

# Workplace Instruction and Workforce Preparation for Adult Immigrants

Miriam Burt and Julie Mathews-Aydinli, Center for Adult English Language Acquisition, Center for Applied Linguistics

## *Background on Adult Learners*

Adult education programs serve learners who are native English speakers and those whose first or native language is not English. Native English speakers attend adult basic education (ABE) classes to learn the skills needed to earn high school equivalency certificates or to achieve other goals related to job, family, or further education. English language learners attend English as a second language (ESL), ABE, or workforce preparation classes to improve their oral and written skills in English and to achieve goals similar to those of native English speakers.

## *Audience for This Brief*

This brief is written for adult ESL teachers and program administrators and for educational researchers, policy-makers, and stakeholders who work with adult English language students in ESL, vocational, or workplace-based classes.

## **Introduction**

The U.S. workplace is increasingly populated with workers whose first language is not English. Data from the 1990 U.S. Census showed 11.6 million foreign-born workers, 9% of the total labor force of 123.5 million. By 2002, there were approximately 20.3 million foreign-born workers, 14% of a total labor force of 144.1 million. While the sheer numbers are impressive, more significant is the fact that these numbers represent a 76% growth rate for foreign-born workers, compared to a rate of only 11% for native-born workers (Grieco, 2004).

Oral English fluency and literacy have long been considered to be key factors in workforce success. Since 1964, the need for immigrant adults to be proficient in English in order to be successful at work has been one reason for federal funding for adult education programs (Chiswick & Miller, 2002; Moore & Stavrianos, 1994).

Adult educators across the country are seeking ways to ensure that foreign-born adults will be successful in gaining English proficiency and in entering and advancing at

the workplace. This brief reviews the three venues in which federally funded instruction is available for immigrant workers: at the workplace, in vocational classes, and in adult ESL classes. Basic program features and the strengths and challenges of each type of program are described, and recommendations are given for addressing the challenges. This information will help program administrators and teachers select, establish, and improve programs for the adult immigrants they serve.

## **Workplace Classes**

Classes to improve immigrant workers' English language skills may be offered at the workplace during the workday, before or after the workday, or in a mixed configuration, with the first hour of the class (for example) held during the workday and the second after work. Workplace classes may be funded by the company, by the labor union, through a grant from the U.S. government or a foundation, or through a combination of funding sources (Burt, 1997). Generally speaking, workplace classes are free to workers.

## *Strengths of workplace-based classes*

**Ease of scheduling.** Adult immigrants lead busy lives. Offering ESL instruction at the workplace can alleviate some scheduling challenges. For example, a study of healthcare workers in Canada (Duff, Wong, & Early, 2002) found that female immigrant workers have extra demands on their time as mothers and wives, along with cultural expectations for them to be at home, both of which make it difficult for them to allot time beyond the work day for ESL study. Providing instruction at the workplace during regular work hours is one way to address this issue.

**Authenticity of content.** Materials used in instruction that are drawn from those used in the workplace can have positive outcomes for learners. Teachers and administrators in a workplace-based program in Pennsylvania described their success with workplace materials (Monti, 2004, 2006), and Jacobson, Degener, and Purcell-Gates (2003) found positive outcomes when authentic materials were used in workplace instruction for adults. These investigators argue that adults need to practice real-life situations to retain

what they have learned and to believe that the time they spend in the program is worthwhile. Clearly linking the learning of English to practical and professional contexts through the use of authentic materials is one way to address this issue. In addition, the workplace can provide its own language and skills learning laboratory, through materials that include safety posters, memos, tools, and machines, and through interaction with co-workers and supervisors. Specific vocabulary, including the names of machines and other specific terms used on the job, can be discussed and practiced where they are used and needed.

**A positive work environment.** When native-English-speaking co-workers are involved with immigrant workers as peer mentors or conversation partners, the interaction can help to strengthen teamwork and a sense of community at the workplace. The result can be a more pleasant working atmosphere as well as more efficient work practices. For example, as Gerdes and Wilberschied (2003) report in their description of a workplace ESL program at a restaurant chain in Cincinnati, Ohio, the nonnative-English-speaking workers appeared more confident on the job, and interactions between native and nonnative English speakers increased, when they participated in classes together and the native English speakers served as peer mentors in the classes. Offering classes at the workplace may send a message to nonnative-English-speaking employees that they are of value to the company. This can reduce worker turnover, improve productivity, and reduce the likelihood that the company will need to close down or move offshore (The Manufacturing Institute, 2006).

