Limited English proficiency creates barriers to both education and employment for approximately 28 million people in the United States. They face societal, institutional, and personal barriers to equitable employment. The American job market and employer expectations may be confusing, and the concept of lifelong learning is foreign to them. Barriers presented by educational and employment institutions to the limited English proficient (LEP) adult include standardized entrance examinations, diploma requirements, and employment performance tests. Adults also fear loss or rejection of their culture, ethnicity, and identity when they speak a second language. Four English as a Second Language (ESL) curriculum models integrate vocational and English language skills and provide special assistance to LEP students: prevocational ESL classes, vocational ESL, bilingual vocational training, and on-the-job training with vocational ESL support. Vocational instructors can help LEP students by allowing culturally diverse students to learn in diverse ways, using demonstrations or audiovisual aids and relying less on lectures, and using bilingual assistants. Research and development is needed in the areas of the elements of English needed to be taught and their order, strategies to reduce language demands of LEP jobs, and identification of successful program materials and instructional strategies. (YLB)
EQUITY FROM THE BILINGUAL EDUCATION SPECIALIST’S PERSPECTIVE
by Jo Ann Crandall

SUMMARY Vocational educators have grappled with equity as a problem and have espoused it as a cause since 1963 when Congress issued both an equity mandate and an equity challenge with the passage of the Vocational Education Act. This paper is one of seventeen reports commissioned by the National Center for Research in Vocational Education to meet the equity challenge through a multidisciplinary approach encompassing three perspectives—academic, vocational education, and special interest group advocacy.

The following paper describes the special needs of adults with limited English proficiency. It begins with an extended discussion of the many societal, institutional, and personal barriers faced by those for whom English is a second language. Practical in orientation, the illustrative examples in this paper highlight the difficulties of persons with limited English proficiency in finding and keeping work. Proposed solutions include four potential curriculum models for teaching English as a second language as an integral part of vocational education. These models are based upon a clear understanding of the language skills needed for the limited English proficient to be employable and on different learning patterns among individuals. The paper concludes with a variety of teaching techniques and a research agenda for improving the teaching of English as a second language.

INTRODUCTION

Approximately 28 million people living in the United States speak a language other than English as either their first or dominant language, and that number is likely to increase. Although the majority of these people are native-born residents and citizens, large numbers of immigrants and refugees who are entering the country help make up this statistic. In 1980 alone, approximately 168,000 Indo-Chinese refugees and more than 50,000 Eastern Europeans, Soviet Jews, Ethiopians, Kurds, Afghans, and others will enter the United States. Other immigrants—members of families of United States citizens—will
also join the population. Thus, although only one in eight persons today is of another language background, that percentage is likely to increase. In fact, in many urban school systems today, the number of students of limited or non-English background is increasing rapidly. By 1985, for example, the population of the Los Angeles County schools will be 50 percent Hispanic.

Naturally, not all people whose first language is another language lack proficiency in English; many acquire English through the schools in courses called English as a second language (ESL), in bilingual education programs, or through interaction with the English-speaking majority population. However, for many of these people—especially for those who entered the United States as teenagers or adults—the level of English proficiency may be seriously limited, creating barriers to both education and employment, and thus restricting both their economic potential and the potential contributions they can make to United States society. Congress recognized that problem when it passed Public Law 94-482 (Title I, Part B, Subpart 3, Section 181), pointing out that:

... one of the most acute problems in the United States is that which involves millions of citizens, both children and adults, whose efforts to profit from vocational education are severely restricted by their limited English-speaking ability because they came from environments where the dominant language is other than English; ... such persons are therefore unable to help to fill the critical need for more and better educated personnel in vital occupational categories; and ... are unable to make their maximum contribution to the Nation's economy and must, in fact, suffer the hardships of unemployment or underemployment.

