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ABSTRACT

The purpose of this project was to design and develop simulation materials utilizing vocational situations) in mildly/moderately handicapped young adults. The final product, a set of materials titled "Social Skills on the Job," includes a videotape of 15 lessons, a computer software package, and a teacher's guide, and was marketed to a commercial publisher (American Guidance Service) and made available for sale. Lessons cover such skills as calling in when sick, admitting mistakes, and dealing with criticism from an employer. This report describes the design, development and field testing of the materials, the formative evaluation, the experimental phase, and the summative evaluation. While evaluation data did not show statistically significant differences between two experimental groups and a control group, the complete set of materials was viewed by teachers as highly effective and very relevant in accomplishing objectives. Use of various media in an integrated package was rated very positive by most teachers. Appendices list review board members, present sample materials from "Social Skills on the Job." provide summaries of field test data, and include copies of assessment instruments and tables of supporting data. (JDD)

EXECUTIVE SUMMARY

FINAL REPORT
USING SIMULATION TECHNOLOGY TO PROMOTE SOCIAL COMPETENCE OF HANDICAPPED STUDENTS FOR CONTRACT #300-85-0156

Louise S. Appell; And Others

Submitted to:

U.S. Department of Education
Office of Special Education Programs

Macro Systems, Inc. March 15, 1989

EXECUTIVE SUMMARY

1. BACKGROUND

In 1985, the Office of Special Education Programs issued an RFP to "design and develop simulation materials utilizing advanced technologies for promoting social competences in mildly/ moderately handicapped young adults." It also required that "a study be made of the effectiveness of simulation as a means of facilitating the transfer and generalization of skills and strategies related to developing social competence."

The literature in the field provides substantial documentation to support the contention that handicapped youngsters need to develop social competencies necessary for success in the world of work and that they can benefit from social skills training programs to prepare them for securing and maintaining employment. The potential for simulated experiences as a training strategy has also been the subject of a body of literature, with many authors citing the advantages of computer technology as a delivery vehicle.

Simulation as a teaching strategy is as old as written history. The Greeks and Romans developed to a high art the strategy of using drama to teach. Long before there were textbooks and skill sheets, people-watching was the primary means of learning. Practical reality suggests that, for non-readers, imitation is an efficient way to acquire social skills.

This RFP included within the scope of work the design and development of the materials, formative evaluation of the materials and, in addition, a summative evaluation with special attention to issues of transfer and generalizability. Of special note was the stipulation that the contractor should develop a marketing strategy and implement it to "ensure the commercial marketing of the materials."

2. APPROACH

Macro's proposal in response to this RFP was based on an approach to the development of technology based materials for improving employee social competence that incorporated the fundamental principles of social learning theory. This theory is a dynamic explanation of the complex and interactive relationship among cognitive, behavioral, and environmental influences on individual learning. This formulation of how people learn represents a marriage of information processing theory with reinforcement theory.

Design Of The Materials

An initial task of this project was to review the literature for identifying the types of job-related social behaviors that might become the objectives for the product. In addition, meetings with special education teachers and consultation with special education and employment professionals , who served on the Review Board gave the project team an informed perspective from which to design the materials.

Although we explored the possibility of developing an interactive videodisc, in 1985, when this project began, few schools had access to videodisc technology. Field testing would have been impossible. Thus, it was decided to develop a videotape component to be used by teachers in a group situation, computer software for drill and practice to be used individually or in small groups and a teachers guide with accompanying student skill sheets.

Fourteen objectives were selected, with the thought that most semesters are 15 weeks long. Scripts for the videotape were written and rewritten, with every effort made to present concepts in a setting appropriate for the target audience and with enough exposition to assure that the student viewing the tape would be able to identify with the situation. Arrangements were made with the Rock Terrace School in Montgomery County, where a drama teacher working with handicapped adolescents was eager to have his students experience the challenge and the excitement of performing for a professional videotaping crew and with the Duke Ellington School of the Arts in Washington, D.C. where drama students eagerly sought an opportunity to have a sample tape of their work to use for obtaining bookings.

Because many handicapped students with mild to moderate cognitive impairment are poor readers, it was decided that the computer software would include voice synthesis. Another important decision in designing the software was to use graphics that feature characters with ethnic and racial diversity and that are different from the childish and simplistic images of many software packages. The choice to develop the software for the Apple IIe was based on market statistics which suggested that this was the equipment most frequently found in the schools.

The teachers guide was designed to help instructors use the materials in a variety of ways to meet the needs of particular groups of students. The guiding principle for its development was social learning theory. In addition, clarity in style and format and brevity of introductory and directional information were important objectives.

Formative Evaluation And Modification

The evaluation literature commonly refers to the field testing, revising, retesting of materials cycle of sequential activities as formative evaluation. This product was evaluated in its developmental stage by teachers in four school districts in the Richmond, Virginia area during the 1986-87 school year in classes composed of our target audience.

During a hands-on workshop at the beginning of the school year, the teachers met with the deputy project director and the field site coordinator to learn about and experiment with the materials. They were introduced to the observation sheets they would use and worked out a schedule for observations and interviews.

The data collected from this year long field testing was crucial to the development of the final product. It resulted in important modifications, including a complete rewrite and re-shooting of two of the video vignettes and rewrite of many of the "wrong" choices or foils used in the computer software. Modifications to code to improve the voice quality was another result of the formative evaluation, as well as the addition of Advance Organizers to the teachers guide.

Summative Evaluation

Summative evaluation of the revised materials was conducted in five school districts in the Richmond, Virginia areas during the spring semester of 1988 and again in the Richmond area and Alexandria, Virginia during the fall of 1988. Teachers were assigned to one of three groups. The E1 group received the complete program, including the videotape, computer software and teachers guide. The E2 group received material in print form only, which included the videotape scripts as well as the computer scripts. The C group received no special materials.

No special training was provided. Teachers were not asked to make observations or keep a log; only to cooperate with testing and observation schedules. Students were pretested using two subtests (Test 4-Job Related Behaviors and Test 8-Hygiene and Grooming) from the Social and Prevocational Inventory Battery - Revised (SPIB-R). This is a group administered test and the selected subtests were in a true/false mode.

Students also were tested using the Vocational Adaptation Rating Scales (VARS). This is an individually administered rating scale and must be completed by someone familiar with the students over a long time period. This test was administered on a pre- and posttest basis by the classroom teachers.

Classroom observations and interviews with teachers and students were conducted throughout the project. A structured interview format to use with employers was also developed, targeted as a strategy to gather information on transfer of classroom learned skills an generalizability to real life situations.

3. RESULTS

Materials

The final form of the materials includes three components. A videotape, 65 minutes in length features 15 lessons, 1 for each of the 14 objectives and a summary lesson. Each lesson has two vignettes, which present a situation and then ask students how the character should respond.

Teachers are expected to stop the tape for discussion. When they restart the tape, the vignette ends with the worker's decision and a rationale.

The computer software package includes 15 separate diskettes, one for each objective and a summary lesson. The software is designed to be used as drill and practice. Its format is in a simulation mode. A situation is presented corresponding to a vidoetape lesson, between boss and worker or between coworkers. Students are able to put themselves into the situation by choosing from a menu of several male and female worker figures. One of four different bosses is generated randomly for each lesson. The software features voice synthesis, which a teacher may choose to use or not. If a school has a color monitor, the software is in color; however, it also works in monochrome.

The third component is the teachers guide which includes introductory chapters with information about learner characteristics, suggestions for use of the product to meet IEP goals, recommendations for scheduling, ideas to meet different teaching styles and a procedure for using role playing. Each lesson begins with an advance organizer. A discussion guide presents suggestions for discussion and probing questions a teacher might ask to stimulate discussion, new vocabulary that are introduced and ideas for language related activities. Reproducible worksheets for each lesson and copies of the videotape script are another feature of the teachers guide.

During the entire project, we were mindful of the task to market the product to a commercial publisher. One strategy we used to ensure commercial viability was to ask the Director of Product Development of American Guidance Service to serve on the Review Board. When the materials were completed, we applied for permission to copyright, obtained a copyright on the package and negotiated an agreement with American Guidance Service. They have designed an attractive package, promoted the product with a vigorous direct mail campaign and it is now available for sale.

Research

A serious complaint has often been levied at those who conduct research in the field. A source of concern is that reports are written in a fashion too highly technical and too heavily laden

with statistics as to be comprehensible only to those few who emphasize statistical findings to the exclusion of all else. Thus much important information often goes unread.

The rich data provided by observation and interview in this project make it possible to provide a broad picture of how the program affected students and teachers. While there are statistical analyses, they reveal little of the dynamic interaction that went on in the classroom.

The most disappointing aspect of this study was not that the data do not show statistically significant differences between the E1, E2, and C groups (although that is surely disappointing to any research effort). Most disconcerting was our inability to collect data by interviewing the employers to find out about transfer and generalizability of the skills learned by using the product. Two factors were important deterrents to completing those interviews. First was the fact that few students remain steadily employed. In our sample, many of the students had jobs only on a seasonable basis . Most crucial, however, was the adamant refusal by some teachers and students to even give us the names of employers we might interview. For the most part, these were the higher functioning students who did not want their employers to find out they were special education students. One vocational education teacher was appalled that we would even consider doing such a thing. While we came to understand the sensitivity to this exposure, we were nevertheless disappointed not to have an opportunity to test this hypothesis.

Major findings include the following:

- While the statistical analyses were not supportive of the major hypotheses, this appeared to be due in part to enormous differences between classes, the ceiling effect of the tests, and lack of sensitivity of standardized tests to measure growth over a short time period.
- The complete set of materials of videotape vignettes, computer software and teachers guide was viewed by teachers in the E1 group as highly effective and very relevant in accomplishing objectives. This was confirmed by observation of classrooms using the materials.
- Use of various media (videotape, computer software, print) in an integrated package was rated very positive by most teachers.
- Teachers reported that the videotape vignettes were very effective and that most of them covered very important topics and were of high quality.

- Teachers reported that the teacher's guide was effective. While individual worksheets varied in terms of appropriateness to certain populations, in general they were well received.