### ***Challenges of workplace-based classes***

**Unrealistic expectations.** Both employers and employees can have unrealistic expectations about the amount of time it takes to learn English (Kavanaugh, 1999; Mikulecky, 1997; Pierce, 2001). Research is limited regarding English learning in adults (National Center for ESL Literacy Education, 2002), but studies with children reveal that it can take 2 to 5 years to become socially adept in a second language and 5 to 8 years to become academically on par with native speakers (Cummins, 1991; Thomas & Collier, 1997). A workplace ESL class of 40 to 60 hours will yield only modest gains in English language acquisition. Furthermore, in an ethnographic study of workplace programs in California, Katz (2000) found that most employers don't understand how long it takes to learn a language; they think of language as a discrete workplace skill that can be learned in much the same way as learning to operate a machine.

**Learner discomfort.** Workers who are learning English might be uncomfortable in classes in the workplace, fear-

ing that poor classroom performance could affect their employment. Co-workers might also make fun of their lack of English language skills. For example, at one work site, learners trying to speak English at team meetings reported being laughed at by native-English-speaking co-workers for demonstrating nonnative-like pronunciation (Moore, 1999). Even at a multinational company that deliberately sought out workers from other cultures, immigrant workers with high-level English language and literacy skills reported feeling insecure on the job because of co-workers' reactions to their inability to speak English as native speakers (Thompson, 2006). Discomfort in workplace ESL classes may also occur when programs project a deficit attitude, with workers in the classes viewed as deficient and lacking in some way (in this case, in language skills) and therefore in need of help (Gallo, 2004).

**Teacher knowledge.** Obtaining authentic materials used on the job is time-consuming, and instructors may receive no compensation for gathering these materials, be uncertain about how to use them, and lack training in workplace ESL instruction. Another challenge concerns how much an instructor needs to know about workplace-specific tasks. Must ESL instructors know how to weld or fix a computer to meet the needs of learners in the workplace? Some practitioners argue that teachers need to understand only the language and discourse used in the workplace, while others maintain that at least some familiarity with learners' tasks at work is also necessary. Because of such challenges, teacher training is essential in workplace ESL. Training that includes requiring instructors to job-shadow employees and interview managers and others at the workplace is recommended (Johns & Price-Machado, 2001).

**Sensitive issues.** An ESL class sponsored by an employer and held at the workplace may be less likely to address workplace problems than a vocational or general ESL class held at another location. For example, immigrant workers (possibly more so than native English speakers) in workplace training courses may feel apprehensive about raising sensitive issues, such as relations with native-English-speaking co-workers or worker rights and responsibilities, when their ESL classes are held at the workplace. In fact, some researchers point out that the real and important issues of workplace safety may be less likely to be addressed in a workplace situation than they would be in a class outside the workplace (e.g., Katz, 2000; Smith, Perry, & Moyer, 2006). The same unease that keeps immigrant workers from reporting unsafe work practices or safety violations may also prevent them from bringing up these issues in workplace ESL classes (Kalarao, 2004). Kalarao notes that cultural differences may lie behind workers' reluctance

to talk about such issues and recommends that all workplace-related ESL training, regardless of where it occurs, be designed with cultural differences in mind. The decision to use or to not use English and to adopt the workplace attitudes and behaviors of native English speakers also may be affected by a desire to maintain one's own cultural and linguistic identity (Moore, 1999; Pierce, 2001).

**Views of education vs. training.** Many business leaders are not accustomed to supporting long-term educational endeavors and may not understand the length of time it takes to learn a language. Thus, pedagogical arguments about the value of learning over time run counter to the average employer's goals when establishing a workplace ESL program. Grognet (1995) describes the distinction as follows: Educators are attuned to education, business leaders to training. Education is long-term, sequential, knowledge-oriented, decontextualized, and connected to other education and advancement opportunities within a company or across companies. Training is short-term, not sequential, and may be separated from other plans and opportunities. Many companies are comfortable with the concept of training, but less so with education (Burt, 1997).

Some companies may fear that if employees, including nonnative English speakers, are given training of any kind, they will move on to another job (Chenven, 2004; Creticos, Schultz, & Beeler, 2006; Katz, 2000). This may be one reason that some companies are willing to invest in training for workers on specific, nontransferable skills that will be useful in their particular context but less willing to provide more open-ended training that could lead to opportunities outside the company. Most employer-provided training programs are developed for and offered to managers or other highly skilled workers (Ahlstrand, Bassi, & McMurrer, 2001).