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Therefore, though Title VI of the Civil Rights Act of 1964 prohibits discrimination on the grounds of race, color, or national origin, the bitter reality is that those who grow up speaking another language, through association with their family or neighborhood, without acquiring adequate proficiency in English, have greater difficulty both in becoming educated or trained for a vocation and in acquiring jobs which provide an opportunity for mobility and advancement. The barriers to equitable employment which the limited-English proficient (LEP) adults face are societal, institutional, and personal in nature.

**SOCIETAL BARRIERS**

It is commonly believed that persons who do not speak English cannot get jobs in the United States. Any quick look around the kitchens, hallways, and homes in American urban centers, however, proves that this is not the case: adults who speak no English may in fact, be easily hired—and just as easily exploited by their employers. In a recent case, for example, a Vietnamese refugee who spoke little English found himself paid almost nothing at the end of the month because no one had explained to him that the time card he punched was supposed to be his own, not just any card displayed next to the time clock.

What is true, however, is that for an individual to retain an entry-level job or to obtain a job which offers some opportunity for advancement is indeed difficult without adequate English skills. Just understanding the American job market and the expectations that employers have of employees can be enormously confusing to someone from another culture. For example, in many parts of the world, such as Japan, Southeast Asia, or other regions, employers become almost an elder in the family and are expected to provide for their employees throughout the employees' lives, even if their work is no longer needed by the employer. In return for life-long economic protection, employees offer similar loyalty and unquestioning trust in their employers. Employees retain their positions for life, without thought of getting a "better job" either within the same organization or in another, under a different employer. Thus when confronted by the system in the United States, a system that often requires employees to take low, entry-level jobs paying the minimum wage so as to acquire experience and the opportunity to use, and thereby increase their proficiency in English—all in the hope of eventually securing a better job—they have an unusually strong fear of being trapped in that first job for the rest of their working lives. These employees are even more confused (and shamed) when an employer criticizes them in front of others. The only face-saving action available is for the incumbent to leave without ever returning to the job; were the employee to return, the employer would then be publicly confronted with loss of face, likewise an intolerable situation for these employees.
Thus cultures and subcultures differ in their values and attitudes toward work as well as in actual employment practices. For people who speak only limited English, the problems can be profound: they may not understand the American employment system (how to find out about jobs and apply for them, how to behave during an interview, or how to fill out application forms), and they also may lack the ability to ask questions or receive guidance which will enable them, to get the information needed to understand the system. If they are fortunate, they may have someone who speaks their language and who has already mastered the system to interpret that system for them. Unfortunately, even with that orientation, the level of English required to be able to read want ads (often a difficult task even for native English speakers!), to be able to respond appropriately in interviews by asking thoughtful questions and giving acceptable answers, and to be able to read job descriptions and fill out resumes, application forms, and the like is often very high and requires special ability in English. For example, the terms "previous employment," "other relevant work experience," and "employment history," all request similar information, but how is someone who speaks only limited English able to discern that?

Differences among cultures also affect people's attitudes toward education. For many, education is appropriate only for children or for a few scholars, and the concept of life-long education, of adults pursuing training that leads to new vocations or careers, is foreign and must be explained. Becoming students again as adults can require difficult adjustments and result in embarrassing moments. Adults who come from cultures where education is limited to a very small elite and where training is provided only by the employer may not be at all familiar with American educational practices. They may need to be taught to be students, much as children are socialized into our educational system, and they may need encouragement and support during the difficult transitional period.

INSTITUTIONAL BARRIERS

Once the role of education in employment is understood, however, inability to speak English sufficiently may continue to act as a barrier to obtaining the much needed education that leads to a first or better job.