- Teachers who were exposed to the print materials only (E2) varied in their acceptance of the materials. Those who had been exposed to the complete set of materials, either from the field testing or because they had previously participated in an E1 group, were dissatisfied with print materials only. However, several teachers in this E2 group praised the print materials, perhaps because they were better than no materials at all.

4. OBSERVATIONS AND RECOMMENDATIONS

Several observations are worth making about the overall project, especially since many of these relate to the larger issue of conducting research in real-life classroom situations.

Technology is not yet readily available to all special education teachers. While schools cooperated and assisted teachers in obtaining needed equipment, it should not be assumed that teachers have ready access to such equipment. Thus, it is difficult to recruit teachers and assign them to experimental conditions at random.

Special education students have erratic attendance. By the end of each semester of the study, a considerable number of students had withdrawn, were absent, or were homebound. One teacher characterized this phenomenon in this way: "These kids are just finding themselves; they are experimenting and looking for their place."

Criteria for student placement varies across school districts, even when all the school districts are located in a single state. Thus, one might find one EMR class that the teacher characterized as "high functioning" and another one in the same or a different school district as "low functioning." Concomitant with this is the often found practice of placing students with different handicapping conditions in the same classroom. It became difficult to tell, then, the comparability of the classes across the experimental groups.

School districts appear to be using the label of learning disability (LD) for students much more frequently than in the past. As a result, there are fewer students in the category of EMR. In this study, as a consequence, fewer EMR students were available to us than we anticipated. This

situation is not unique to Virginia. Special education professionals across the country have noticed an increase in the numbers of students classified as LD and a corresponding decrease in the numbers of students classified as EMR. Are the students changing? We think not. Perhaps we are becoming more sophisticated in identifying problems or perhaps through societal pressure we are selecting labels that are seen as less odious.

In this study, we encountered difficulties in obtaining a sizable sample of mildly cognitively impaired (EMR) students. While in part due to the issues we discussed above, other reasons included teachers receiving the same students from year to year or competing curriculum needs.

Within experimental conditions, considerable variability existed across classrooms. This was, of course, anticipated to some extent. We were interested in observing how the materials were used without supervision from outside. Throughout our observations, we noticed that teachers in the E1 group had considerable variation in the way they used the materials. Thus, it could not be said that all students in the E1 group were exposed to the materials in the same way. Kerlinger points to this as a problem in conducting experiments.

Teachers have many demands on their time. While they were extremely cooperative, competing demands sometimes resulted in their compressing the lessons over a short time period or omitting some of the computer lessons with some students. We also found that two administrations of the VARS for each student was very difficult within one semester of time, especially if the teacher had a large class.

Special education students do not participate in work experiences on a regular basis. Some worked for a short time while others were planning to work or had worked in the past. Most were not working at all.

Important recommendations include the following:

- Continue to develop materials that use technology. The technological component of these materials was seen as highly positive by both teachers and students. Long ago Skinner spoke of the inherent motivating factor in using machines. Special education is only beginning to examine the enormous potential offered by the new technologies.

- Consider alternative methodologies and designs for conducting research on special education populations. Given the small number of teachers responsible for special education in a given school district; the needs of school systems, teachers, and students that are in conflict with the needs of researchers to conduct experiments; the difficulties in selecting random samples of teachers and students and assigning them to experimental conditions at random; and the difficulties in maintaining control over experimental conditions, it is suggested that qualitative methodologies that focus on describing student and teacher behavior and observing them in natural settings be used.

- Identify alternate ways of measuring student behaviors. Teachers consistently report that students are often able to perform well on a paper and pencil measure of knowledge about a particular behavior. But this knowledge does not often carryover into a change in behavior. While this is not new and researchers have known for years that there is a low relationship between pencil and paper measures of knowledge, skills, and attitudes, on the one hand, and measures of actual behaviors, on the other hand, this issue is especially important when measuring special education students.

PROJECT OUTCOME

Special education professionals have recognized for many years the critical importance of adequate job-related social skills in the successful integration of mildly handicapped students. Many practitioners have repeatedly called for adequate materials to use for teaching these important skills.

This project produced a comprehensive set of materials that have been copyrighted and licensed to a highly reputable, large volume publisher, American Guidance Service. The commitment of this publisher to promote these materials through brochures, mailings, and conference exhibits ensures that they will be available to the broadest possible range of special education professionals.

One conference presentation on the results of the research using these materials is already scheduled. A journal article is planned.

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I. INTRODUCTION

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Many of the nation's mildly and moderately handicapped youth leave the public school system with high hopes, poor prospects for steady employment, and critical need for the subtle interpersonal skills that would increase their chances of making it in the working world. Many leave the school environment with little understanding of how mainstream society expects them to conduct themselves.

The special education literature has repeatedly emphasized the critical importance of social competency as a factor in sustained employment of handicapped youngsters. Even when work skills are well-learned and work performance is unquestionably good, the absence of appropriate interpersonal behavioral skills can and does result in loss of job and, frequently, a lowering of self-esteem and confidence.

For all human beings, whether handicapped or not, life is a continuously turning kaleidoscope of interpersonal encounters and exchanges. In many ways, society measures personal success based on the ability to behave appropriately in social interactions. If handicapped young adults are to reach the goal of integration into the main fabric of society, maintaining a measure of independence and paying jobs, it is essential that they become socially competent. They must learn courtesy and respect for others and to expect and elicit courtesy and respect in return. They must become sensitive to the needs and feelings of others and be willing to make adjustments in their personal needs. Most important, they must learn the specific job-related social skills that will make them acceptable and valued employees.

The Office of Special Education Programs, recognizing the need for instructional materials to aid educators who are preparing their students for the world of work, issued RFP 85-100 entitled "Using simulation Technology to Promote Social Competence of Handicapped Students" in an effort to address these needs. The scope of work called for the design and development of special materials, field testing and modification of the materials, and a summative evaluation component to measure their effectiveness, with special attention to the issues of transfer and generalizability. Of

special note was the stipulation that the contractor should develop a marketing strategy nd implement it to "ensure the commercial marketing of the materials."

Macro Systems, Inc., was awarded one of two contracts to incorporate simulation technology in the design and production of materials to teach employee-related social competencies to young adults who are mildly handicapped. In the proposal response to the RFP, Macro noted that special educators have been among the first to recognize the potential worth of microcomputers as a teaching resource. Their unique capabilities for error correction, branching, repetition, data collection, and patience make them ideal instruments for special needs students. They require students to be working participants interacting with the computer,and they are "programmed" for success, thus increasing the students' sense of competence through mastery of new skills in a failure-free, nonthreatening environment.

Using the microcomputer in conjunction with videotape for the presentation of real-life simulations offers excellent potential for practicing appropriate social competencies. Combining the micro with a videotape voice track and a voice synthesizer capable of presenting screen text aurally for poor readers and nonreaders increases the likelihood that handicapped students will be able to use it to maximum advantage. Attractive computer graphics can help to focus and hold attention.

Simulation as a teaching strategy is as old as written history. The Greeks and Romans developed to a higher art the strategy of using drama to teach. Long before there were textbooks and workbooks and skill sheets, people-watching was the primary means of learning. Practical reality suggests that, for nonreaders, imitation is an efficient way to acquire social skills. Many people use television personalities as models for their behavior, their dress, their lifestyle.

Despite the well-acknowledged importance of social skills for handicapped populations and the general agreement of the need to ensure that classroom-learned social skills transfer from the classroom to the real world and are generalizable across different but similar circumstances, little research has been done to measure the use of alternative approaches to meeting these needs. This project was designed to address this issue and provide for the collection and analysis of data on the impact of supplementary instructional materials using simulation technology on the transfer and generalizability of job-related social skills.

Throughout this project, we have been mindful that commercial publication of materials ensures their wide dissemination and ready availability to the largest number of handicapped students and the widest audience of educators. A contract has been negotiated with American Guidance Service, publisher of instructional materials targeted to special educators. They will vigorously promote the materials to a wide audience of special education professionals.

The purpose of this project was to add to the body of knowledge about the acquisition, transfer, and generalizability of specific job-related social competencies using alternative approaches that include advanced simulation technology designed to supplement social competency curricular materials for mildly/moderately handicapped youth.

Specific objectives include:

- To design and develop a comprehensive and integrated set of materials consisting of videotape vignettes, computer software, and printed materials to teach job-related social skills to mildly/moderately handicapped youth. The group of skills was selected from those identified by special education teachers and other knowledgeable professionals.
- To field test (formative evaluation) and revise the materials using a target population in school settings.
- To evaluate the effectiveness (summative evaluation) of the components using a target population with special attention to transfer and generalizability.

II. DESIGN AND DEVELOPMENT OF MATERIALS

II. DESIGN AND DEVELOPMENT OF MATERIALS

This first phase consisted of the design and development of the materials. During this phase, objectives were identified through a search of the literature, meetings with special education teachers, and consultation with special education and employment professionals, who served on the Review Board (listed in Appendix A). These objectives were considered representative of the types of social skills handicapped students needed in order to be successful in work settings.

In designing the materials, the learning needs of the target population were carefully considered. Foremost was acknowledgement that the characteristics of students with learning deficits are exceedingly varied. Some characteristics appear frequently, whereas others rarely appear. The impact of these characteristics on student learning and student needs also varies depending on such factors as teacher, subject, environment, instructional strategy, and materials. Diagnostic labels such as learning disabled or mentally retarded do little to aid instructors in trying to find materials to match the needs of their students.

Although some individuals within a category may share common characteristics, and although one commonly finds stereotype references to a specific handicap, various groups of handicapped persons are not homogenous. Handicapped individuals within the same category vary. All mentally retarded learners, for example, do not have coordination difficulties nor do all severely learning disabled students have the same type of perceptual deficits.

While individual characteristics or behaviors cannot be predicted on the basis of a label, some generalizations can be made about the common needs of mildly/moderately handicapped individuals. Common characteristics cut across the various categories of disabled persons, and therefore many handicapped people share common needs.

