Multicultural Career Assessment: A Collaborative Interagency Approach

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Abstract

The focus of this paper is based on an interagency collaborative project to assist limited English proficient (LEP) adults in entering the labor force. Trained vocational evaluators assisted by interpreters assessed clients that spoke many different languages and had various worldviews. The four main languages spoken were Vietnamese, Farsi, Kurdish and Somali. Among other languages were Arabic, Spanish, Bosnian, Russian, Urdu, Ukraine, Bangladesh, Swahili, Korean, Kingwana, and Pashtu. Approximately half of the population in the program were refugees and had experienced trauma.

Most of the clients tested were not familiar with the Western tradition of testing, did not understand the implications and the mechanics of testing and were not familiar with time constrains inherent in most tests. Research and review of existing tests yielded little that could be applied to the evaluation of this varied population. Non-verbal paper and pencil tests that are generally thought to be culture-free were not always fair as the individuals were not familiar with the pictures depicted or the specific problem solving strategies demanded by these tests. Observations from those working with the clients, English proficiency assessments, work history and interviews as well as work samples were found to be the most useful in determining interests, abilities and skills.

This paper discusses shared experiences and proposes practical strategies for assessment from a practitioner's perspective. The primary goal is to increase awareness of the impact of multiple cultural influences in assessment that can improve the evaluators' sensitivity and skills when working with limited English speaking populations whose Worldviews are very different from our Western culture.

In 1999 several organizations: Fairfax Council Public Schools Adult Education (FCPS), Afghan Association for Solidarity and Cooperation (AASC), Boat People S.O.S (BPSOS), Center for Multicultural Human Services (CMHS), Ethiopian Economic Development Council (ECDC), Hispanic Committee of Virginia (HCVA), Korean Community Service Center (KCSC), and Northern Virginia Family Services) formed a coalition to create a coordinated delivery system to better serve Limited English Proficiency (LEP) individuals. The coalition provided the following services: English as a Second Language (ESL) assessment; Vocational Interest, Aptitude, Abilities Assessment, Workplace Readiness/Job Search Workshops, and Counseling.

In addition to group workshops, coalition members provided interpreters for the vocational assessment process in the following specific languages:

Afghan Association for Solidarity and Cooperation (AASC): Farsi, Dari and Persian
Boat People S.O.S (BPSOS): Vietnamese and Chinese
Center for Multicultural Human Services (CMHS): Amharic, Arabic, French, Bosnian, Khmer, Kurdish, Russian, Serbo-Croatian, Somali, Urdu and other languages upon request
Committee of Virginia (HCVA): Spanish
Korean Community Service Center (KCSC): Korean

An additional component of the proposal was the collaboration offered by George Washington University to assist with research on the vocational assessment of limited English speakers and project evaluation. These services were for limited English participants (LEP) and included the following populations residing in Fairfax County and the city of Falls Church, Virginia: Temporary Assistance to Needy Families (TANF), Virginia Initiative for Employment not Welfare (VIEW)—the work portion of the program, and Job Training Partnership (JTPA)—legislation that ensures that the workforce has skills necessary to obtain and retain gainful employment. The Coalition also offered a variety of strategies utilizing bilingual expertise and resources to address the needs of this diverse population. The project was called "Employment Readiness for Limited –English Speakers" (ERLES.) Approximately 200 participants were assessed during a two-year period.

The four main languages spoken by the participants were Vietnamese, Farsi, Kurdish and Somali. Other languages were Arabic, Spanish, Bosnian, Russian, Urdu, Ukraine, Bangladesh, Zaire, or Korean. Some of these participants were not literate in their own language. Many of the participants had been refugees for less than 5 years. It was anticipated that some of the clients would have multiple problems that could affect their full and/or successful participation in the project. A major issue concerned the cultural differences and the language barriers faced by the participants, some of whom came from non-technological and rural societies and were illiterate. Many of the participants would not be able to practice their former vocations due to lack of or limited English skills and lack of US credentials. Some of the female participants had never worked outside the home and might find leaving their families, which they considered their first job, objectionable. Many were traumatized by war and the loss of family. In order to assist the participants to alleviate these issues, bilingual/bicultural contact persons guided participants through the project. Specialized services were offered by partnering service providers, e.g., mental health counseling, psychological evaluations, etc. Each client referred to Project ERLES and/or vocational assessment was required to have an IED (Individual Employment Development) plan. The IED incorporated the job-related training opportunities and support services that their case workers (self-sufficiency workers or employment services specialists) deemed appropriate and necessary. The major goal of project ERLES was to assist clients to determine their work readiness and benefit from training opportunities. Whenever appropriate, and depending on eligibility for different services, they could be referred to other ESL and adult

education services and additional support services available in the county, e.g. mental health. In the first component of the project, participants were assessed to determine the level of their ability to understand, speak, read and write English using a wide range of assessment instruments.

The second component of the project was Vocational Evaluation. Certified Vocational Evaluators (CVE's) worked together to provide participants, DFS staff and other coalition teams with comprehensive evaluations. Results were used to assist in the selection of appropriate and attainable work goals. Interpreters provided by the coalition were used as translators. Depending on the evaluation plan, interest, aptitude and occupational skills were assessed using a combination of interviews, psychometric tests, work samples, job analysis checklists and computerized aptitude testing. To minimize bias, hands-on performances were emphasized.

The evaluation team made great efforts and weighed carefully the selection of assessments to be used with non-English or limited English Speaking individuals in order to limit bias. When selecting tests to use with individuals from different cultures, it is important to take into consideration each person's world view, education background, socio-economic status, language proficiency, and expertise in test taking. Prior to implementing the grant project, considerable research was conduced to identify aptitude tests developed or normed on representative populations. Evaluators corresponded with psychologists throughout the world to assist with the development of a comprehensive assessment for this population. Results of the correspondence provided minimal information that was applicable to the project. Most information applied to populations in the Americas and Western Europe.

Test Translation

Ideally, tests need to be developed in the native language of the individuals being tested and normed on a representative population. Considerable effort is being invested to develop and translate tests for cultures throughout the world. The *International Test Commission* (ITC), an association of national psychological associations, test commissions, publishers and other organizations whose members encompass the Americas, as well as some countries in the Middle and Far East, and Africa will meet in Brussels in July 2006 to discuss issues on test adaptation across language and cultures as well as to revise guidelines for the adaptation of tests from one culture to another. The *Journal of Testing International* has many articles devoted to the advances and difficulties in the area of test translation and development. According to Koh, Maznah, Adbullah, Zumbo (2004), although great strides are being made regarding this issue, considerable challenges remain in the realm of "test theory, measurement, and advanced statistical analysis." (p. 4.) Test translations offer alternatives, but these again, present their own particular difficulties. Iliescu (2004), a Romanian psychologist, reports regarding the drawbacks of many tests in Romania.