Both educational institutions and employment institutions can present barriers to the LEP adult. For example, many vocational education and technical training programs require everyone to take standardized entrance examinations, which are usually written for native English speakers. Thus LEP adults are unjustly penalized, even though they may know the information requested or be able to perform the tasks required, their limited English often prevents them from successfully demonstrating either fact on the examination. Furthermore, LEP adults often lack
the required high school diploma, but some vocational training programs (such as CETA and Job Corps), require either a high school diploma or the General Education Development (GED) series and then, too, even when the GED is accepted for entrance, problems may remain since the GED is written for native-English speakers as well. For the person whose dominant language is not English, tests then become language tests, rather than cognitive or skill tests. Even those who are granted entry into a vocational training program may find themselves unable to compete with their native-speaking classmates when both the textbooks and the instruction are in English and no attempt is made to accommodate the limited-English speaker—either through bilingual or simplified English texts, bilingual instruction, or English as a second language (ESL) classes. Often, LEP adults have low education levels and lack literacy and computational skills that must also be addressed before success will be likely in vocational education classes. Unfortunately, basic education classes and ESL classes may be unavailable or so crowded that they are not very effective. (In some adult basic education programs, 50 percent of all enrollment is in ESL, and classes of fifty students are common, with long waiting lists for entry into these classes.) Many of these ESL classes, in addition, are not taught for the very low literate or uneducated but require students to have basic literacy for success in the class.

Similar barriers exist for LEP adults in the marketplace, even for those who have already mastered vocational skills, since proof of that mastery often requires successful completion of an employment test or demonstration of those skills in response to a request in a language (English) that the adults do not adequately understand.

These tests penalize those whose language differs even slightly from standard English. For example, even blacks who speak nonstandard English varieties or Hispanic bilinguals may score below their actual knowledge or achievement levels because the medium through which they are tested—standard English—presents an additional barrier. An auto mechanic could be fully able to repair a car and discuss that repair adequately with a customer, fill out a bill, and order new parts, but still be unable to be licensed because that state requires an examination conducted in English for licensing. It is ironic that language requirements to get a job often exceed those for practicing the job. For example, the reading in the texts required for getting both the training and the license to be a cosmetologist or auto mechanic are far more difficult than the reading actually used on the job. For someone who speaks English as a second language, necessary training or education presented in English can constitute a further obstacle to employment.

Those who can bypass an entrance test and successfully complete an application form and an interview may be rewarded with the opportunity of employment, but because of inadequate English skills, they may find their time in
that job to be short. If they do not understand the names for things they are working with, if they cannot understand directions given to them and do not know how to ask to have these directions repeated or clarified, they will undoubtedly have problems on the job. The first time a customer asks for an explanation which is not given or an employer makes a request which is not filled may be the beginning of the end for the person on that job.

Surprisingly, being able to read job manuals or to fill out orders or inventory forms is not enough; adults also have to learn how to talk with coworkers and employers, both about their jobs and about more casual or informal topics. Being able to talk about the weather, the traffic, and vacations provides the “glue” which keeps offices and shops functioning as a team. Employees unable to make that small talk are viewed as cold and uncommunicative: they seem to be people who just do not fit in and they may lose their jobs for this reason.

Since many adults who are of limited English proficiency are also poor and disadvantaged in other ways, they may face additional problems relating to transportation, child care, or health as well. They may live far from a vocational education institution and be unable to afford the cost of transportation to get to school, or be unable to afford child care while they study. This is especially true of women with small children or older adults who remain homebound; they are unable to take advantage of the opportunities for English language training and vocational preparation which are available to them, and thus, their job horizons may be severely limited.

PERSONAL BARRIERS

Since language is the most obvious symbol of one’s culture, ethnicity, and identity, it is natural for many adults who speak another language to fear loss of that identity or rejection by their own culture—or both—when they decide to speak a second language (English). It may be safer, though certainly less productive in the long run, to avoid taking the risks required to study ESL or to attempt to work in a second language. Since their cognitive growth and development—all their experiences and education—have been in another language, they will find themselves unable to express themselves fully in a new language and they may become very frustrated. If their children are acquiring English rapidly and simultaneously becoming just as rapidly Americanized, the fears of the parents may become even more pronounced.

Fortunately, however, both vocational educators and language educators (both ESL and bilingual) have ways to overcome these barriers and to assist LEP adults to a more productive career. A number of successful program models exist that can
guide communities in search of appropriate programs for their LEP population. These programs may be housed in a vocational/technical school, a community college, an adult basic education program, a CETA or Job Corps program, or at the job site (on-the-job).

