in the process of developing customized curricula and establishing logistical arrangements for this training at the time of the site visit, but they were enthusiastic about curriculum materials from Aztec, which they will use as a basis.

The project had not encountered any individuals for whom English is a second language, so that type of training will not be required.

Accomplishments to Date

This project is ambitious in scale, so getting the program off the ground has been a substantial accomplishment. The three employers seem to be committed to the project, which has facilitated greatly the start-up. Furthermore, the union personnel at Hill-Rom have been very supportive. The project seems to have established excellent communication channels that undoubtedly help to keep the employers informed and supportive. Because the employers have been so supportive, the marketing and outreach efforts have been targeted on employees. The numbers of employees have been less than planned, but are still quite large.

⁹ Actually due to incredibly bad timing and miscommunication, the assessments at Hill-Rom were accidentally deleted and permanently lost from a computer's hard drive. The assessments were re-offered, but fewer individuals took them than in the original case.

As noted, over 400 employees have been assessed with a CASAS instrument and completed baseline surveys for the evaluator. Because of an incredibly unlucky set of circumstances, the assessment data were irretrievably lost at one of the companies, so a second assessment was done. Individual plans were developed for each employee who was assessed, and individual conferences were held to help the employees understand the results of the assessment and the planned training regimen.

Digital literacy training has begun, which means that the logistics of hiring instructors and setting up times and places have been accomplished. The project is using the Aries curriculum, and is training for the Living Online certification. The project staff indicated that they had some difficulty in finding qualified instructors for the computer training, but were quite happy with the individuals they eventually hired. In addition to the computer training, curriculum development work has been done for math and reading.

The employers who were interviewed were strongly supportive of the program. They projected significant personal development benefits for their employees, which they presumed would be translated into on-the-job productivity improvements.

Barriers/Issues

The project has encountered significant issues with both the reading and math literacy “half” of the project and the digital literacy “half.” Although the assessments were completed by the time of the site visit so that we didn’t really get a first hand look, we suspect that it took considerable time and effort to get them arranged. The logistics of arranging for sites with the computer and online facilities necessary had to be accomplished. The employers had to make the decision to allow the assessments to be done on company time, and appropriate communications had to go to the employees. After making all of these arrangements, the project ran into the IT problem at one of the companies that caused the loss of over 200 assessments and the need to conduct a second assessment. Finally after all of this investment in time and resources, the project “discovered” that the CASAS assessment test is more of a locator, and is not valid as a baseline for learning gains.

An issue that has arisen, although probably more of a positive than a negative, is the overall results from the assessments. The project had anticipated that most of the employees would require math or reading training in order to qualify for the certification, but in fact, the largest share tested on the assessment at the “gold” level. Table 1 summarizes the results of the assessments. Note that the scores on the math assessment

Table 1
Assessment Results, by Firm

Firm/Test	< Bronze (<210)	Bronze [210, 225]	Silver [226,245]	Gold (> 245)	TOTAL
Cook/Math	4	31	49	19	103
/Reading	0	2	44	57	103
Bos. Sci./M	3	27	96	32	158
/Read.	0	0	49	109	158
H-R/Math	1	22	100	31	154
/Read.	0	1	46	105	152
TOTAL/M	8	80	245	82	415
/Read.	0	3	139	271	413

results were not as high as on the reading assessment, but still almost 80 percent of all the employees assessed were at the silver or gold level in Math. For reading, 99 percent of the employees were at the silver or gold level—66 percent were at the gold level. This implies that fewer participants will be requiring the reading or math training.

The digital literacy, or computer training, issue that the project has encountered has been some initial concerns on the part of employees about the relevance and difficulty of the class. Employees were quite enthusiastic about the availability of this training and a sizeable number signed up. In a telling comment, the employer representative said that more people signed up for the IC3 training than come to company picnics or other “fun, social” events. However, many employees felt that the pace of the class was too rapid and/or the content was too technical. The project decided to have students work toward Living Online certification first, but this is the last portion of the Aries curriculum. Students, already frustrated by the pace or content of the class, wanted to know why they were being started at the end of the training material. All eight employees who were interviewed had low opinions of the book that was being used.

A difficulty that arises at a program with multiple employers is that it is hard to customize the curriculum. The employers involved in this project are competitors and so the strategy that is being used is to develop generic material that pertains to the industry, but is not specific to any one firm.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date. The respondents said that Terri Schulz had been very supportive. They appreciated the atmosphere of “learning together,”

although they wished they had known in advance that the CASAS assessment was not useful as a baseline score for learning gains, and that there is no reasonable assessment tool for IC3.

One of the respondents indicated that they were especially pleased with how the DWD was willing to “shake things up” in the Indiana economy. The context of this remark was that too many folks were complacent with the state’s economy, and that it was the belief of this individual that innovations from the state government such as the 21st Century Workplace Skills demonstration were necessary to kick-start economic growth.

Evaluation

The Critical Skills project of the IHIF is a highly professional endeavor. For a program that virtually started from scratch, it has made a lot of progress in a short amount of time. The size and scope of the project has not reached what was proposed, but is sizeable nevertheless. In the initial months of the project, it has conducted CASAS assessments for over 400 individuals (actually almost 500 if one counts the first assessment at Hill-Rom). It has developed individualized plans for each employee who was assessed and conducted an individual conference with each. We have appended a copy of a blank plan to this report.

After getting the project up and running and conducting the assessments and individual planning, it seems like the project is just getting to the essence of the activity—providing training that will lead to certification. Computer training was just getting underway and math and reading are not far behind it.

The project has already contributed two important findings. First, the relatively high achievement on the CASAS assessment begs the questions of whether the basic skills levels of incumbent workers are as low as was hypothesized at the beginning of the demonstration and consequently whether the CASAS assessments are the appropriate set of tools on which to base the certificates. Second, the high take-up rates of the computer training indicates the high level of interest on the part of employees, but the struggles that the employees reports at least at the initial stages of IC3 training may suggest that a different curriculum or certification may be appropriate.

The bottom line is that, to date, this program is successfully traversing the early stages of its learning curve. It is easy to picture a thriving training enterprise in a few months with a full complement of classes and many participants upgrading their skills and knowledge. That outcome will, of course, depend on participants continuing their interest in their own personal development and experiencing success in their courses. And the Critical Skills program will need to develop appropriate curriculums and to staff the courses with excellent adult educators. Extrapolating from the early months’ experiences at the program suggests that it will achieve those outcomes, and that this program will become one of the exemplars for future expansion of the 21st Century Workplace Certification program.

Appendix: Individual Plan Documents



Individual Plan

Participant:	
Company:	
Contact Information:	
Shift Worked:	
Assessment Date:	
Math Raw Score:	
Math Scale Score:	
Reading Raw Score:	
Reading Scale Score:	
Goals:	
Certificate Desired:	
Training Desired:	
Available Training Days:	
Available Training Hours:	
Peer Mentor?:	
Math Pre-Test Score:	
Math Post-Test Score:	
Reading Pre-Test Score:	
Reading Post-Test Score:	
IC3 Living On Line:	
IC3 Key Applications:	
IC3 Computing Fundamentals:	



Participant:	
Company:	
Training Selected:	
Instructor:	
Participation Hours:	
Instructor Comments:	
Training Selected:	
Instructor:	
Participation Hours:	
Instructor Comments:	
Training Selected:	
Instructor:	
Participation Hours:	
Instructor Comments:	
Training Selected:	
Instructor:	
Participation Hours:	
Instructor Comments:	
Training Selected:	
Instructor:	
Participation Hours:	
Instructor Comments:	
Training Selected:	
Instructor:	
Participation Hours:	
Instructor Comments:	
Training Selected:	
Instructor:	
Participation Hours:	
Instructor Comments:	

Site Visit Report

Indiana Health Industry Forum

Date of Visit: August 7, 2007

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to Boston Scientific, in Spencer, IN, one of the participating companies in the Indiana Health Industry Forum (IHIF) workplace skills initiative Critical Skills. Dr. Hollenbeck interviewed the initiative's program manager, Dr. B. J. Bischoff; interviewed an IC3 instructor; interviewed four employees who had participated in IC3 training; interviewed two supervisors, and interviewed a representative of the participating company that was visited. This was the second site visit to one of the IHIF program's companies. The first site visit took place on December 13, 2006, and included a visit to Hill-Rom, in Batesville. Note that Ms. Terri Schulz, from the Indiana Department of Workforce Development, and Mr. Michael Brooks, Executive Director of IHIF, accompanied Dr. Hollenbeck. All together, the following individuals were interviewed:

Dr. B. J. Bischoff, Owner, Bischoff Performance Improvement Consulting, Indianapolis
Ms. Nora Vanderploeg, HR Consultant, Boston Scientific, Spencer
Ms. Debby Newforth, Senior Skills Trainer, Boston Scientific, Spencer
Ms. Christie Scott, ACE in VI (production area), Boston Scientific, Spencer
Mr. Darryl White, Supervisor, Shared Services, Boston Scientific, Spencer
Lisa, Allan, Stephanie, and Dianna, Boston Scientific employees

Background

The Indiana Health Industry Forum (IHIF) is a small, not-for-profit, private sector membership organization. Its goals are to advance Indiana's health-related businesses and contribute to the economic development success of the state. Its members represent a private/public alliance of manufacturers, suppliers, educational institutions, health care providers, service providers, and government. In its umbrella role, the organization serves as a clearinghouse and broker of resources and information, as well as a spokesman on issues facing the industry.

IHIF has only two staff persons, so the organization leverages its operations through collaboration and partnerships. Dr. Bischoff, who had worked with IHIF on a prior project, brought the 21st Century Workplace Skills Initiative to the IHIF Executive Director Mike Brooks' attention. Together, IHIF and Dr. Bischoff fashioned the Critical Skills project, which is a Type 2 multi-company project with three health care equipment manufacturers as partners.

Training Description

The Critical Skills project assessed the basic skills of a large number of employees at the three companies and developed an Individual Critical Skills Plan for all of them. In particular, the number of assessments done at Boston Scientific, Hill-Rom, and Cook Urological were 158, 153, and 103, respectively. Note that 240 employees at Hill-Rom had been assessed prior to the accidental deletion of computer records. The assessments were voluntary at Boston Scientific and Hill-Rom, but they were mandatory for employees hired within the last 18 months for Cook. The employees were, however, paid for their time to complete the assessment (and re-assessment at Hill-Rom) at all three companies.

In addition to preparing the Individual Critical Skills Plan for all individuals who were assessed, project staff conferenced with all 415 employees on an individual basis. Because the math and reading appraisal scores were so high, the project mainly focused on providing IC3 computer training to the employees who volunteered. At Boston Scientific (and we believe at the other two companies), this training was offered one time a week for two hours. The training began in late 2006 and was just finishing up for the individuals who participated in the training for all three modules: Living Online, Computing Fundamentals, and Key Applications. Note that the training was taken on the employees' own time. The training took place on site for Hill-Rom and Boston Scientific, and was held in a nearby high school for Cook. The project started out using the ARIES curriculum, but based on the objections of both instructors and program participants, the project jettisoned ARIES and relied on customized materials that the instructors developed based on Certiport's Mentor materials.

Reading, math, critical thinking, and problem-solving training was offered to individuals whose assessments suggested the need. One section was offered at Boston Scientific and one at Hill-Rom. The Hill-Rom class had 32 participants, and the Boston-Scientific class had 5 participants. The project staff developed customized curricula using materials from Aztec for this training, which was offered weekly, although the actual time in class varied by the needs of the participants. As with the computer literacy classes, the basic skills training was unpaid.

Accomplishments to Date

The project is almost at its end. IC3 certification preparation and testing has almost been completed. One "graduation" ceremony has been held at Hill-Rom, and another one is planned to be held in the very near future at Boston Scientific. Several dozen participants have been awarded Gold, Silver, or Bronze certificates that reflect several months of training effort, especially in the area of computer literacy. The fact that the project is almost at its end should not be minimized. The employees at Boston Scientific who were interviewed pointed out that they had been in training on a weekly basis for over eight months. That means that the Critical Skills project has been responsible for the administration of the training for that period of time - - employing instructors, arranging for testing, keeping track of recordkeeping, interacting with employers, and so forth.

This project has been ambitious in scale since its start, but it faced a constraint that seriously limited its reach. The companies did not pay the employees while they were being trained; rather it was voluntary (after the appraisal test, for which workers were compensated for their time). This constraint had two impacts. It reduced considerably the number of workers who were willing to participate in the training, and it likely meant that only the most motivated workers would participate. At Boston Scientific, 158 workers were appraised, but only 68 were post-tested. At Hill-Rom, 153 were appraised and 94 were tested. At Cook, 103 were appraised and 7 were tested.

In addition to the drop-off in the number of participants, there has also seemingly been a drop-off in employer commitment. When the project started, all three employers were committed strongly to it. Over time, however, apparently the interest of one of the employer partners has waned. The other two companies have been consistent in their commitment, though.

All in all, the data that were supplied to us about participation and certificate earning were as follows:

Company	Number of Tests Taken											
	Appraisal		Pre-tests		CASAS		IC3					
	Reading	Math	Reading	Math	Prob. Solv.	Crit. Think.	LOL		CF		KA	
							Pass	Fail	Pass	Fail	Pass	Fail
Boston Scientific	158	158	68	69	—	—	44	28	16	9	31	6
Cook	103	103	7	7	—	—	12	12	15	1	15	4
Hill-Rom	153*	153*	94	94	24	24	62	26	46	0	53	4

Company	Number of Certificates		
	Gold	Silver	Bronze
Hill-Rom	19	40	50

*240 in original appraisal

There are several things to note about these data. First, individuals' time was reimbursed for the appraisals and the companies strongly supported them¹⁰. At Cook, the appraisals were mandatory for all individuals who were recently hired. On the other hand, the IC3 training and pre-tests were voluntary and were on the employees' own time. Thus there was a considerable decrease in the number of individuals pre-tested or tested for IC3 certification compared to the number of appraisals.

The counts of pass or fail in the IC3 certification columns use individuals' best scores, not all of their scores. That is, if an individual failed Living Online twice and then passed it, they would be included only in the pass column. It is probably not appropriate to try to compare the passing rates for the three different IC3 certification tests because Living Online was given first,

¹⁰ Note that because of the accidental loss of data, the appraisals were given to Hill-Rom employees twice. The initial test offering had 240 individuals appraised, whereas the re-take had 153 individuals.

and it may be the case that individuals who did not pass that certification self-selected not to proceed to the other courses or were asked not to take those courses.

Barriers/Issues

The Critical Skills project staff provided us with a copy of a summary of a feedback session that they had held with Boston Scientific representatives prior to the site visit. Not surprisingly, since the project had mainly evolved into an IC3 preparation training course, most of the feedback dealt with IT issues and the relevance of IC3 certification. Because of the stringent FDA requirements that the company must follow as a manufacturer of medical equipment, Boston Scientific tightly controls its computing environment. Some of these controls inhibited the IC3 instruction and training. For example, many employees don't have company-issued e-mail addresses. Furthermore, employees had different levels of access to the Internet. Finally, the company had specific security protocols. These issues, and others, required IT support that was not expected at the beginning of the project. In general, the company felt that the training would have been far more smoothly accommodated if it had had more information at the beginning of the training.

Whereas the company felt that they had gotten some very positive outcomes from its partnership, it questioned the relevance of the IC3 certification tests for many of its workers. The company was very appreciative of how responsive the Critical Skills staff had been to the company's constraints and schedules. Furthermore, Boston Scientific was pleased about how energized workers had become about furthering their education and about the high test scores of the employees. However, in terms of the content of the digital literacy instruction, the company representatives felt that it was more technical than what they thought they were getting into. And they felt that there should be a pre-test to determine participants' skill level prior to the class, so that some instruction could be tailored to individuals who were extreme novices.

We found very little evidence of customization in the training at this site. We pointed out in our first report that one difficulty that arises at a program with multiple employers is that it is hard to accomplish customization of the curriculum, especially when the participating employers are competitors. So the strategy that is being used is to develop generic materials that pertain to the industry, but are not specific to any one firm.