The following needs are often found in some combination among mildly/moderately handicapped individuals:

- Simplified Vocabulary--Many mildly-moderately handicapped persons have a limited reading ability and have difficulties acquiring and retaining vocabulary. They need simplified sentences and vocabulary to help in understanding material.

- Repetition--Many mildly/moderately handicapped individuals have auditory and/or visual memory deficits which may lead to difficulty in the assimilation, storage, and retrieval of information. The repetition of relevant material gives a student more opportunity to grasp the information.

- Focused Attention--Many mildly/moderately handicapped students find it difficult to focus on any particular activity for any length of time. They are easily diverted from a simple task or are threatened by a more complex activity. These individuals need help in focusing their attention on the material sat hand. Other handicapped persons are hyperactive (i.e., restless, engaged in random activity), and they too need their attention focused in order to achieve.

- High Motivation Level--Many mildly/moderately handicapped persons have low levels of motivation and need interesting and enticing materials and innovative approaches to stimulate their learning.

- Reinforced Concepts--Many mildly/moderately handicapped students are slower at grasping concepts. They need instruction that starts at a more concrete level, is presented in smaller steps, and allows for immediate response and feedback.

- Slower Pacing Of Program--Many mildly/moderately handicapped individuals have perceptual disorders. A student with auditory perception problems, for example, may not be able to differentiate between different sounds or consonant blends. A lower-paced, well-enunciated program helps students alleviate perceptual deficits. Other handicapped persons have a slow speed of reaction and can benefit from a slower paced program that gives them time to ponder a situation.

- Positive Reinforcements--Handicapped students need to experience success to improve their self-concept and motivation. Positive reinforcement and feedback would help build confidence and stimulate learning.

- Management Of Time And Task--Some handicapped students are unable to organize their work assignments efficiently and become easily frustrated. Work for these students should involve task analysis and a great deal of structure.

- Sequence Of Learning Tasks--Handicapped students are often unable to perform tasks that progress from simple to complex. They need assistance in sequencing their work so that they understand the logical order of the tasks.

- Application Of Previously Learned Skills--Many handicapped students have great difficulty using what they have studied in one environment to a new or different context. They need direct instruction in how to transfer skills and knowledge to a new setting.

- Generalizing Learned Skills To Real-Life Situations--Unlike some of their nonhandicapped peers who can automatically apply their learning to real-life settings, handicapped students need real-life reinforcement and many opportunities to interact in different but related environments.

- Ability To Make Social Inferences--Handicapped learners are less likely to interpret nonverbal cues, judge a situation and respond appropriately without external coaching or training. The complex nature of social interactions requires careful intervention in how to interpret and respond appropriately.

Social learning theory, which is closely associated with uses of simulation in instruction, guided the development of the component materials. Social learning theorists, represented by Bandura, place great emphasis on social variables as influences on what and how people learn. Bandura (1977) maintains that most behavior is learned through modeling and that "from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (p. 22). Observational learning or modeling has four processes that include attention, retention, motor reproduction, and motivation. Attentional processes are responsible for what is selectively observed from among many influences. Retention of modeled events is facilitated by use of visual imagery (when verbal skills are lacking) and verbal coding which Bandura calls symbolic coding. He also cites the importance of rehearsal as a memory aid. A theory's value, from the social learning viewpoint, is in its ability to create changes rather than to merely describe them (Rosenthal and Zimmerman, 1978). The dynamic nature of this theory and its respect for cognitive, behavioral, and environmental influences make it particularly attractive to educators and practitioners who concern themselves with behavioral changes in children. Its "emphasis on social observation and feedback as the primary means by which individuals learn and alter behavior" (Rosenthal and Zimmerman, p. 79) makes it ideally suited for practical application.

Initially, an interactive videodisc approach was considered. Staff at Macro felt that this technology offered the best opportunity for addressing the many learning needs identified. However, at the time when this product design was begun (Spring, 1986) few schools had videodisc equipment, and the software tools for creating such a product were at a very early stage.

Committed to the development of a technology product, Macro staff asked the schools what they would be able to use in the near term. This practical yardstick provided the guidance for the development.

All materials were designed with the teachers and students in mind. Materials were aimed at the students' levels of functioning. They are easy to use, interesting, and focused on the particular objective that was being taught. They are also highly motivating. Materials were developed as a comprehensive and integrated package. The three separate components of the package are described below. (Sample materials from the social skills program are presented in Appendix B.)

The **videotape component** was designed to be used by the class as a whole. This component involved the development of videotape vignettes (2 for each of the 14 objectives and a summary). The vignettes were designed to stimulate class discussion about a particular objective. For example, a vignette introduced the objective of getting to work on time. Students were presented with a situation and then asked what they might do. Teachers were expected to stop the videotape and lead a discussion on this topic. Each videotape vignette ended with the worker's decision and a rationale. A second videotape vignette presented the same objective in a different setting using the same format. Videotape vignettes were filmed in real life settings. Professional actors and drama students from regular and special education classes were used as the actors in the videotape. The following is the final set of 14 target job-related social skills:

1. Wearing appropriate clothes
2. Using good personal hygiene
3. Calling in when sick
4. Getting to work on time
5. Greeting authority figures
6. Using appropriate breaktime behavior
7. Doing one's share of the work
8. Maintaining the work schedule
9. Admitting mistakes
10. Responding to introductions
11. Deciding when to ask for help
12. Deciding who to ask for help
13. Dealing with heckling from a co-worker
14. Dealing with criticism from an employer

The computer software component was designed to be used by students on an individual basis. This component involved the development of drill and practice material to reinforce the particular objective presented in the videotape lesson. For example, a computer lesson presented a situation similar to the one on the corresponding videotape lesson. Students were able to put themselves in the setting by choosing one worker from among several. One of four different bosses was generated randomly for each lesson. These were represented by caricatures. An important feature of the computer software was the use of an speech synthesizer which allowed the material to be presented aurally as well as in print.

Since the data reported by market research firms tracking the use of computers in the schools strongly suggested that the Apple IIe was the computer of choice, the software was designed to be used with this popular hardware. Programming was done in C and assembly language, which provides a rich library of database and graphics functions and insures its easy portability to other hardware in the future. The speech synthesizer chosen was the popular Echo II because it was the brand most frequently purchased by the schools. When the Echo + was developed, Macro modified the software to accommodate this improved peripheral. An important feature of the software was the high quality graphics that were designed to avoid simplistic or childish images. The caricatures used had features that suggest ethnic and racial variety and were chosen to appeal to adolescents and young adults.

The Teacher's Guide was the third component developed. The guide was seen as the pivotal element of the program in integrating the components of the social skills program. Its design was guided by the critical elements of social learning theory that have been proven successful in practice. Macro considered it very important that sound design principles be applied to the materials for teachers as well as to those for students. Clarity and brevity were important objectives, but foremost was the desire to present explanatory information on the rationale for using social learning theory and simulation technology in a way that would motivate teachers to follow as many of the suggested approaches as possible. Introductory chapters of the Teacher's Guide also included information on learner characteristics, suggestions for use of the program in individualized education plan (IEP) goals, recommendations for scheduling the lessons and their various components, ideas to meet different teaching styles and different student needs, and a procedure for using active practice and role playing. Each lesson began with advance organizers to set the stage for the simulation. A discussion guide corresponding to each of the videotape lessons was

presented with suggestions for discussion and probes a teacher might use to stimulate discussion. New vocabulary was introduced as well with suggestions for several language related activities. The guide also had three blackline worksheets for each lesson, reproducible copies of each videotape vignette script, and additional ideas for expanding lesson objectives.

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III. FIELD TEST AND FORMATIVE EVALUATION OF MATERIALS

III. FIELD TEST AND FORMATIVE EVALUATION OF MATERIALS

The development of high quality materials requires diligent, systematic careful evaluation. In order to determine whether instructional products will meet the needs of teachers and students, it is essential that materials be developed, tested, revised, retested, and so forth, through a planned, sequential development/evaluation approach. The evaluation literature commonly refers to this strategy as "formative" evaluation because the activities and their results are used to make decisions regarding modifications, adaptations, and revisions to a product throughout the development phase. The cyclical nature of this activity is demonstrated in Exhibit III-1.

Seven teachers from the counties of Chesterfield, Hanover, and Henrico, Virginia and the city of Richmond, Virginia participated in this phase of the project. A field site coordinator maintained a regular schedule of visits and observations and helped with technical problems of hardware and software that developed. The teachers came together as a group at the start of the project, at the midpoint of the project, and for a final meeting. They were also observed and interviewed informally by other members of the Macro staff. During these discussions, teachers provided feedback on the materials.