**Limited opportunities to earn credentials.** Moving from an entry-level job to a higher level position might require workers to obtain a high school diploma (or general equivalency degree [GED]) or an industry certificate of some type. Typically, workplace programs do not offer these credentials (The Manufacturing Institute, 2006). Even if instruction improves their skills, workers may not meet the standards needed for promotion without a certificate or other credentials. Similarly, if workers belong to a union, workplace classes may not give them a bargaining edge if they do not have needed certificates or credentials.

## **Vocational Classes**

Vocational classes generally provide training for a specific skill area, such as appliance repair, auto mechanics, electronics, office systems, health technology, cosmetology, or welding. These classes are often offered at vocational and

technical schools, community colleges, and for-profit trade schools, and they may or may not be coupled with vocational English as a second language (VESL) classes. Generally, these classes are credit bearing, and tuition costs apply.

### ***Strengths of vocational classes***

**Value of prior knowledge and skills.** Vocational classes allow immigrant workers to be recertified, or certified in the United States, in a skill they already possess, have already been trained in, and perhaps even have worked in (Creticos et al., 2006). They can also provide opportunities for learners to develop knowledge and skills leading to jobs that may be higher paying and on a career track (The Manufacturing Institute, 2006). In a vocational program, immigrant learners being recertified may have the opportunity to shine with their technical knowledge while they learn the specific English terms needed for the job and cultural information about the U.S. workplace.

**Transferability of learning.** In today's work environments, the ability to adapt to new contexts and skills is increasingly valued, and there is a shift away from highly specific vocational training, focused on stable, routine competencies, toward development of transferable knowledge and skills. Therefore, most vocational classes focus on the various components of a particular field of work rather than on the specific needs of an individual workplace. One teaching strategy used in this approach is to have students keep a working journal in English or their native language. In one column of the journal, students regularly record the language skills practiced in class; in another column, they record their use of these skills at work (Chen, 2007). Practices such as this reflect current theories of transferability of learning from one context to another; they also reflect a new vocationalism that involves integration of knowledge and skills (Chappell, Solomon, Tennant, & Yates, 2002; Hyland, 2002; Solomon, 2004; Symes & McIntyre, 2000).

**An arena for practice.** The vocational classroom can provide an opportunity to learn specific skills in a less stressful environment than on the job. Using actual materials, tools, and machines that will be used on the job, learners have opportunities to practice the skills and language needed, without the risk of feeling foolish in front of co-workers or employers for making mistakes with either the language or skills (Katz, 2000; Platt, 1996).

**Opportunities for collaboration.** Vocational classes provide an opportunity for collaboration between adult ESL teachers and workplace-based trainers, thereby possibly addressing the challenge discussed earlier of education versus training objectives. This collaboration can result in exciting classes for all students—native- and nonnative-

English-speaking alike (Casey, Jupp, Sagan, Cranmer, & Kersh, 2004; Platt, 1996). It can also result in learners developing English language proficiency while learning about the U.S. workplace and gaining the technical skills needed to be successful on the job.

**Opportunities to earn a credential.** Most vocational programs offer a certificate or credential of some sort. Data from the state of Washington show that a combination of English language skills, college credit, and a certificate can result in increased income (Prince & Jenkins, 2005). Students who started in ESL classes, obtained a year of college credit, and then received a credential earned about \$7,000 more per year than ESL students who did not get the college credits and earn the credential.

### ***Challenges of vocational classes***

**Access to programs.** Immigrant learners are often underrepresented in community colleges, vocational schools, and other postsecondary institutions. For example, in California, Hispanic/Latino students make up a large proportion of K–12 enrollment, yet they are underrepresented in California’s community colleges and 4-year universities (Ornelas & Solorzano, 2004). This underrepresentation may be due in part to the cost of higher education and the lack of high school credentials that would allow entrance.

**Teacher reluctance to work with nonnative English speakers.** Vocational skills teachers may not have the desire or the skills to work with nonnative English speakers, or they may be unaware of the needs of adult immigrant learners (Platt, 1996). They may also feel that they have no time to teach anything besides vocational skills during the class. A concurrent approach, in which an ESL teacher and a vocational skills teacher work together, holds promise for addressing these concerns (Casey et al., 2004; Wrigley, Richer, Martinson, Kubo, & Strawn, 2003).

**Financial need.** The length of time needed to learn English, vocational skills, and cultural norms can result in considerable costs to learners, and they may need financial assistance. If they obtain a Pell Grant, a kind of financial aid available to low-income students who are enrolled in a credit program that offers an occupational certificate or an associate (2-year) degree, they must meet a number of requirements. If prospective students are nonnative English speakers, they may need to pass English language proficiency tests (Wrigley et al., 2003). If they do not have a high school diploma or GED, they may need to pass an “ability to benefit” test to demonstrate that they can succeed in the program. (For information about Pell Grants, see [www.ed.gov/programs/fpg/index.html](http://www.ed.gov/programs/fpg/index.html).) Nonnative English speakers may not have enough time to pass these tests and learn

the language and vocational skills they need before the grant money is gone (Creticos et al., 2006; Wrigley et al., 2003).