> "Most adaptations are based on ad-hoc translations, which have not been approved by their respective authors and have not been submitted for approval to

> the international copyright owners or publishers. Of course this also means that the norms are not based on national-wide samples or on validation or replication studies, but on mere samples of convenience that are usually small in size and have peculiar occupational distributions." (p.7)

Translating tests appropriately requires linguistic as well as test construction expertise. In addition, it requires extensive knowledge of the culture to which the test applies. Muniz (2004) reports:

> "Another fundamental characteristic of assessment today is the international use of tests and assessment procedures. It is more and more frequently the case that a test developed in one language and culture is used in others. This situation, which in itself is positive, may incur serious problems if the tests are not appropriately translated and adapted to the new languages and cultures in which they are to be used." (p. 2)

Even if norming and translating tests to satisfy fairness criteria for such diverse cultural and linguistic groups were feasible, the heterogeneity found within a culture makes this task even more difficult. For example Arabic is spoken by nearly 200 million people in the Middle East and North Africa from Iran to Morocco, and as far south as Somalia and the Sudan. Arabic refers to the written standard form of the language and the spoken form used to deliver news. It is also the language of the Quran, the Holy book of Islam. However, the colloquial dialects of Arabic vary widely from one country to another. Killean (1999) reports:

> "These dialects differ from standard Arabic and from one another in pronunciation, vocabulary, and grammar and are usually labeled according to major geographic areas, such as North African, Egyptian, and Gulf. Within these broad classifications, the daily speed of urban, rural, and nomadic speakers is distinctly different. Illiterate speakers from widely separated parts of the Arab world may not understand one another, although each is speaking a version of Arabic" (p. 22).

Although not to the same degree, this is also true for the regions where Spanish is spoken and great linguistic diversity can be found from Central to South America.

<u>Test Fairness</u>

Regarding test fairness, Ascher (1991) and Fremer, Diamond and Camaro (1989) refer to the following guidelines issued by the American Education Research Association, the American Psychological Association, and the National Council on Measurements in Education in their "Standards for Educational and Psychological Testing" published in 1985:

- English language proficiency should be determine by more than multiple-choice paper-and-pencil tests
- The reliability and validity of tests may be undermined by language differences

- Administering an English language test to non-English proficient students will assess only proficiency in English language not in a subject
- Translating tests into a student's native language may subvert the tests' reliability and validity

Important placement and career decisions need to be based on data gathered from multiple sources, including the evaluators' judgment, behavioral observations, and input from referring sources. In all cases, less biased results are obtained when multiple criteria and a team approach are used.

Second Language Acquisition

Factors related to second language acquisition and bilingualism may affect the way an individual performs in a second language. Second language acquisition is dependent on learner characteristics and social milieu. Individual aptitudes, such as verbal memory, auditory perception, pattern recognition and categorization, can either enhance or delay learning a second language. The speed and proficiency of learning a new language also depends on access to opportunities for learning the new language and using the second language in formal and informal settings (Wong—Filmore 1985). Bilinguals or individuals that have the ability to speak two languages may also be affected by opportunities to use the second language. They may use the second language in one setting, i.e., school or work, but maintain their native language at home or in social interactions. As bilinguals use the languages they speak in different situations, they are seldom equally fluent in both languages. Since they have not had the same language experiences, some may read and write better in the second language, or they may be illiterate in their native language. It is possible, in the case of children of immigrants, that they understand the language spoken at home but cannot speak it or speak it minimally (Grosjean 1992, 1998). Because of these and many factors, it can never be assumed that an individual will perform optimally on a test just because it is in his or her primary language. Language skills required to perform on psychometric tests are more demanding than face-to-face communication. Fluency in English cannot be assumed from this type of communication. Research suggests that information processing is slower in the less developed language and is more readily affected by noise and other intervening factors (Figueroa and Carcia 1994). Cumins (1980, 1982) reports that it takes approximately five to seven years for "minority language students" to acquire the level of language proficiency necessary to perform optimality on achievement and psychological tests.

Because of the various factors affecting second language acquisition and bilingualism, it is important to ascertain the degree of language proficiency and acculturation of the participant (Fremer, e. al., 1989). Language proficiency in the evaluee's native language and second language, as well as the degree of acculturation can provide practical information for the selection of tests. It is important that test results reflect the skills intended to be demonstrated by test performance rather than the examiner's language proficiency.

In the case of the ERLES participants, many did not know English or were at various degrees of acquiring English as a second language. Some of the participants had fled their countries of origin at different ages and lived in refugee camps prior to entering the United States. Several attended school in host countries while others did not. Many of the participants, particularly those from Middle Eastern countries spoke more than one language. For instance, more than one person from Iraq spoke Kurdish in addition to Arabic. Differences in spoken Arabic were noted in relation to geographic origin. For instance, Mesopotamia Arabic was spoken by people from Central Iraq. This type of Arabic is also spoken in parts of Syria, Jordan and Turkey. In addition to Standard Arabic and Kurdish, other official languages spoken in Iraq were reported as Egyptian, Monadic, and Syriac. At times, interpreters who were from the same region as the participant being tested were not available and their substitutes communicated in their own version of Arabic. One woman from Iran reported her native language as Kurdish, but also spoke some Farsi, or Persian, which is the official language of Iran and is written in Arabic characters. She reported that some other languages spoken in Iran were Turkish, Armenian and Arabic. A college educated gentlemen from Iran spoke English and French. A young woman from Afghanistan spoke Farsi and Pashto, the two official languages taught in school. Another gentleman spoke Farsi, Pashto and Uzbek. Uzbek is a Turkish language and is the official language of Uzbekistan which borders Afghanistan in the North.