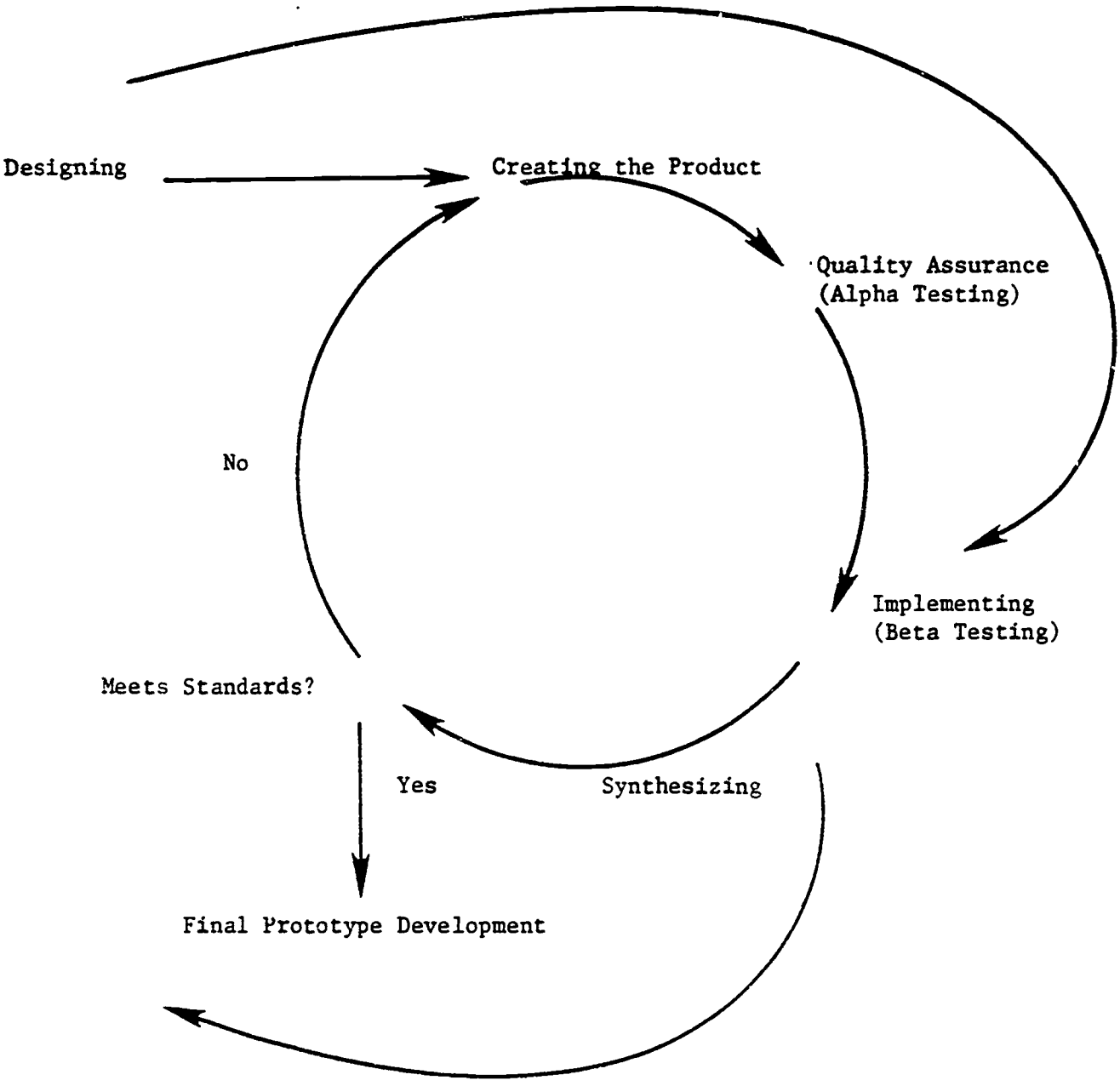
Interviews, observations and questionnaire data were collected from the teachers in order to determine their perceptions of the materials. They addressed such questions as how well did the materials teach the objectives, were they useful, and were they important.

A vital part of this phase was the feedback teachers provided. In particular they provided information on the effectiveness of the materials from each of the three components, suitable target populations, and suggestions for assessment instruments that might be used to evaluate the materials.

Based on teacher input and observation of the materials being used in the field, revisions were made to the materials. Computer software materials were rewritten to make them more challenging for the students. Two of the videotape vignettes were refilmed. Teacher's Guide material was also revised and expanded.

EXHIBIT III-1

FORMATIVE EVALUATION PROCESS



Background Of The Field Testing

During the preparation of the proposal in response to RFP 85-100, Macro contacted the Director of Special Education in the Virginia State Department of Education. At that time, Macro was assured of the cooperation of department personnel in obtaining school sites that would include a mix of urban/rural, industrial/ agricultural environments for field testing and for the summative evaluation.

Following contract award, representatives from the Virginia Office of Special Education participated in Review Board meetings, and at that time, reiterated their intent to assist Macro with the activities requiring participation from teachers and school administrations.

With the materials design and development phases completed, a meeting between Macro project staff and representatives of the Virginia State Department of Education was held in the fall of 1986. Individuals from various school districts in the Richmond area with specific knowledge of students and teachers who might meet the criteria for inclusion in the field evaluation of "Social Skills on the Job" were identified by these Department of Education representatives and a meeting with those individuals was held shortly thereafter. As a result of the second meeting, 7 teachers from 4 districts were identified to participate in the field testing phase.

Since one of the goals of formative evaluation was to gather very practical information as input for the remainder of the project's effort, Macro hired a field site coordinator who lived in the area in which field testing occurred. It was a part-time position and the Virginia Department of Education assisted in locating a graduate student who had the following skills:

An understanding and use of research skills,
Working knowledge of computers,
Familiarity with public school and their general operation,
Familiarity with mildly/moderately handicapped youth.

The deputy project director reviewed the program materials and details of formative evaluation with the field site coordinator just prior to the training session they conducted for participant teachers.

The seven field test sites were very dispersed around the Richmond area and required considerable travel time from one to another. As a result, the field site coordinator visited each field test site biweekly. During the visits, she would discuss the teacher's progress, answer any questions, troubleshoot mechanical problems, and observe the lesson/activity conducted during the period. Afterwards, she wrote a report about her observations and interactions, and she completed the appropriate checklist--videotape or computer--for the activity that had occurred.

The field Site coordinator communicated weekly with the deputy project director. She participated in all project meetings conducted in Richmond. She was always accessible to the field test teachers by telephone, which was critical during the severe and unusual weather that marked Richmond's winter during the field test.

Early in January 1987 the identified teachers participated in a half-day, hands-on training session conducted by Macro project staff at the office of the Virginia Department of Education on the use of the materials known as "Social Skills on the Job." Demonstrations of videotape segments and computer software were given, installation of the Echo voice synthesizers was practiced, and discussions about the use of all materials were held. At the conclusion of the training, teachers were provided with complete sets of materials for use in their classes.

Following this training session, teachers began using the materials in their classes. Macro staff were available to assist with problems and to conduct on-site observations. Teachers completed various rating forms and questionnaires on a regular basis.

Teachers and members of Macro project staff participated in midpoint and final meetings to obtain feedback on use of materials and to obtain teachers' perceptions regarding the suitability and appropriateness of materials with their students.

Data from multiple sources were collected and used to prepare the formative evaluation presented later in this chapter. They include checklists and rating sheets completed by the field site coordinator after each visit and by the teachers at scheduled intervals; observation reports by the field site coordinator, research coordinator, and deputy project director; short answer questionnaires completed periodically by the teachers and district supervisors; and data automatically collected by the computer software.

A particularly severe winter resulting in the unexpected closing of schools on several occasions may have added unanticipated barriers to the systematic use of materials. Additionally, the severe weather caused some delays in the scheduling of observations, the use of all materials, and in the scheduling of the midpoint meeting. It should be noted, however, that it is not felt that such changes in schedule created serious problems in this field testing phase.

The Setting

Field testing was conducted in 4 school districts in the Richmond, Virginia area. Each of the 7 teachers who participated in the testing worked in a different educational setting. All but one of the teachers taught in a high school setting with enrollments of between 1,000 and 1,500 students. All teachers were in settings that could be characterized as special education classes, with enrollments of between 4 to 10 students. One teacher worked in a special education setting located in a career education center with an enrollment of slightly less than 500. Each county represented a mix of rural, suburban and urban environments as well as a mix by racial/ethnic background and socioeconomic level.

The Teachers

Seven teachers participated in the field testing. All were female. One had two master's degrees, one had completed some graduate hours towards a master's, and the remaining five had bachelor's degrees. All had considerable experience as teachers, ranging from 6 to 18 years with an average of over 10 years. All had considerable experience in special education as well, ranging from 6 to 14 years with an average of 9 years.

Teachers varied in terms of their experience with computer skills. Three teachers rated themselves as "not at all experienced," 2 rated themselves as "a little experienced," and 2 said they were "fairly experienced." Four of the 7 indicated they previously had used a computer for educational purposes. Five of the 7 indicated they had previous experience in teaching social skills.

The Students

Classes also varied by sex, racial/ethnic background, grade placement, age, type of handicapping condition, and employment status. The 7 teachers in this study used the materials with a total of 56 students. Table 1 provides a breakdown of the sample of students with whom the teachers worked.

Table 1. Characteristics of Students and Classes in Field Test

Characteristic	Frequency	Percent of Total
Sex		
Male	35	63
Female	21	37
Racial/Ethnic Group		
Black	18	32
White	37	66
Other	1	2
Grade		
9	13	23
10	16	29
11	13	23
12	14	25
Age		
15	7	12
16	15	27
17	10	18
18	16	29
19	5	9
20	2	3
21	1	2
Type of Handicap		
EMR	35	63
LD	16	28
Other	5	9
Employed		
Yes	24	43
No	32	57

Summary Of Findings

Midpoint Meeting

Teachers were asked to rate the materials according to a variety of dimensions. Responses were collected using a closed-response format. Ratings are summarized in Table 2. Informal discussions and comments were also gathered.

Table 2. Summary of Teachers' Midpoint Ratings

VIDEOTAPE SEGMENTS	
Ease of use	- easy to use (100%)
Accessibility of equipment	- usually available (86%)
Amount of material	- enough material (100%)
Sequence of lessons	- okay as is (57%) - use in any order (43%)
Manner in which used	- handicapped only (71%) - handicapped and non-handicapped (29%)
COMPUTER SOFTWARE	
Ease of use	- need some supervision (57%) - easy to use (29%) - no response (14%)
Accessibility of equipment	- usually available (86%)
Amount of material	- enough (100%)
Manner in which used	- supervised (43%) - unsupervised (43%) - other (14%)
Value of synthesizer	- very valuable (14%) - valuable (86%)
Value as supplement	- very valuable (14%) - valuable (86%)
Value used alone	- very valuable (14%) - valuable (86%)
Difficulty of material	- about right (43%) - too easy (57%)

Table 2 (continued)

TEACHER'S GUIDE AIDS

Ease of use	- easy to use (86%) - cumbersome (14%)
Amount of material	- enough (100%)
Value as supplement	- very valuable (29%) - valuable (57%) - no response (14%)
Value used alone	- valuable (71%) - not valuable (29%)
Appropriateness to target population	- appropriateness (71%) - not appropriate (29%)

Final Meeting

Teachers were asked to complete a final meeting comment sheet. Response format used open-ended questions. Data are summarized in Table 3. Data also were gathered based on discussions and comments made at the final meeting. In addition, the deputy project director and the field site coordinator were interviewed to obtain their observations.