Evaluation

The Critical Skills project of the IHIF is a highly professional endeavor. A lot of care and concern has obviously been invested in virtually every aspect of the project - - appraisals followed by individualized consultations, high quality instructors, regular communication with the companies, record keeping, and curriculum development to name a few. From our viewpoint, an unfortunate characteristic of the project that, of course, was not anything that the Critical Skills staff could control, was the fact that the training participants were not compensated for their time. This led to a severe decline in the number of participants compared to the number of individuals who "volunteered" for the appraisal. Furthermore, the individuals

who self-selected into the training tended to be the individuals who scored highest on the appraisals. A fairly minimal amount of basic skills training was done.

Several important lessons have been learned from the Critical Skills project. First, employees are interested in and willing to devote a considerable amount of time and energy in their own formal professional development. The Boston Scientific company representatives noted that their employees were energized about their own education. Second, the project has shown that a general computer training course can be offered successfully in a secure manufacturing environment. However it requires IT staff cooperation and as much advanced planning as possible. Third, the heterogeneity of the staff in terms of computer skills starkly showed the importance of enhancing the basic skills of novices. Furthermore, the project started the computer training with the idea of using the ARIES curriculum, but found that it was particularly ill-fitting to the needs of the employer. So the project went to plan B, which was to use materials based on Certiport's Mentor. These materials worked far better than ARIES.

Site Visit Report

Vincennes University—Aisin U.S.A. Mfg., Inc.

Date of Visit: September 13, 2006

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the workplace literacy program at Aisin U.S.A. Mfg., Inc. in Seymour, Indiana. He observed the workplace literacy class, interviewed the instructor, who also operates as a site manager for Vincennes University, interviewed two representatives from the employer, and interviewed 10 participants in the training program. Note that Ms. Terri Schulz, from Indiana Department of Workforce Development accompanied Dr. Hollenbeck. Bridget Timmeney conducted a telephone interview with Mark Scott, who is the cognizant individual at Vincennes University. All together, the following individuals were interviewed:

Mr. Howard Wills, President, Workplace Training Associates, Inc.,
Nashville, IN
Ms. Julie Bullard, Vice President, Human Relations, Aisin, Inc.
Ms. Lana Coverdale, Training Specialist, Aisin, Inc.
David, Holly, Kathy, Billy, Arlinda, Darlene, Mark, Christine, Paul, and
Stephanie, employees of Aisin, Inc. and participants in class
Mr. Mark Scott, Director, Statewide Business and Industry Training,
Vincennes University (interviewed by telephone on September 19,
2006)

Background

Aisin U.S.A. Mfg, Inc. is a first-tier automotive supplier located in Seymour, Indiana. This plant makes door frames, moldings, and seat assemblies. Its main customer is Toyota Motors, but it also sells to Honda, NUMI, Mitsubishi, and Nissan according to an individual who guided us through the plant. The company is less than 20 years old. It was established by its parent company, Aisin Seiki Co., Ltd., in July 1988. We were told that Aisin U.S.A. Mfg., Inc. employs approximately 1,800 individuals in two plants in Seymour, and it has a third smaller manufacturing plant in Marion, Illinois.

Aisin U.S.A. Mfg., Inc. is a strong believer in training and using education to improve workers' skills. Ms. Bullard said, "We'll support just about any class that affects worker productivity." The firm's involvement in the 21st Century Workplace Skills Initiative was a natural outgrowth of a previous effort in which workers could pursue their GED on site. An individual named Rick Streepy had spearheaded the GED preparation effort. Mr. Streepy hired Howard Willis to be an instructor for the GED program because he needed a certified high school instructor.

When the 21st Century Workplace Skills grant opportunity came along, Aisin was interested in pursuing it, and they worked with Howard on the application, which of course was successful. In fact, Howard developed the application, with input from company staff. Vincennes University had provided specific skill training—tool and die making and press operator—to Aisin employees in previous efforts.

Training Description

The training curriculum that was proposed in the grant application was quite specific. Two groups of employees (12 – 14 individuals in each group) are scheduled to be trained. Each group would receive 80 hours of instruction that will comprise basic reading/computer literacy (30 hours); math (20); communication (14); and problem solving (16). The training that is being delivered seems to fit within this general framework, but respondents indicated that the training is highly individualized, and the group tends to self-direct the subjects that are covered.

The training takes place two afternoons per week from 3:00 to 5:00 pm, so that both first and second shift employees may participate. It takes place on site in a partitioned corner of a conference room that has been furnished as a classroom with computers at each learning station and instructional equipment at the front of the room. The facility seems quite adequate, although when the class was observed, the noise from other activities going on in the remainder of the conference room was somewhat distracting.

The instructor seems to have established a great relationship with the class participants. He has a very easygoing manner, and seems very adept at individualizing the instruction. One of the participants interviewed who was an extremely shy individual indicated that she appreciated the way that Howard got everyone, including herself, to participate during class. (Among his techniques is calling on someone, and then having that person select the next presenter, who will select the next presenter, and so on.)

In order to contextualize the instruction, Howard was using the plant's policy manual for reading and communication. During the classroom observation, we saw participants parsing sentences from that manual that were extremely long, legalistic, and sometimes obtuse. As part of the math training, the participants had been given calculators, which they very much appreciated. An interesting anecdote that we heard was that a supervisor who is participating in the class to brush up on reading and math skills came upon a company policy that he was able to use to solve a personnel problem in his unit.

Accomplishments to Date

Although still fairly early in the grant, this program seems to be on track. Its first group of participants is perhaps a quarter of the way into their instruction. The students have been pre-assessed, have had some introduction to computers, and seem to be seriously engaged in learning. The firm seems to be fully supportive of the class, and is paying the workers their straight-time wages during class-time.

We were particularly struck by how motivated the participants at this site seemed to be. For example, one of the individuals interviewed had five children at home. Because of heavy production demands, her shift at work often began early at 5:00 am instead of 7:00am, and yet she stayed at work to attend class two days a week. Many of the other participants were similarly working very long days, but still staying engaged fully in their training.

Barriers/Issues

As just discussed, family issues may strain some of the participants. In particular, attendance has been affected on a couple of occasions for child care reasons. Another constraint that was mentioned was production/job responsibilities. On occasion, work demands affected the attendance of some of the group. This is apparently especially a problem for maintenance staff, a relatively small number of highly specialized staff who must respond to problems whenever they arise. One of the training participants opined that it may be difficult for second shift workers to get to the training.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date. Respondents indicated that communications had been timely and clear, and all technical assistance activities had been useful.

Evaluation

Training is well under way, and the adult learners are enthusiastic about the opportunity they have been afforded. They report that they are having fun, participating actively, and learning. Despite long shifts, they are staying at work for the two hours of class two days a week.

Especially noteworthy at this site is the interaction between the participants and instructor. An excellent rapport seems to have been forged in a relatively short period of time. Most of the participants appreciated his low-key style, which they characterized as “not like school.”

We got the impression that the employer (probably realistically) had little expectations of a direct influence of the training program on worker productivity or profitability. The training was seen as a morale booster and potential benefit for employees that will likely have an indirect positive influence on their job performance.

Howard’s goal for the program is to raise achievement by a grade level in the 80 hours of instruction with each group. We had a few concerns or unanswered questions following the

visit: (1) Given the unstructured, nonlinear instructional approach, will all of the subject material get covered? (2) Given the extreme heterogeneity in computer skills, how will the instruction be handled to bring the least technology literate students up to a level to become IC3 certified while still keeping the individuals who are highly facile with computers engaged? (3) Will the employer or the students find a way to sustain the learning that is occurring after their group has been through the grant's training program?

All in all, this program seems to be accomplishing the goals and objectives set out by DWD in the grant initiative. Solid adult education and technology training is being provided to incumbent workers. Even though we had a brief introduction to Howard, we are convinced that he will be able to successfully address the first two concerns noted above. Given the firm's apparent commitment to the education and training of all workers, we suspect that it will sustain the education and training if at all possible.

Site Visit Report

Vincennes University—Aisin U.S.A. Mfg., Inc.

Date of Visit: June 25, 2007

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the Industrial Skills (workplace literacy) class at Aisin U.S.A. Mfg., Inc. in Seymour, Indiana. This was the second site visit to Aisin; the first occurred on September 13, 2006. He observed the workplace literacy class, interviewed Howard Wills, the site manager for Vincennes University, who also is the instructor for the program, interviewed a representative of the employer, interviewed a supervisor, and conducted a focus group with four participants in the training program. All together, the following individuals were interviewed:

Mr. Howard Wills, President, Workplace Training Associates, Inc., Nashville, IN,
Site Manager for Vincennes University and Instructor
Ms. Lana Coverdale, Training Specialist, Aisin, Inc.
Mr. Rick Amers, Shoku-Cho (Supervisor), Body Department, Aisin, Inc.
Mona, Donnie, Earl, and Wes, employees of Aisin, Inc. and participants in class

In addition to the interviews, project staff reviewed a formal status report provided by Mr. Wills. This report had a considerable amount of evaluative data from the first class of participants in the Aisin program.

Background

Aisin U.S.A. Mfg, Inc. is a first-tier automotive supplier located in Seymour, Indiana. This plant makes door frames, moldings, and seat assemblies. Its main customer is Toyota Motors, but it also sells to Honda, NUMI, Mitsubishi, and Nissan. The company is less than 20 years old. It was established by its parent company, Aisin Seiki Co., Ltd., in July 1988. We were told that Aisin U.S.A. Mfg., Inc. employs approximately 1,800 individuals in two plants in Seymour, and it has a third smaller manufacturing plant in Marion, Illinois.

Aisin U.S.A. Mfg., Inc. is a strong believer in training and using education to improve workers' skills. In January of this year, the company moved the training functions out of the human resources department into a separate training department, which was a demonstration of its importance to the firm. The firm's involvement in the 21st Century Workplace Skills Initiative was a natural outgrowth of a previous effort in which workers could pursue their GED on site. When the 21st Century Workplace Skills grant opportunity came along, Aisin was interested in pursuing it, and the company worked with Howard on the successful application.

Aisin is very pleased with the training program, and intends to continue it in its present format over the next 24 months if the company is successful in its application for a Training Acceleration Grant (TAG) with DWD.

Training Description

The training curriculum that was proposed in the grant application was quite specific. Two groups of employees (up to 15 individuals in each group) were scheduled to be trained. Each group would receive 80 hours of instruction comprised of basic reading/computer literacy (30 hours); math (20); communication (14); and problem solving (16). The training that is being delivered seems to fit within this general framework, but respondents indicated that the training is highly individualized, and the group tends to self-direct the subjects that are covered. Our initial site visit took place during the first one-third of the first group's class; whereas the second site visit took place at the end of the second group's. Our impression is that the first group spent more time on technical reading and communication than the second group. The latter spent more time on problem solving and computer literacy.

The training takes place two afternoons per week from 3:00 to 5:00 pm, so that both first and second shift employees may participate. During this site visit, we learned that the class even attracts individuals from the third shift, who come in during their off hours to participate. The firm seems to be fully supportive of the class, and is paying the workers their straight-time wages during class-time.

The training takes place on site in a partitioned corner of a conference room that has been furnished as a classroom with computers at each learning station and instructional equipment at the front of the room. The facility seems quite adequate, although when the class was observed, the noise from other activities going on in the remainder of the conference room was somewhat distracting. The participants indicated that they had often been distracted during class, as well.

The instructor seems to have established a great relationship with the class participants. He has a very easygoing manner, and seems very adept at individualizing the instruction.

Howard also works hard at contextualizing the instruction. During our first site visit, he was using the plant's policy manual for reading and communication instruction. During this site visit, we learned about a problem solving exercise that all of the participants in the class had conducted. They were given the assignment of "studying" their work area and processes, and finding a suggestion about how efficiencies might be gained. Apparently, the plant's production manager attended class presentations on their projects and was quite impressed with all of them. Some of the suggestions showed substantially large potential cost savings.

Accomplishments

Basically, this grant has been successfully completed. In the first group of trainees, 14 individuals started the class, and 12 completed it. In the second group, 17 started and 15 were going to finish. In this latter group, one of the non-completers had been terminated from his job; and the other dropped out. Howard indicated that this individual seemed to want to avoid the assessments.

The firm is extremely pleased with the training program, and is committed to continuing it for many of its other employees. Outcomes that the firm has observed include much better communications and attitudes of the workers who participated. Furthermore, the firm is very proud of its recent accomplishment of four straight months with 100 percent on-time delivery. The respondent from the firm indicated that she realized that this accomplishment could not be ascribed totally to the training program, but she felt that it had contributed to the feat.

The participants who were interviewed were highly complimentary toward all aspects of the training. They felt that their work skills had been sharpened, especially in the areas of communication, math, and problem solving. Furthermore, they were proud of earning four college credits at Vincennes.

Barriers/Issues

No barrier or issue was thought to be a significant impediment for individuals who participated in the class. However, the commitment of twice a week training for almost a six month period was noted as a significant commitment of time. This may have been an issue for other workers who did not volunteer for the class.

Class attendance was reported to have been 90 percent or more. On occasion, work demands affected the attendance of some members of the group. However, the participants and the supervisor who was interviewed indicated that there was considerable support for the training across the firm, so work schedule issues were usually resolved.

Evaluation

This program seemed to have been a win-win. The adult learners were enthusiastic about the opportunity they had been afforded. They reported having fun, participating actively, and learning. Despite long shifts during the work day and despite the six month commitment to complete the class, the participants regularly attended the two hours of class two days a week.

The employer also felt like a winner. An interesting transition had occurred between our first and second site visits. During the first visit, we got the impression that the employer had low expectations for a direct influence of the training program on worker productivity or firm profitability. The training was seen as a morale booster and potential benefit for employees that will likely have an indirect positive influence on their job performance. During the second visit, we heard more often about “bottom-line” impacts – the on-time delivery accomplishment and the cost-savings that students had discovered in the course of doing their projects.

In short, we think that this program was excellent. Perhaps its only weakness is that the 80-hour curriculum that was proposed and that was, for the most part, followed, underestimated the amount of instructional time required to get students prepared for IC3 certification. Furthermore, Howard was not experienced with IC3 prior to the 21st Century Workplace Skills demonstrations, and it has taken him some time to get the appropriate hardware and software set-

up. Some individuals in the second group at Aisin may, nevertheless, get IC3 certified in Living Online, but these individuals had high baseline skills in computers.¹¹

The lack of wide-scale IC3 certification will limit the number of participants who will get DWD certificates. However, the participants were far more motivated by their own learning and potential for advancement as well as the college credits that they will earn. And the firm was quite pleased with its bottom-line results. Aisin clearly wants to sustain the training program as it has been delivered and is virtually committed to two groups starting instruction in July or August.

¹¹ Note that Howard reviewed this report, and informed us that since our visit, six persons have passed the “Living On Line” component, and one person has passed the “Living on Line” and “Computing Fundamentals.”

Site Visit Report

Vincennes University—Wishard Health Services, Inc.

Date of Visit: September 14, 2006

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the workplace literacy program at Wishard Health Services, Inc. in Indianapolis, Indiana. He observed the workplace literacy class, interviewed the instructor, who also operates as a site manager for Vincennes University, interviewed an employer representative, and interviewed six participants in the training program. Bridget Timmeney conducted a telephone interview with Mark Scott, who is the cognizant individual at Vincennes University. All together, the following individuals were interviewed:

Mr. Howard Wills, President, Workplace Training Associates, Inc.,
Nashville, IN

Ms. McChelle Callen, Director of Employee Development, Wishard Health
Services, Inc.

Eunice, Christy, Faye, Cynthia, Frankie, and Paula, employees of Wishard and
participants in class

Mr. Mark Scott, Director, Statewide Business and Industry Training,
Vincennes University (interviewed by telephone on September 19,
2006)

Background

Wishard Health Services is a medium-sized hospital that operates a 300+ bed facility in downtown Indianapolis. It is a public hospital, affiliated with the Indiana University School of Medicine, that has a special focus on low-income patients. Over 85 percent of its patients are covered by Medicare, Medicaid, or uninsured. This focus forces the hospital to be extremely cost-conscious given the well-known payment limitations of the Medicare and Medicaid programs.

Wishard has a long, storied history dating back to the 1850s. It opened in 1859 as City Hospital mainly to treat a smallpox epidemic and then as a Civil War military hospital. Its history reflects emphases on education and social services. It instituted a school of nursing in the 1880s and established a Social Services Department in 1918. City Hospital was renamed Indianapolis General Hospital in 1947, and then was renamed Wishard Memorial Hospital in 1975. The IU School of Medicine affiliation began in 1984.