Using Bilingual Interpreters for Test Translation

The role of interpreters is significant in setting the tone of the evaluation. Interpreters are relied upon not only for translating specific directions, but also for interpretation of other relevant information before, during and after the test administration. They must clarify cultural issues and help the evaluator understand the bias in each unique situation. The majority of test takers and many of the interpreters were not accustomed to the Western tradition of testing. They did not understand the implications and the mechanics of testing and were not familiar with test format, time constraints, and other standardization factors. Frequently, interpreters wanted the test taker to perform well so they provided more information than was called for or gave clues as to right and wrong answers. Many interpreters tended to relate to the participants in ways that made it difficult to maintain impartiality. This was particularly true when they shared the same culture and wanted the participant to be seen in the best possible light and as a reflection of their culture's esteem.

In many situations the bilingual interpreter conveys concepts rather than word for word translations. A Russian translator explained that some of the English words could not be translated when it was apparent her translation seemed much lengthier than the English directions. It is necessary for the evaluator to seek clarification of the concepts that are translated in order to identify possible bias. To insure fairness, most of the interpreters were specifically trained by the vocational evaluators on issues of test protocol and cultural factors that might adversely affect the evaluation. Some of these were:

- Importance of evaluation in future outcomes

- Fear when confronted with a testing situation
- Skills being tested may not be important in the client's culture
- Fear of failing
- Fear of revealing information linked to past experiences with authority
- Confusion
- Discomfort if questions seemed too personal for participant
- Items on tests that might not be readily recognizable in the participant's culture, i.e., drawings of objects
- Honesty with everyone involved in the process was stressed
- Information such as body language, distance, use of gestures, eye contact and other factors that might make the participant uncomfortable or anxious

Following the evaluation, the interpreters were asked to discuss the above factors and other observations of relevance.

General overview, process and methods.

Clients were referred by the Department of Family Services' (DFS) Workforce Development staff for ESL assessments and then for Vocational Evaluation. ESL diagnostic evaluations included participant's capacity to read, write, and speak English and were reported in terms of Student Performance Levels (SPL's.)Participants were assessed from beginning (including non-literates) through advanced levels of English proficiency. Tests used, included the California Adult Assessment system (CASAS) which is validated by the U.S. Department of Education Program Effectiveness Panel and is used throughout the United States to test adult English skills. It meets the mandates of the federal Workforce Investment Act. Individual written reports were provided to evaluators prior to vocational assessment.

The second component of the project was Vocational Evaluation. Certified Vocational Evaluators (CVE's), worked together to provide participants, DFS staff and other coalition teams with comprehensive evaluations to assist in the selection of appropriate and attainable work goals. Upon completion of assessment, clients proceeded to the third component of the project: Workplace Readiness/Job Search Workshops were provided by the Community Based Organizations (CBO) that was part of the coalition. The workshops included: Balancing Work and Family, Workplace Readiness (Career Development, Job Search Skills, Job Interviewing, and Job Shadowing/Volunteer experience), Technical and Administrative skills, American Workplace Culture and Economic/Consumer Education. Previous to the assessment, evaluators received referral information consisting of an Intake Interview, which included questions developed by the evaluators, and detailed ESL assessment results. Members of the coalition provided other relevant information, such as family dynamics and work history.

Most of the participants did not drive and had limited income for public transportation; therefore, transportation could be arranged and paid for through the Northern Virginia Family Services (NVFS). The lead evaluator worked with an NVFS representative to coordinate transportation and the evaluee's schedule. Services were also

coordinated with the Center for Multicultural Human Services to ensure that interpreters would be available for the assessment. A vocational assessment plan was developed for each participant upon review of background information including work history, expressed interest, ESL assessment results and cultural issues. An interview form was designed to obtain specific and detailed information. The background information and evaluation plan determined the level of assessment needed. Based on this information, specific tools were selected to determine vocational outcomes. All assessments were one-on-one.

Assessment tools used in vocational evaluation included an extensive occupational interview, interest inventories and vocational aptitude batteries as well as direct measure of various skills and behaviors using work samples. In order to enhance objectivity and accuracy and to minimize bias, assessment techniques and tools, including work samples were modified when necessary. Test translations were used when available and trained bi-lingual interpreters were used when such translations were not available. Please refer to the attached addendum for a detailed description of tests used in the assessment.

Interview Process

The interview form is often the most important tool for obtaining relevant information. During the interview, clarification should be obtained from the participant with regard to comprehension and reasons for unorthodox answers in order to avert labeling such answers as aberrant. Research conducted by Li-Ripac (1980) found a tendency to attribute more deviancies to individuals from outside the professional's cultural milieu.

Collecting and verifying information about the individual's educational and work history is a standard procedure in vocational assessment (Dowd, 1993). The need to understand work history is crucial when implementing a transferable skills analysis, particularly when working with people from countries that have no standard framework for organizing and classifying occupational and educational information. The following examples illustrate this point:

A gentleman from Pakistan reported that he had a Master's degree in teaching. Upon further inquiry, he reported that his Bachelor's degree required two years of post secondary training and the Masters' another two years of university studies. The number of school years necessary to obtain even the high school equivalency depends on the country. We found great variability in the preparation required to become a teacher. For instance, several of the women from Afghanistan that we assessed reported that they had been teachers in their country. Three of them completed high school and were awarded certificates following two years of training post high school. This is not unlike educational practices in many parts of the United States before the modern system of teacher training and certification emerged during the late 19th and early 20th centuries

A gentleman from Somalia reported during the interview that he ran a restaurant. Further discussion about his job demands revealed that the restaurant was much more informal than most in the U.S. There were not many transferable skills associated with his restaurant employment in Somalia where he collected money waited tables, and washed dishes. There was no cash register, no automatic dishwasher, and service was very casual. In another situation the referral information indicated that the participant's work history included law enforcement in the military service. However, during the interview process, the individual denied an involvement with the military police. He stated that he had been a truck driver in the military transporting medical supplies.

A twenty-one year old woman from Somalia reported that she completed high school, attended nursing school for 6 months and participated in a 4-month nursing practicum. She reported 4 years of work experience in a hospital for pregnant women. Her duties included the following: taking blood pressure; taking the patients temperature in the arm pit; using the stethoscope to listen to the patient's heartbeat; providing assistance in the delivery, and preparing and operating medical equipment used for vaginal infections and birthing procedures. The women reported the job title as Nurse-Midwife; however, the occupation maybe translated to Birth Attendant or Nurse Aide-Delivery in the United States. This translation was based on the length of training and specific job duties. Another woman from Somalia, who indicated she was illiterate, reported trading in cattle. Although, she had no formal education, she was extremely sophisticated in her system of trading and exchanging cattle for other goods. She knew exactly how many head had been in her herd and the equivalent value of each one in relation to the value of the goods she expected to receive in exchange. She was an expert in the feeding, handling, health and economics of her cattle. Other women who reported being "only housewives and mothers" were accomplished seamstresses who made their own patterns, cooks who planted their own crops, etc.

