

Remedial Education at Two *Jobs to Careers* Sites

The need to connect frontline workers to remedial or developmental education in English and math is an unexpected focus for many *Jobs to Careers* grantees. Many of them designed their programs based on the assumption that most frontline workers would have the necessary literacy skills to participate in selected college-level courses. But, as a *Jobs to Careers* employer partner stated, “What an eye-opening experience this has been for us. During one of the implementation sessions with supervisors, it was revealed that some of the targeted frontline staff would not even apply to the program because of fear of a requirement to write a two-paragraph essay.”

This situation is common, not just at *Jobs to Careers* sites but among frontline health care workers in general. As a result, several *Jobs to Careers* sites delayed launching occupation-specific training or decreased the number of participants they would enroll while they addressed the need for basic education skills.

Writing in *Philanthropy News Digest*, Jerry Rubin, formerly director of the *Jobs to Careers* National Program Office, pointed to the same issue in his current work. As president and CEO of the Jewish Vocational Service (an education partner in *Jobs to Careers* with East Boston Neighborhood Health Center), Rubin wrote, “More than half of all adults lack adequate literacy skills for the modern workplace, regardless of their educational credentials.”

In a 2001 American Management Association study of corporate concerns, employers ranked developing and improving workforce skills 8th out of 25 issues. That same year, the National Association of Manufacturers surveyed its employer members about their reasons for rejecting applicants for hourly production positions: 32 percent cited inadequate reading/writing skills; 21 percent stated the reason was inadequate math skills; and 18 percent said inadequate oral communication skills. In 2003, the National Assessment of Adult Literacy reported that 14 percent of adults were below basic in prose literacy; another 29 percent had only basic prose literacy. The NAAL report

also noted that several population groups were overrepresented in the below basic level category (see table).

A few *Jobs to Careers* grantees are creatively combating the lack of basic skills in their frontline workers by using work-based learning, supplemented with distance learning or classroom instruction, to incorporate literacy attainment into their programs. While meeting the challenge is not easy, it does create an opportunity for *Jobs to Careers* educational partners and employers to develop new strategies for providing remediation.

Thanks to Mike Hancock, director of education and human resources support at Asante Health System, for providing this article.

ADULTS WITH BELOW BASIC PROSE LITERACY, 2003

	Percent with Prose Literacy Below Basic
Did not graduate from high school	55%
No English spoken before starting school	44%
Hispanic adults	39%
Black adults	20%
Age 65+	26%
Multiple disabilities	21%

Source: National Assessment of Adult Literacy, http://nces.ed.gov/naal/kf_demographics.asp

Owensboro Community & Technical College: Contextualizing Courses

Remediation is a critical element for most health care projects seeking to train frontline workers. Many workers have been out of school for years, and most did not fare especially well when they were in school. Owensboro Community & Technical College has years of experience providing remedial education for a variety of industries, yet *Jobs to Careers* offers it something different. First, the new remediation program targets the health care industry. Second, it prepares participants not just to take college-level classes but to reach the high level of academic preparedness needed to enter OCTC’s nursing curriculum. The nursing curriculum prerequisites include two courses of non-credit remedial math and one course of for-credit college-

Through on-line and work-based training, these frontline workers in Owensboro, Kentucky, are on the path to becoming Associate's degree Registered Nurses.

The learning in OCTC's Math RX is contextualized. The entire course will require only five group-learning sessions, all held at partner hospitals where the students work.



level math. The college places students in the sequence of classes based on assessment test scores. Many frontline health care workers are placed in the remedial, non-credit courses.

For the initial *Jobs to Careers* participants, OCTC used its traditional coursework for the first remedial level of math. Recently, adopting elements of *Jobs to Careers*' work-based learning approach, OCTC developed not only a contextualized version of the course but has added in a work-based learning component. Students' assignments relate to work they are doing. A simplified example would be the study and mastery of percentages. The assignment for a student working in a lab might be: to determine the percentage of lab tests conducted during the whole day that are done in the morning. A student working at the front desk may have the same assignment but reframed: to determine the percentage of the patients who arrived at your desk today that came in the morning.