Over the past few years, Wishard has had a human resources objective of “grow our own,” and “churn over instead of turn over,” implying that the corporation wanted to establish effective career paths for its employees. It has a tuition reimbursement program, and it engaged in a program with Ivy Tech to encourage employees to pursue additional postsecondary

education, but it had employees who were not capable of passing the entrance test to qualify for the Ivy Tech classes.

The hospital established an education department (The Wishard Institute for Employee Development) apart from its human resources department earlier this year. The 21st Century Workplace Skills Initiative fit in very nicely with the hospital's desire to provide career growth opportunities for all of its employees, and was a good project for the new department. The organization learned about the grant opportunity through the hospital's parent corporation, Health and Hospital Corporation of Marion County. That entity interacts actively with the Indianapolis Private Industry Council (IPIC), and Howard Willis was on IPIC's list of training vendors. Howard developed the application, with input from the hospital staff, and he made the connection to Vincennes University.

Training Description

The training curriculum that was proposed in the grant application was quite specific. Two groups of employees are scheduled to be trained. Each group would receive 80 hours of instruction that will comprise basic reading/computer literacy (30 hours); math (20); communication (14); and problem solving (16). The training that is being delivered seems to fit within this general framework, but respondents indicated that the training is highly individualized, and the group tends to self-direct the subjects that are covered.

The training takes place two afternoons per week from 1:30 to 3:30pm, so that both first and second shift employees may participate. It takes place in a very small room that has been furnished with computers; however the computers have not yet been connected online due to a technical problem. They anticipate having Internet access soon. The computers were loaned to the program by IPIC. Nine individuals participate in the program—all female. The facility could not handle more, and is extremely cramped with nine. In short, the facility is barely adequate.

The instructor seems to have established a great relationship with the class participants. He has a very easygoing manner, and seems very adept at individualizing the instruction. In order to contextualize the instruction, Howard was using the hospital's employee policy manual for reading and communication. During the classroom observation, we saw participants parsing sentences from that manual.

Accomplishments to Date

Although still fairly early in the grant, this program seems to be on track. Its first group of participants is making progress on their instruction. The students have been working on reading and communication, with a little bit of math thrown in. All participants seem to be quite serious about their learning. The firm seems to be fully supportive of the class, and is paying the workers their straight-time wages during class-time.

Although the class-size was small (or maybe because the class-size was small), we were struck by the extreme heterogeneity in ability. At one extreme, one of the students was extremely low functioning and at the other extreme, one of the students had a college degree, but was participating because English is not her native language. Presumably this heterogeneity will require considerable individualization in the instruction, and during our brief observation of the class, we saw quite different levels of one-on-one instruction.

Barriers/Issues

The only issue that was raised by any of the participants in terms of constraints that might limit their participation was transportation. Some of the participants come from other buildings, and they were concerned about being tardy because of transportation hassles. This seemed to be a fairly minor issue.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date. Respondents indicated that communications had been timely and clear, and all technical assistance activities had been useful.

Evaluation

Training is well under way, and the adult learners are enthusiastic about the opportunity they have been afforded. One of the participants who was interviewed indicated that other workers in her unit were “jealous” of her opportunity, and were hoping to get into the second group of trainees slated to start after the 1st of the year.

Noteworthy at this site is the interaction between the participants and instructor. An excellent rapport between Howard and the nine participants seems to have been forged in a relatively short period of time. Most of the participants appreciated his low-key style, which they characterized as “not like school.” The participants also mentioned that an unanticipated benefit to the training was the way that the nine of them supported each other, despite not knowing each other prior to the training program.

A couple of concerns that we had following the site visit were whether the technology instruction (IC3) would get accomplished and how the overall effectiveness of the program would be impacted by the extreme heterogeneity in skill levels that we perceived. Our concern about the technology piece emanates from the fact that there was a late start in getting Internet access and from the fact that none of the participants who were interviewed felt that computer literacy was an important skill to accomplish their jobs. This lack of urgency about the need for computer skills was incongruent with information that the employer supplied that indicated that the entire hospital was adopting an online system in January 2007.

All in all, this program seems to be on a positive trajectory. Although constrained by facilities and equipment, the program does seem to be delivering instruction that is appropriate for the participants. The participants are seriously engaged, and very appreciative of the opportunity to participate. Given the hospital's commitment to "growing their own," we suspect that it will find a way to get the technology hooked up to the Internet in the short-run to sustain the education and training for its employees in the long-run.

Site Visit Report

Vincennes University—Wishard Health Services, Inc.

Date of Visit: May 29, 2007

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the workplace literacy program at Wishard Health Services, Inc. in Indianapolis, Indiana on May 29, 2007. This was the second site visit to Wishard; the first occurred on September 14, 2006. During this visit, we observed the workplace literacy class, interviewed the instructor, who also operates as a site manager for Vincennes University, interviewed an employer representative, interviewed a supervisor, and interviewed four participants in the training program. All together, the following individuals were interviewed:

Mr. Howard Wills, President, Workplace Training Associates, Inc.,
Nashville, IN, instructor and site manager for Vincennes University
Ms. McChelle Callen, Director of Employee Development, Wishard Health
Services, Inc.
Ms. JoAnn Pardue, Director, Environmental Services, Wishard Health Services,
Inc.
Marcia, Tony, Oartel, and William, employees of Wishard and participants in
class

In addition to the interviews, project staff reviewed a formal status report provided by Mr. Wills. This report had a considerable amount of evaluative data from the first class of participants in the Wishard program.

Background

Wishard Health Services is a medium-sized hospital that operates a 300+ bed facility in downtown Indianapolis. It is a public hospital affiliated with the Indiana University School of Medicine that has a special focus on low-income patients. Over 85 percent of its patients are covered by Medicare or Medicaid, or are uninsured. This focus forces the hospital to be extremely cost-conscious given the well-known payment limitations of the Medicare and Medicaid programs.

Over the past few years, Wishard has had a human resources objective of “grow our own,” and “churn over instead of turn over,” implying that the corporation wants to establish effective career paths for its employees. The hospital established an education department (The Wishard Institute for Employee Development) apart from its human resources department in 2006. The 21st Century Workplace Skills Initiative fits well with the hospital’s desire to provide career growth opportunities for all of its employees, and was a good project for the new department.

Training Description

The training curriculum that was proposed in the original grant application for this site was quite specific. The initial application indicated that two groups of employees were scheduled to be trained. Each group would receive 80 hours of instruction comprised of basic reading/computer literacy (30 hours); math (20); communication (14); and problem solving (16). Our first site visit took place near the beginning of the training for the first group of students, and this site visit took place near the end of the second group's training. During both visits to Wishard, we observed training class periods, and our impression was that the training being delivered fit the general framework that had been proposed. Respondents indicated that the training is highly individualized, and the group tends to self-direct the subjects that are covered.

The training takes place two afternoons per week for two hours each. It is housed in a very small room that has been furnished with computers. The program needed to deal with a significant delay in getting the computers online during the first group's training; however the computers were reported to be fully functional for the second group. The facility severely constrains the number of participants. It can just barely handle 10 individuals. In the first group, 10 individuals started the training and five completed it. In the second group, 10 individuals started the training, and 7 or 8 are still attending. The retention does not seem to be related to the training; but rather is due to employment separations or terminations. The first group of students was all female students; whereas the second group is virtually 50/50 male and female.

Howard indicated that once the computers became available in the first group, a considerable amount of classroom time was invested in KeyTrain, a self-paced basic skills software tool. This tool did not seem to play a prominent role for the second group, however. We were told that participants could access KeyTrain on their own time if they chose. From this change in emphasis, we infer that KeyTrain was not perceived to be helpful or effective.

Whereas the "theme" of the first group may have been KeyTrain, the "theme" of the second group was GED preparation. The employer, the supervisor, and the participants all referred to the training as a GED prep class. During the class period observation, the students were practicing three paragraph essays that they expected to encounter on the GED test.

The instructor seems to have established a great relationship with the class participants. He has a very easygoing manner, and seems very adept at individualizing the instruction. All of the participants who were interviewed raved about Howard.

Accomplishments

This site is delivering on its promises. The trainer completed an 80 hour training program with one group of participants and has almost completed the program with a second group (it is scheduled to be completed by June 30). The hospital seems to be fully supportive of the class, and is paying the workers their straight-time wages during class-time.

Perhaps the most positive accomplishment of the program has been to instill into the participants self-confidence and a desire to pursue additional learning. Without rigorously analyzing CASAS assessment results, we would hazard a guess that the basic skill levels of the Wishard employees are significantly lower than the average for the entire demonstration. Nevertheless, the employees have embraced the idea of pursuing additional education. The employees felt better about themselves and their prospects. The supervisor of the employees noted more self-confidence and better attitudes in her workers.

In our first site visit, the participants thought that employee interest and participation was limited because it was new and untested. Those participants thought that once the word got out, there would be greater interest and even jealousies about who gets to participate. The supervisor's remarks seemed to substantiate this prediction. She had several employees who were interested in participating. The excitement about and engagement in the program are certainly noteworthy. However, we think that the positive attitudes and self-confidence of the employees plus the "spinning" of the program as GED prep puts added pressure on Wishard to sustain the opportunities for their low-skilled employees.

Barriers/Issues

By and large, there were no major barriers or issues that limited participation by the individuals who were enrolled. The modest facility limited the initial enrollment, but for the individuals who were enrolled, supervisors were supportive and work schedules did not seem to get in the way.

Evaluation

All in all, this program seems to have been successful. Although it has been constrained by facilities and equipment (especially during the first few months of instruction), the program has delivered basic skills instruction appropriate for the participants. The participants were and continue to be seriously engaged, and very appreciative of the opportunity to participate.

Noteworthy at this site has been the interaction between the participants and instructor. An excellent rapport between Howard and the participants seems to have been forged in the relatively short period of time that comprised the class. Most of the participants appreciated his low-key style, which they characterized as "not like school."

After visiting the program a second time, we had a few concerns or issues from which the hospital, instructor, or state can learn. First of all, the digital literacy component (IC3 certification) of the demonstration seemed to have gotten lost. The training program included computer literacy with reading and only allocated a total of 30 hours to these subjects. Other demonstration sites are finding that even with somewhat computer-experienced employees, it is taking almost that long to prepare for a single certification (computing fundamentals, living on line, or key applications). In our first site visit, the employer felt that computer literacy was an

important skill for employees to attain because the entire hospital was going online in January 2007. However, this urgency was not reiterated during the second visit.¹²

A second issue concerns the cost of the program. Because of the facility space limitations and because of employee turnover, perhaps only a dozen employees will complete the program. On a per completer basis, this is over \$4,000. Furthermore, we anticipate that none of the participants will receive a certificate because of a lack of preparation for the IC3 certification.¹³

Finally, the issues of next steps and sustainability need to be seriously addressed by the hospital. The hospital has between one and two dozen employees who are enthusiastic about learning and who have improved attitudes about their jobs and employer. We suspect that despite participating in an excellent program for 80 hours, many of the employees will still not have the skills/knowledge to obtain their GEDs. The Education Institute clearly desires to develop a program to support the further development of the entry-level, lower-skilled employees, but sustainability seems to hinge on grants or other external funding. We did not hear of any strong commitment on the part of the hospital's upper administrative levels.

¹² Howard Wills reviewed this report. He noted that the Wishard Institute will be conducting extensive personal computer (PC) training over the next two years as the hospital moves to a paperless environment.

¹³ Howard further reported that since our site visit, two of the 13 individuals who completed the training passed "Living on Line" and will receive DWD certificates.

Site Visit Report

Center of Workforce Innovations-Ports of Indiana

Date of Visit: August 29, 2006

Activities/Interviewees:

Bridget Timmeney and Kevin Hollenbeck conducted a site visit to the Center of Workforce Innovations (CWI) workplace literacy program at the Ports of Indiana. These two project staff members observed an ESL and IC3 preparation class, interviewed CWI staff, interviewed employers, and interviewed an instructor at the CWI training facility at the Port, and interviewed the President and Vice President of CWI at their main office in Valparaiso. All together, the following individuals were interviewed:

Ms. Linda Woloshansky, President, Center of Workforce Innovations, Valparaiso
Ms. Miche Grant, Vice President, Quality Assurance, Center of Workforce Innovations, Valparaiso
Ms. Sandy Tuman, Workforce Associate and Program Manager, Center of Workforce Innovations
Mr. Perry Liangos, Plant Manager, Feralloy Processing Co.
Mr. Rick Henke, Plant Manager, Indiana Pickling and Processing Co.
Mr. Mark Lewers, Manager, Workforce Certification, Workforce and Economic Development Unit, Ivy Tech Community College, Gary
Mrs. Midge Hutnick, Instructor, Portage Adult Education

Background

The Indiana Port Commission oversees and provides services at three ports: two Ohio River ports at Mount Vernon and Jeffersonville and a Lake Michigan port at Burns Harbor. The latter, the Port of Indiana-Burns Harbor, houses a recently established training facility that is operated by the Center of Workforce Innovations as funded by a 21st Century Workforce Certification grant. Twenty-two companies or organizations operate at this port. The Port Director has facilitated the CWI outreach to the companies, and, to date, a handful of the companies are sending employees to be trained.

The collaboration between CWI and the Port on the 21st Century Workforce grant builds on an established relationship. A few years ago, CWI had received funds from Energize Indiana to provide basic skills programs as part of Governor O'Bannon's Energize Indiana effort. CWI facilitated programs that in turn provided similar occupational classes for many of the Port firms. Thus when the 21st Century Workforce grant came along, it was reasonably straightforward to re-establish the collaboration. Not only did the Port Director support the effort, so did the

International Longshoremen's Association (ILA), which represents many of the workers at the Port.

An interesting aspect of this site's effort is that it engendered an in-kind donation from the Port Authority in the form of a training facility. A small, seldom-used building right at the entrance to the Port has been converted into a training center. It has been equipped sufficiently thus far to offer some training classes, and plans are in place to further rehabilitate the facility. Right now, the training center is open Tuesday, Thursday, and Friday. Sandy Tuman, the project manager, is generally at the site on those days.

Training Description

A hallmark of the training that is going to be offered at this site is that it will integrate basic skills instruction into specific occupational courses. CWI has developed a set of six course offerings that include two basic skills courses and four occupational-specific courses. The basic skills courses include English as a Second Language and IC3—Computers for the Workplace. The occupational courses are Basic Electricity, Oxy-Burning, Basic Hydraulics, and Motor and Motor Controls. At the time of this visit, only the basic skills courses are being delivered.

As of the date of the interview, two sections of English as a Second Language were operational. The instructor is from one of project's partners, the Portage Adult Education Department. The course is 40 hours in length; with two 2-hour sessions per week for 10 weeks. Each session has some group instruction in reading/speaking and some individualized computer assisted instruction. A total of 9 students are enrolled. The sessions are offered in the morning and afternoon, and the instructor is flexible enough to allow students to come to either class depending on their work situations.

The IC3 class is offered in the afternoon in a computer lab that has about 10 work stations. The instructor is from another partner, Ivy Tech, and he is using the Aries curriculum. It is intended to be a 72 hour program.

The project intends to offer the Oxy-Burning class next; followed by the other three occupational classes. The curricula for these classes will be customized from existing Ivy Tech curricula. A feature that the program is offering to participants is that they may earn college credit at Ivy Tech for the Motor and Motor Controls, Basic Electricity, and Basic Hydraulics classes. Any math and reading remediation that is required in the occupational classes will be offered by the Portage Adult Education staff.

Accomplishments to Date

Getting the program off the ground has been a substantial accomplishment. Staff from CWI, particularly Ms. Tuman, has invested a lot of time and energy in outreach activities to the employers and workers. They have done this by developing a number of brochures and flyers to market the program, by making presentations to employers and workers, and by coordinating

efforts with the Port Authority. Their effort seems to have paid off; they report that 10 of the port's employers have agreed to participate.

The refurbishment of the training center and equipping its computer laboratory is also a significant accomplishment. To date, the renovation of the training center has essentially gotten it to a point of acceptable functionality. However, the Port has promised to fund an upgrade that will facilitate even more training. The visibility and proximity of the location to the employers and workers is a critical element in the program's success to date.