## **Adult ESL Classes**

English language learners attend ESL classes to improve their oral and written skills in English and to achieve goals related to job, family, or further education. These classes usually are offered through local educational agencies, community colleges, or community-based organizations. They are generally free or offered at a very low cost (National Center for ESL Literacy Education, 2002).

Preparation for the workplace has been a focus of instruction in adult ESL classes since the 1970s, in response to the arrival in the United States of almost 200,000 Indochinese refugees, many of whom had little previous education and low literacy skills in their native language. Rather than teaching English language skills without reference to any particular context, instructional programs can integrate elements of workplace language and culture, including workplace skills such as teamwork (Marshall, 2002b).

### ***Strengths of adult ESL classes***

**Applicability to multiple contexts.** Workers change jobs an average of 10.5 times between the ages of 18 and 40 (U.S. Department of Labor, Bureau of Labor Statistics, 2006) and need to have skills that are transferable from one job context to another. They need to be both upwardly mobile in their current jobs and able to use skills in various locations (Creticos et al., 2006). How can transferability of knowledge and skills be taught? When workplace skills are taught in the general ESL classroom, they might be in the context of various language functions, such as asking for clarification, giving and following directions, and expressing lack of comprehension (Grognet, 1996). These language functions are useful and transferable. Mastering them can help students get a job or thrive in their current job. These skills are used in any job, not just in entry-level jobs, and they are likely to be useful in other contexts as well, such as when interacting with children’s teachers, in the community, and for advancing in and contributing to U.S. society in general (Marshall, 2002b).

**Nurturing atmosphere.** The goal of adult ESL classes is for learners to learn English and succeed in accomplishing their goals, and the atmosphere of these classes can often be characterized as nurturing (Mathews-Aydinli, 2006). Although the transition from this environment can be a challenge for students preparing for academic classes, where a premium is placed on grades, correctness, and language complexity, it can also provide advantages for adult learners preparing for the workplace. When teachers simulate workplace situa-

tions by assigning tasks that students may need to perform, such as training new employees, organizing materials and equipment to be used, leaving messages if they are going to be absent, and working in teams to solve problems, learners have a safe space to try out workplace-specific language and behaviors. (See Marshall, 2002a, 2002b, for examples.)

**Challenges of adult ESL classes**

**Diverse learner goals.** Many adult ESL classes are multi-level and diverse, and students come to class with various goals and objectives (Mathews-Aydinli & Van Horne, 2006). Not all students in a class may be equally interested in workplace skills, so time spent on needed content and skills may not be adequate. Furthermore, the ESL classroom often lacks a direct connection to the workplace and may not seem authentic to students. The transfer of skills learned in class may, therefore, be difficult.

**Teacher knowledge.** ESL teachers may not know the language and communication skills needed to help learners succeed in the workplace. They may need training on how to integrate workplace language and skills with the general ESL curriculum, as Marshall (2002a, 2002b) describes. This training might include visits to vocational classes and work sites.

**Limited coverage of specific skills.** The culture of each workplace is distinct (Ehrenreich, 2002). The diversity of students in adult ESL classes means that the specific issues, language, culture, and rules of a given workplace may not be addressed. When students work in very different contexts, worksite-specific vocabulary and the individual culture of a given worksite are less likely to be covered.

**Irregular learner attendance.** The challenge of having limited time to spend on workplace skills may be exacerbated by the fact that attendance in adult ESL classes is often sporadic because of transportation, work, and family issues (Condelli, Wrigley, & Yoon, 2002). Students who are unable to attend class regularly because of family and work obligations may miss out on workplace applications.

The strengths and challenges of each program type are summarized below in Table 1 and Table 2.

**Ways to Address Challenges**

Because workforce preparation for adult immigrants is such an important issue, efforts should be made to provide this preparation whenever possible. The following recommendations focus on how workforce preparation can be enhanced in instruction in and outside of the workplace.

**Improve instruction in all venues**

A study of 345 frontline supervisors and executives in 24 manufacturing companies with at least 150 employees determined that employers liked hiring nonnative English speakers because they found them to have good attitudes and to be very productive (Duval-Couetil & Mikulecky, 2006). At the same time, many employers reported that their workers' English language skills were a problem. Some of the companies had offered English language classes but had been disappointed with the results, finding that the instructors were teaching decontextualized grammar and vocabulary rather than workplace-related language and skills (Duval-Couetil & Mikulecky, 2006). This study suggests that quality workplace-related ESL instruction is needed.