Table 3. Summary of Teachers' Final Comments

1. EFFECTIVENESS OF PROGRAM IN ACCOMPLISHING OBJECTIVES

Overall teachers rated the program very highly. Five of the seven said it was excellent, very or highly effective. One said it was good. One said effectiveness varied.

2. COMPARISON OF THESE MATERIALS WITH OTHERS DESIGNED TO TEACH SOCIAL SKILLS

Overall teachers rated materials very highly compared to other materials. Teachers liked the combination and variety of materials. They considered them "interest grabbing" with high motivation. More programs like this one should be on the market.

3. RELEVANCY OF MATERIALS TO OBJECTIVES

Overall teachers rated materials very relevant to stated objectives. Only one teacher felt that topics covered should have previously been mastered by someone of this age. However, she commented that topics were still good generators of classroom discussion.

Table 3 (continued)

4. INTERRELATIONSHIPS OF COMPONENTS IN ACCOMPLISHING OBJECTIVES

Some difference of opinion existed on the interrelationships of various components. Five of seven were very positive, making such comments as follows: double reinforcements, good and thorough, all relate well, or excellent. One teacher said her students believed the computer material to be "insultingly simple." Some expressed the view that the computer software and videotape materials were at lower levels than the worksheets.

5. FORMAT, STYLE AND QUALITY OF MATERIALS

While in general teachers gave very high ratings to format and style, a number were concerned with the quality of the computer disks. In particular speech (transmitted on voice synthesizer) was not transmitted evenly. Other comments relating to the computer software included totally inadequate, quality of disks troubling, disks of poor quality. One teacher said materials were too simplified and repetitive for high school LD students.

6. AMOUNT OF TIME NEEDED TO COMPLETE PROGRAM

Teachers responded to this question in two ways. Some commented on the amount of time it would take to complete the overall program--a few said it would take a semester, while one thought it would take a full year. Others commented on the amount of time it would take to complete a single lesson. Those thought it would take 2-3 class periods for each lesson.

7. AMOUNT OF PREPARATION TIME NEEDED TO USE PROGRAM

Most said that preparation time was minimal. One offered the view that duplication of worksheets was the most time consuming task. And one said she needed a computer course.

8. USE OF PROGRAM (TOTAL OR SOME COMPONENTS) IF AVAILABLE

Opinions differed on whether or not they would use the total program if available. Three said they would use the total package. One said she would use all except the computer software unless it was drastically changed. One said she would only use with EMR or lower functioning students. Two teachers said it was not suitable with their students (high school LD students and 15-16 year old EMR students).

9. CHANGES OR ALTERATIONS YOU WOULD MAKE IN PROGRAM

Six of the seven teachers suggested changes in the computer software. Comments included: too easy and repetitive; need more participation or interaction by students; too easy, too dull, too slow; speed up and make selections harder; have situations that don't always work out and bosses that aren't so pleasant. One teacher suggested using different characters in the videotapes.

In addition to the written and informal data generated at the midpoint and final meetings, five other kinds of data were collected during the course of the field evaluation.

(1) Observation Description Sheet

This sheet was completed by the field site coordinator each time she visited a teacher. She was asked to write a brief description of general impressions. In particular she was to comment on classroom setting, manner in which students began class, apparent level of organization, and interruption and disruptions. She was also free to make other observations. A summary of these is found in Appendix C.

(2) Observation Rating Sheet for Videotape/Discussion

This sheet was completed by the field coordinator each time she observed a videotape/discussion. On a Likert scale (usually, sometimes, rarely, not observed), she was asked to comment on nine areas for each lesson observed. Areas included:

- videotape lesson presented to total class
- students attentive during videotape and discussion
- students interested during videotape and discussion
- students interested in reinforcement activities
- lesson fits well into one-week segment
- teacher uses materials with ease
- teacher follows recommended sequence of presentation of lessons
- teacher follows recommended sequence of materials within lesson
- materials suitable for use in mainstreamed classes

(3) Observation Rating Sheet for Computer Software Use

This sheet was completed by the field coordinator each time she observed use of computer software. On a Likert scale (usually, sometimes, rarely), she was asked to comment on eight areas for each lesson observed. Areas included:

- student able to use software by self
- student attends to task
- student completes lesson in one sitting
- student stops work and asks questions

- student reports enjoying software
- student reports software helpful
- student wants to use software again
- student reports software is better way to learn than other ways

(4) Rating Sheet for Individual Lessons

This sheet was completed by teachers after using each lesson. On a Likert scale (above average, average, below average), she was asked to comment on four areas related to the various segments of each lesson. Areas included:

- importance of content
- technical quality
- interest to handicapped
- effectiveness in teaching skill

(5) Student Information on Computer Software

The computer software had a utility disk connected with each program that stored student performance on each lesson. Data were provided summarizing student performance using computer software. (See Appendix C for a summary of these data.)

IV. EXPERIMENTAL PHASE AND SUMMATIVE EVALUATION OF MATERIALS

IV. EXPERIMENTAL PHASE AND SUMMATIVE EVALUATION OF MATERIALS

An effective summative evaluation incorporates a number of major stages. The summative evaluation activities were divided into 6 separate stages. They included: (1) final selection of competencies; (2) selection and development of measuring instruments to be used with the target population, with teachers. and with employers; (3) identification of population and sample; (4) hypotheses to be tested, research design, and analysis; (5) procedures for collection of data; and (6) presentation of data.

Stage 1: Specification of the desired skills or behaviors and final selection of competencies

Macro considered several relevant factors in designing an evaluation plan for this project. Identification and specification of the desired skills were important considerations throughout the life of the project. In fact, some would argue that the decision about what one is to teach is as important as how it is to be taught. Considerable effort went into the decision as to which set of job-related social skills were included in the various components of the overall program. The importance of input from teachers, special educators and others in the field was given serious consideration.

After a thorough review of the literature and gathering input from teachers in the field and members of the Review Board, 14 competencies were identified. Videotape vignettes, computer software, and print materials were designed based on these competencies.

The 14 co. .petencies included the following skills:

personal grooming
personal hygiene
calling when sick or late
getting to work on time
greeting authority figures
behavior during breaktime
doing own share

following a schedule
reporting mistakes
responding when introduced
when to ask for help
who to ask for help
heckling from co-worker
criticism from boss

Stage 2: Selection of the measuring instruments

Two issues surrounded the selection of measuring instruments. One issue to consider was who was to be the source of information. It was decided that information was to come from three sources: from the students themselves, from the teachers who were using the program and working with the students, and from the employers. Patton (1980) addresses the issue of multiple sources of information in conducting evaluations. He suggests that by using multiple sources of information, reliability and generalizability of information are strengthened.

A second issue related to measuring instruments was the selection or development of the actual means of gathering data and measuring students. In this study, Macro used a combination of standardized instruments and questionnaires designed specifically for this study.

Two instruments were selected to gather information with respect to attainment of social skills. Two tests from the Social and Prevocational Information Battery-Revised (SPIB-R), both in a true/false format, were administered directly to students at the beginning of the study and at the conclusion of the experiment. A second measure was the Vocational Adaptation Rating Scales (VARS). This instrument was identified by teachers during the field testing. It takes the form of a 4-point rating scale along six dimensions: verbal manners; communication skills; attendance and punctuality; interpersonal behavior; respect for property, rules, and regulations; and grooming and personal hygiene. A rater is to look at the frequency of occurrence of a behavior that a worker might display in an employment situation. Both a frequency score and a severity score are determined. Four scales from the VARS were completed by teachers for each student at the beginning and end of the study. Following are descriptions of each of these tests. (Copies of SPIB-R subtests and VARS scales are presented in Appendix D.)

The Social and Prevocational Information Battery-Revised (SPIB-R) Subtests 4 and 8, published by CTB/McGraw-Hill, 2500 Garden Road, Monterey, CA 93940, 1986 is designed to assess knowledge of skills and competencies thought to be important for community adjustment of students with mild mental retardation. The complete battery contains 9 subtests. The test is designed primarily for junior and senior high school levels. True-False items are administered orally to small groups of students. The test format is designed to minimize reading skills, permit testing to groups of at least 10 students, provide simple scoring, and permit a moderately high degree of success.

The 9 subtests in the battery cover such areas as purchasing habits, budgeting, banking, home management, functional signs, among others. The manual recommends administering sample items to familiarize students with the way in which items are marked. The authors suggest that separate scores are obtainable for each of the 9 tests. According to the authors, "for the high school reference group, the range [of correct responses] was from 72 percent in Banking and Job Related Behavior to 79 percent in Hygiene and Grooming, and Functional Signs."

Subtest 4 - Job Related Behavior and Subtest 8 - Hygiene and Grooming were used in the study. According to the manual, the 30 true-false items in Subtest 4 include knowledge "relating to such areas as the role and duties of a supervisor, appropriate communications with co-workers and supervisors, what constitutes completing a job, and appropriate work relations with fellow employees." Subtest 8 consists of 26 true-false items covering areas related to health care, need for body cleanliness, "consequences of poor health or inadequate personal hygiene or grooming, and when and how to use body cleaning and grooming agents." Based on the information provided in the manual, it is reasonable to administer Subtests 4 and 8 in one session.

Complete information on definition and interpretation of scores, reliability, validity, and other technical information for Subtests 4 and 8 is provided in the manual. The following pertinent information is given here.

Senior High Level

Test	Mean	SD	Percent Correct	KR20*	r_n
4 - Job Related Behavior (30)	21.6	3.9	72.0	.73	.68
8 - Hygiene and Grooming (26)	20.5	3.7	78.8	.75	.73

*For original SPIB on 453 senior EMR students in Oregon.

Percentile scores for each test are also provided.