But beyond establishing a physical location and getting employers to agree to allow their employees to participate, the program has begun delivering instruction and developing relationships with those participants. The ESL and IC3 computer classes are off the ground. Much work has gone into the design of the Oxy-Burning class, and plans are being made for tailoring the Ivy Tech curricula for the other occupational classes to the Port training environment.

The employers who were interviewed were strongly supportive of the program. They projected significant personal development benefits for their employees, which they presumed would be translated into on-the-job productivity improvements.

Barriers/Issues

This program is a model 2 program, which means that it involves a consortium of employers. This site visit illuminated some difficulties with that model vis-à-vis the single employer programs. Outreach to and communication with employers becomes more complex because there are multiple employers with whom to deal. Different employers will have different levels of commitment to the program. Furthermore, we were told that a situation that has already arisen is that different employers have different policies about compensation for training time. So individuals sitting next to each other in a training course may have different pay arrangements.¹⁴

Another difficulty that arises at a program with multiple employers is that it makes it hard to customize the curriculum. Different employers have differing procedures and tasks. Instructors are likely to ask the participants for workplace examples, but in general such examples may be germane to only one or two individuals.

Also, having participants from multiple employers necessitates a shared facility. This has occurred at the Port, with some success. But it should be recognized that a shared facility like the training center requires additional transportation on the part of the participants, requires more trust from the employers who lose some control over the whereabouts of their employees, and

¹⁴ This situation struck us as potentially affecting the motivation or participation of some trainees. Staff persons from the program did not think that this belonged in a section of the report called "barriers/issues." They noted, "Any educational classes at other locales cannot control the compensation of those attending any program-continuing education anywhere will have the same scenario of varying levels of pay."

requires shared investment in developing the facilities, furnishing equipment, and ongoing maintenance/sustainability.

The final issue that should be mentioned is the current facilities. In a “glass half-filled, half-empty” world, getting the facility off the ground is clearly an accomplishment to celebrate (glass half-full). However, the current facilities clearly constrain the number of individuals who can be trained, and the type of instruction that can be offered (glass half empty).

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date. The employers felt that the program would or should have economic development gains for the state. One of the employers opined that there should be a high tech bias to the training. The program manager indicated that the State has been very helpful in administering the grant to date.

Evaluation

For a program that virtually started from scratch in terms of facilities, curriculum, and employer collaboration, it has made a lot of progress in a short amount of time. After examining the materials available, it appears as though considerable effort has been invested in the employer and worker marketing efforts that have been undertaken. Clearly, renovating the site to its current condition, which is still well short of optimum, has taken much effort. But given that training is well underway, those efforts must be judged as successful.

The impression that we got was that considerable learning was occurring in the ESL and IC3 classes. Interestingly, the ESL classes were making significant use of on-line software. An important question, for which it is too early to answer, is the extent to which integration of basic skills into occupationally-specific classes will promote the acquisition of those skills.

Another key issue for this program will be whether enrollment will reach its projected numbers of participants. Many of the employers at the Port are small businesses that may have difficulty paying workers for training time, and may not see immediate benefits to production. Note that the program had already decreased the number of hours per week for its IC3 class to four (although not the overall length of the class) because employers felt like they could not afford to have workers out for six hours per week.

The bottom line is that, to date, this program is successfully traversing the early stages of its learning curve. It is easy to picture a thriving training enterprise in a few months with a full complement of classes and many participants upgrading their skills and knowledge. That outcome will, of course, depend on several factors. Training participants will need to continue to enjoy and to experience success in their courses. Employers will need to see tangible benefits. The program will need to develop appropriate curriculums and to staff the courses with excellent adult educators. Extrapolating from the early months’ experiences at the program suggests that

this program will achieve those outcomes, and that this program will become one of the exemplars for future expansion of the 21st Century Workplace Certification program.

Site Visit Report

Center of Workforce Innovations-Ports of Indiana

Date of Visit: May 22, 2007

Activities/Interviewees:

Bridget Timmeney and Kevin Hollenbeck conducted a site visit to the Center of Workforce Innovations (CWI) workplace literacy program at the Ports of Indiana. These two project staff members observed an ESL class, an IC3 preparation class, a Basic Electricity class, interviewed CWI staff, interviewed three instructors at the CWI training facility at the Port, and interviewed seven students currently attending classes. Due to unexpected production problems at the scheduled employer sites, employer and supervisor interviews were not conducted during the site visit as planned, but rather, a limited review of participating employers was completed on June 12, 2007 via telephone interviews. All together, the following individuals were interviewed:

Ms. Miche Grant, Vice President, Quality Assurance, Center of Workforce Innovations, Valparaiso
Ms. Sandi Tuman, Workforce Associate and Program Manager, Center of Workforce Innovations
Mr. Richard Parrette, President, Packaging Logic
Mr. Mark Lewers, Manager, Workforce Certification, Workforce and Economic Development Unit, Ivy Tech Community College, Gary
Wendell Cooper, Supervisor, Senior Maintenance Manager, Packaging Logic
Ms. Midge Hutnick, ESL Instructor, Portage Community Adult Education
Mr. Paul Neithammer, Electricity Instructor, Ivy Tech Community College, Gary
Rich and Jane, IC3 students
Nicholas, Ricardo, and Ernesto, ESL students
Matt and Keith, Basic Electricity Students

Background

The Indiana Port Commission oversees and provides services at three ports: two Ohio River ports at Mount Vernon and Jeffersonville and a Lake Michigan port at Burns Harbor. The latter, the Port of Indiana-Burns Harbor, houses a training facility that is operated by the Center of Workforce Innovations as funded by a 21st Century Workforce Skills grant. Twenty-two companies or organizations operate at this port. The Port Director facilitated the outreach of CWI to the companies, and at this point, a handful of the companies are sending employees to be trained. Not only was the initial Port Director behind the effort, so was the International Longshoremen's Association (ILA), which represents many of the workers at the Port. This support is currently at a point of transition. The Port Director left his position to take a job with private industry outside the Port and, as a result, the 21st Century Workforce grant partners at the

Port are in a state of flux about the priorities and level of support for the initiative from the yet to be designated Port Director.

An interesting aspect of this site’s effort is the in-kind donation of a training facility from the Port Authority. A small, seldom-used building right at the entrance to the Port has been converted into a training center. It has been equipped sufficiently so far to offer some training classes, and at the time of our initial visit, plans were in place to further rehabilitate the facility or possibly move it to a different site on the Port property. Neither had occurred at the time of the second visit, however. Currently, the training center is open Tuesday, Thursday, and Friday. Sandy Tuman, the project manager, is generally at the site on those days.

Training Description

Initially, the hallmark of the Port training was the integration of basic skills instruction into specific occupational courses. CWI developed a set of six course offerings that include two basic skills courses and four occupational-specific courses. The basic skills courses include English as a Second Language and IC3—Computers for the Workplace. The occupational courses are Basic Electricity, Oxy-Burning, Basic Hydraulics, and Motor and Motor Controls. At the time of the second visit, the Oxy Burning class was completed (8 enrollments and 7 completions); the Basic Electricity and the basic skills courses were being delivered.

As of the date of the interview, two sections of English as a Second Language are being held. Two additional sections of this class were completed in January. The instructor, from one of project’s partners, the Portage Adult Education Department, has taught all four sections. Each section is 40 hours in length, with two 2-hour class periods per week for 10 weeks. Each instructional period includes some group work in reading/speaking and some individualized computer assisted instruction. Enrollment totals are noted below. The classes are offered in the morning and afternoon, and the instructor allows students to come to either class depending on their work situation.

Enrollment totals are noted below, by session. In these data, each session is comprised of two sections. Most of the students enrolled in the second session were also in the first session.

	Enrolled	Still Attending	Completed	Certificates
First Session	8	na	7	none
Second Session	6	5	5	TBD

The second IC3 class is again offered in the afternoon in a computer lab that has about 10 workstations. The instructor is from another partner, Ivy Tech, and he is using the Aries curriculum. This instructor sequences the units as follows: Computer Fundamentals, Living on Line, and Key Applications. In addition to the CASAS testing, students were given an informal pre-assessment of computer technical skills and an informal assessment of learning styles and impediments. The course is intended to be a 72-hour program – 4 hours per week for 18 weeks. Enrollment activity for IC3 is noted below:

	Enrolled	Still Attending	Completed	Certificates
First Session	10	na	8	?
Second Session	4	2	TBD	TBD

The second of the vocational courses, Basic Electricity, began in April. It is held two afternoons each week, 4 hours per week for 10 weeks. The instructor is from Ivy Tech and offers practical project based-instruction supplemented with a textbook, workbook exercises, video assisted instruction, and on-going practice quizzes. The eight students that started this class are still attending. The instructor indicated that attendance has generally been good; although on the day of the visit, only four students were in attendance.

The project intends to offer the Basic Hydraulics class next, followed by the Motor and Motor Controls class. CWI staff also indicated there has been further employer interest in additional IC3 and ESL classes. However, this seemed to be inconsistent with the very low level of current enrollments.

Accomplishments to Date

The program is progressing through the training schedule largely as planned. Staff from CWI, particularly Ms. Tuman, has invested a lot of time and energy in continued outreach activities to the Port employers and workers. Presentations to employers, workers, and union representatives, as well as brochures and flyers were used initially to market the program. These efforts have been followed up by a Port training center open house in the late fall, a video with student and business testimonials, a local newspaper article, an article in the Port Newsletter, and a highlight in the CWI newsletter. Outreach continues in an effort to enhance the effectiveness of the 11 employer agreements so that employees are more readily referred, enrolled, and supported in training.

The training center facility and equipment has continued in its mode of acceptable functionality. The Port's plans of further renovations are on hold, which has limited the training space. The three instructors patiently and cooperatively work around each other to accommodate limited space, shift schedules, and the addition of the vocational classes. As would be expected, the vocational classes require lab equipment and supplies. The Basic Electricity instructor regularly transports lab supplies from his Ivy Tech campus in Gary in order to make these instructional tools available to the Port location.

The employer interviewed includes the President of Packaging Logic. Packaging Logic is a non-union employer that enrolled a newly hired worker into the Basic Electricity course and plans to continue this employees' enrollment into the remaining vocational classes. Although located nearby in LaPorte, Indiana, this employer is outside of the Port but reports that a large number of its customers are located within the Port. The employee being trained had been hired to fill an anticipated retirement of a Senior Maintenance person. For him, the course augments on-the-job training. The employee attends training during work time and is paid for his time in

training. The employer is pleased with the content and delivery of the course and has seen increased employee confidence as well as an increased loyalty to the company.

The supervisor interviewed from Packaging Logic is pleased about the opportunity for formalized training and indicated that the firm supports the training received on the job. Although originally hired to train as a replacement for a planned retirement, the supervisor finds this new hire serves an important back up role. The added depth not only allows for greater vacation flexibility, but also has added greater efficiency to operations due to less down time of machinery. The employee/trainee is paid for time during training and for mileage, given the distance to training.

Barriers/Issues

This program continues as a model 2 program, which means that it involves a consortium of employers. The second site visit further illuminated difficulties with a model 2 program vis-à-vis the single employer programs. Outreach to and communication with employers becomes more complex because there are multiple employers with whom to deal. These communications are further compounded at this site because of the heavy involvement of unions.

The participation levels are modest and may be the biggest issue for this site. During this visit, we observed classes with very low enrollments. A total of only nine students were in attendance in the three classes held that afternoon. One of the nine students was unemployed, one student was employed with a firm outside of the Port, and one student was participating while on disability. While clearly making a positive impact on the lives of these nine students, the question of maintaining the cost of three instructors for this low number of students looms over this program. Without greater numbers of referrals from employers, the cost to operate the program may be prohibitive.

The current training facilities also remain somewhat problematic. Participants, instructors, CWI staff, and employers appreciate an on-site facility in close proximity to the businesses. Securing this facility was clearly an asset to the program. However, the current facilities constrain the number of individuals who can be trained, and the type of instruction that can be offered. All involved seemed previously buoyed by the prospect of space renovations and/or the move to an alternative, more spacious site at the Port. Having this move delayed, or possibly cancelled altogether, appears to be a barrier to program growth.

Evaluation

For a program that virtually started from scratch in terms of facilities, curriculum, and employer collaboration, it has made a lot of progress. Examining the materials available, it appears as though considerable effort has been invested in the employer and worker marketing efforts that have been undertaken. Clearly, renovating the site to its current condition, which is still well short of optimum, has taken much effort. But given that solid training has been occurring, those efforts should be judged as successful.

This second visit confirmed that considerable learning was occurring for the few students present in the ESL, IC3, and basic electricity classes. The ESL classes continue to make significant use of on-line software. An important question remains regarding the extent to which the ESL learning is occupationally specific for the students involved. This question was also left unanswered for the basic electricity students who used a standard textbook and Ivy Tech curriculum augmented by the instructor's portable hands on lab opportunities. It was not clear the extent to which integration of basic skills had been accomplished into the occupationally specific classes. Furthermore, it was not clear whether the students in the occupational classes were deficient in basic skills. While employers reported their satisfaction with the soft skills impact of the training, e.g., increase in self-confidence, increased commitment to the employer, and increased interest in further training, it was not immediately evident whether the training increased the basic academic skills of the participating employees.

Students and employers reported limited knowledge of and/or value in the certification earned through successful participation. Employer representatives indicated they appreciated the initiative's ability to offer Ivy Tech classes in a customized manner rather than in the full semester format. This alternative format allows for less negative impact on the production schedule due to the employee's absence during class time. There appears to be further opportunity for the employer and instructors to increase the joint planning and development of curriculum to ensure contextualization of basic skills instruction in vocational topics combined with industrial specific relevancy of course work.

Another key issue for this program will be whether enrollment will reach its projected numbers of participants. Many of the employers at the Port who are referring students to training are from small businesses that may have difficulty paying workers for training time, and may not see immediate benefits to production. Lack of sufficient numbers of students may make the cost per student high and the operation of the program prohibitive.

The employer interviewed cited WorkKeys profiling as the primary benefit of participation. He felt that the WorkKeys assessments compiled of worker skills and deficiencies highlighted the need for considerable employee development. The profiling also provided skill levels to be used as a basis for future hiring.

All in all, our sense is that CWI has designed an excellent program of basic skill and occupationally specific skill training. The intent of the program is to integrate basic skill instruction into the occupational programs. Furthermore, the program has successfully delivered ESL and IC3 training. The instructors that offer classes at this site all seem to have high levels of commitment and expertise. In addition to the design and implementation of an excellent set of classes, CWI staff has invested significant resources into effective marketing and outreach materials. While it may be far from optimal, the training center facility is functional.

The Achilles heel appears to be limited participation. This leads us to question the depth of the employer commitments to the Initiative. Certainly a few of the employers have high levels of commitment, but other employers do not seem to be sending many, if any, employees. This observation is further supported by the difficulty of securing employers and supervisors to interview for this second site visit. Only one employer, one that is outside the jurisdiction of the

Port, made himself available for interview after several months of unsuccessful attempts. Employer participation from this model 2 design appears to be hindering further success for this initiative.

Given all of the positive and innovative aspects of this site, we would hope that a participation “tipping point” would soon be achieved. Our evaluation, however, suggests that such a tipping point has not yet been reached.