**Table 1. Strengths of Program Types**

| Workplace Classes         | Vocational Classes                  | Adult ESL Classes                  |
|---------------------------|-------------------------------------|------------------------------------|
| Ease of scheduling        | Value of prior knowledge and skills | Applicability to multiple contexts |
| Authenticity of content   | Transferability of learning         | Nurturing atmosphere               |
| Positive work environment | An arena for practice               |                                    |
|                           | Opportunities for collaboration     |                                    |
|                           | Opportunities to earn a credential  |                                    |

**Table 2. Challenges of Program Types**

| Workplace Classes                                   | Vocational Classes   | Adult ESL Classes                   |
|---|--|-------------------------------------|
| Unrealistic expectations about language development | Access to programs   | Diverse learner goals               |
| Learner/worker discomfort                           | Teacher reluctance to work with nonnative English speakers | Teacher knowledge                   |
| Teacher knowledge                                   | Financial need   | Limited coverage of specific skills |
| Sensitive issues                                    |  | Irregular learner attendance        |
| Views of education vs. training                     |  |                                     |
| Limited opportunities to earn a credential          |  |                                     |

What constitutes quality workplace-related instruction? Keeping in mind the limited time available and the need for results, Burt (2003) made the following suggestions for educators:

- Develop short, discrete, and achievable goals for the program.
- Offer short, highly focused classes with clearly stated, measurable, and attainable objectives.
- Educate everyone involved about the process of learning a second language and the time it takes. For example, conduct an information session for all workers and their supervisors, nonnative English speakers and native English speakers alike, to clarify the process of language learning and to get buy-in from all stakeholders.
- Bring in speakers from various workplace settings to talk about their work, arrange field trips to different work-sites, and tailor instruction to show students explicitly the connection between language and skills used in the workplace and in other aspects of their lives.
- Use the native language when appropriate in instruction, and encourage employers to allow use of the native language in the workplace.
- Encourage employers to provide opportunities for workers to use English on the job.
- Get workplace leaders involved in instruction, so they understand what is involved.

For more information about these strategies, see Burt (2003) and Marshall (2002).

### ***Link ESL and job skills training***

In their study of community college ESL programs, Chisman and Crandall (2007) found evidence that successful vocational programs include ESL classes that meet concurrently with vocational classes. Another approach is for ESL teachers to co-teach with vocational skills teachers, so that students get the benefit of workplace skills, culture development, and language training (Platt, 1996).

### ***Collaborate***

Stakeholders in the public and private arenas can collaborate to provide the funding and services necessary to ensure that immigrant learners will be well prepared to enter, succeed in, and be promoted at the workplace (Creticos et al., 2006; Martinez & Wang, n.d.; Wrigley et al., 2003). Collaboration can help both higher-level and beginning-level learners.

**For higher level learners, provide necessary credentials and placement services.** Data from community college programs indicate that a combination of ESL instruction, college credit, and a credential can result in increased

income (Prince & Jenkins, 2005). However, immigrant adults' access to such programs is often limited. Martinez & Wang (n.d.) note that businesses and foundations can support programs that encourage immigrant participation. They cite, for example, the Annie E. Casey Foundation, which funds initiatives to strengthen the economic success of low-income working families. They suggest that collaborations can also be established to ensure that workforce preparation courses do the following:

- Teach English and workplace skills that are transferable across occupations
- Teach occupation-specific skills and language
- Offer counseling and placement services
- Offer training on skills needed to pass entrance exams or to obtain credentials

Some adult immigrants who have the necessary work credentials may have difficulty obtaining a job commensurate with their training and abilities (Creticos et al., 2006). Job placement and other support is needed for immigrants with college degrees and adequate English who are underemployed. Although they may have the language and work skills needed to perform high-level jobs in the United States, they may need help finding jobs and learning how to operate in the U.S. workplace. One organization that provides these services is Upwardly Global ([www.upwardlyglobal.org/about/index.php](http://www.upwardlyglobal.org/about/index.php)), a nonprofit organization based in San Francisco, which matches highly skilled and educated immigrants with employers. Upwardly Global helps immigrants write résumés and develop their interviewing skills and provides them with information about the culture of the U.S. workplace.