THE ROLE OF ESL IN OVERCOMING BARRIERS TO VOCATIONAL EDUCATION AND EMPLOYMENT

A number of changes in the teaching of ESL have enabled ESL teachers to meet more adequately the needs of LEP adults. ESL classes are becoming increasingly specialized, providing only the most relevant vocabulary and structures that may be needed by a given adult learner. Instead of a "general" English class, like the foreign language classes that most Americans took when they were in high school, these ESL classes focus on the specific English needed by someone to function in a specific job or domain. Thus, ESL is increasingly becoming ESP (English for specific purposes) and the adult ESL class is likely to focus on vocation-specific English (called VESL), such as clerical ESL, food services ESL, welding ESL, or upholstery ESL. What these classes teach is a basic spoken command of English (emphasizing listening comprehension and understandable, though not accentless or flawless, spoken English), as well as sufficient reading and writing skills and vocabulary to enable the adult to read the necessary textbooks and manuals, signs and safety instructions, and to write instructions, order forms, and bills required for both vocational training in the field and for use on a specific job.

At a minimum, the vocational ESL class enables the student with limited-English proficiency to do the following:

- Ask for directions and follow commands
- Talk about the tools and materials used in learning the vocation and in performing the skills
- Discuss work with fellow employees, customers, and employers
- Understand and be able to discuss some of the methods and procedures required by the vocation
- Use technical manuals, textbooks, catalogs, and other reading materials to study for the vocation or to practice performing the skills
- Explain processes while doing them or after completing them
• Complete work orders, inventory lists, bills, time cards, and health, insurance, and tax forms

• Understand and talk about safety and health and request emergency assistance

• Respond to offers of assistance and be able to offer assistance in return

• Seek clarification or repetition of previous statements or commands

• Socialize appropriately with fellow workers and employers

The LEP adult must still master the basic sound system of English, the basic grammatical structures and sentence patterns, and a portion of its vocabulary. However, the focus is not upon acquiring flawless pronunciation or sentences that use only full standard forms and avoid colloquial expressions or ungrammatical patterns. The focus is on acquiring enough English to be able to function in English in the vocational classroom and on the job and to be able to use English to get more information (and more practice in the language in both classroom and employment). LEP adults need to learn not only the language, but also the rules for appropriate use of it. They may have mastered the direct imperative and say, “Give me a raise,” but if they say that to their employers or use a similar direct command with their instructors, they are likely to suffer far worse consequences than if they had said, “Woudja lemme have a raise?”

The comprehension level of LEP students should be greater than their speaking ability. In fact, one of the difficulties facing LEP students in vocational classes is the variety of synonyms used to refer to the same object although they may need to choose only one of these to refer to a specific object in speaking or writing, they will need to understand a number of referents, both in texts and in classroom discussion.

Although there are a number of curricular designs and approaches to teaching ESL—structural (also called audio-lingual), situational, and functional—any of these can be adapted for use in the vocational ESL classroom. The vocational subject area simply provides the framework for beginning instruction and continuing relevant language study and practice. The result is greater motivation and satisfaction and more efficient language learning.

It is important to remember that these ESL learners have already acquired proficiency in one language which has served them well in most areas of their lives; they do not need to acquire English to be able to express their intimate feelings, to discuss their beliefs, or to talk about movies, television, pets, or their family.
However, they do need to add a second language for job preparation, for employment, and for improvement of communication skills in any specific area. This need has the advantage of being more easily met than the need for full-scale fluency in a language, since it takes less time to acquire a smaller subset of the larger language, and of being less threatening, since students are able to retain and maintain their ethnicity and identity through continued use of their first language. (This use of two different languages is similar to the use of formal and informal English by a monolingual English speaker, since there is a difference between the way people talk with an employer at work and the way that they talk with friends or family at home.)