Site Visit Report

St. Francis Hospital & Health Centers

Date of Visit: September 28, 2006

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the Project HEALTH (Helping Employees Advance Learning Through Healthcare) program at St. Francis Hospital & Health Centers in Indianapolis, Indiana on 28 September, 2006. He conducted a group interview with the project leadership team and employer representative; an interview with an instructor; and two focus groups with participants—one group of ABE students and one group of School at Work (SAW) participants. He also observed class sessions in both ABE and SAW. Note that Ms. Terri Schulz, from the Indiana Department of Workforce Development accompanied Dr. Hollenbeck. All together, the following individuals were interviewed:

Mr. James Dix III, Manager of Organizational Development & Training, St. Francis Hospital & Health Centers
Ms. Nancy Olsen, Director of Adult & Continuing Education, Central 9 Career Center
Ms. Kristin Harris, Workforce Adult Education Specialist, Indiana Department of Education
Ms. Connie Dirks, Adjunct ABE Instructor, Central 9 Career Center
Sister Saima, April, Crystal, and Darlene, St. Francis employees and ABE students
John, Becky, and Jeannine, St. Francis employees and SAW participants

Background

St. Francis Hospital & Health Centers is a mid-sized hospital (600 beds) and outpatient clinic system operating in and around Indianapolis. It is part of a network of hospitals located in Indiana and Illinois owned and operated by the Sisters of St. Francis Health Services, Inc. The history of St. Francis Hospital & Health Services dates back to its founding in Beech Grove in 1914. In addition to the hospital facility in Beech Grove, the organization operates hospitals in Indianapolis and Mooresville. The hospitals pride themselves on their clinical excellence. Its website notes that St. Francis is the only teaching hospital in Indiana to receive the HealthGrades Distinguished Hospital Award for Clinical Excellence three years consecutively, and it is ranked among the top five percent of all hospitals in the country for overall clinical performance.

The 21st Century Workplace Skills Initiative came along at an excellent time for St. Francis. It was a perfect fit with the nascent School at Work (SAW) program that had begun in late 2005. St. Francis had initiated SAW on a pilot basis with funding from the state (Department of Education), and as per that program's recommendation, the hospital had teamed

up with Central 9 Career Center to provide adult basic education as needed. The grant letter of intent notes that in conducting this pilot, St. Francis had pre-tested (using TABE) 40 employees for SAW, of whom 20 required adult basic education. These individuals were referred to the Central Nine Career Center, and 10 of them enrolled. At the time of the grant letter of intent, seven of the 10 were continuing their training.

The 21st Century Workplace Skills grant solved two issues for St. Francis. First, it formalized ABE for individuals who do not test high enough for SAW, and it continued and expanded enrollment in SAW. The grant allows the hospital system to provide in-house adult basic education and SAW in what it hopes to be a seamless system. In addition, Project HEALTH added the IC3 Living Online preparation and certification and a Mentoring Match-up & College Connect piece to assist workers in their career development.

Training Description

Project HEALTH's training "curriculum" serves three tracks of individuals. Track I students meet the 9th grade reading level requirement of SAW and may or may not have a high school degree or GED. These students entered the SAW class in August, and it is expected that 80 percent of them will graduate from SAW in April, 2007. The students' goals for this track are completion of SAW and/or IC3 certification, and career exploration prior to postsecondary enrollment. The program's goal is improved basic skills, SAW graduation, and 21st Century Workplace Bronze certification. A total of 16 students have been placed in this track.

Track II students meet the SAW reading level requirement but do not have a GED and desire one, or have a high school diploma or GED and want to brush up on basic skills prior to enrolling in SAW or into a postsecondary program. These students started adult basic education in July, and it is expected that 70 percent of them will earn their GED. The students' goals for this track are GED attainment, possibly completion of SAW, and career exploration prior to postsecondary enrollment. The program's goal is improved basic skills, GED attainment, and 21st Century Workplace Bronze certification.

Students in Track III read below the 9th grade level and may or may not have a GED or high school diploma. As with the Track II students, these students started ABE in July. Because of their lower skill levels, these workers are less likely to have postsecondary aspirations and may be less likely to achieve the 21st Century Bronze certification. Between Tracks II and III, 15 students enrolled in ABE.

St. Francis intends to start a second cohort of workers into this program in August 2007, which would extend beyond the grant period. Note that some of the SAW students will come from the ABE class in the first cohort.

The SAW program meets for two hours a week for 32 weeks. There are two different sections. We were told that the instruction alternates between a (video) presentation and general discussion in one period to computer-aided exercises focused on the material that had been presented in the next period. The classes meet in the St. Francis Education Center, which is a

relatively new facility off campus that is very well equipped for the educational programs of the hospitals.

The ABE program will have a variable length depending on when students take their GED. It is scheduled to meet twice a week for 2 hour sessions. So far, the class has met in a variety of classrooms in several different locations. Because it moves around, the instruction does not use online resources. The instructor develops her own lesson plans and individualizes it extensively because of the extreme heterogeneity among the students' skill levels. The instructor feels that math will be the most difficult area for the students, and so she intends to cover math often interspersed throughout the class. Mr. Dix has obtained some curriculum materials from the Crispus Attucks magnet school program, which focuses on health care, and the instructor is studying them to see what might be useful for her ABE class.

Instructional time for IC3 is scheduled to be two hours per week for 18 weeks.

The students are paid for the time that they spend in class.

Accomplishments to Date

Project HEALTH has made considerable progress, although the program is a bit behind its proposed schedule. It has recruited and enrolled over 30 workers; about half and half into the SAW and the ABE class. Some of the accomplishments to date that the interviewees mentioned included the following:

- Attracting a variety of students into the ABE class in terms of age, ethnicity, and ability levels (note, however, that most of the students come from two departments—environmental and food service, and all are female)
- Strengthening the relationship between St. Francis and Central 9 Career Center
- Solving the logistical nightmare of having the original ABE instructor go out on disability by finding another instructor who turned out to be highly energetic and committed
- Adding the career development and job shadowing tier to the program's curriculum
- The skill building of SAW students in using computers, time management, and communication

The students in the classes noted that they had increased their levels of self-confidence and self-esteem. They thought that the instructors in the program were excellent, and they felt that the class members pulled together to help each other. On top of the enjoyment and benefits they were getting from the classes, they noted that they were being paid.

Barriers/Issues

We asked the students whether they had any barriers or issues that prevented them from fully benefiting from the class in which they were participating. For the most part, the students did not mention any problems. A couple of the ABE students indicated that participation in the class caused them to have problems meeting the schedule for their second (non-St. Francis) jobs.

An issue that seemed obvious to us was why the ABE class got shuttled around to different locations. This seemed to add some logistical complications that would seemingly be unnecessary given the wonderfully-equipped Education Center facility. Having a single location would make the class more stable for its students. Furthermore, if that location had technology, then the students might be able to benefit from computer-aided instruction or online resources.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. The leadership team had an overriding concern that their budget was not adequate for the program that they have established. Their tight budget was constraining what could be accomplished. In terms of day to day administration by DWD, all seemed quite pleased to date. Respondents indicated that communications had been helpful, and all training activities had been useful. They did note that they struggled a bit with the emphasis on CASAS and movement away from TABE.

Evaluation

St. Francis's program is well under way, and the participants are generally enthusiastic about the opportunity they have been afforded. For most of the students who were interviewed, their motivation was the opportunity to be prepared for college. The ABE students who were interviewed especially felt like they had been stymied in their career advancement because they did not have a college degree. They thought that this program was a wonderful opportunity because the hospital was paying for it, and furthermore, paying them for their time.

A highlight of this program is the outstanding facilities at the Education Center, from which the SAW students benefit. Hopefully, the ABE class can stabilize and make permanent use of those facilities as well. The site visit raised a couple of questions regarding the programmatic approach that the project is pursuing. First, the leadership team has explicitly set a program goal of achieving only the Living Online level of IC3 certification. The proposed 18 weeks of instruction and wonderful computer facilities would seem to allow some, if not all, of the SAW graduates to pursue all three levels of IC3 certification. The second question is about sustainability of the training after the grant. It was not clear to us that the hospital had made a commitment to the continuation of these programs.

An interesting aspect about the effort at St. Francis is that its proposal indicated that the leadership team intended to develop an advisory committee that included representatives of all

the stakeholders in the program. This was the first site that we encountered that had such a committee planned. The literature on adult education notes that such an advisory committee is an important component of successful programs. The bad news is that formation of the committee had not yet occurred as of the time of the site visit.

Nevertheless, it was clear from our visit that a lot of time and effort has been invested into getting this program successfully off the ground. The payoff to date has been the considerable excitement that it has generated from the participants, who seem to be seriously engaged and very appreciative of the opportunity. Given the hospital's commitment to education and the career development of its employees, it seems quite likely that the Project HEALTH initiative will be sustained and will result in substantially enhanced careers for many workers who may currently be underemployed.

Site Visit Report

St. Francis Hospital & Health Centers

Date of Visit: May 30, 2007

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the Project H.E.A.L.T.H. (Helping Employees Advance Learning Through Healthcare) program at St. Francis Hospital & Health Centers in Indianapolis, Indiana on May 30, 2007. This was the second site visit to St. Francis; the first occurred on September 28, 2006. Dr. Hollenbeck conducted an interview with a supervisor, a group interview with the project leadership team and employer representative; an interview with an instructor; and a focus group with participants in an IC3 class. He also observed an IC3 class session. All together, the following individuals were interviewed:

Mr. James Dix III, Manager of Organizational Development & Training, St. Francis Hospital & Health Centers

Ms. Nancy Olsen, Director of Adult & Continuing Education, Central 9 Career Center

Ms. Kristin Harris-Deckard, Workforce Adult Education Specialist, Indiana Department of Education

Ms. Margaret Ferry, Director, Environmental Services, St. Francis Hospital & Health Centers

Ms. Connie Dirks, Adjunct ABE Instructor, Central 9 Career Center

Pam, Rick, Regina, and Jane, St. Francis employees and IC3 participants

Background

St. Francis Hospital & Health Centers is a mid-sized hospital (600 beds) and outpatient clinic system operating in and around Indianapolis; it has facilities in Beech Grove, Indianapolis, and Mooresville. It is part of a network of hospitals located in Indiana and Illinois owned and operated by the Sisters of St. Francis Health Services, Inc. St. Francis prides itself on clinical excellence. Its website notes that St. Francis is the only teaching hospital in Indiana to receive the HealthGrades Distinguished Hospital Award for Clinical Excellence three years consecutively, and it is ranked among the top five percent of all hospitals in the country for overall clinical performance.

The 21st Century Workplace Skills grant fits very nicely into St. Francis' education and training program. It provides basic education to incumbent employees with very low skills, and it provides, through the School at Work program, slightly higher functioning individuals the opportunity to brush up on academic skills prior to pursuing postsecondary education. In addition, the grant has funded instruction in digital literacy, and it has a career development initiative featuring job shadowing and mentoring. All of this complements the ongoing education and training at the hospital, which is targeted on higher level staff.

The project features an effective collaboration between St. Francis, the Indiana Department of Education, and Central 9 Career Center. The latter two organizations primarily administer the adult basic education component of the initiative; although the project management team meets often concerning all aspects of the initiative. However, during the interview, we learned that Ms. Olsen will be leaving the Central 9 Career Center soon, so the project's collaboration is facing a transition.¹⁵

Training Description

The training program is effectively comprised of two tracks. Employees with limited reading skills participate in adult basic education, and employees with at least a ninth grade reading level enroll in the School at Work (SAW) program. The goal of the initiative is to have the adult education students get their GED (if they don't have a diploma or GED) and then move into the SAW program. Its further goal is to have SAW graduates take an IC3 certification preparation course and get certified in order to get a 21st Century Workplace certificate. Ultimately, the program's goal is to prepare adequately individuals who want to pursue postsecondary education.

After a slow start, Project H.E.A.L.T.H. has progressed fairly smoothly along its designed curriculum. A total of 18 individuals have participated in the adult basic education, of whom 11 are still enrolled. As might be expected, attendance was reported to be rather irregular. A total of 17 employees started the SAW program and 12 graduated from it. At the time of the site visit, the project was in the 4th week of IC3 training. Ten of the 12 SAW graduates had enrolled. Because the hospital acquired 30 "slots" for the IC3 training, enrollment was opened to all hospital employees. Interest was high and all 30 slots were said to have been filled.

The project management team is beginning to plan for the mentoring and job shadowing piece, which is to follow the IC3 training. Furthermore, St. Francis intends to start a second cohort of workers into the SAW program in August 2007; completion of this program will extend beyond the grant period. The program expects that some of the SAW students will come from the ABE class in the first cohort.

The 30 students in IC3 are in two classes. Each class meets once a week for two hours each session. The IC3 classes will go approximately 15 weeks from early May to the end of July. Using the Aries curriculum, the sequence of units includes Computer Fundamentals, Living Online, and Key Applications. The classes meet in the St. Francis Education Center, which is a relatively new facility off campus that is very well equipped for the educational programs of the hospitals. While it was ongoing, the SAW program met for two hours a week for 32 weeks at the Education Center. There were two different sections.

¹⁵ After the site visit, we learned that Kristin Harris Deckard, the Indiana Department of Education member of the team, is also leaving the project. It will be interesting to see how the program fares after losing its primary ABE partners, but Ms. Deckard was quite optimistic about its prospects in an email communication.

The ABE program has a variable length depending on the needs of the students and their level of preparation for the GED. The program is scheduled to meet twice a week for 2 hour sessions. During our first site visit, we learned that the class had met in a variety of classrooms in several different locations, which seemed to hinder its continuity. During this visit, we learned that the site was more or less permanent at a room in the Indianapolis facility.

The adult basic education students and SAW students are paid for the time that they spend in class. We were told by some of the students in the IC3 class that they were not getting paid for their attendance, so we infer that the hospital is not paying the wages for the individuals who just signed up for the computer class unless they are on salary.

Accomplishments to Date

Project H.E.A.L.T.H. seems to be institutionalized at St. Francis and an important component of the hospital's education and training thrust. The entire administration of the hospital and the hospital's foundation are "on board." Apparently, there is some consideration of expanding the program to all seven hospitals in the Sisters of St. Francis system.

Some of the accomplishments to date that the interviewees mentioned included the following:

- The medical terminology piece of SAW was sufficiently rigorous that it helped several students in career advancements or transitions.
- The initiative is opening up the notion of career development for the hospital's entry-level workers
- Students' involvement seemed to have greatly energized them; they seem to exhibit more positive attitudes in their jobs.

The supervisor that we interviewed was highly praising of the program. She indicated that it made her job much more difficult to have to schedule around the absences of the students for class, but it seemed to be worth it. The workers communicated better and exhibited higher levels of self-confidence.

Barriers/Issues

A significant barrier arose at this site that actually caused a substantial reduction in enrollment in the adult basic education class. Five individuals who were employed at the Mooresville site of the hospital had been attending, but they all decided to stop because the cost of gasoline had skyrocketed and was making the trip from the Mooresville facility to the Indianapolis campus (approximately 25 miles one way) prohibitive.

Evaluation

In many ways, the St. Francis program seems to be the site that is closest to following the 21st Century Workplace Skills demonstration design. The program is serving persons with low reading skills in its adult education track. The SAW component is polishing the skills of those with slightly higher skills through a highly contextualized curriculum that has been developed for health care settings. Furthermore, SAW is clearly facilitating employees' aspirations to advance in their careers and attend postsecondary education. All in all, the St. Francis program is placing much emphasis on the DWD certification process and has therefore dived into the IC3 certification process.

Other noteworthy aspects of the St. Francis program are its collaboration with the Indiana Department of Education and Central 9 Career Center, its advisory committee, and its outstanding facilities at the Education Center (for SAW and IC3 students, at any rate). Perhaps the most impressive aspect of the program is the extent to which it is supported by the employer. St. Francis clearly values education and training and has now embraced this program that is geared toward its entry-level, less skilled occupations. An event that showcased the hospital's support was the graduation ceremony for the SAW class. It is well known that an important component of a workplace education program is overt support by the employer.

St. Francis also benefits by having a strong program champion in James Dix. James has clearly worked hard to develop and institutionalize the SAW program and Project H.E.A.L.T.H. Besides managing these initiatives, he has been the SAW and IC3 instructor. All the students who were interviewed had nothing but kind words to say about James as an instructor.

The only issue that we might raise about the St. Francis program is the status of the adult education class. This class seems to be struggling considerably despite a teacher who seems quite dedicated and competent. Part of the problem may be the fact that it is playing "catch-up." The adult education class had no permanent location for several months, and it lost an initial instructor to illness. Now the class is struggling with attendance, facing the departure of its Central 9 Career Center manager/liaison, and recently lost several students because of a transportation barrier.

Given the hospital's commitment and the considerable excitement that the program has generated from its participants, who seem to be seriously engaged and very appreciative of the opportunity, it seems quite likely that the Project H.E.A.L.T.H. initiative will solve the adult basic education issues and sustain the project beyond its current grant period.

Site Visit Report

Steuben County Literacy Coalition – Salga, Inc.