**For beginning-level learners, increase access to programs.** If students do not have the education necessary to participate in a vocational program, collaborations can make available services that enable learners to access and succeed in ESL classes. Businesses, foundations, and other stakeholders can work together to

- provide case management or child-care services so parents can attend classes, and
- ensure that the program addresses the English and job skills needed for jobs available in the area (The Manufacturing Institute, 2006; Martinez & Wang, n.d.).

College-bound students can hold dual enrollment in high school and college and receive college credits for classes they take in high school. However, credit-based transition programs often serve primarily academically proficient or high-achieving high school students (Hughes & Karp, 2006). In the past few years, policymakers, education reform groups, and researchers have been increasingly advocating for these services to be available to middle- or even low-achieving

high school students. Immigrant learners in high schools could also benefit from credit-based transition programs; these courses could prepare them for the content and skills they need while also increasing their comfort with attending postsecondary school. This is especially true if there is a true collaboration between a high school and a college—one that allows students to access college facilities and services.

## Conclusion

In a survey conducted by the National Association of Manufacturers (The Manufacturing Institute, 2006), more than 80% of the responding employers reported that they were experiencing at least a moderate shortage of qualified workers. Nine out of ten reported a shortage of skilled production workers in jobs such as machinist, operator, craft worker, distributor, and technician. Given the fact that immigrants will account for half of the growth in the nation's working-age population between now and 2015 and all of the growth between 2016 and 2035 (Borjas, 2005), it is important to equip them with the language and skills they need to succeed in these manufacturing jobs or in whatever jobs they fill. It is also important to help them succeed in the workplace, vocational, and adult ESL classes they attend, as well as in high school programs, before they enter the job market. English language and workforce preparation instruction can be conducted in the workplace, in vocational classes, and in general adult ESL classes. This instruction needs to be excellent, and additional services may be required to help immigrant learners access and benefit from this instruction.

For more information on factors to consider when planning for, setting up, and evaluating a workplace program for immigrant workers, see CAELA FAQ #20 at [http://www.cal.org/caela/esl\\_resources/faqs.html#twenty](http://www.cal.org/caela/esl_resources/faqs.html#twenty).