Some of the participants had held important jobs, including high ranking positions in the army in their country of origin. For instance, a gentleman from a Middle Eastern country earned a law degree following five year's training at a University. He had positions of great of authority in the Army and taught at the university level. His career goal in the U.S. was to become a high school teacher. He had no doubt that his skills were sufficient for that position, and found it difficult to understand that he would need specialized training in order to obtain certification.

Selection of Work Samples and Tests:

According to Pruitt (1972) "Work samples incorporate the realistic aspect of actual work with the time tested principles of test construction." (p. 61). He further notes that those individuals who may perform poorly on psychometrics are more effectively assessed by work samples. Some test takers, such as those with limited English

proficiency face many disadvantages when taking traditional paper and pencil tests. Psychometrics tends to:

- ✓ rely on verbal directions
- ✓ use time constraints
- ✓ require a minimum of academic achievement
- ✓ lack representation of minority/refugee populations in the normative data

Verbal directions need translations, which as noted throughout this article, are dependent on a variety of factors and often not available. Time constraints are a concept unique to Western culture. Many refugees have never been exposed to the need for working quickly and completing as many test items as they can in a short period of time. Many of our clients had no formal education and lacked the academic skills for completing psychometric tests. Using paper and pencil tests was often a challenge and alternative tools were needed to assess work skills and behaviors. We found that work samples lend themselves perfectly for use with a limited English proficiency clientele. Because they are hands-on, these tasks can often be demonstrated, thereby eliminating the need to rely on verbal direction. In addition, work samples are often selected based on the career group that they represent. The VITAS work samples are arranged according to work groups as defined by the Guide for Occupational Exploration (GOE). Therefore, if a client is interested in auto mechanics—found in the Crafts work group—For example, the VITAS system addresses the various skills required by this occupation through several work samples including:

- #9: Pipe Assembly
- #11 Lock Assembly
- #19 Spot Welding

Work samples can address skills in isolation or in specific occupational clusters of skills. For example, if one wanted to simply assess fine finger dexterity, the Purdue Pegboard could be administered. This test requires the client to use their fingers with speed and dexterity to place pegs into holes. To determine one's clerical aptitudes including numerical recognition, attention to clerical detail and fine finger dexterity, one could administer the VITAS #5—Verifying numbers. This task requires the client to compare numbers presented in a rolodex file to those presented on a list and to find discrepancies between the two and make corrections as needed. Flipping the cards and using the pencil to record answers requires fine finger dexterity. Keeping track of one's place on the list and looking back and forth between the list and the file requires eye-hand coordination. Catching errors and recording the errors accurately requires attention to clerical detail. Recognizing differences in numbers requires some numerical aptitude, at least the ability to recognize numbers. An evaluator can make certain assumptions concerning transferable skills, by making observations of the client's ability to perform the Verifying Numbers work sample. In addition, similar work samples that address the "Records Processing" work group can also be administered to determine if the client can generalize these skills across similar tasks.

When selecting work samples for our clients, we considered the following issues:

- Time Constraints: The assessment was generally three hours long; therefore, many work samples could only be administered partially, making it impossible to use norms. Performance on these work samples could be observed and assumptions be made, but they could not be compared to norms and industry standards. However, some work samples are easily administered in their entirety in a short period of time and we tried to rely on the use of such tests.

- Client's Interests: Generally, non-verbal, pictorial interest tests were used. At times, it was necessary for the interpreters to describe certain pictures on the tests due to cultural differences and lack of experience to Western occupations. Work samples were selected to address the client's stated interests. We attempted to administer as many work samples as possible from the work group related to that interest. For example, a client interested in clerical work might be administered the VALPAR 7: Multi-Level Sorting, VITAS 5-Verifying Numbers, VITAS 13-Calculating, and VIEWS 10-Mail Sorting.

- Referral Question: If the referring program had a concern about a specific type of skill or limitation, then work samples were selected that would address this issue.

- Cultural Awareness and Educational Background: The client's cultural background, and work history were also considered when selecting work samples.

Testing Process:

Clients arrived to the assessment center either by Taxi, public transportation, or their own means. On many occasions, family members accompanied them for moral support. In addition, many mothers brought their young children when child care could not be found. Interpreters were also present to translate. The process began with the initial interview and clients were invited to ask any questions or address any issues of concern. An interest test was administered next. If time allowed, the test was scored as soon as possible so that results could be considered when selecting work samples. Most clients were administered a non-verbal test designed to measure cognitive or problem-solving ability, such as the Raven Standard Progressive Matrices, Revised BETA Examination or VALPAR #6 Problem Solving. Mathematical skills were measured with the Wide Range Achievement Test (WRAT) or informal assessments. When appropriate, clients were also administered psychometric tests measuring mechanical reasoning and spatial aptitude. Relevant work samples were administered according to the evaluation plan. The testing session lasted approximately three hours. It was at times necessary to bring clients back for a second session. Tests and work samples were scored and a report was written based on all information gathered during the assessment.

Report Writing and Recommendations:

Reports provided background information as well as test results. Recommendations were made regarding job training, placement options, adult education and apprenticeship opportunities. In some instances recommendations for further assessment to investigate issues due to emotional and physical trauma were made. The recommendations for job placement included occupations identified at the client's present level of ability, assessment results and the client's present English language proficiency. For example, educational assessment results for a gentleman from Afghanistan indicated a 4th grade English level and 8th grade math. He attended the University of Afghanistan and received a Bachelor of Arts in Education. He worked as a teacher in Afghanistan. One immediate recommendation included working as School Bus Driver, School Bus Monitor or Bus Attendant, because the general education development for Language for these careers is 2nd to 6th grade. Other job placement recommendations that required higher English language proficiency were offered. For example, another recommendation for this same gentleman was to pursue a position as a Teacher Aide as his spoken English language skills improved. This position requires a 7-8th grade ability of the English language.