Date of Visit: September 27, 2006

Activities/Interviewees:

Bridget Timmeney conducted a site visit with the workplace enhancement project at Salga, Inc. in Fremont, Indiana. She observed the workplace literacy class, interviewed the project manager, interviewed two representatives from the employer, and interviewed 2 participants in the training program. A subsequent telephone interview was conducted on October 2, 2006 with the instructor due to time constraints at the site. All together, the following individuals were interviewed:

Ms. Kathy Armstrong, Steuben County Literacy Coalition, Angola, IN
Ms. Theresa Myers, Purchasing and Human Resources Coordinator, Salga Inc.
Mr. Ed Petry, Plant Manager, Salga, Inc.
Augustina and Renee, employees of Salga, Inc. and class participants
Ms. Faith Frey, Instructor, Steuben County Literacy Coalition, Angola, IN

Background

The ABC Group of Companies, a Canadian-based international manufacturer in plastics processing, owns Salga, Inc. ABC Group's core business (an Automotive Tier 1 Supplier) is the design, development and production of plastic automotive systems and components for the automotive industry worldwide. Salga, Inc. manufactures plastic blow molded products primarily for the automotive industry. The two products observed in production at this plant included air intake ducts and bottles for fluid management systems. The company's main customers include Toyota Motors, Ford, and Subaru. Salga employs approximately 80 workers with the HR coordinator reporting that approximately 50 percent of the workforce is limited English proficient.

Salga, Inc. is a strong believer in training and using education to improve workers' skills. The company employs a significant number of limited English proficient workers and is committed to improving communication with their Spanish-speaking employees. Through general manager Ken Westfall's leadership, they believe improved English skills will increase quality and environmental standards performance in the plant. The firm's involvement in the 21st Century Workplace Skills Initiative was a natural outgrowth of a previous effort on site with the Steuben County Literacy Coalition (SCLC) entitled, English Works.

When the 21st Century Workplace Skills grant opportunity came along, Salga was interested in pursuing it, and they worked with the SCLC instructor, Faith Frey, on the identification of needs. In concurrence with the SCLC Board, Kathy Armstrong, SCLC

Executive Director, developed the application, with input from company staff. The Literacy Coalition had previously assisted the firm with training limited English speaking employees through instruction regarding plant safety procedures and translation of Salga's safety manual.

Training Description

The training curriculum that was proposed in the grant application is planned for two phases. The total number of employees trained is targeted at 25. Each phase includes three two-hour blocks of instruction each week in order to accommodate the shift schedule. Both groups would receive 60 hours of instruction in Phase I. This training includes mastery of Salga's quality systems and environmental controls through increased English proficiency. Instruction and proficiency is demonstrated through increased speaking, reading, listening, and writing mastery. The activities observed in the classroom appeared to fit within this general framework, but some modifications were made to the proposed framework to ensure adequate time for students to reach individual competency and to accommodate the range of literacy within the group. This ten week training will be followed by the nine week/54 hour Phase II training that includes applied math and computer literacy instruction.

The training takes place in a classroom provided by the employer. One session is offered for 3rd and 1st shift workers from 6:00 to 8:00 three mornings per week and another session is offered for 2nd and 3rd shift workers from 2:00 to 4:00 three afternoons per week. The facility seems very accessible and quite adequate. The employer has been very accommodating with supplies and equipment for Phase I and, during Phase II, the Literacy Coalition will supply laptops for the IC3 training.

The instructor, Faith Frey, seems to have established a great relationship with the class participants and appears to be the glue in the project. She has a very easygoing manner, and seems very adept at individualizing the instruction. She has a strong command of the Hispanic culture and Salga work culture and is able to customize training opportunities for optimal instruction. A tutor was also observed assisting with instruction in the class and works one-on-one with students to help adjust to the variation in individual proficiency levels.

In order to contextualize the instruction, Faith used the plant's quality and environmental controls policy manual to teach reading, writing, and communication. During the classroom observation, students were translating a Traceability Form in conjunction with a work order. Group problem solving was observed in order to complete the order with attention given to plant quality principles. Students were observed to be very engaged in problem solving and in the ensuing discussion.

Accomplishments to Date

The visit occurred on the last day of class prior to the Phase I final assessment. Salga management seemed very supportive of the activity. On behalf of the company, the instructor had translated both the quality and environmental control manuals, and students were assessed about their functional knowledge of the manual's content. Very practical examples of

contextualized learning were observed. Certificates of completion were being prepared for the following day's testing. A class celebration with management was also planned. The participants seemed very pleased with their accomplishments and pleased with the recognition.

The participants were very engaged in the training. Three of the six hours of training each week is taken from their personal time. Participants are paid their full wage for one of the two training hours each day. The shift supervisor reported that workers are using/trying their English more on the job which is improving confidence and communication on the job.

Barriers/Issues

A few reports of family issues were identified as barriers to participation. In particular, attendance has been affected on a couple of occasions for child care, court dates, and transportation reasons. One particular incident that was mentioned involved a participant who had a court date and needed to miss the last hour of class. Because this person was the ride for two other classmates, all three participants missed class that day. Management also reported that another constraint is production timing and workloads. Because of the time spent in class by the trainees, extra work was required on a few Saturdays in order to make a deadline. Although this revised scheduling added cost to the firm, management commented that they believed the benefits of the skills gains still outweighed the cost.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. There was one mention of the challenges of incorporating the required math and computer literacy skills in this setting so that it is beneficial to the employer and the participant. It also appeared there had been some growing pains with CASAS but that the technical assistance activities had been useful.

Evaluation

Training is well under way, and the adult learners are enthusiastic about the opportunity they have been afforded. They report that they are having fun, participating actively, and learning. Despite long shifts, and long commutes in some instances, they are staying at work for the two hours of class three days a week and are gaining skills and confidence in their usage of English on the job.

Especially noteworthy at this site is the interaction between the instructor and participants. Also noteworthy is the rapport between the instructor and the firm's management. Both the participants and employer were appreciative of the instructor's ability to mix English as a Second Language instruction with work, life, and cultural contexts. It appears that the employer (probably realistically) had little expectations of a direct influence of the training program on worker productivity or profitability. The training was seen as a means to improve

employee communications that would likely have an indirect positive influence on job performance.

The program appeared to be reaching the goal of increasing English proficiency and improving the functional understanding of quality procedures and environmental controls at Salga, Inc. A few concerns and questions were raised regarding the next phase of training that addresses math and IC3 training: (1) Given the remaining hours and funding available, can all of the subject material be covered with this limited English speaking group to facilitate desired competency attainment? (2) Given the extreme heterogeneity in computer, English skills, and literacy even in the native language, how will the instruction be handled to bring the least technology literate students up to a level to become IC3 certified while still keeping the individuals who are more experienced with computers engaged? (3) Will the employer or the students find a way to sustain the learning that is occurring after their group has been through the grant's training program?

All in all, this program provides solid evidence of the effectiveness of ESL training for incumbent workers. The instructor did an excellent job of integrating contextualized learning while facilitating language proficiency. All parties are concerned about the mathematics and technology challenges to be faced in Phase II, but they are aware of the importance of struggling through these challenges in order to meet the DWD grant initiative objectives. Given the competency of the instructor and the firm's expressed commitment to the education and training of its workers, one suspects that Phase II will be a success, and that Salga will sustain the education and training of its workers, if at all possible.

Site Visit Report

Ivy Tech Community College-Bloomington

Date of Visit: August 22, 2006

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit, during which he interviewed the Project Director in Bloomington, and completed interviews at and around the French Lick area. All together, he interviewed the following individuals:

Ms. Brenda McLane, Executive Director, Workforce & Economic Development Unit, Ivy Tech-Bloomington
Mr. Sam DeWeese, Program Manager, Ivy Tech-Bloomington
Mr. Keith Schnulle, VP of Human Relations, Benchmark Hospitality
Carissa, Noreen, Carri, and Lynn, incumbent workers from the French Lick Resort and current employees of Benchmark Hospitality
Ms. Kayle Mena, Adjunct Instructor for Ivy Tech-Bloomington

In addition, he observed a class led by Ms. Mena that was in progress at the Community Center in Paoli. Note that Dr. Hollenbeck was accompanied by Ms. Terri Schulz, of the Indiana Department of Workforce Development.

Background

This grant is playing a small role in a very ambitious economic development project in Orange County. We give a brief description of the historical development of the economic development project to put the training into perspective. In the early decades of the 20th century, the Valley Springs area, which consists of the neighboring towns of French Lick and West Baden, was a popular resort destination. Part of the attraction to these destinations was their mineral springs and salt licks, which were thought to have curative powers. Both French Lick and West Baden have storied pasts.

After a fire destroyed the West Baden Hotel in 1901, it was rebuilt the following year with a huge domed atrium and four Moorish towers. It was a grandiose structure that was billed as the "Eighth Wonder of the Architectural World." In the early part of the century, ownership changed hands a couple of times, until the Great Depression hit, after which it was donated (sold for \$1) to the Jesuits, who used it for a seminary. In the 1960s, it was sold and donated to a private business college, which used it until the mid 1980s. Unfortunately, it was then sold to a developer who went into bankruptcy, and the property has been vacant since. It suffered considerable deterioration during its vacancy. It was partially upgraded a couple of times using philanthropic funds so that it could be preserved as a historical landmark and sold. After the Indiana legislature approved the Springs Valley as a site for a casino, the West Baden Hotel was

purchased by a joint venture called Blue Sky, LLC in March 2005. The joint venture also purchased the French Lick Springs Resort and is restoring it. The French Lick Springs Resort and Casino are scheduled to open in November 2006. The restoration of the West Baden Springs Hotel is scheduled to be completed by July 2007.

The French Lick Springs Hotel was also re-built after a fire; in 1897. It thrived as an elegant resort during the first decades of the 20th century. But it, too, was hard hit by the Great Depression and the coincidental death of its entrepreneurial owner, Tom Taggart, in 1929. It managed to stay in business, partly because of its world class golf course, and cycled through periods of revival and decline. However in the late 20th century, it became noticeable that it had deteriorated seriously, although it never closed until after the renovation began following the March 2005 purchase.

The resorts and casino are projecting a huge economic boom to the area. All together, the firm that will be managing the properties, Benchmark Hospitality, has been in the process of hiring approximately 1,100 new employees, who will join the approximately 300 workers who had worked at the resort at its closing. The owners retained those incumbent workers and have guaranteed them they would not lose any income during the renovation.

Training Description

Benchmark Hospitality is attempting to convert a property that was in decline with a limited clientele into a high quality operation with a worldwide customer base. As one might imagine, that conversion will require a significant amount of employee training. Part of the training regimen will be a required course in customer service called *French Lick Springs 5-Star Certification*. Benchmark has contracted with Ivy Tech-Bloomington to provide that training. In Spring 2006, the 300 existing employees went through the training. All were assessed using WorkKeys prior to the training. After the training had been completed, approximately 10 percent of the employees volunteered to receive literacy services; and almost a quarter of the incumbent workers are pursuing their GED.

The training that is being funded as part of the 21st Century Workplace Skills demonstration is the *5-Star Certification* training for the newly hired workers. The planned process to be followed for screening, hiring, and training these workers is as follows:

- Step 1: WorkOne is the intake site for applicants. Some “soft skills” profiling is done (looking for motivation, positive attitude, interest in serving people, and interest in working for the Resort).
- Step 2: Candidates for employment are assessed using WorkKeys.
- Step 3: Individuals who fail to score at the level identified for their specific position will be encouraged to seek remediation through Ivy Tech, and may re-test.
- Step 4: Successful candidates who are hired by Benchmark will receive the *5-Star Certification* training that will cover soft skills, communication, problem-solving,

and critical thinking. New hires requiring computer training will receive it through “individualized professional development plans.”¹⁶

The *5-Star Certification* training is a 47-hour course. It is comprised of seven modules: a self-awareness section using the DiSC Classic Profile; a customer service section that focuses on integrity and trust; problem solving; conflict management; a customer service section that reinforces skills from prior sections; personal planning; and stress/change management. The class that we observed had about 20 students, and was being taught in a fairly traditional, but informal, comfortable style. Lesson objectives were presented, which were followed by class discussion or role playing.

Accomplishments to Date

The Resort is scheduled to re-open in November, and so Benchmark has hired a significant number of new staff in order to get them fully trained in time. The inflow of workers is so rapid that we got the impression that Ivy Tech is spending a lot of time on the logistics of finding classroom space and lining up instructors. Nevertheless, the training is occurring, and we would suspect that the participants are unaware of the amount of scrambling that is going on.

The employees who were interviewed, all employees of the hotel prior to its closing for renovation, were quite enthusiastic about the *5-Star Training* that they had received¹⁷. Some of them still referred to the materials that had been used in the class, and all of them said that the section of the training dealing with the DiSC profile was quite valuable in dealing with colleagues. (Note that these employees were far more satisfied with the *5-Star Training* than with the MSI training that they received as supervisors. We didn't delve into reasons for their dissatisfaction with the management training, so their comments regarding it may not reflect on the training per se, but rather on logistical issues such as its timing.)

The representative of the employer was also very enthusiastic about the training. He clearly felt that it would help facilitate the transition to a 5-star quality resort.

Barriers/Issues

Some issues or problem areas that we observed included securing enough classroom space to accommodate all of the training participants. The respondents indicated that the classroom space at the facility that they were using, the Community Learning Center in Paoli, was quite limited. Needing the classroom space for an entire day apparently limited the program's options. The resort's management company, Benchmark, was operating out of an

¹⁶ There seems to be some discrepancy about this. The original application from Ivy Tech indicated that technology training would not be offered as part of the *5-Star* program, but rather it would be individualized. However, the revision of the application submitted at a later date showed 8 hours of technology training for all participants. See footnote 3 below.

¹⁷ Note that these individuals had participated in the pilot program, which consisted of 62 hours taken over a longer time period.

abandoned factory that had virtually no training space because of the need to accommodate the burgeoning hiring and job-specific training activities.

Another feature of the program that was somewhat concerning was the apparent lack of a technology component. The pilot program that had been given to existing employees included four hours of technology training. Ivy Tech's original application had indicated that the technology component was replaced by individualization, whereby only those workers who would need to use computers would receive training. However, in the revision to their proposal, Ivy Tech indicated that a total of eight hours of technology training would be integrated into the *5-Star Training* (this was accomplished by dropping the personal planning section of the course, and shortening the length of four other sections by an hour each.) Nevertheless, we saw no technology training being undertaken as part of the class.¹⁸

Finally, we were told that nobody has volunteered for the WorkKeys remediation activities, and so they have not been operational.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date. The employer representative re-enforced the expected economic development gains that would accrue to a county that sorely needed them, and that the state should be proud of its role in supporting that development. The program manager indicated that the State has been very helpful in administering the grant to date. She had no real suggestions; she was grateful that DWD had opted to include the soft skills training of her program in its demonstration.

Evaluation

It is somewhat difficult to evaluate the training at this site. The overall pilot demonstration program funded by the state is intended to improve the literacy and technology skills of Indiana's workforce, and to garner employer and employee excitement about a workplace skills certification. The *funded* training that has taken place in this program has been delivered only to individuals who were assessed to have levels of skills at or above a WorkKeys profile for their position indicating that they were unlikely to be deficient in basic skills, and we saw no evidence of technology training (see footnote 3.) The curriculum that is being delivered is aimed at "soft skills" and not basic academic skills.

¹⁸ In response to this report, the program manager explained that the technology component had been put on the "back burner," and their plans were to deliver it after the Resort opens in November. The delay was due to space and cost issues. The facility used for training only had 11 computer stations, which would not have been adequate even for a single class, and would have doubled the fees. After the opening, the technology training can be delivered on site, with laptops. The employer has agreed to these plans, and all in all, this solution seemed to make the most sense in satisfying the employer and still meeting the needs of the grant.

Nevertheless, it appeared as though the employer and employees who had been through the training thought it was of high quality and was imparting important problem solving and independent thinking skills. There was clearly instruction and learning taking place, and the participants currently in the training and the participants who had been through the training felt that it was valuable. The entire atmosphere surrounding the Resort project was “charged.” Expectations are high that the project will reap significant benefits to the county and employees.