## References

- Ahlstrand, A. L., Bassi, L. J., & McMurrer, D. P. (2001). *Workplace education for low-wage workers*. Alexandria, VA: American Society for Training and Development.
- Borjas, G. (2005). *Immigration policy and human capital*. Cambridge, MA: Harvard University Press.
- Burt, M. (1997). *Workplace ESL instruction: Interviews from the field*. Washington, DC: National Center for ESL Literacy Education. Retrieved September 11, 2007, from [www.literacynet.org/eslwp/home.html](http://www.literacynet.org/eslwp/home.html)
- Burt, M. (2003). *Issues in improving immigrant learners' English language skills*. Washington, DC: Center for Applied Linguistics. Retrieved September 11, 2007, from [www.cal.org/caela/esl\\_resources/digests/Workplaceissues.html](http://www.cal.org/caela/esl_resources/digests/Workplaceissues.html)
- Casey, C., Jupp, T., Sagan, O., Cranmer, S., & Kersh, N. (2004). *Putting good practice into practice: Literacy, numeracy and key skills within apprenticeships*. London, England: National Research and Development Centre for Adult Literacy and Numeracy. Retrieved September 11, 2007, from [www.nrdc.org.uk/publications\\_details.asp?ID=26](http://www.nrdc.org.uk/publications_details.asp?ID=26)
- Chappell, C., Solomon, N., Tennant, M., & Yates, L. (2002). *Research the pedagogies of the new vocationalism* (Working Paper 02-13). Sydney, NSW, Australia: UTS Research Centre for Vocational Education and Training. Retrieved September 11, 2007, from [www.umanitoba.ca/unevoc/2002conference/text/papers/chappell.pdf](http://www.umanitoba.ca/unevoc/2002conference/text/papers/chappell.pdf)
- Chen, Y. (2007). Learning to learn: The impact of strategy training. *ELT Journal: English Language Teachers Journal*, 61(1), 20–29.
- Chenven, L. (2004). *Getting to work: A report on how workers with limited English skills can prepare for good jobs*. Washington, DC: AFL-CIO Working for America Institute. Retrieved September 11, 2007, from [www.workingforamerica.org/documents/PDF/GTW50704.pdf](http://www.workingforamerica.org/documents/PDF/GTW50704.pdf)
- Chisman, F., & Crandall, J. A. (2007). *Passing the torch: Strategies for innovation in community college ESL*. New York: Center for Advancement of Adult Literacy. Retrieved September 11, 2007, from [www.caalusa.org/eslpassingtorch226.pdf](http://www.caalusa.org/eslpassingtorch226.pdf)
- Chiswick, B. R., & Miller, P. W. (2002). Immigrant earnings: Language skills, linguistic concentrations, and the business cycle. *Journal of Popular Economics*, 15, 31–57.
- Condelli, L., Wrigley, H. S., & Yoon, K. (2002). *What works study for adult ESL literacy students: Study summary*. Washington, DC: American Institutes for Research. (ERIC Document No. ED 482789). Retrieved September 11, 2007, from [www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content\\_storage\\_01/0000019b/80/1b/95/f2.pdf](http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/95/f2.pdf)
- Creticos, P. A., Schultz, J. A., & Beeler, A. (2006). *The integration of immigrants in the workplace. Prepublication release*. Naperville, IL: Institute for Work and the Economy. Available from [www.workanddeconomy.org/current\\_projects1.htm](http://www.workanddeconomy.org/current_projects1.htm)
- Cummins, J. (1991). *Language learning and bilingualism* (Sophia Linguistica Monograph No. 29). Tokyo: Sophia University, Sophia Institute for International Communication.
- Duff, P.A., Wong, P., & Early, M. (2002). Learning language for work and life: The linguistic socialization of immigrant Canadians seeking careers in healthcare. *The Modern Language Journal*, 86(3), 397–422.
- Duval-Couetil, N., & Mikulecky, L. (2006). *What employers think about LEP employees, ESL programs, and the instructors who teach in them*. Unpublished manuscript.
- Ehrenreich, B. (2001). *Nickel and dimed: On (not) getting by in America*. New York: Henry Holt.
- Gallo, M. L. (2004). *Reading the world of work: A learner-centered approach to workplace literacy and ESL* (Professional Practice Series). Malabar, FL: Krieger.
- Gerdes, C., & Wilberschied, L. (2003). Workplace ESL: Adaptations to fill a growing need. *TESOL Journal*, 12(3), 41–46.
- Grieco, E. (2004). *Fact sheet #4: The foreign born in the U.S. labor force*. Washington, DC: Migration Policy Institute. Retrieved September 11, from [www.migrationpolicy.org/pubs/four\\_foreign\\_born\\_in\\_labor\\_force.pdf](http://www.migrationpolicy.org/pubs/four_foreign_born_in_labor_force.pdf)
- Grognet, A. G. (1995). Adult education in the workplace. In *Literacy, work, and education reform: Summary of a symposium marking the 35th anniversary of the Center for Applied Linguistics*. Washington, DC: National Center for ESL Literacy Education. (ERIC Document No. ED379970)