The recommendation for adult education classes often included computer courses such as Computers for the Beginner an "A S-L-O-W" introduction to the computer, its keyboard, and the mouse and use of Microsoft Works to become comfortable using a computer. Another example of an adult education class that was recommended was the Accounting Certificate Assistant Program. This training prepares individual to become an accounting assistant, accounts receivable/payable clerk, assistant bookkeeper, accounting technician, or payroll clerk. One Vietnamese client currently participating in ESL classes had prior work experience in Vietnam as a hair cutter, farmer and tailor. She wanted to pursue Cosmetology training as her language improved. It was recommended that she pursue training opportunities through adult education in Cosmetology/Barbering or an apprenticeship program in Nail Technician or Manicurist. These occupations require an English language Development score of 2 or 4th-6th grade level of competency.

A client from Russia who received formal training for nursing, also worked for the Red Cross and as a massage therapist in that country. Her recommendations included specific information pertaining to the Commission on Graduates of Foreign Nursing Schools and the National Council on the State Boards of Nursing, as well as, TOEFL (test of English as foreign language), IELTS (International English Language Testing Service), and TOEIC (Test of English in International Communications).

Depending on the client's psychological background further counseling was suggested, especially for those who were exposed to war. One client was recommended for further psychological assessment, because he personally experienced 20 years of war and fighting in Afghanistan. Some of the client's reported that medical conditions were currently being treated or were treated in the past. Due to the lack of medical information available and the background training of the job placement specialist who were not trained in rehabilitation, various clients were recommended for medical evaluation or a functional capacities evaluation. For example, during the 3-hour assessment, a client demonstrated the ability to sit for up to one hour. After one hour of sitting, he needed to stand and walk for 5 minutes. When he was asked to stand during work samples and tasks, he indicated that he needed to walk or move a little between tasks due to back and

leg pain. He reported that he was receiving treatment for "lumbar vertebrates are close to each other". It was recommended that the client's physical and medical conditions be considered during job placement through a functional capacities evaluation or treating physician's recommendations.

Another client reported that when she was 35 years old she sustained a brain injury. She was hit in the back of the head by tent poles and became unconscious. She reported that she was in a coma for two days while in the hospital. The specific time period for her entire hospital stay was not clear. She reported that she did not receive any type of therapy after the accident. In addition, she had not experienced seizures. At the time of the assessment the client reported right shoulder pain that radiated to her hand. She described the pain as an ache verse a shooting pain. The client also reported emotional issues related to the following: her husband's arrest, 2-1/2 years since she heard from her husband and witnessing the murder of her son. She stated that she was taking medication for her "mind", but could not specifically state the type of medication or type of physician treating her, i.e. general practitioner, psychiatrist. Due to all of these factors, this client was referred to the Department of Rehabilitative Services as well as Brain Injury Services.

Cultural Differences that Affect Test Selection and Use

Individuals from the United States have been tested from an early age. Test results are used in school for grade placement, program placement, disability identification, career identification, college scholastic aptitude, etc. Results of tests are also used for employment purposes, to identify marital satisfaction/discord, and for clinical diagnosis, etc. (Brislin 1990). The majority of people in the world, however, have not been exposed to test taking. By failing to understand the purpose and seriousness of testing, individuals not familiar with test taking and test format may not answer all the test items, or they may answer questions at random. This lack of knowledge places them at a disadvantage because they fail to recognize that results of testing could affect future training and career opportunities.

Many tests rely heavily on time, encouraging elements of competitiveness. People not exposed to test taking procedures may not realize the need for speed and accuracy and may answer too fast thereby missing relevant detail. In cultures that value harmony and group agreement, such as Vietnam and China, people tend to answer positively when they think that such answers are socially expected. Some tests require right or wrong, true or false, like or dislike answers. This emphasis on dichotomies is incompatible with the world view of people from cultures that think in a holistic and intuitive manner.

Inherent in tests is the assumption that the level of technological development is the same everywhere. Tests fail to take into consideration that individuals from other cultures may not have been exposed to the same developmental experiences as children in the United States are. For example, American children have extensive experience with building blocks and puzzles, which are used for the purposes of encouraging creative expression. Lacking these kinds of experiences, individuals from other cultures are at a disadvantage when asked to perform on tests that synthesize the whole from the parts.

Individuals who favor field-dependent cognitive learning styles tend to find it difficult to discover simple figures embedded in a complex pattern (Bennett 1990.) An example of this situation was a middle aged Somali man who was asked to assemble several pieces of pipe varying in size and type, according to a photograph of the completed assembly. When the man experienced difficulty progressing on the task, the interpreter indicated that all job skills were learned in his native country by watching and doing. The concept of replicating a two-dimensional drawing or photograph was so unfamiliar; he initially could not do the task. After a brief demonstration, he was able to use the photograph to complete the task independently with this accommodation.

When selecting aptitude tests for non-or limited English speaking individuals, the tendency is to assume that a non-verbal test, such as the *Raven Progressive Matrices* (RAVEN), would be a non-biased measure of ability. We found that most of the participants, particularly those from Somalia who had little or no formal education performed poorly on such tests. It cannot be inferred from this performance that the individual was limited in his or her ability to problem solve and reason. Participants from other countries who are also lacking formal education, but might have had more exposure from Western culture, tended to perform better on these matrices. This was frequently the case with Vietnamese participants. Many of the Vietnamese participants had solid educational backgrounds, including college and previous job experience. Vietnamese education until 1954 was based on the French system, but upon the country's division, South Vietnam followed a model based on U.S. education. As a result, many of the Vietnamese participants had a definite advantage over participants from countries where education is based on non-Western systems. Many, however, had been in this country less than five years, their knowledge of English was limited and their knowledge of the U.S. workplace environment, norms and practices were limited.

Research and experience with the RAVEN suggest that individuals in some non-industrialized societies are unused to two-dimensional symbols and geometric forms. Neisser (1997) suggests that rising scores on the RAVEN in industrialized countries over the past 10 years may be, in part, attributed to the visual and technical environment in which children are raised.

> "Beyond merely looking at pictures, we analyze them. Picture puzzles, mazes, exploded views and complex montages appear everywhere-on cereal boxes, on McDonald's wrappers, in the instructions for assembling toys and in books intended to help children pass the time. Even the answer sheets for standardized tests-often on pages separate from the questions-assume that the test-taker can locate the right places to record their responses." (p.8)

Raven (1998) reports:

> "The Progressive *Matrices* test was developed to measure educative ability in a way which would be minimally contaminated by variation in the knowledge possessed by those being tested. Yet one of the earliest results to emerge was that many people living in pre-literate societies such as Africa were unused to attending to, and perceiving, the circles, squares, triangles, and lines which

> constitute the problems. Perhaps more fundamentally, they were unused to thinking in two-dimensional planes and reasoning in the vertical and horizontal modes familiar in reading and counting. Even photographs of people were not recognized as representations of people …" (p. G26).