THE CRITICAL ELEMENTS OF THE JOBS TO CAREERS REMEDIATION PROGRAM AT OWENSBORO COMMUNITY & TECHNICAL COLLEGE

OCTC has developed a variety of remedial courses to prepare applicants for its certificate and degree programs. While specifics vary from course to course, elements common to all remediation courses include:

- A continuity and mastery model of instruction that allows students to move forward as soon as they master all of the requisite skills, rather than when the traditional semester ends
- Real-life examples from the workplace and assignments that are completed as part of the work process
- Instructors with industry experience
- Links to additional resources (e.g., the tutoring center) in a supportive way that encourages all students to continue making progress

In developing this course, college staff interviewed nurses and frontline supervisors to identify real-life examples of the use of math on the job. These examples were then incorporated into a curriculum that is now used in preparing frontline workers for the nursing program (*see box*).

According to OCTC Vice President of Workforce Development Cindy Fiorella, contextualized courses benefit students and the college alike. Using everyday examples from the workplace helps students see the relevance of math to what they do every day, which in turn helps them stay in the program and advance. A benefit to the college is that students enter the nursing program with a greater mastery of foundational math skills, lessening the need for nursing instructors to spend time reinforcing math skills.

OCTC has completed the design of Math RX, its revised version that incorporates work-based learning. The next step is for the college to prepare students—at whatever level they enter—for the college-level math course. The learning in Math RX is contextualized. The entire course will require only five group-learning sessions, all held at partner hospitals where the students work. The remainder of the instruction will be work-based and also provided through online instruction, with small group and individualized tutoring sessions arranged to meet the individual needs of the participating students. Math RX will add flexibility to the program. Students will only spend time learning what they need to know, not what they have already mastered.

OCTC is now developing a math continuum for allied health. According to Fiorella, when the college completes the entire remedial math curriculum, students will have access to “something that will be more relevant and hopefully ensure their success.”

Asante Health System: A New Certificate

In Medford, Oregon, Asante Health System recognized during the first year of *Jobs to Careers* that to prepare frontline workers for the project's targeted occupation of “health care informatics assistant,” it would require two things: a new curriculum and a one-year, college-level certificate to be awarded upon its successful completion. Asante has designed a rigorous curriculum that includes

general education courses (e.g., English composition), as well as math and science courses (e.g., anatomy and physiology, algebra) and information technology courses (e.g., introduction to operating systems, database management). College readiness in language and math proficiency is essential for student success.

Asante launched the program in 2007. All employees selected for this course of study began by taking placement tests through Asante's education partner, Rogue Community College. The result: almost every individual required remediation to some extent. The biggest area of need was in math, and a few students also needed to improve their language skills. Moreover, the *amount* of math remediation needed was a big surprise to Asante. Some employees had to take as many as three courses to qualify for the informatics program.

Asante placed individuals needing the least amount of remediation into its first learning cohort toward earning the new credential. Those with larger remediation needs went into a second cohort. The employees in the first group had one semester to complete their remedial work. Those in the second cohort had two semesters. A tutor worked with the few who needed three remedial math courses, helping them develop their skills one-on-one. After

a few weeks of tutoring, all took the test again and scored high enough to progress with the other cohorts.

Another problem arose early in the first semester. Some employees were struggling in the math and computer courses. Reasons varied. For some, it was the first time they were using distance learning (the computer class was offered on line). Others had never taken a college-level course, found the subject matter too challenging, or hadn't developed proper study habits.

For the math class, Asante took advantage of the fact the students met together to complete their on-line work. A tutor was there in person to provide immediate help as students worked on line. For the computer class, the instructor came to the Asante campus instead of just teaching on line and worked closely with the students, even allowing them to retake tests in some instances.

By the beginning of their first semester of the informatics curriculum, few students needed any assistance beyond what their instructors could provide. Over the course of this first year, a few student employees dropped out for family-related reasons, but all those who completed the remedial classes were ready to begin the informatics curriculum.

In Oregon, and Rogue Community College are partnering to prepare health care workers to earn the state's first certificate in Health Care Informatics.