It may be difficult to implement changes in this program since the employer is under pressure to open the Resort soon and thus may be wary of anything that might cause delay. However, it seems to us that the following recommendations might be fairly easy to institute without causing delays to the flow of trained/certificated employees. First, there might be a better process than the one currently being followed to encourage individuals who are screened out by the WorkKeys assessment to remediate their skills and re-test. Second, Ivy Tech should consider post-program assessments. It needs to identify what skills to assess and how it should assess those skills after the training program. At present, there doesn't appear to be any assessment of learning gains.¹⁹

¹⁹ Following the site visit, Ivy Tech instituted a pre- and post-assessment of the soft skills class according to the program manager.

Site Visit Report

Ivy Tech – South Bend/Warsaw Campus

Date of Visit: November 13, 2006

Activities/Interviewees:

Bridget Timmeney conducted a site visit at the Ivy Tech – South Bend/Warsaw Campus workplace literacy program currently being offered in conjunction with Symmetry Medical - Othy. An IC³ preparation class was observed and interviews were conducted with Ivy Tech staff, the class instructor, the employer HR representative, and participating employees of the company. All together, the following individuals were interviewed:

Ms. Jean Perrin, Executive Director, Workforce and Economic Development, Ivy Tech Community College-South Bend

Ms. Loreen Lemon, Human Resources Training Coordinator, Symmetry Medical-Othy

Mr. Tim Ergle, Ivy Tech Community College, Elkhart County Project Manager and Instructor

Blake, Ben, Rosa, Leslie and Diana – IC³ class participants

Background

Ivy Tech Community College – South Bend originally had a number of employers expressing interest in participating in this workplace skills initiative. Six firms from this Ivy Tech region had identified a need and interest in pursuing basic and computer literacy skills training for their workforce. Unanticipated plant layoffs, union signoffs, and workflow issues have all been attributed to the decrease in the number of participating employers. Two of the original six employers remain as possible partners. One of the two businesses, Symmetry Medical – Othy, located in Warsaw, is currently actively participating in the program.

Symmetry Medical - Othy is a leading supplier of custom and standard orthopedic surgical instruments. Othy, with 500 employees located in three locations around Warsaw, Indiana, manufactures instruments used in the placement and removal of orthopedic implants and other surgical procedures. The firm offers contract-manufacturing services that take surgical instruments from concept through delivery. The products are produced as a complete package or as individual instruments.

Training Description

As of the date of the interview, two sections of the training plan were underway. Ivy Tech initiated training with the Work Smarts curriculum that emphasizes four strategies: be positive and proactive, be accountable and flexible, be cooperative and respectful, communicate and actively listen. Ivy Tech offered these classes for eight contact hours to 86 workers at the Claypool location. On October 10th, IC³ Computing Fundamentals training began. Two different instructors provide this training through Ivy Tech. The course is 32 hours in length, with two 2-hour sessions per week for 8 weeks at the Ivy Tech-Warsaw location. The distance between the training site and the students' workplace varies between five and 20 minutes for travel. Each session has some group instruction using the DDC Training software, hands on computer assisted instruction, and periodic quizzes for assessment. A total of 37 students are enrolled. Sessions are offered in the morning and afternoon to accommodate the shift schedules. Students who have been identified by their manager, during formal employee evaluations, as needing this training for improvement in their job are being paid for participation. The remaining students are not being paid for the training.

The project intends to offer the communications, math and reading/writing training next. The curricula for these classes will be customized from existing Ivy Tech curricula and from company specific work applications. As other companies join in the training activity, Ivy Tech plans to use their distance learning video technology at the Ivy Tech campuses in order to diminish the travel and instructional costs for this geographic region.

Accomplishments to Date

Getting the program off the ground has been a substantial accomplishment. Staff from Ivy Tech, particularly Ms. Perrin and Project Manager, Melissa Denton, has invested a lot of time and energy in outreach activities to the employers and workers. They have done this by developing brochures and flyers to market the program, by meeting with employers, and by establishing a training schedule to meet the employer and worker needs.

Beyond getting employers to agree to allow their employees to participate, the program has begun delivering instruction and developing relationships with those participants. The Work Smarts and IC³ computer classes are off the ground. Plans are being made for tailoring the Ivy Tech curricula for the communications and math sessions.

The employer interviewed was supportive of the program and projected significant personal development benefits for employees, which they presumed would be translated into on-the-job productivity. The employees/trainees interviewed were strongly supportive of the program and had found benefits both on-the-job and personally from the training. They were particularly pleased with the style and appropriately rigorous pace of their instructor and attributed much of their success and enjoyment in the class to him. After talking with other co-workers enrolled in the training with a different instructor, they were unanimous in reporting that they were fortunate to have the instructor they did.

Barriers/Issues

Initially this program was designed as a model 2 program, which means that it involves a consortium of employers. This site visit illuminated some difficulties with that model vis-à-vis the realities of a company's ability and willingness to fully participate in such an initiative. Whereas the initial participating employer demonstrates a culture of training integrated in its operations and administration, other companies struggle to maintain their viability in the manufacturing sector (automotive supplier), to secure a union's willingness to have their members participate in training, and another company's ability to manage its workflow to allow workers to participate in training. Outreach to and communication with businesses continues to be complex and varied given each company's needs. This site visit portrayed well the varying level of commitment and associated reasons for this variation.

The trainees and the employer emphasized that Ivy Tech has been very flexible in establishing a training schedule and assessment times. Ivy Tech has been responsive to both the company work schedule and workflow, which is ideal for the delivery of workplace adult education. It should be recognized that the employer managers prefer that training occur in house rather than off-site to avoid travel time and to promote further integration of training within the workplace. Travel to Ivy Tech requires additional transportation on the part of the participants, requires more trust from the employers who lose some control over the whereabouts of their employees, and requires shared investment in developing the facilities and furnishing equipment. The company also noted that part of their investment has been to facilitate study groups for the IC³ trainees to ensure the concepts are clear for the trainees. These study groups, organized by the Othy Human Resource Training staff, meet at Othy at varied times throughout the week to accommodate the different shifts and to address the questions students have as they prepare for class quizzes and exam for this IC³ module.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date. The employers felt that the program would or should have economic development gains for the state. All of the participants expressed their satisfaction with the IC³ training and thought they could further benefit from taking the remaining modules beyond the Computing Fundamentals module. The employer representative also reported that the full complement of IC³ training would be beneficial to their employees. The program manager indicated that the State has been very helpful in administering the grant to date. Respondents indicated that communications had been timely and clear, and that all technical assistance activities had been useful. One suggestion was made to offer some sessions through teleconferencing or some similar technology to reduce costs.

Evaluation

The program observed matched well with the proposed programmatic approach. The classroom observations suggested that considerable learning and enthusiasm for learning was occurring in the IC³ class observed. Keeping in mind that the program is still in its early stages of implementation, a few concerns were raised. Foregoing the full complement of IC³ computer skills modules limits the extent to which this site can contribute to testing the effectiveness and usefulness of this training as a benchmark for computer literacy. Secondly, related to IC³ training, there seemed to be very little contextualization of instruction. A concern might be whether this will limit the achievement of skills since contextualization is such a key component of effective adult education. Also it would seem to constrain the payoff to the employer.

Another key issue for this program will be whether enrollment will reach its projected numbers of participants. Many of the employers that initially expressed interest in participation are not able to participate. The program manager reported that discussions with two remaining employers continue with hopes that activity may start after the first of the year. The outcome of whether this site can remain as a model 2 activity has yet to be determined, and, therefore, a questions remains about whether enrollment goals can be achieved.

Nevertheless, it was clear from the visit that a lot of time and effort has been invested into getting this program off the ground. The payoff to date has been the considerable excitement that it has generated from the participants and commitment from the participating employer. Much work still needs to occur with the development of curricula for the workplace skills components. An important question, for which it is too early to answer, is the extent to which integration of basic skills into occupationally specific content will promote the acquisition of those skills.

The bottom line is that, to date, this program is successfully traversing the early stages of its learning curve. The outcome of a fully integrated program as proposed will, of course, depend on several factors. Training participants will need to continue to enjoy and to experience success in their courses. Employers will need to see tangible benefits. The program will need to develop appropriate curriculum and to staff the courses with excellent adult educators. All parties are concerned about the challenges to be faced in the next phase of training and they are aware of the importance of struggling through these challenges in order to meet the DWD grant initiative objectives. Given the competency of the Ivy Tech staff and the Symmetry Medical-Othy's expressed commitment to the education and training of its workers, one suspects that this next phase will be a success, especially if the other identified firms participate.

Site Visit Report

Ivy Tech – South Bend/Warsaw Campus

Date of Visit: October 3, 2007

Activities/Interviewees:

Kevin Hollenbeck and Bridget Timmeney conducted a site visit at the Ivy Tech – South Bend/Warsaw Campus workplace literacy program currently being offered at the Symmetry Medical – Othy training area. A mathematics class was observed and interviews were conducted with Ivy Tech staff, the class instructor, the employer HR training representative, and participating employees of the company. All together, the following individuals were interviewed:

Ms. Loreen Lemon, Human Resources Training Specialist, Symmetry Medical-Othy
Ms. Melissa Denton, Ivy Tech Community College, Workforce and Economic
Development Project Manager
Mr. Robert Lee, Ivy Tech Community College Mathematics Instructor
Raquelle, Abigail, and Marla – math class participants

Background

Although Ivy Tech Community College – South Bend originally had six employers express interest in the workplace skills initiative, Symmetry Medical - Othy is the only firm that has consistently participated in the initiative's efforts. A second employer, Dalton Foundry, more recently joined the initiative by enrolling employees in the final IC3 class. Continued unanticipated layoffs, union signoffs, and workflow issues have all been attributed to the decrease in the original number of participating employers. Layoffs and workflow issues at Othy also caused delays in class start dates throughout the program.

Symmetry Medical - Othy, Inc. manufactures surgical instruments supporting primarily orthopedic hip and knee joint replacements. These instruments are high precision, machined components manufactured to the customers' designs and are used in the placement and removal of orthopedic implants and other surgical procedures. Othy, with 380 employees, is based in Warsaw, Indiana, where some of the orthopedic industry's largest companies are headquartered. The firm offers contract-manufacturing services that take surgical instruments from concept through delivery.

Othy representatives identified themselves as a Tier 2 business in the orthopedic industry and explained that due to the local competition, they continually struggle to retain their workforce. Employees often are lured by the neighboring Tier 1 orthopedic manufacturers in Warsaw which offer more competitive compensation. Othy has used training as a retention tool and as a tool toward developing and maintaining a skilled workforce. Othy is very pleased with this workplace basic skills training program and intends to continue with IC3 Key Applications

training if the company is successful in its application for Skills Enhancement Funds through DWD.

Training Description

The training plan outlined in Ivy Tech's proposal was well under way at the time of this second visit. Training began initially with soft skills training using WorkSmarts for eight contact hours. Further soft skill training included Workplace Communication (8 hours) and the same amount of time spent (8) on Teamwork training. Basic skills training was also included in the proposal with Math for Industry (28), followed by Reading for Information (12) and 24 hours of Workplace English. The training plan concludes with 32 hours of IC3 Computing Fundamentals. Our first visit occurred during the initial class of IC3 training and this second visit occurred during the math training.

Location of training varied throughout the length of the initiative. WorkSmarts was given at Othy's Claypool location, all IC3 training occurred at the Ivy Tech-Warsaw campus and the math class was held on-site in portioned off space within the Othy human resources area. The facility seemed adequate although the employees and the teacher mentioned the use of a smart board, rather than an overhead projector, would be helpful. The phones ringing from surrounding offices seemed to be distracting during our observation, but this was not mentioned as a problem for those individuals we interviewed.

The math class takes place every Wednesday from 3:30 to 5:30 pm and includes employees from three different shifts. Only those employees whose manager identified math as a weakness in their staff evaluation are paid their straight time wages during class-time. All other students voluntarily enroll in the class. This payment criterion is the same for the IC3 classes. The WorkSmarts class time was fully paid for all enrollees.

The instructor seems to know the material well but there was little evidence that contextualized teaching or learning was integrated in the curriculum as indicated in the proposal.

Accomplishments to Date

Staff, particularly Ms. Lemon and Project Manager, Melissa Denton, has invested a lot of time and energy in outreach activities to the employers and workers. They have done this by developing brochures and flyers to market the program, by meeting with employers, through various printed and video announcements in the employer locations, and by establishing a training schedule to meet the employer and worker needs. The following represents activity for each of the training components:

	Enrolled	Still Attending	Completed	Certificates
WorkSmarts	250		250	NA
Workplace Communications	TBD			
Teamwork	TBD			
Math	15	15		
Reading	TBD			
English	TBD			
IC3/Computing Fundamentals	180		23	

The employer representative interviewed offered high praise for the program. She indicated that class scheduling and recruitment was difficult, but effort seemed to be worth it. She indicated that the workers communicated better and exhibited higher levels of self-confidence. Although some of the training was mandatory, she noted a sizable number of workers were participating voluntarily. The workers/trainees interviewed were pleased to have an opportunity to further their education.

Some of the accomplishments to date that the interviewees mentioned included the following:

- The IC3 Computing Fundamentals class, although rigorous and not particularly applicable to their job, enticed them to want to learn more about the computer.
- Students' involvement seemed to have greatly energized them; they seem to exhibit more positive attitudes in their jobs and seemed to take more active interest in other training opportunities offered through their employer, i.e., apprenticeship programs and future community college enrollment.
- The employer appears invested in workforce training. For workers who were not chosen for the apprenticeship program, workers are still able to take the associated coursework through the use of the employer's 100 percent tuition reimbursement program.

Barriers/Issues

Initially this program was designed as a model 2 program, meaning that it intended to involve a consortium of employers. This second site visit illuminated further difficulties with that model vis-à-vis the realities of a company's ability and willingness to fully participate in such an initiative. Although an additional company joined the initiative by sending 2 workers to the current IC3 class, the overall level of participation demonstrates the company's struggles to maintain their viability in the manufacturing sector (automotive supplier), to secure a union's willingness to have their members participate in training, and another company's ability to manage its workflow to allow workers to participate in training. The math class that was

observed at Othy was rescheduled several times due to lay-offs, employee retention issues and instructor availability issues. These struggles demonstrate the realities of offering basic skills training within the competitive manufacturing sector.

Evaluation

This program appears to have developed a strong working relationship between Ivy Tech and the employer. Although the two entities worked together somewhat prior to this grant initiative, both the employer representative and the Ivy Tech program manager commented on the mutual efforts to meet the needs of the employer, workers and Ivy Tech instructors and staff. This growth was also observed comparing the two site visits.

Both site visits revealed that minimal contextualization had occurred with the curriculum. The mathematics instructor was aware and committed to adult education but commented that the materials used, and method of delivery, was similar to the standard Ivy Tech mathematics course offering. Examples from company everyday work environment had not been embedded into the curriculum as indicated in the proposal. The instructor also had not interviewed supervisors or observed on the plant floor or work areas. There also seemed to be very little contextualization of instruction in the IC3 Computing Fundamentals classroom previously visited. The workers interviewed during this latter visit found little use for the IC3 content in their jobs or for their personal use of computers. A concern might be whether this will limit the achievement of skills since contextualization is such a key component of effective adult education. Also it would seem to constrain the payoff to the employer.

Another key issue for this program is the absence of worker/student certification. All of the individuals interviewed were unaware of the potential to earn 21st Century Workplace Skills Certification. Students had been tested through CASAS for the basic skills components and IC3 pre and post testing was completed for the Computing Fundamentals class, but no work had been done to translate learning and test gains to the potential for certification.

The payoff to date for this program has been the commitment and relationship developed from the participating employer. The employer has experienced some benefits, though not quantified, related to employment retention and competitiveness. Some of the employer's workforce have experienced some success with training and, therefore, are turned on to further training and professional development. These benefits may open the door to future collaboration between Ivy Tech and the employer.

There may be more potential for benefit not yet realized due to the implementation flaws with the program. The bottom line, to date, is that this program has not successfully traversed the learning curve of a fully integrated program. Training participants appear eager to learn but comment about the lack of relevancy of the coursework to their jobs. The employer reported that retention would have been a more serious concern during the spring and summer hiring period of its local competitors, but the training opportunities had made their employees more invested in their existing employment. Any further employer outcomes other than this anecdotal evidence has not been tracked. The program will need to develop appropriate curriculum and to staff the courses with excellent adult educators.