The Vocational Adaptation Rating Scales (VARS), Scales Verbal Manners (VM), Attendance and Punctuality (AP), Interpersonal Behavior (IB), and Grooming and Personal Hygiene (GP), published by Western Psychological Services, 12031 Wilshire Blvd. Los Angeles, CA 90025, 1980 is designed to measure maladaptive behavior that is likely to occur in a vocational setting. According to the manual, it emphasizes inadequate social behavior that might jeopardize the employment status of a handicapped worker. One of the premises upon which VARS was developed is that if a retarded worker's social shortcomings were determined and then remediation were provided, he or she might experience greater success on the job. The test includes 6 scales, which were the four used and listed above and Communication Skills (CS) and Respect for Property, Rules, and Regulations (RP).

Information was gathered from teachers using an interview and observation format. Areas covered in these observations included demonstrated facility of teachers in working with materials, efficiency of materials, interest shown by teachers and students, and demonstrations during role play or other simulations that skills were learned. Descriptive data were also gathered on the students, their classrooms, their teachers, and the work situations in which they were involved.

As with the formative evaluation plan, the admonition that one should only collect data that would be useful in making decisions about effectiveness and should avoid collecting data that would be cumbersome or intrusive, holds here as well. Macro was especially mindful of avoiding unnecessary burdens on teachers, students, and employers in the collection of data. Macro recognized the importance of remaining unobtrusive within the schools and the workplace, of being aware of the primary needs and goals of schools and employers, and of being sensitive to the needs of the target population throughout the life of the project. Thus the measures Macro used took these factors into consideration.

Stage 3: Identification of population and sample

Research conducted in a school system must be developed in such a way as to provide benefit to the teachers, students, and administrators of the system while at the same time incorporating the central issues relating to sample selection. Students were mildly cognitively impaired persons aged 16-21.

The following criteria were used for the selection of teachers.

(1) Students should be ages 16-21.

(2) Students should be classified as EMR or EMH.

(3) At least some of the students should be employed.

(4) Teacher should have Apple computer readily available. Echo synthesizers were desirable but could be provided if not available at each school.

(5) Teacher should have a videotape player readily available, preferably in the classroom.

(6) Teacher should be willing to participate.

Stage 4: Hypotheses to be tested, research design and analysis

Initially, this study planned to test three research hypotheses; however, practical problems that surfaced during the field test made it necessary to back away from two of them. One hypothesis was stated in the Summative Evaluation Plan as follows:

> E subjects will be able to apply social skills in a job setting significantly better than C subjects. The null hypothesis that there will be no significant differences in application of skills as related by employers on a questionnaire will be tested at the .05 level of significance using a repeated measures analysis with two factors, time of testing and experimental condition. In addition, data collected from employer interviews will be used to supplement information obtained from questionnaires.

Two factors entered into the decision not to test this hypothesis. We were surprised to find how many of the students who were listed as employed in data given to us by the school, were, in fact, no longer employed. Some has been holding seasonal jobs, some had been employed during the time when the records were entered and were no longer employed for whatever reason (not a piece of information available from the schools), and some were expecting to be employed at a future date.

The more compelling reason for eliminating the collection of information to test this hypothesis was direct requests from several teachers that employers not be contacted because students are very sensitive about having their employer know they are in special education. In one case, a teacher stipulated that employment informatiaon would be released to us only to be used for frequency data and only provided we guaranteed not to contact employers.

It is interesting that we as researchers had no understanding of the realities of life as a "labeled" special education student when we were designing the summative evaluation plan. Despite much rhetoric about removing pejorative labeling, the very fact that a young person is a special education student is in itself a label as damning as retarded or learning disabled or any other categorical label.

Since interviews or observations of students where employed is the only reasonable way to measure transfer and generalizability of classroom learning of employee-related social skills to real-life employment, it presents a serious dilemma to researchers who, nevertheless, do not want to intrude negatively into the lives of handicapped students.

The second hypothesis which was eliminated was stated as follows in the summative evaluation plan:

> E subjects will show significant improvement over time in the learning of social skills. This hypothesis will be tested by examination of trends automatically recorded by the computer software for each subject. Time series or trend analysis will be employed.

During the field testing, efforts to collect data on student performance required teachers to execute a data retrieval task. Since the voice component of the software and the too-obvious foils

for each lesson resulted in few errors, teachers became disinterested and called the utility program superfluous. They consistently failed to perform the data retrieval task.

Although the foils were made more ambiguous and the level of difficulty raised during modifications to the software following the field test, our experience with the teacherss inconsistency in recording made us very wary of using this strategy to collect data during summative evaluation. Our concern was that we would get data skewed by the inconsistency. It was therefore decided to eliminate this hypothesis.

The third hypothesis, which is the focus of the following report, was stated in the Summative Evaluation Plan as follows:

> Subjects who are exposed to advanced simulation technology materials (E1) will perform significantly better on measures of social competence than those who received the print only materials (E2) and those who did not receive additional intervention beyond what is offered by the schools or employers (C). The null hypothesis that there will be no significant differences in mean performance on Subtests 4 and 8 of the Social and Prevocational Information Battery-Revised (SPIB-R) was tested at the .05 level of significance using an ANCOVA analysis with the pretest used as a covariate.

A quasi-experimental design was used in this study. Teachers who met established criteria were nominated by school districts. All EMR students within a teacher's class(es) were used. At least 50 percent of students were to be employed (if possible). One experimental variable--type of treatment--was used. Where possible, teachers were assigned to type of treatment on a random basis within each school district. Due to constraints of available samples, assignment to type of treatment had to be modified due to the fact that some teachers had participated in the field testing the previous year or in the first round of the summative evaluation and thus were already familiar with the materials.

Qualitative data were used to supplement and strengthen the quantitative data as appropriate. Procedures described by Patton (1980), Yin (1984), and Miles and Huberman (1984), among others, were followed to allow the richness of those data to add additional support.

Three groups were established.

E1 -- This group received the complete program. This included videotape, computer software, and the complete teacher materials.

E2 -- This group received complete teacher materials. In addition to the Teacher's Guide, they included scripts of the videotape vignettes and a facsimile of the computer software. They did not receive the videotape or computer software.

C -- This group did not receive any special materials. They served as a control group.

The summative evaluation of this project was conducted in two parts. In the first part, 15 teachers were nominated by their school districts to participate. Five of these teachers participated the previous year in the field testing. In the second part, 11 teachers were nominated by their school districts to participate.

Stage 5: Procedures for collection of data

Uniform procedures were used for the collection of all data. During the formative evaluation, teachers were given questionnaires and were observed and interviewed. Student data were collected on student progress using the computer software. The program was intentionally developed so that all students would reach the criterion after three trials. Thus the collected data did not distinguish among students. Other data were not collected on student progress on the computer software, although some teachers had students record their use of the computer software.

The summative evaluation was conducted in two parts. As stated earlier, the reason for doing this was to provide opportunities for teachers who were in the Control (C) group during Part One to participate in the study during Part Two. A second reason was to increase the number of students who were exposed to the materials.

During the summative evaluation, the emphasis shifted from gathering information from teachers about the materials to a focus on students, who served as the primary source of data Two standardized instruments were administered to students on a pre/post treatment basis. Two SPIB-R

subtests (Subtest 4-Job Related Behavior and Subtest 8-Hygiene and Grooming) was administered to all students by Macro staff within two weeks of the onset of implementation of the treatment. Some students who were absent were tested subsequently and included in the initial testing. Upon completion of the treatment, all students who were present in school on the date scheduled for testing were administered the SPIB-R as a posttest. Posttests were administered by Macro staff and teachers. In all cases, standardized administration procedures were used. Tests were administered to groups of students following directions in the Examiner's Manual.

The VARS instrument was completed on all students by teachers. This is an observation instrument and must be completed by individuals who have had an opportunity to observe students for at least 1 month. Observations are completed on an individual basis and are subject to interpretation by the teacher. Teachers were asked to administer this scale at the onset of the program and again upon completion of the treatment.

Classroom observations were made by Macro staff. Teachers and students were interviewed and students were observed using the videotape vignettes, using the computer software, or using material from the Teacher's Guide.

Stage 6: Findings

The Setting

The summative evaluation was conducted in 6 school districts in Virginia. Five of these were in counties in the Richmond, Virginia area. One was located in the Northern Virginia area. School districts in Alexandria, Chesterfield, Hanover, Henrico, Hopewell, and Prince George participated in the summative evaluation. Each county represented a mix of rural, suburban and urban environments as well as a mix by racial/ethnic background and socioeconomic level.

Schools within these school districts represented a variety of types of schools. Some of the high schools were traditional in appearance while others were campus schools. In these latter types, buildings were built in sections. Classrooms were usually entered directly from the outside rather than from a hallway or corridor.

In many ways, the schools reflected their geographic location. For example, one school in the middle of a suburb of Richmond was on the corner of a large intersection. Surrounded by several strip malls, fast food restaurants, and gas stations, this school blended right in with the surroundings. It looked like an extension of them. In contrast, another school was located in an extremely rural area of another county. It was traditional in type, with an easy-to-find central office, and classrooms emanating from corridors. Schools used in this study reflected a mix of suburban and rural; large and small; in affluent areas and in working class locales.

Special education classes also differed from one school to the next both within and across school districts. In some classes, a large space was provided, usually sufficiently large for a class of 25. In other classes, students were crowded into a very small space and access to the classroom was actually through another classroom. Two teachers did not have regular classrooms assigned to them and so had to move materials and equipment from room to room, depending on availability.

Most classes had television monitors in the classroom, although several had to move the monitor in from the media center. In one class, students had to go to the media center to watch the videotape vignettes.

Accessibility to computers was somewhat similar to the television monitors. Some of the classrooms had computers in them; others had to bring them in from another location. None of the classrooms used earphones when students were using the computers, thus resulting in the computer-activated voice heard around the room. However, this situation appeared more distracting to the observer than to the remainder of the students. Perhaps they were used to many distractions.

The Teachers and Classes

Twenty-six teachers participated in the summative evaluation. Nine of these were in Part One and Part Two. Seventeen different teachers participated in the summative evaluation. Five were in the initial group involved in the formative evaluation. Three of these stayed with the project for its three year duration. Two participated in Part One only. Of the remaining 12, half participated in Part One and Part Two.