ESL classes can also provide a general orientation to the American job market, to the types of occupations that are possible and the degrees of mobility and advancement available within each, as well as to employer expectations and employee rights. Often this is presented in the VESL class or in a prevocational ESL or general employment ESL class. Here, those with limited-English skills and insufficient information about employment in the United States are provided with the English needed to find a job, to keep it, or to advance to better jobs. They practice using English to inquire about training and employment, to complete application forms, and to perform successfully in interviews. General employment vocabulary dealing with benefits, leave, taxes, salary, and work schedules, for example are taught, and adults have an opportunity to practice, at least in an employment context, this vocabulary and the basic constructions in both oral and written English. In this way, the purpose of the ESL class is clearly focused on vocational improvement and employment.

A third type of ESL class may also be appropriate, though it is usually housed in a university program that is preparing students for professional technological careers: this course is referred to as English for academic purposes (EAP) or ESL study skills. In EAP courses, the focus is on the English required to pass college classes: to read difficult texts, to write library research papers, to listen to lectures and take adequate notes, and to be able to answer essay questions on examinations. Some of the principles of the EAP class can be incorporated into VESL classes when necessary; for example, if the vocational training program requires heavy reading of passages describing processes or procedures, the VESL teacher can address some of the special English features which make this reading a problem. For example, sequence markers such as first, then, and finally must be understood, as must this, that, these, those, and the use of other shortened or synonymous forms.

Unfortunately, not every vocational training institution offers prevocational or vocational ESL, or even any ESL classes. The most common model for offering vocational training to LEP students is one that simply requires them to learn
enough English to be able to pass entrance examinations, to attend classes with native English-speaking students, and to read the texts intended for native speakers, all with little systematic assistance from either an ESL teacher or a tutor. Those who manage to survive this approach are usually the students who have high educational backgrounds, previous experience in that vocation, or exceptional motivation.

There are four other curriculum models, however, that integrate vocational and English language skills, and provide special assistance to LEP students: (1) prevocational ESL classes, which lead to employment and often continued ESL support; (2) vocational ESL either prior to or concurrent with vocational training; (3) bilingual vocational training; and (4) on-the-job training with vocational ESL support.

Prevocational ESL and Employment

In areas where there are LEPs who come from a variety of language backgrounds and who have a wide range of vocational plans, or where there are no major employers or vocational programs offering job opportunities to many adults, a program offering prevocational ESL (focusing on general employment language and providing orientation to the American job market) can assist one with limited English in acquiring an entry-level job. When possible, ESL classes are conducted either before or after work, sometimes on the job site, to help ease the transition to the world of work, and to provide special English classes building upon the day’s use of English and dealing with any language-related problems which may have arisen during that day. Because prevocational ESL classes can offer a quick return for the hard work of language learning, instructors can often be assured of steady attendance and concentrated effort from their students. These prevocational ESL classes can also provide a careful transition from a native cultural employment world to what may be the radically different employment world of the United States.

Vocational ESL and Vocational Training

When a vocational/technical institute or CETA program are available and there are sufficient numbers of LEPs to study any one vocation such as welding, auto body repair, or clerical skills, institutions can offer a coordinated and integrated curriculum of vocational skills classes and vocational-specific English (VESL) classes. For example, in one large vocational school, students may take ESL classes that focus specifically on upholstery, welding, auto body repair, or other fields while they are taking their skills training. The ESL instructor and vocational instructor work closely in planning the curriculum. Either the ESL instructor attends
the vocational classes with the students (at least during the first semester of designing the program) and adapts the ESL classes to reflect the vocational content and vocabulary, as well as the difficult English structures encountered in that class, or the two instructors operate as a team that meets periodically to plan coordinated instruction. Unfortunately, few VESL materials are commercially available. When they are, some of this integration can be provided by the materials; however, even then the VESL teacher needs to become familiar with the vocation, understanding the language demands, and the terminology, processes, and requirements of the job. Even though VESL teachers do not have to become competent in the vocation, they must nevertheless be familiar enough with the vocation and the skills training classes to be able to assist students in mastering the reading, writing, and oral English requirements of the vocation. VESL teachers do not need to be able to operate keypunch machines or ten-key adding machines to be able to teach VESL courses that assist in keypunch or clerical training, but they must know what these machines are and the kinds of written and oral language needed to master them in a work setting.