Investigation of responses has demonstrated this factor with many of our participants. Further, when analyzing and arranging out of sequence pictures, examinees, might arrange them in such a way that they convey a story congruent with their own cultural backgrounds and may be misinterpreted by the professionals interpreting the tests because they are comparing these individuals to norms that do not include them.

Paradoxically, non verbal tests which rely on pictures can be biased as the stimulus pictures may not elicit the same response when the item presented is not a common object in the examinee's culture. For instance, an individual living in the tropics may never have seen a toboggan or ice skates, or may not easily recognize that a chimney is truncated. Picture completion tests were also difficult for these clients, particularly those from developing countries. Imagine being asked to draw the missing part of a sink, when you have never had running water. Would you know that the drain was not included in the picture? Moreover, how often would a person from a small village in Somalia be asked to draw? This may be an unfamiliar activity and when faced with the challenge, the respondent may not know how to perform the task. They may be anxious that their replication be an exact and realistic representation, rather than a simple attempt to supply the missing information. Another consideration is that even non-verbal tests require pencil manipulation and the writing of numbers and symbols, and many of the participants had never done this, or were inexperienced in this respect.

When working with immigrant populations, evaluators must be aware that the concept of vocational preference is not applicable to all cultures as it is in the United States. American children are introduced to careers at a very early age in school and at home. They are given the message that any career is attainable with the proper preparation. Moreover, gender stereotypes have become less defined and we encourage our children to seek non-traditional careers if they prefer them. American education emphasizes self-awareness and choices are made based on a variety of factors, the least of which is satisfaction.

In other cultures, attitude, temperament and preference may not be the significant factor, driving someone to choose a vocation. Rather, familial expectations, opportunity, geography, gender and other cultural factors may dictate career choices (Fouad and Hansen, 1987). In many cultures people perceive themselves as a family unit first and then as individuals. This loyalty can demand that personal goals and aspirations be subordinated to the greater needs of the family. Moreover, educational and job opportunities may not be available to women, as is the case with many of the female Afghani participants. The ability to make choices is also dependent on self-awareness and being able to predict what situations will appeal to us. Vocational evaluators often expect the participant to make decision about work tasks and environments based on what they know about their own temperaments and values. However, individuals living in a non-industrialized society whose experience is limited to home life or tending the family farm may not be able to picture themselves in another work environment. We

have to use caution when we expect an individual who has not been exposed to our preference driven society to identify preferences as we do.

Cultural bias inherent in US developed interest tests makes it difficult to determine participant preferences. With limited English proficient or non-English speaking individuals, pictorial inventories are used to determine occupational interests. Although these tests are not language dependent, they do reflect situations and environments typical of American culture. We tend to take for granted that the occupations, tools, and tasks that are familiar to Western societies exist in other cultures as well.

Most female clients had not participated in the work force. Particularly in Afghanistan under the Taliban, women were bound by a code of modesty that restricted interactions between men and women. Women's most important contribution to society is still seen in many countries as homemakers and mothers. While these women accepted the necessity of working outside the home in their new culture, they were conflicted by their changed roles. Very few female participants ventured outside of traditional occupational interests such as, teaching and childcare. Participants who were Muslim followed the doctrine of the Koran which forbids alcohol and the consumption of scavenger animals such as shellfish and pork, or any food prepared with pork products. When expressing occupational preferences, these participants were either reluctant to consider employment in establishments that sold or handled these commodities, or simply indicated that they would not consider employment under such circumstances. Some participants indicated that they could handle pork if it was wrapped, or that they would be willing to work in places where alcohol was served as long as they did not have to serve it.

Culture Specific Variables that Affect Testing Performance

Refugee participants tell stories of seeking asylum for years in more than one country, often living in camps, before relocating to the United States. More than a few participants from Somalia where civil war ravaged the country for almost two decades had traveled through several countries seeking asylum and then had to relocate because camps closed in the host countries. Likewise, a woman who fled the Sudan because of that country's civil war lived in Ethiopia, Kenya, and in Egypt prior to arriving in the United States. She escaped the persecution and famine that killed many of her family members, but had to endure years of deprivation in countries that did not give her official refugee status. She told of the atrocities of war, the hunger and the pain of losing family members and of being displaced first within her own country and then in foreign lands. Finally in Egypt she attended school and eventually worked as a kindergarten teacher. Now in the U.S., she is without credentials, and formal training pertaining to her stated profession. She faces a host of added burdens including a new culture, a new language and economic obstacles. Like this woman, refugees do not choose to leave their homeland. Memories of the brutality of war, imprisonment, and torture are with them. Mental health issues impact the performance of individuals who have experienced war

and displacement and they are particularly at risk of not performing to potential during assessment.

Test scores that are greatly incongruent with the person's educational and occupational history have puzzled us even when such factors as culture, language and test bias are taken into consideration. The literature documents pervasive depression and post traumatic stress disorder that are manifested as vague somatic complaints such as headache, abdominal pain, and joint pain. These symptoms are experienced by many refugees most immediately following resettlement, but can last for years. (Lipson, 1993). Frequently, the refugees we tested manifested many of these symptoms that we suspect are an expression of their psychic wounds. These factors might have affected their test performance.

One Vietnamese woman was referred for vocational assessment with an additional diagnosis of mental retardation. Her scores on our tests were consistent with other non-disabled Vietnamese women who had previously participated in the assessment. What was very different about this woman was her behavior during the testing. She was extremely non-assertive and lacked any initiative. Upon further investigation, it was discovered that she was Ameresian, the mixed race children left behind by U.S. troops after the U.S. withdrawal from Vietnam. They are known as *bui doi*, "dust of life" or children of dust. Vietnamese Ameresian children were regarded as the detritus of the war, denounced by their countrymen and often abandoned by their mothers. If not abandoned, they and their mothers were often homeless and the children illiterate. There was a tremendous prejudice against the Amerasians in Vietnam. The disgrace to the mother and child is also affiliated to custom; an unmarred girl who has a baby is a dishonor to the family (Schnidehette, et. al. 2000). It may be suggested that this woman's unique cultural background and life experiences significantly impacted her social and behavioral development. These examples highlight the importance of understanding and approaching vocational assessment in a holistic manner.

