A study was undertaken to determine the kinds of communication that occur in the workplace and are needed for workers to be effective, for the purposes of developing English-as-a-Second-Language (ESL) instruction for workers. Five hourly employees of an automobile parts company were interviewed. Communication needs identified included common explanatory, questioning, and reporting needs concerning machines, materials, and workers. Common problems resulting from poor communication, communication needs beyond the workplace, and important work-related concepts that need to be taught were also identified. Implications are drawn for the development of customized computer software to teach work-related ESL. (Adjunct ERIC Clearinghouse on Literacy Education) (MSE)
Determining Communication Needs of ESL Workers: Implications for Customizing Computer Courseware

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Determining Communication Needs of ESL Workers: 
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Courseware 
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**Background**

ESL workers are faced with the challenges of today’s changing workplace as well as the communication needs that are required in the work environment. The expectations in today’s workplace include adequate basic skills, effective communication skills, positive work attitude, basic computer skills and the SCANS skills and competencies. The Secretary’s Committee on Achieving Necessary Skills (SCANS) include the foundation skills (reading writing, math, etc.); thinking skills (reasoning, problem solving); personal qualities (honesty, integrity). The SCANS competencies include demonstrated abilities in resource management, interpersonal skill – team skills, information skills – computer skills, systems skills, and technology utilization skills. In today’s workplace more and more emphasis is being placed on cross-functional, self directed teams, in which workers are able to work together with fellow workers of diverse backgrounds to analyze, solve problems, and make informed decisions for which they take responsibility. (Philippi, 1994)

**Statement of the Problem**

Many workers whose English is limited find it difficult to understand and follow directions, ask questions if they are not sure of them, communicate needed information to the appropriate party, or express ideas in a team meeting. Often they are not familiar with the terminology needed for the job. Also there may be personal matters that they are not able to communicate, such as the need to be away from work, problems with co-workers, or inability to explain problems they have with the job. (Grognet, 1994) To assist ESL adult learners to become more effective employees, there needs to be a meaningful approach that assists them in learning communication skills needed for the workplace.

In some ESL classes there are many students with varying ability levels. Often it is difficult to meet these differences in ability. Although there are advantages in using a social, collaborative approach in learning English, the computer offers distinct advantages, too. For one thing adults are generally interested in learning about and working on computers. Companies want employees to have basic computer skills. Computer courseware can be customized to meet specific needs through authoring tools. And finally, language patterns can be heard over and over again to provide a good model for needed communication. Use of customized computer-courseware with purposeful, interactive modules is one approach that may meet the need for individualized help in acquiring the needed communication skills for the workplace. By customizing existing ESL computer courseware through its authoring tools, it is possible to provide a meaningful approach by which ESL workers can learn needed communication for a particular worksite, or related industry.
Purpose of Study and Procedure
The initial consideration for developing customized computer courseware is the needs-assessment of types of communication that workers use and need for their jobs. The purpose of this study was to determine the kinds of communication that occur and are needed for workers to be effective within the workplace environment. To accomplish this purpose, the following procedures were undertaken:

- Determine population
- Determine what information is needed and formulate questions (Appendix A)
- Contact company with ESL workers to set up interviews
- Conduct interview with both supervisors and hourly workers
- Transcribe interviews into more readable form
- Analyze the results to determine content to include in customized computer program

Problems Encountered
Problems were encountered throughout this study. The first problem was the company targeted to interview workers and supervisors was no longer available. The company who hired primarily ESL workers, mostly Hispanic, was sold to another company and moved out of the area. Another company, which hires many Hispanic and minority workers, was contacted. The primary “problem” with this company was their practice of assisting ESL workers. Assistance was provided for hourly workers who do not know English. All line leaders, supervisors and other personnel are required to be bilingual so that hourly workers can speak in the language with which they are most comfortable. The only incentive for learning English at this workplace is seeking a higher position for which they would need to know English.