Bilingual Vocational Training

The third curriculum model is one that is receiving increasing attention and support, especially in areas with large concentrations of people who speak the same first language and belong to a large ethnic community. For example, in areas of the country with large Spanish, Chinese, or Vietnamese populations, the most efficient way of providing vocational training may be to offer it in two languages (bilingually): in both the native language and English.

Bilingual vocational training programs can be designed in a number of ways. If the vocational instructor is bilingual, then that instructor can simply switch from one language to another, perhaps presenting the terminology and procedures for the day's work in English, but then switching to the native language for discussion and explanation. Consider how difficult the concept of set theory or electricity is when presented in one's own language; it becomes much more difficult with explanations provided exclusively in another language. If a teacher can explain the concepts and answer questions in the students' dominant language, then the concepts can build upon previous cognitive development in the first language, ensuring a more rapid and often less personally threatening learning process.

If the vocational instructor is not bilingual, then a bilingual assistant can be brought into the class to provide special attention to those most in need of it. Bilingual aides can develop vocabulary lists, translate difficult texts, and explain culturally relative information, focusing on differences between the ways that a vocation may be acquired or practiced in the adults' previous environment and the
ways that it is acquired or practiced here in the United States. Such factors as nonverbal behavior (eye contact, gestures, physical spacing between people) and culturally relative values (time, work ethic, cooperation, or competition) can often be most effectively explained in the first language. So can terms such as “social security number” and “electricity.”

In a bilingual vocational program, however, English must be used and taught, unless the LEP adults can be assured that they will be able to obtain employment and have the opportunity to advance in that employment without having to use English, either with employer or customer. Although such situations do exist, it is not likely to be the most productive approach, since employment conditions may be limited and lack of English may continue to offer a barrier to full, productive employment. Usually, ESL classes are offered with the bilingual vocational instruction, often by the bilingual individual who assists in the vocational instruction. These classes can be prevocational or vocation-specific, with the latter providing the greatest coordination between the language and vocational instruction. The VESL class might precede the vocational class or follow the vocational class (or both), and provide either a preview or a review of the day’s instruction (or both).

**ESL and On-The-Job Training**

In the last curriculum model, students receive ESL assistance while they are enrolled in on-the-job training programs. This approach has proved especially effective in companies where large numbers of LEP people are employed in work that is routine and that requires very limited English skills, at least for initial employment. Electronics assembly work, for example, can be quickly learned with the assistance of a bilingual or a successfully employed adult of the same ethnic or language group. The amount of English required can be minimal. However, to be able to function socially on the job and to acquire additional skills leading to advanced employment or better pay, the LEP adult needs to have additional ESL instruction and practice. Companies are often willing to pay for this instruction, both in release time from the job and in paying for the textbooks and instructor's salary, since they can be assured that the employee's production will improve due to better communication with the supervisor and coworkers.

**HOW THE VOCATIONAL INSTRUCTOR CAN BETTER MEET THE NEEDS OF LEP STUDENTS**

Although there are a number of models that provide integrated language and vocational instruction for students who are of limited-English proficiency, additional
strategies are available to the vocational instructor or program that will reduce the language barrier and make vocational training more accessible to them. These strategies will also help compensate for the lack of a VESL or even ESL class.

People demonstrate a variety of strategies for acquiring information or skills. Some prefer to learn by observation, testing their own competence without being overseen by the instructor, demonstrating their skill only after they have practiced on their own, achieved mastery, and are confident of the results. Others prefer working with others, making a number of attempts, each one more closely approximating the desired behavior, and seeking assistance or comment from the instructor or other students as they are learning. Vocational instructors need to allow these culturally diverse students to learn in whatever ways are most appropriate for them. Some learn by doing; others learn by watching; yet both groups are capable of achieving the same degree of skill.