Conclusions and Recommendations

- The interview process is of critical importance and sets the tone for an effective evaluation. Establishing rapport is a fundamental tenet of a successful interview, but critical when working with individuals from different cultures. Important information to gather during the interview process includes: specifics regarding past job preparation (on-the-job training, apprenticeships, vocational courses, high school, college, classroom instruction in factory or other work places, etc.), detail on educational background, levels of native language proficiency as well as English proficiency, proficiency with additional languages, detailed descriptions of as job duties, any equipment, machines, tools used, length of employment, work environment specifics, physical capacities, medical restrictions or limitations, work preferences, and miscellaneous information such as driving licenses, personal cultural concerns, work tasks, environment, or dress to be avoided, and information on religious holidays and practices.

- Requesting additional information during the referral can effectively individualize the assessment. Information that might be useful may include: family, place of birth, marital status, who constitutes the "family", languages spoken at home, who makes decisions in the home, and familiar expectations regarding occupational goals. Checking for congruency and obtaining clarification should be an ongoing process.

- Preferably, tests should be administered by an individual who is fluent in the language as it is spoken in the region of the test taker. Given the diversity of the population this was, in a few cases, not feasible. Therefore, when using interpreters, safeguards must be taken to assure that they are fluent in both languages, and that they know the regional variation of the language, if applicable. It is also important that the interpreter is familiar with the test vocabulary, with the purpose of testing and test protocols. Therefore, training was provided to the interpreters by the vocational evaluators. Interpreters might identify with eh examinee and give prompts in order to avoid that the examinee "loose face" (a cultural concern among Asian people.) Care must also be taken that the interpreter is favorably predisposed toward the examinee along social and political lines. For reasons of confidentiality, relatives should not be asked to translate in an assessment situation.

- During the interview process the evaluator may want to clarify the appropriateness of specific questions with the interpreter. For example, a question regarding marital status, financial issues, or family dynamics may seem intrusive in certain cultures.

- Examinees should be taught the test format and rules of test taking. The evaluees should be taught how to complete booklet covers, the use of separate answer sheets, and the importance of accuracy and speed. They should be informed when it is appropriate to guess or to skip difficult questions. Most importantly, it should be emphasized that it is acceptable to ask questions when the directions are not understood.

- When confronted with the testing situation, individuals form different cultures may react with anxiety and exhibit behaviors that can be interpreted as inappropriate. It is important to be aware of the stages of acculturation of the individual and attempt to develop a true comfort level.

- Take care when observing and describing behaviors that these are not labeled deviant when in fact they may represent practices from the evaluee's cultural background.

- Do not discourage individuals from pursuing long term vocational goals just because they have not yet acquired the necessary level of English proficiency.

- When pictures are used in tests, insure that the evaluee is familiar with these and that they are part of his culture as pictures seen previously are processed faster

- Take into account possible learning difficulties and their effects on oral language and reading.

- Whenever possible connect the evaluation with the individual's personal experience and attempt to devise situational assessments that reflect these experiences.

- The use of a bilingual team is highly recommended. Bilingual teachers, counselors, psychologists, speech therapists, caseworkers, vocational counselors, etc. might be asked to be part of the team. Paraprofessionals specifically trained in assessment and under direct supervision of the evaluator can be of invaluable assistance. When using paraprofessionals in the assessment process, provide careful training and review results. Bilingual community members can be included in the team as they can provide specific cultural information which can help clarify the information gained during the assessment.

- Use language that is clear and concise. Avoid regionalisms, colloquialisms, idioms, and double negatives.

- Work samples should be included as part of the vocational assessment battery because they simulate actual work tasks and the valuator can place more confidence in the results. Successful performance on the work samples depends less upon verbal skills; therefore, work samples tend to be less culturally biased than paper/pencil tests. Work samples are high in face validity and may be less unfamiliar to the evaluees.

References

Ascher, C. (1991). Testing Bilingual Students: Do We Speak the Same Language? *PTA Today*, 16(15), 7-9.

Bennett,, C.I. (1990). *Comprehensive Multicultural Education Theory and Practice*, (2nd ed.). Boston, MA: Allyson and Bacon

Brislin, R.W. (Ed.). (1990). *Applied Cross-Cultural Psychology*. Newbury Park, NJ: Sage Publications.

Cummins, J. (1980). Psychological Assessment of Immigrant Children. *Journal of Multilingual and Multicultural Development.* 2,97-111.

Cummins, J. (1982). Tests, Achievement, and Bilingual Students. *Focus*, 9(2), 1-8.

Dowd, L.R. (Ed.). (1993). *Glossary of Terminology for Vocational Assessment, Education and Work Adjustment*, Menomonie, WI: University of Wisconsin-Stout, Materials Development Center.

Figueroa, R.A., & Garcia, E. (1994) Issues in Testing Students from Culturally and Linguistically Diverse Backgrounds. *Multicultural Education*, 2(1), 10-19.

Fouad, N.A., & Hansen, J.C. (1987). Cross Cultural Predictive Accuracy of the Strong-Campbell Interest Inventory. *Measurement and Evaluation in Counseling and Development*, 20,(1), 3-10.

Fremer J. Diamond, & Camara, W.J. (1989). Developing a Code of Fair Testing Practices in Education. *American Psychologists*, 44(7), 1062-1066.

Grosjean, F. (1982). *Life with Two Languages*. Cambridge, MA: Harvard University Press.

Grosjean, F. (1998). Studying Bilinguals: Methodological and Conceptual Issues. *Bilingualism: Language and Cognition*. 1 (2), 131-149.

Iliescu, Dragos. (2004) Serious Test Adaptation and norming in psychological testing in Malaysia. *Testing International*, 14, (1&2), 6.

Killean, Carolyn G. (1999). Arabic Language. *Microsoft Encarta Online Encyclopedia 2000* http://encarta.msn.com

Koh, K.H. Maznah, B. Abdullah, R. & Zumbo, B.D. (2004). Psychological Testing in Malaysia. *Testing International*, 14, (1&2), 4.

Landis, D & Brislin, R.W. (Eds.). (1983*).Handbook of Intercultural Training, Volume I Issues in Theory and Design.* New York: Persimmon Press.

Lipson, J.G. (1993). Afghan refugees in California: mental health issues. *Issues in Mental Health Nursing*, 14(4), 411-423.