Fourteen of the 17 teachers were female. All had considerable experience in special education as well, ranging from 6 to 14 years with an average of 9 years.

Class size varied. Table 4 provides detailed information for each class. Class size ranged from 3 to 12 students with an average size of 7. Most classes had students whose primary handicapping condition was EMR; however, a few classes had students who were multiply handicapped (either physical or emotional disabilities) and two classes (same teacher) had at least half of the students who were LD rather than EMR.

The Students

In the summative evaluation phase the decision was made to target the materials towards students who were categorized by their school district as mildly cognitively impaired. This term is not one that is used in Virginia to categorize students, however. Consensus was reached among the participating district personnel that EMR was the state's equivalent to mildly cognitively impaired or mildly mentally handicapped (supported in Brantlinger, 1988, and MacMillan, 1988). Since all students in this project were located in the Commonwealth of Virginia, we are reasonably comfortable that guidelines were applied by local school districts in a similar manner.

The 26 teachers (29 classes) in the summative evaluation used materials with a total of 197 students. Ten students who had originally been on the rosters for this study were not available at the time of pretesting of the SPIB-R and thus could not be included in additional analyses. Table 5 provides a breakdown of the sample of students by age, grade, gender and employment status of the sample of students with whom the teachers worked.

Students ranged in age from 14 to 20 with an average of 16.8. They were in grades 9 through 12 with about one-fourth of them in grades 10 and 11 . Sixty-one percent were male. One-fourth were employed, although these figures are somewhat misleading since many of them were not actually employed during the time the project was conducted in their school.

Table 4. Class size by type of group. Initial Roster and (Pretest)

Class Code	Type of Group E1	E2	C	
1111		4		
1112			5	
1121		3		
1211			8	
1212	7			
1311			9	
1312	7(6)			
1411	8			
1421			7	
1511		8		
1512			5	
2111	9			
2112	6(5)			
2211	8			
3111	7			
3211		5		
3311			5	
3312	7(6)			
3411		10		
3412	8			
3511	3			
3512	4			
4111	9(8)			
4112	7			
4113	8			
4114	9			
6111		11		
7111	12*(9)			
7112	8*(5)			
Totals	127	41	39	207(197)**

*Contained at least half LD students
**Although on the initial class roster, 10 students were not available at time of pretesting.

Table 5. Characteristics of Students and Classes
Summative Evaluation - Total

Characteristic		Frequency	Percent of Total
Gender			
	Female	80	39
	Male	127	61
	Total	207	100
Grade			
	9	46	22
	10	51	25
	11	54	26
	12	39	19
	Missing	17	8
	Total	207	100
Age			
	14	6	3
	15	32	15
	16	43	21
	17	55	27
	18	39	19
	19	14	7
	20	7	3
	Missing	11	5
	Total	207	100
Employed			
	Yes	54*	26
	No	153	74
	Total	207	100

*13 of this group are LD students and not part of the target group. An additional 21 of this group were not working regularly at the time the project was conducted. Some had worked the previous summer or were planning to work the following summer. Others had been employed less than one month.

Social and Prevocational Inventory Battery - Revised (SPIB-R)

The authors of the SPIB-R indicate that reference group data is based on "standardization data from the original (completed in 1975) SPIB....[while] there is great structural similarity between the items in SPIB and those in SPIB-R...users should be very cautious in using percentile rank scores." The original reference group consisted of a proportionate random sample of secondary schools containing EMR classes from the state of Oregon. Characteristics of the students in this sampling group were similar in some respects to those in the current study. They ranged in age from 14 to 20 years. Average IQ was 68 and were thus classified as EMR. Unlike this sample, a majority were white and 75 percent were in formal work experience programs.

Two subtests from this test were administered to the students on a pretest/posttest basis. On Subtest 4 - Job-Related Behaviors, average scores for the E1 and E2 groups at the time of pretesting suggest these groups are comparable, while the C group had a slightly lower average score. For E1 and E2, these raw scores placed them in the 57th percentile for the norming group. On a raw score basis, the differences are minimal with E1 and E2 scoring one raw score point higher than the C group (after rounding). This is also reflected in percent of items correct. Posttest scores for each of the three groups indicated no change at all for the E1 group and slight increases for E2 and C.

On Subtest 8 - Hygiene and Grooming, average scores for the E1 and E2 groups at the time of prestesting suggest these groups are comparable, while the C group had a slightly lower average score. This is consistent with information from Test 4.

Detailed information is provided in Table 6.

Data from the ANCOVA indicate that there are no significant differences between E1, E2 and C on either Test 4 or Test 8, after adjusting for pretest differences. (Detailed information is provided in table format in Appendix E.)

Table 6. SPIB-R Pre and Post Test Raw Scores for Three Groups

Subtest 4 - Job Related Behaviors (Maximum Score = 30)

	E1		E2		C	
	Pre	Post	Pre	Post	Pre	Post
n	117	97	41	33	39	32
X	23.0	23.0	23.4	24.7	21.9	23.3
% correct	77	77	77	83	73	77
%ile rank	57	57	57	79	48	57

Subtest 8 - Hygiene and Grooming (Maximum Score = 26)

	E1		E2		C	
	Pre	Post	Pre	Post	Pre	Post
n	117	97	41	33	39	32
X	20.0	18.9	20.3	21.6	18.5	19.4
% correct	77	73	77	85	73	73
%ile rank	36	28	36	58	28	28

Vocational Adaptation Rating Scales (VARS)

This test was completed by the teachers. They were asked to rate students on several dimensions of behavior. Table 7 provides data on this test.

Table 7. Means and Standard Deviations, VARS Frequency Scores

	E1		E2		C	
	Pre	Post	Pre	Post	Pre	Post
Scale 1 Verbal Manners (maximum frequency score = 52)						
n	119	75	40	23	30	29
X	42.3	45.4	45.2	43.7	46.2	47.2
SD	8.7	7.3	7.8	7.9	5.9	5.5
Scale 3 Attendance and Punctuality (maximum frequency score = 100)						
n	116	75	34	24	37	31
X	89.2	92.2	91.8	90.1	92.7	92.5
SD	9.8	8.5	8.4	7.8	7.7	9.0
Scale 4 Interpersonal Behavior (maximum frequency score = 148)						
n	118	77	40	25	38	31
X	124.1	131.2	127.4	126.9	132.2	134.8
SD	15.4	14.6	15.5	15.3	10.7	10.1
Scale 6 Grooming and Personal Hygiene (maximum frequency score = 60)						
n	119	77	41	24	39	31
X	55.8	56.6	57.4	56.5	54.8	55.5
SD	5.8	5.2	4.0	6.6	8.0	11.0

Note: Higher scores represent less frequent occurrence of maladaptive behavior of the scale.

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V. SUMMARY AND CONCLUSIONS

V. SUMMARY AND CONCLUSIONS

Over the course of this project, the focus has been on meeting the special needs of mildly handicapped youth and their teachers through creative, innovative, well-designed and executed materials that carry no stigma, imply no pejorative labels and invoke no negative images. These are materials that reflect good educational practice, that enhance the classroom environment, and extend the opportunities for learning.

These instructional materials will be published by American Guidance Service, a well known publisher of instructional materials for special education. Commercial dissemination and distribution will result in their widest possible availability to all teachers who care about meeting the individual needs of students at different ability levels.

This project was unusual in that it incorporated both a product development phase and a research phase on the product's effectiveness. Analysis of the data collected during the research phase led to some important conclusions.

Conclusions

(1) Standardized tests scores do not differentiate between students in E1, E2, and C groups. Thus we were not able to reject the statistical null hypothesis that students in E1 group would perform significantly higher than students in E2 or C groups. While there are many possible explanation for this, we offer some of the most probable ones below.

- The ceiling effect. Many students performed at very high levels on pretesting and thus were unable to demonstrate growth since they were at the top of the test.
- Insensitivity of standardized tests. Standardized tests may not be sufficiently sensitive to discriminate minor changes in attitude or skills in such a short time. The duration of the treatment lasted about three months. In general, tests may not be able to discriminate differences students may have made.

- Low relationship between standardized test performance and actual behaviors. It has long been recognized that individuals provide socially acceptable responses to standardized tests. Teachers frequently commented that these students were able to "get the answers correct on tests" but were not able to perform desired behaviors when faced with a real situation.

(2) Videotape vignettes are uniformly liked by students and teachers; skilled teachers used stories in conjunction with vocabulary development, advanced organizers and other activities suggested in the Teacher's Guide.

(3) Computer software is easy to use by students. It provides good drill and practice for some students, especially the lower functioning students. Students and teachers developed new ways to use computer software that appeared to be beneficial to them.

(4) Materials were most suitable for the mildly handicapped student--those who are classified as educable mentally retarded (EMR) in the Commonwealth of Virginia. While the videotape and print materials were satisfactory for learning disabled (LD) students, the computer materials proved too easy for those students who participated in the field testing and those few who were in the summative evaluation.

(5) Although it was our intention to gather information from employers, this proved to be impossible for reasons that were external to this particular project. We asked to have some of the students participating in this experiment to be those currently working, but our desires and the actualities of these students were inconsistent. Most of the students were not employed. Those who were employed were not employed on a regular basis. Many of these students are going through transition stages and employment for them is often very transient.

A second reason for not obtaining information from employers was even more striking. Teachers reported during the formative evaluation and again during the summative evaluation that students were very sensitive about their relationship with employers. In some cases, students had obtained jobs on their own and did not wish in any way to be singled out and have their employers contacted. They feared

that they might be identified as "special education students" or "handicapped" students and these labels would be a stigma and jeopardize their relationship with employers. This was especially true for students who were working outside of the school or outside of a protected environment.

A third reason for not obtaining employer information had to do with the nature of employment itself. Many of these students who were thought to be employed at the time the summative evaluation began were, in fact, not really employed. Some had been employed the previous summer. Others had worked a month or two, but had no consistent record of employment. In no case did the period of employment correspond with the period of the treatment. Related to this was the fact that many of these students were working in jobs where their immediate supervisors might not be able to provide accurate information. Employment in the food service industry as bus persons and fast food clerks or in gasoline service stations often resulted in immediate supervisors who were ill-equipped to make informed judgments about these students.