Delays with interviews with hourly workers was another problem encountered. I had already interviewed ten supervisors, but needed to interview hourly workers, too, to determine from their perspective the kinds of communication needed on the job. First, there was the General Motors strike during the summer of 1998, so there were no workers to interview. (This company makes air bags, steering wheel covers and other components for GM automobiles.) Then there were labor union organizational meetings taking place, since this company was not a union shop. By the end of this time, there were holidays and special celebrations taking place that interfered with interviews. After the holidays, the Human Resources contact was too busy with new hires to arrange for the interviews. Finally, I was able to get five interviews with hourly workers completed. I would have liked more, but the information I was receiving was becoming redundant, so I felt that more interviews probably wouldn’t provide much additional information.

Results of Study
After I transcribed the interviews, I began to analyze the findings. (I had tape recorded all of the supervisor interviews, but was asked not to use a tape recorder with the hourly employees.) I read through all the transcripts and listed the kinds of communication into categories, tallying the number of times the same form of communication was mentioned.
The results of this study fit quite well with the communication needs listed in the studies conducted by Alamprese, 1994 and Lynch 1990. The communication needed for jobs that I was able to determine, in the order of times mentioned, are:

- To report problems with machines or materials
- To report an injury on the job
- To explain problems with material or product being made to other workers on the line
- To ask questions to find out needed information, such as production expectations for the day
- To explain why the worker was late
- To explain a need to be away from the job, whether for vacation, family matters or health reasons
- To explain his/her job to the QS 9000 inspector

**Problems Resulting From Poor Communication**

During the interviews there were also indications of problems that occurred because of poor communication. Those mentioned were:

- Worker couldn’t explain the problem with the machine or material so bad parts were made, causing scrap
- Worker couldn’t tell her supervisor that the work was too hard, so problems developed with her wrist
- Worker couldn’t express ideas in team meeting or explain what she thought was the cause of a problem, so was blamed for the problem
- Worker couldn’t understand the production expectations for the day so made wrong product

**Communication Needs Beyond the Workplace**

Other forms of communication needed beyond the workplace were also mentioned. Among these were:

- Need to make clerk at store or mall understand what they wanted to buy
- Need to understand the doctor or nurse at the clinic to know how to care for injury
- Desire to carry on conversation with co-workers on the line
- Need to know about paying taxes and filling out needed forms
- Desire to apply for store charge card
- Need to exchange goods purchased

**Needed Work-Related Concepts**

Other work-related concepts were mentioned during the supervisor interviews that workers should know to be effective workers. These included:

- Safety issues – protective clothing, procedures with toxic chemicals, etc.
- Health issues – health insurance plans, procedure for reporting an injury
- Workplace terminology
  - Machine parts
  - Product terminology
  - Measurements
  - Job-related understandings
• Work process
• Quality control

Implications for ESL Customized Computer Courseware
With this information collected, the next steps include planning for the customized computer courseware that will incorporate work-related concepts and communication needs of the workplace. First of all, a determination will be made as to which work situations are representative of this type work environment (manufacturing) and which types of communication are needed. This might include scenarios in which workers solve problems related to faulty materials or malfunctioning equipment, follow procedures after an injury, understand the need for quality control, understand work process, or just communicate a problem with the product to another worker on the line. A possible dialogue will be written in both English and Spanish. The help of a bilingual instructor will be enlisted. The script for scenarios will be finalized and written out. Videos and photos will be taken at the plant so authentic context will accompany written text. The photo and videos will be edited and then integrated into the software via the authoring tools. Also included will be voice overlays, music and other appropriate sounds. The series of scenarios, representing real problems on the job for which appropriate communication is presented, should provide a meaningful approach to language needs for ESL workers.

Conclusion
Most ESL workers need communication skills in English to meet the challenges of today’s workplace. Determining authentic workplace communication needs provides the information needed for the development of customized computer courseware. Workers interested in improving their English on the job should be able to improve their communication skills in an interesting, self-paced, interactive approach. This courseware which provides meaningful learning contexts and models for workplace communication skills will provide an innovative approach for assisting ESL adults in becoming more effective workers.

References
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