Li-Ripac, D. (1980). Cultural Influences of Clinical Perception: *A Comparison of Caucasian and Chinese American Therapists. Journal of Cross-Cultural Psychology*, 11, 327-342.

Muñiz, José (2004). President's Letter. *Testing International*, 14, (1&2), 2.

Neisser, Ulrich (1997). Rising Scores on Intelligence Tests. (Electronic version). *American Scientist*, 93, 8.

Peters, H.A. (1988). *A Study of Southeast Asian Youth in Philadelphia: A Final Report*. Report prepared for the U.S. Department of Health and Human Services, Family Support Administration, Office of Refugee Resettlement, Washington, D.C.

Pruitt, Walter. A. (1972). *Vocational (Work) Evaluation*. *(* pp. 1-4). Menomonee, Wisconsin: Walt Pruitt Associates.

Raven, J., Raven, J.C & Court, J.H. (1998). *Raven Manual: Section 1: General Overview*. Oxford: Oxford Psychologists Press.

Sattler, J.M. (1974). *Assessment of Children's Intelligence*. Philadelphia, PA: W.S. Sanders Company.

Sattler, J.M. (1992). *Assessment of Children's Intelligence.* (Revised 3rd ed.). San Diego, CA: Jerome M. Sattler.

Schindehette, S.D. Sider, D. Kramer, & L. Fowler. (2000). Against the Odds. *People Weekly*, 53(17), 63-64.

Wong-Fillmore, L. (1985). Second Language Learning in Children: A proposed Model. Paper presented at the national information exchange co-hosted by the National Clearinghouse for Bilingual Education and the Georgetown Bilingual Education Center, Rosslyn, Virginia, July.

Appendix

TESTS USED WITH PROJECT ERLES' PARTICIPANTS

INTEREST:

- Pictorial Inventory of Careers (PIC): utilizes an audio-visual format to identify potential career exploration and training
- Reading-Free Vocational Interest Inventory (RFVIII: M/F): a non-reading vocational preference test. Requires no verbal symbols or written statements. Pictorial illustrations are presented in a forced-choice approach for selection
- Bilingual Career Exploration "De Carreras"
- Vocational Interest Profile Report (VIP): Interest Checklist developed by the U.S. Department of Labor: items were selected to reflect a sampling of jobs found in 12 work categories
- Self-Directed Search (SDS) Form E: Spanish Edition. Assesses career interests of Spanish-speaking individuals with low reading levels
- My vocational Situation: a two page questionnaire useful for individuals seeking help in career decision. It helps determine if lack of vocational identify, lack of information or training, or emotional or personal barriers may be causing a problem.

PSYCHOMETRICS—cognitive and academic

- Raven Progressive Matrices (RAVEN)
- BETA III
- Wide Range Achievement Test—Revision 3 (WRAT3)

WORK SAMPLES

- Vocational Interest**,** Temperament and Aptitude System (VITAS) consists of 22 work samples that represent Work Groups identified in the *Guide for Occupational Exploration.* Each sample affords a client the opportunity to perform a task which is identical or similar to a real-life job experience. Most samples require no reading, but when written material is part of the task the reading level does not exceed the sixth grade level.
  - #1 Nuts, Bolts & Washers
  - #2 Packing Matchbooks
  - #3 Tile Sorting & Weighing
  - $4 Collating Material Samples
  - #5 Verifying Numbers
  - #6 Pressing Linens
  - #7 Budget Book Assembly
  - #9 Pipe Assembly
  - #11 Circuit Board Inspection
  - #13 Calculating

- #19 Spot Welding
- #20 Laboratory Assistant
- #21 Drafting

- Vocational Information and Evaluation Work Samples (VIEWS), a comprehensive, standardized system normed on a sample of individuals with mental retardation. The work samples are related to Worker/Skill groups identified in the *Dictionary of Occupational Titles.*
  - #4 Collating and Stapling
  - #5 Stamping
  - #6 Nut Weighing
  - #8 Valve Disassembly
  - #10 Mail Sort
  - #11 Mail Count
  - #13 Budgette Assembly
  - #14 Valve Assembly
  - #15 Circuit Board Assembly
  - #16 Drill Press

- Jewish Employment and Vocational Service (JEVS) System, a standardized procedure for client evaluation based on ten of the DOT Worker Trait Groups. Stresses behavioral observations.
  - #5 Sign Making
  - #30 Union Assembly
  - #31 Leather Assembly
  - #33 Metal Square Fabrication
  - #36 Lock Assembly
  - #40 Filing by Numbers

- Several VALPAR work samples were used. VALPAR Component Work Samples Series (VALPAR) is Criterion Referenced to the *Revised Handbook for Analyzing Jobs* (RHAJ) and the *Dictionary of Occupations Titles* (DOT), both published by the U.S. Department of Labor. In addition, most of the products are analyzed in terms of Methods Time Measurement (MTM) industrial performance standards. As a result, assessment results relate directly to competitive performance in the world of work.
  - Clerical Comprehension and Aptitude
  - Upper Extremity Range of Motion
  - Independent Problem solving
  - Multi-Level Sorting
  - Simulated Assembly
  - Whole Body Range of Motion
  - Tri-Level Measurement
  - Eye-Hand Coordination
  - Drafting

CAREER EXPLORATION

- Comprehensive Occupational Assessment and Training System (COATS)
  - Food Preparation
  - Barbering/Cosmetology
  - Small Engine
- New Concepts Corporation Career Exploration Programs
  - Floral Designer
  - Health Occupations
  - Electronics Assembly

APTITUDE:

- Bennett Mechanical Comprehension Test (BMCT)
- Revised Minnesota Paper Form Board (MPFB)
- SRA Pictorial Reasoning Test
- Hand-Tool Dexterity Test

OTHER: Informal Tasks

- Career-related math
- Functional math
- Informal Assessments

COMPUTERIZED ASSESSMENTS:

- Auto Ketch
- Printshop
- Order Processing
- Data Entry

Transferable Skills Analysis: The work history of the participant was analyzed to determine past skills. These were compared to a computer data base: OASYS, a comprehensive transferable skills analysis engine that includes thousands of occupational descriptions and work descriptors, along with employment outlook, wage and salary data, training locations and O*NET

Interviews & Behavioral Observations: Throughout the evaluation, the participant's behaviors as related to a work situation were observed and recorded.

Modifications: Modifications were used to comply with the Americans with Disabilities Act (ADA).