Another strategy available to the vocational instructor is one that reduces the dependence upon language as the means of acquiring the skill. Many instructors lecture at the beginning of a class and then lead a discussion, answering questions based on that lecture. All of this instruction is linguistic, requiring careful attention to the language being used and resulting in a special burden upon those who have limited English proficiency. If instruction can involve demonstration, use of films or videotapes, graphics, or opportunities for peer instruction and practice, the opportunity increases for these students to master the information and the skill. Some vocational/technical schools even provide a whole array of approaches for mastering the same body of information and the same skills for the vocation, including computer-assisted instruction and other programmed texts/approaches. Students must demonstrate mastery, but it is left to them to determine the means of obtaining that information and skill, either by looking at visuals and working with another student, or by reading a textbook and practicing on their own.

Vocational instructors do not need to become language teachers, but they can and should become more aware of the difficulty of the language they are using and should work consciously to simplify some of it, either by providing synonyms or simple explanations whenever possible, by writing difficult words on the board and pointing to them as the class progresses, or by providing review sessions or repeating information in several different ways.

They can also work closely with a bilingual assistant, who can provide explanations in the classroom, assist in translating passages that are particularly difficult, compile bilingual glossaries, and provide explanations for difficult concepts. Often a successful former student or one who is particularly advanced can function informally in this capacity. This assistant can also explain culturally different practices. For example, the role of the secretary is different in different
parts of the world, just as the style and format of correspondence, the manner of answering the telephone, and the hours spent on the job may vary. Those practices that are confusing can be explained by the bilingual assistant.

Research and Development Needs

Although there is a clear relationship between job success and linguistic capability, and an even clearer relationship between job access and language, we still have little research that identifies exactly what features of English are most important for employment and which can be left for later acquisition or be omitted entirely. Unfortunately, a great number of judgments are made on the basis of language, many of them seemingly unrelated to individual linguistic capabilities in any way. For example, employers are willing to rate employees on their ambition, intelligence, leadership capabilities, emotional stability, and a host of other factors simply by listening to a short tape-recorded conversation of those employees. Even in meeting people and working with them, we make quick assessments of them on the basis of the way they talk, the vocabulary they use, their pronunciation or accent, and the gestures they use. We do this both consciously and unconsciously. Until we know, however, which of these features is the most important or most salient, it is difficult to know exactly what elements should be taught to the person acquiring English as a second language, and in what order they should be taught. At the present time, we do not have the research in first language or second language employment to establish the features which are most important.

There is, however, substantial anecdotal and descriptive evidence to show the importance of short, conversational exchanges between coworkers. We also know that adults need a variety of approaches for getting information repeated. They need to be able to request clarification through the use of a variety of language strategies. For example, when asked to “check out the carburetor on this car,” a mechanic needs to be able to say, “Did you say the carburetor?” or “Was that the carburetor?” If all else fails, the mechanic needs to be able simply to say, “Would you repeat that?” or “What’s that again?” Native speakers have a host of ways of getting information repeated; LEP employees need to have knowledge of these as well.

We also need additional research to show the strategies which both those who are native and those who are not native speakers of English use to reduce the language demands of their jobs. When confronted by large manuals or reports, how much of them do people really need to read and what strategies do they use to accomplish that as quickly and painlessly as possible? When do they rely on others for information, rather than look it up in a reference, and how do they do this so that these requests are acceptable and result in quick and appropriate answers? If
we can perform baseline research, actually documenting language demands of various jobs (an expansion of some of the most interesting functional literacy research being conducted today), then we can teach from these demands and actually present strategies that have proven successful for others.

Currently, we have a guide to minimal competency for adult language learners that identifies the basic notions we express through language (time, space, quantity, quality, and duration), and the functions we use language for (to give and receive information, express opinions and judgments, socialize, and get what we want), as well as a basic vocabulary list and set of basic English structures. This syllabus, which establishes a baseline for language proficiency, needs to be specifically adapted to vocational requirements, resulting in fully supported task analyses that integrate the skills practiced on the job with the language requirements that accompany these skills.