Site Visit Report

Center for Mental Health

Date of Visit: December 14, 2006

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to The Center for Mental Health, Inc. (CMH) workplace skills grant program in Anderson. Dr. Hollenbeck interviewed the project manager, another CMH staffperson helping with the project, a CMH Vice President, an official from Ivy Tech who is a partner of CMH on the project, an Ivy Tech instructor, and two CMH employees participating in IC3 training. In addition, he observed an IC3 preparation class. Note that Ms. Terri Schulz, from the Indiana Department of Workforce Development accompanied Dr. Hollenbeck. All together, the following individuals were interviewed:

Ms. Barbara Scott, Vice President and COO of CMH, Anderson
Ms. Cassie Hope, HR Assistant and Project Manager, CMH
Ms. Connie Clark, Training & Development Specialist, CMH
Ms. Connie Trout, Project Manager, Workforce & Economic
Development, Ivy Tech Community College, Muncie
Ms. Connie McLaughlin, Instructor, Ivy Tech
Laura Vaughn and Laura Jones, CMH employees

Background

The Center for Mental Health, Inc. (CMH) is a private, not-for-profit, behavioral health care organization serving individuals and families in nine Central Indiana counties. The services offered include group/family/individual counseling, medical services, life assistance programs, gambling/addiction programs, supported employment, residential care, education, and others. It is a large organization with over 300 employees, of whom over 250 are health care professionals.

An interesting aspect of this program is that it is targeted on a single occupation. The basic skills enhancement and digital literacy training is being offered to residential coaching staff members. The job description for this occupation is as follows:

- Monitor consumer medication compliance and provide opportunities for increased independent functioning
- Teach, coach, and assist consumers in learning activities of daily living including personal hygiene, cooking, money management, housekeeping, meal planning, laundry, socializing, etc.
- Monitor and document the health and welfare of consumers
- Develop and maintain a therapeutic rapport with consumers
- Conduct bed-checks and other activities to be aware of status of consumers
- Provide non-violent crisis intervention when indicated
- Transport consumers

- Monitor and document the overall health of consumers
- Keep such records as are necessary in the performance of duties, including regular reports of status, issues, and successes

One of the motivating factors for CMH to apply for the grant was a concern about whether the skill levels of their coaches were adequate because they were experiencing high levels of turnover as benchmarked with other residential facilities in the state.

The originator of the application for the CMH was Karen Thaxton, who is no longer with the organization. She had been its HR Manager. Stepping in as project manager has been Ms. Hope, who works in the HR Department, and is especially interested in the grant because she was formerly a residential coach for the organization. However, Ms. Hope believes that the project is somewhat behind schedule because of the transition in project leadership.

Training Description

The project is planned to proceed in three phases. The first phase is to have participants take the Myers-Briggs Personality Inventory and attend several “brown bag” seminars on topics related to communication skills and work and learning environments. At the time of the site visit, this phase of the project had been completed for the initial employees who volunteered for the project.

Phase two of the project involved having a WorkKeys profile of the residential coach position, conducting WorkKeys assessments of employees, and offering basic and workplace skills training as needed. The WorkKeys areas that the Center chose were applied mathematics, reading for information, writing, and observation. We didn’t get a clear understanding of the goals of this phase of the project, but it is our understanding that Keith Hamilton from Ivy Tech conducted a job profile and established levels for entry level and for an effective incumbent. The CMH proposal noted that the basic skill levels were level 3 for applied math, and level 4 for reading for information, writing, and observation. The employees who participate in phase two will be assessed using WorkKeys, and will be offered remediation and basic skills training as needed. The training modules that will be developed by Ivy Tech instructors will be customized to the duties of residential coaches. Each module was budgeted to be 30 hours and to include math skills, reading, writing, and observational tasks.

Phase three of the project is the computer literacy portion of the grant. The proposed plan was comprised of five three-hour sessions and certification testing for the first level of IC3 certification, Computing Fundamentals. Employees interested in the other two phases of IC3 certification were to be offered the opportunity to pursue them through the use of the CMH tuition reimbursement benefit.

An innovative component of the CMH training is the incentive plan that is attached. All of the employees who participate will do so on paid time. But furthermore, if they receive positive performance evaluations in their position, they will earn a pay increase of an additional \$0.25 per hour for completing phases 1 and 2 (two potential increases) and an addition \$0.50 for

completing phase 3. Current employees who have received appropriate performance evaluations and subsequent raises will instead receive \$50 at the completion of each phase, for a potential incentive of \$150.

Accomplishments to Date

At the time of the site visit, CMH had completed phase 1. They had had 34 employees who took the Myers-Briggs Personality Inventory, and attended three 3-hour workshops. The project will offer more workshops if more employees get hired and volunteer to participate.

The WorkKeys job profiling and assessments components of phase two had been completed. The CMH proposal had planned for 60 employees to be assessed; however, it only had 36 employees volunteer. The assessments were done by WorkOne. We got sketchy data about results, but what is documented in this site's progress report to DWD is that 22 employees were at entry level in one or more of the assessment areas, and nine were below entry level in at least one of the assessments. CMH staff persons indicated that they were surprised by these rather low results, and felt that perhaps their turnover problem existed because the workers did not have the skill levels required to be effective. The proposal suggests that Ivy Tech will be conducting the basic skills training, and at the time of the site visit, respondents indicated that they were in the process of curriculum planning. On the positive side, six of the individuals who were assessed were found to score at the effective levels on all four assessments.

Although the basic skills training was still in the curriculum planning process, the computer training in Phase 3 was underway at the time of the site visit. Several classes had been started. Each class met once a week for three hours. The particular class that was observed was meeting for the second time. Each class was scheduled to meet five times as preparation for the Computing Fundamentals certification.

Barriers/Issues

The project has encountered a number of logistical issues and a substantive issue dealing with the content of the computer training. Among the logistical issues, the biggest headache has been scheduling. By the nature of the job, the residential coaches must be with customers for 24 hours a day, 7 days a week, for 365 days a year. Furthermore, there are not a lot of substitutes or extra staff on duty that can cover for an individual while they are being assessed or trained. Consequently training may occur during "off-hours" or "off-days." A second issue that has been encountered is staff reluctance to participate. Some of the staff are college students, who feel they do not need additional training or who feel that they are not in career jobs.

The substantive issue that became apparent at the time of the site visit was the content of the computer training. The proposal submitted by CMH had been approved for funding even though it proposed providing computer training leading to Computing Fundamentals certification only, when the 21st Century Workplace Bronze Certificate required certification in Living Online. No one picked up on this discrepancy at CMH or at DWD until the time of our site visit.

Consequently, CMH and their partner, Ivy Tech, had made arrangements for the Computing Fundamentals training. Compounding the confusion was the fact that the employees were very unhappy about the content of the training after their initial class. They felt that it was highly technical and covered information that they would never use in their jobs. Finally, Ms. Hope had sat through the training, and she seemed to agree that it was inappropriate.

The CMH grant seemed to be at a crossroads at the time of our visit. The CMH project manager felt that what the organization desired was basic keyboarding and some training in Word Processing applications. However, CMH and Ivy Tech were well into the more technical Computing Fundamentals training. It will be interesting to learn how this issue gets resolved.

Interactions with State/Programmatic Suggestions

We asked respondents for their opinions about program administration by the state, and whether they had any suggestions. All seemed quite pleased to date.

Evaluation

A major accomplishment of this project is simply that it has gotten underway despite the departure of the key individual who championed the grant and was responsible for its design. It seems to have successfully completed its first phase, which in reading between the lines, must have taken considerable time and effort to elicit employees and to schedule. Furthermore, the project has completed its job profile and WorkKeys assessments of 36 employees. Finally, the project has gotten computer training underway.

This project has a couple of distinctive characteristics. First, it included the generous incentives for employees to garner their participation. Not only are the employees being paid while they are being trained or assessed, but also they are eligible for raises upon completion of the three phases of the project. Second, the project is achieving a measurable outcome of importance to the employer.

The employer knew that it had high turnover in the residential coach position because of the availability of benchmarks to other similar institutions in Indiana. By having a formal job profile and assessments of the incumbents holding the positions, the employer found that skill levels were not adequate, and so there was an obvious need for training. The employer was exceptionally pleased to learn this information and clearly intended to act on it.

The problems that CMH is having in trying to get the computer literacy training portion of the project aligned with their needs is unfortunate. Given the solid information that the organization has about the WorkKeys skill levels and the potential for basic skill enhancement training to make a substantial difference to the organization and presumably to the employees, we hope that a viable solution to its phase three gets found.

Site Visit Report

Center for Mental Health

Date of Visit: June 6, 2007; August 2, 2007

Activities/Interviewees:

Kevin Hollenbeck conducted a site visit to the Center for Mental Health, Inc. (CMH) workplace skills grant program in Anderson, Indiana. During this visit, he conducted interviews with an Ivy Tech instructor, the CMH Project Manager, the Ivy Tech Project Manager, the CMH Human Resources Director and observed a class at Ivy Tech. This was the second site visit to CMH; the first occurred on December 14, 2006. In addition to these interviews, Bridget Timmeney interviewed a CMH Residential Coordinator and 4 students via phone on August 2, 2007. All together, the following individuals were interviewed:

Mr. Larry Gilbert, Ivy Tech Instructor
Ms. Cassie Hope, CMH Project Manager
Mr. Mike Pickrell, Ivy Tech Project Manager
Ms. Debbie Trammell, CMH Human Resources Director
Ms. Linda Harrison, CMH Residential Coordinator
Betty, Elaine, Carolyn, and Karen, CMH Residential Coaches and training participants

Background

The Center for Mental Health, Inc. (CMH) is a private, not-for-profit, behavioral health care organization serving individuals and families in nine Central Indiana counties. CMH provides group, family and individual counseling, medical services, life skills programs, gambling/addiction programs, supported employment, residential care and other mental health services. The particular focus with the 21st Century Workplace Skills Initiative is the CMH residential care component and specifically, the residential coaches working in the group homes for adult consumers with mental illness. CMH was founded in 1968, and residential care for adults with mental illness began in 1979 with the first of four homes purchased.

The residential coaches manage and supervise the daily lives and living environment of consumers living in CMH group homes, consistent with consumer treatment plans. Coach responsibilities include, but are not limited to, assisting consumers in the development of skills to eliminate psychosocial behaviors; monitoring medication to increase independent functioning; teaching, coaching and assisting consumers in daily living skills; providing non-violent crisis intervention, monitoring and documenting consumer health and welfare; organizing and supervising community based activities for consumers; maintaining and organizing house working files; account for and coordinating the appropriate management of house monies; and entering medical record data following Center guidelines. The grant monies were intended to increase basic reading, math and computer skills of residential coaches and increase retention of individuals in this position. The training is mandatory, staff members are paid for their time in

training, and incentives are available for the successful completion of three different benchmarks.

CMH employs from 30 to 35 residential coaches at any one time depending on the caseload and turnover of incumbents.

Training Description

The project plan included three training phases, the order of which has changed slightly due to management staffing changes and revisions to the initial content of the training. The first phase included participants taking the Myers-Briggs Personality Inventory and attending several “brown bag” seminars on topics related to communication skills and work and learning environment. At the time of the June site visit, over 30 individuals had taken the Myers-Briggs, and 10 (newly hired) coaches had not yet taken it.

Phase two of the project included profiling the residential coach position using WorkKeys, conducting WorkKeys assessments of the participating employees, and providing basic and workplace skills training consistent with the deficiencies noted from the WorkKeys assessment results. The Center selected applied mathematics, reading for information, writing, and observation as the WorkKeys basic and workplace skills areas. Level 3 was chosen as the cutoff level for math, and level 4 was chosen as the cutoff for the remaining areas. Training was provided to staff members who did not meet these benchmarks, and Ivy Tech instructors were responsible for customizing training specific to residential coaching duties.

At the time of the visit, a class that covered communication, reading, and writing had just begun. It was in its second of five weeks. The instructor had planned to cover communication in the first week; reading in weeks two and three; and writing in weeks four and five. Three sections of the class were offered; each section having three hours of class time per week. The enrollments in the sections were said to be between two and seven depending on the students’ test results. The participants were only required to attend those classes that covered material in which they were deficient. So if an individual tested well in reading but not well in writing, that individual would only be required to attend the class when writing was being taught. After the five week course had been completed, basic mathematics was to be offered, and seven students were to attend.

The last phase of training is the computer literacy portion of the grant. The Center’s initial plan called for five three-hour sessions and certification testing for the first level of IC3 – Computing Fundamentals. Employees who were interested in completing the remaining two IC3 levels were eligible to take these independent of work time through the CMH tuition reimbursement benefit. As described below, the computer literacy design was modified. The trainees and grant administrator found that the training content of the Computing Fundamentals did not meet their needs. The modified training plan has substituted Living Online for Computing Fundamentals. Instruction for Living Online was scheduled to begin this month—August 2007, i.e., after basic math.

Accomplishments

The CMH initiative has progressed through a couple of starts and stops. As documented in our first site visit report, the initiative started slowly because of personnel changes at the agency. It got underway and conducted the phase one seminars. However, when IC3 training started at Ivy Tech in late fall, the participants and grant administrator felt that the training was missing the mark. So it was halted, and the program stalled for a few months. At the time of our site visit, the program had gotten started again, and as noted above, several employees were taking classes in reading and communication at Ivy Tech.

Even though the agency may feel frustrated by the restarts, we think that the initiative has achieved several major accomplishments of significance. First, the initiative has earned a solid commitment from CMH management. The WorkKeys profiles of the Residential Coach position and assessments of incumbents in that position have been an “eye opener” for CMH, and reinforced the need for basic skills upgrading. Second, the agency has conducted the Myers-Briggs assessments and seminars comprising phase one of the project. Third, all of the residential coaches have been assessed with WorkKeys and, at the time of our visit, 17 persons are engaged in formal basic skills training.

Barriers/Issues

The major barrier at this site has been scheduling assessments and classes. The residential coach position is a 24/7 job. Furthermore, CMH operates four separate residences. It has been a major challenge to schedule activities in a way that minimizes the disruption and continues appropriate care for consumers. In general, part-time employees and supervisors have been used for coverage during the assessment and training times.

A second major challenge has been employee resistance. The trainees, on the whole, appreciate the opportunity for further training. They find it convenient and generally like the chance for personal and professional improvement. However, they question the relevance of this particular initiative. All of the trainees who were interviewed felt that the training content, particularly in math, is not related to their jobs. They did not see a benefit for themselves, for their jobs, nor for the consumers they serve. All recognized the use of math skills on the job and were highly complimentary of the math instructor, but found the material presented in class to be unrelated to the skills and tasks performed on the job. As a result, it is not clear to staff why CMH is investing money and time into the training.

Evaluation

The 21st Century Workplace Skills initiative has turned on a “light bulb” for the Center for Mental Health. The organization had been experiencing high turnover in the residential coach position—relative to other residential homes in the state—and found out that their assumption that incumbent workers in that position had the skills to succeed was incorrect.

Residential coaches have a very demanding job, and apparently, have been hampered by basic academic skill levels that are beneath the WorkKeys profile for this occupation. CMH is very hopeful that the training provided through this grant will facilitate the incumbent workers' job performance and reduce turnover.

Unfortunately, our sense is that the employees' resistance to and complaints about the initiative will impair its success. For example, none of the employees who were interviewed expressed knowledge about or interest in the certificates. These were clearly not an incentive for them. The Center did establish an innovative system of bonuses/pay raises for successful participation. The employees were well aware of the bonuses, but seemed to minimize them.

A question we have is whether a more concerted effort at contextualization would have helped to engage the participants' interest. In briefly observing instruction and interviewing an instructor and several students, it appeared as though minimal contextualization occurred.

The payoff for CMH in participating in the 21st Century Workplace Literacy program is the awareness gained about the discrepancy between the requisite skills needed for the residential coach position and the actual skill levels of their existing coaches. Many of the residential coaching staff members were assessed to be deficient in skills required of this position. The challenge for the organization as it finishes up this grant and designs future training programs is to assure appropriate alignment to the content needs of this position and successfully relay the purpose and benefits of training to the staff.