- Grognet, A. G. (1996). *Planning, implementing, and evaluating workplace ESL programs*. Washington, DC: Center for Applied Linguistics. Retrieved September 11, 2007, from www.cal.org/caela/esl\_resources/digests/PLANNINGQA.html
- Hughes, K. L., & Karp, M. M. (2006). *Strengthening transitions by encouraging career pathways: A look at state policies and practices*. Washington, DC: American Association of Community Colleges and League for Innovation in the Community College.
- Hyland, K. (2002). Specificity revisited: How far should we go now? *English for Specific Purposes*, 21(4), 385–395.
- Jacobson, E., Degener, S., & Purcell-Gates, V. (2003). *Creating authentic materials and activities for the adult literacy classroom: A handbook for practitioners*. Cambridge, MA: National Center for the Study of Adult Learning and Literacy. Retrieved September 11, 2007, from www.ncsall.net/fileadmin/resources/teach/jacobson.pdf
- Johns, A., & Price-Machado, D. (2001). English for specific purposes: Tailoring courses to student needs—and to the outside world. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (3rd ed., pp. 43–54). Boston: Heinle & Heinle.
- Kalarao, N. (2004). Breaching the language barrier. *Occupational Health and Safety*, 73(6), 60–65.
- Kavanaugh, K. (1999, April). Teaching the language of work. *Training and Development*, 14–16.
- Katz, M-L. (2000). Workplace language teaching and the intercultural construction of ideologies of competence. *The Canadian Modern Language Review*, 57(1), 144–164.
- The Manufacturing Institute/Center for Workforce Success/ Jobs for the Future. (2006). *Improving workplace opportunities for limited English-speaking workers: An overview of practices in the manufacturing sector*. Washington, DC: National Association of Manufacturers. Available from www.nam.org
- Marshall, B. (2002a). *English that works: Preparing adult English language learners for success in the workforce and community*. Washington, DC: Center for Applied Linguistics. Retrieved September 11, 2007, from www.cal.org/caela/esl\_resources/digests/Englishwks.html
- Marshall, B. (2002b). *Preparing for success: A guide for teaching adult English language learners*. McHenry, IL, & Washington, DC: Delta Systems and Center for Applied Linguistics.
- Martinez, T. E., & Wang, T. W. (n.d.). *Supporting English language acquisition: Opportunities for foundations to strengthen the social and economic well-being of immigrant families*. Baltimore, MD: The Annie E. Casey Foundation. Retrieved September 11, 2007, from www.aecf.org/upload/PublicationFiles/l.pdf
- Mathews-Aydinli, J. (2006). *Supporting adult English language learners' transitions to postsecondary education*. Washington, DC: Center for Adult English Language Acquisition. Retrieved September 11, 2007, from www.cal.org/caela/esl\_resources/briefs/transition.html
- Mathews-Aydinli, J., & Van Horne, R. (2006). *Promoting the success of multilevel ESL classes: What teachers and administrators can do*. Washington, DC: Center for Adult English Language Acquisition. Retrieved September 11, 2007, from www.cal.org/caela/esl\_resources/briefs/multilevel.html
- Mikulecky, L. (1997, December). Too little time and too many goals. *Focus on Basics*, 1(D), 10–13.
- Monti, M. (2004). Workplace instructional development with authentic materials. In *Fieldnotes for ABLE staff, 2004 edition*. Harrisburg, PA: Adult Basic and Literacy Education. Retrieved September 11, 2007, from www.able.state.pa.us/fieldnotes04
- Monti, M. (2006). *Integration of learner roles and authentic materials in the adult education context*. Lancaster, PA: Southeast Professional Development Center.
- Moore, R. (1999). Empowering the ESL worker within the new work order. *Journal of Adolescent and Adult Literacy*, 43(2), 142–149.
- Moore, M., & Stavrianos, M. (1994). *Adult education reauthorization: Background*. Washington, DC: Mathematica Policy Research.
- National Center for ESL Literacy Education. (2002). *Adult English language instruction in the 21st century*. Washington, DC: Center for Applied Linguistics. Retrieved September 11, 2007, from www.cal.org/caela/esl\_resources/languageinstructionEng.pdf
- Ornelas, A., & Solorzano, D. G. (2004). Transfer conditions of Latino/a community college students: A single institution case study. *Community College Journal of Research and Practice*, 28, 233–48.
- Pierce, F. D., (2001, April). ESL: Valuable resource or idealism: Using case studies for finding answers. *Professional Safety*, 35–39.
- Platt, E. (1996). *The vocational classroom: A great place to learn English* (Vocational and Workplace ESL Instruction Series). Washington, DC: Center for Applied Linguistics.
- Prince, D., & Jenkins, D. (2005). *Building pathways to success for low-skill adult students: Lessons for community college policy and practice from a statewide longitudinal tracking study*. Washington, DC: American Association of Community Colleges.
- Smith, S. M., Perry, T., & Moyer, D. (2006). Creating a safer workforce. *Professional Safety*, 51(12), 20–25.
- Solomon, N. (2004). *Integrating work and learning: Learning to be a "real" worker* (Working Paper 0404 RP152). Sydney, NSW, Australia: Oval Research, UTS. Retrieved September 11, 2007, from www.oval.uts.edu.au/working\_papers/2004WP/0404solomon.pdf
- Symes, C., & McIntyre, J. (2000). Working knowledge: An introduction to the new business of learning. In C. Symes & J. McIntyre (Eds.), *Working knowledge: The new vocationalism and higher education* (pp. 1–13). London: SRHE/Open University Press.
- Thomas, W. P., & Collier, V. (1997). *School effectiveness for language minority students*. Washington, DC: National Clearinghouse for Bilingual Education. Retrieved July 23, 2007, from www.ncela.gwu.edu/pubs/resource/effectiveness/thomas-collier97.pdf
- Thompson, C. (2006). Using a language that's not your own: Experiences of multilingual employees. *The Diversity Factor*, 14(2), 30–36.
- U.S. Department of Labor, Bureau of Labor Statistics. (2006). Number of jobs held in a lifetime. Retrieved August 8, 2007, from www.bls.gov/nls/nlsfaqs.htm#anch41
- Wrigley, H. S., Richer, E., Martinson, K., Kubo, H., & Strawn, J. (2003). *The language of opportunity: Expanding employment prospects for adults with limited English skills*. Washington, DC: The Center for Law and Social Policy, the National Institute for Literacy, and the National Adult Education Professional Development Consortium. Retrieved September 11, 2007, from www.clasp.org/publications/LEP\_report.pdf