Needs assessments have been performed in a variety of vocational settings to prepare vocational ESL courses that will most efficiently present the required vocational English. These needs assessments involve lengthy observations of classroom interaction, analysis of texts and manuals, interviews with both supervisors and instructors to determine what is most important, and interviews and observations with both native-English-speaking employees and employees whose first language is other than English. Rarely has a program had sufficient funding or time, however, to allow the kind of comprehensive needs assessment that can then lead to carefully sequenced language and vocational skill acquisition. What is needed is a great deal more of this kind of needs assessment, involving analysis of the written and oral language that is used both in vocational training or education and in the practice of that vocation. These needs assessments can then form the basis for texts, which can be adapted to meet local job or training requirements. Today few of these texts are available, except in the most highly skilled areas such as engineering, management, accounting, medicine, and law. The numbers of uneducated people requiring both English-language and vocational preparation is increasing, this should result in the production of many more ESL texts focusing less on the professions and more on skilled vocations.

A great deal more research is also needed to identify the most successful program materials and instructional strategies in various VESL or bilingual vocational classrooms. We need to identify the strategies that work best with students and then develop materials that teach instructors how to use these strategies. Similarly, we need to study successful employees (both native English-speaking and those who acquired English as a second language) to determine what strategies or practices they use which contribute to their success on the job. Then we can teach these strategies as well as teach the vocation or the English used in that vocation.
To date, evaluation components have been most frequently neglected, both in VESL classes and in bilingual vocational programs. This is partially due to a lack of adequate assessment instruments; it also results from a lack of research on exactly what is most important in these programs. Without having enough information about what is most important in them, it is difficult to evaluate programs effectively.

Clearly, there is substantial need for additional research in the field, both of written and oral language used on the job and of classroom approaches and materials that are most effective. In order for this research to be effective, however, vocational and ESL instructors (or linguists) will need to work together, each informing the other of the requirements and results of their work. Vocational instructors can advise linguists and language teachers who are audiotaping or videotaping classroom language. By listening to or viewing those tapes, they can assist in determining if the language taught in the ESL class is indeed appropriate and useful. ESL teachers can advise vocational instructors who want to know of approaches or strategies they can use to reduce the reliance upon difficult language-based instruction in their classes. Vocational instructors can attend ESL classes to observe the difficulties students have and to acquire a number of techniques that language teachers use to reduce these difficulties, and then take them back to their vocational classes and adapt them for use there.

**SUMMARY**

Although there is a substantial amount of research and a variety of projects that need to be implemented to improve the access of those with limited English proficiency to both education and employment, the prospects in 1980 for accomplishing this are very promising. A number of successful programs exist and a variety of program models have been developed. Adapting and applying these models and developing new curricula will enable LEP adults to acquire education in a wide range of vocations and will reduce barriers to employment equity which these adults currently face. The net result will be wider and more effective employment for a large percentage of our population.
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ACKNOWLEDGMENTS

Before vocational educators can adequately meet the special needs of special groups, they must be committed to a philosophy of equitable education. The issue of equity in education has received a great deal of attention over the last ten years from the legislative, judicial, and academic sectors. As a result of this attention, research and analysis have shown that the term “equity” has a different connotation for nearly everyone who has attempted to define and apply it to educational programs. In addition, a host of related terms such as equality, disparity, and discrimination are a part of the vocational educator’s daily vocabulary.

In an attempt to help vocational educators to articulate a definition of equity, the National Center for Research in Vocational Education has commissioned seventeen papers on equity from three broad perspectives—academic, vocational, and special needs. The authors in each of the three groups provide their own perceptions of and experiences with equity in education to bring vocational educators to a better understanding of this complex but timely issue.

The National Center is indebted to these seventeen authors for their contribution to furthering research on equity in vocational education.

We are also indebted to Dr. Judith Gappa, Associate Provost for Faculty Affairs at San Francisco State University for reviewing and synthesizing all seventeen papers. Special thanks also go to Cindy Silvani-Lacey, program associate, for coordinating the papers and to Regina Castle and Beverly Haynes who spent many hours typing manuscripts.

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Executive Director

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