Observations

Several impediments to conducting experiments in the field with special education students, in particular with the use of studies involving technology, were noted.

(1) Technology was not readily available to all special education teachers, thus making it difficult to recruit teachers and assign teachers to experimental conditions at random.

Many schools have computers, but there is no consistent brand of computer available to teachers on a regular basis. Some had to locate computers in the media center. Others had to share computers with other teachers. Some had to transport computers to their room. Only in a very few cases were computers available to these special education teachers in their classrooms.

Since these materials involved the use of an Echo synthesizer, the problem of obtaining appropriate equipment was exacerbated. Most of the classrooms observed had the voice synthesizer being used while other instruction was occurring. For some students, this presented a distraction, both for students using the computer and for other students in class.

(2) While every effort was made to be sure that materials were accurate and did not present mechanical problems, there were occasional problems with some of the materials, especially with the computer software.

Problems encountered during the field testing with computer software alerted Macro to potential problems with computer software. Computer materials were checked and rechecked, yet when actually put into use occasional glitches remained. The central reason for this problem appears to be the reliability of the hardware available to teachers. Many of the computers are moved repeatedly; both students and faculty use computers and multiple users may result in problems. Software reliability may also be a problem and must be checked continually.

No problems were encountered with videotape vignettes. Teachers were able to locate their place, rewind, and in general move from one lesson to another with minimum effort.

(3) Criteria for placement of students varied across school district. Although all teachers and students were drawn from one state, differential assignment of students to classes was observed from one school district to another and actually within school districts.

During the summative evaluation, we requested that students who participated in this phase be classified by the school district as EMR. In most cases this was observed. But even within this classification, teachers reported that a particular class might be a "high functioning" group or a "low functioning" group. Thus we observed substantial heterogeneity from class to class. We could never really be sure if a particular class was comparable to another class. In fact, pretest scores on the

SPIB-R suggest that control group actually began at a slightly lower level than either groups E1 or E2. We also observed considerable differences from class to class. Two of the classes were mixed LD and EMR. Two classes had physically as well as cognitively impaired students. Several of the classes had students with multiple handicaps, especially emotionally disturbed.

(4) The availability of a sizable sample of mildly handicapped students was problematic. Some teachers received the same students from year to year. Some teachers were unable to fit materials into their standard curriculum.

Although we had between five and seven school districts participating throughout the life of this project, the availability of handicapped students was limited. Coupled with the other criteria for selection of teachers and students, most importantly the availability of technology, it is difficult to obtain a sufficiently large sample.

Other factors affecting sample size were the number of teachers in each school district who worked with special education students. While we had excellent cooperation from the various school districts, we ran into problems and needed to use teachers more than once. This may have confounded the results in that some teachers participated during the formative (field testing) evaluation and Part One and Part Two of the summative evaluation. Thus, they were considerably more familiar with the materials than new teachers who were recruited.

(5) Assignment of teachers to experimental or control groups on a random basis proved to be impossible to carry out. Researchers need to be sensitive to several issues when trying to conduct an experiment in the field. In this study, random assignment of teachers to groups without regard to prior experience of teachers (whether or not they had participated in the field testing and whether or not they had participate in Part One) and location of teachers (in which school district they were located) were very important considerations. Although 26 teachers in 6 school districts participated in some part of the summative evaluation, 5 of these had been in the field testing and were thus familiar with the materials. In order to obtain

cooperation from the school districts, we needed to be sure that at least one teacher from each school district had an opportunity to participate in the E1 group during Part One and Part Two. We also had decided to have a larger representation of teachers in E1 compared with E2 and C as reported in the summative evaluation plan submitted earlier. For these reasons, it was not possible to assign teachers to experimental and control groups on a random basis.

(6) Experimental conditions varied by teacher. Teachers used materials in a variety of ways depending on their individual teaching styles. While some constructed additional activities and extensions, others did not.

(7) Teachers have many demands on their time; some found it difficult to participate because of competing forces. Others were unable to complete the full program in the required time frame. Still others were not able to begin the program when originally planned.

(8) Special education students do not participate in work experiences on a regular basis; some worked for a short time while others were planning to work or had worked the previous summer. Many were not working at all.

A Final Word

As is usually true in projects of this nature, the Macro staff learned and grew in experience and understanding of the needs of the target population of students and teachers and of the pressures and realities of the marketplace. We thank the Department of Education, Office of Special Education Programs for providing us the opportunity to make a contribution to the field and to the youth whose potential gain is our greatest reward.

APPENDIX A

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REVIEW BOARD MEMBERS

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APPENDIX B

SAMPLE MATERIALS FROM "SOCIAL SKILLS ON THE JOB"

- Introductory Chapters from Teacher's Guide
- Sample Teacher Materials - Lesson 3
- Sample Student Materials - Lesson 3
- Sample Print
- Sample Print Version of Computer Software - Lesson 3

Social Skills On The Job

Teacher's Guide

Created by

MACRO SYSTEMS, INC.
8630 Fenton Street
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Under Contract to the U.S. Department of Education
Office of Special Education Programs
Washington, D.C. 20202

Contents

Chapter 1

Background and Rationale

Introduction

Social skills are verbal and nonverbal competencies that an individual uses while interacting with another person. How one collects and filters, processes and codes, interprets, stores, and recalls information from the accumulation of his or her experiences will determine the individual's personal behavior pattern.

The importance of social skills for youth who are handicapped is well documented. However, there is an equal body of literature regarding the difficulties involved in interacting successfully with others. Often the problems in acquiring social skills reflect a difficulty in perceiving and interpreting the moods and feelings of others, predicting the consequences of one's actions, or generalizing from one situation to another. Any one, or combination, of these deficits can cause problems at work, such as misinterpreting nonverbal feedback from a boss or co-worker, or breaking the unwritten social rules of the workplace.

Many individuals who are cognitively impaired have adaptive behaviors or social competencies in their répertoire, but they are unable to use them at appropriate times. For example, a person may know how to shake hands but may not know the appropriate time for using this greeting. Environmental cues that assist an individual in identifying appropriate behaviors do not strongly influence persons who are cognitively impaired. Unlike their peers who develop social perception skills incidentally, usually from group situations, many individuals who are cognitively impaired need direct training in awareness and use of nonverbal rules.

Social competence can enhance the lives of many individuals who are cognitively impaired in several areas including school, community, and the workplace. The ability to work and earn a living is one of the measures of competence in adulthood. ***Social Skills On The Job*** is designed to help students practice social skills that will allow them to compete successfully with their peers in the job market.

Learner Characteristics

Learner characteristics of cognitively impaired students vary widely; few are readily apparent, and most are discovered only upon close study. Some occur infrequently; others with alarming regularity. The students you work with will demonstrate one or more of the characteristics, but no one student will exhibit all of them. The list is not exhaustive in scope, for the characteristics of cognitive impairments are far too complex to be adequately described in this guide. The purpose of the list is to stimulate recollection of the challenges you and your students share daily and to point out areas where ***Social Skills On The Job*** can offer instructional benefits to many students.

- *Difficulty interpreting verbal and nonverbal cues* --such as puns, jokes, idioms; tone and volume of voice; facial expressions and proximity --impedes appropriate social behavior. A person with this disability may be hurt by playful teasing and will feel no satisfaction from a pat on the back for a job well done.

- *Lack of coordination or physical agility*--refers to one's balance, grace, fine motor skills, and athletic prowess. Clumsiness and a generally plodding manner are among the visible signs of this disorder.

- *Low tolerance for frustration*--is exhibited in emotional flare ups and the inability to surmount small barriers. Breaking a pencil point is ample reason for tearing up a writing assignment; a missed bus is justification for staying home from work.

- *Lack of generalization skills*--is the inability to transfer ideas learned in one environment to a new, unfamiliar one. A person may know how to ride the bus to work but not to the shopping mall, or how to operate one piece of machinery without being able to operate a similar though slightly different piece.

- *Auditory and visual memory deficits*--impair one's retention of sounds and images. "Put away your coat," to a person with an auditory memory deficit, may leave him or her wondering what to do with the coat. Sight words may be impossible to remember for one with a visual memory deficit.

- *Hyperactivity and hypoactivity*--are disorders of attention. A hyperactive person is unable to filter out extraneous environmental stimuli and unable to control flight between one object and the next to catch the eye. Conversely, the hypoactive person will focus for prolonged periods of time on a single object or activity, lacking the natural curiosity and energy to explore and enlarge his or her world.

- *Difficulty with concept formation and comprehension* --is a common cognitive disability in which the person has problems understanding and using abstract thought. A student may understand shirts and trousers but not the concept of clothes; may want juice or water without understanding the idea of drinks.

- *Perceptual disorders* --impair one's ability to interpret environmental stimuli. A person with a visual-perceptual disorder may have trouble with relationships, may see a mast and hull but not the sailboat, or see everything double and in constant motion. One with an auditory-perceptual disorder may not understand, and consequently fail to act on, simple verbal instructions.

- *Lack of self-confidence and a poor self-image* --like lack of motivation, result from repeated failure. A person without confidence will be reluctant to try new things, falling further behind peers.

- *Deficit in problem solving and information processing skills* --presents difficulties in moving to higher order thinking skills, such as logical thinking, organizing and sequencing from simple to complex tasks, and grouping units into categories.

Social Learning Theory

Social learning theory is a dynamic explanation of the complex and interactive relationship among cognitive, behavioral, and environmental influences on individual learning. Its primary thesis is that interaction between a person and his or her environment determines action. Social learning theory places great emphasis on social variables as influences of what and how people learn. Children's thoughts are shaped by the social milieu in which they are raised, and how they collect, process, and interpret information results from their exposure to behavior patterns around them.

Social learning theorists maintain that behavior is learned primarily through modeling. Modeling, also known as learning by observing, generates new skills and new behavior as the actions witnessed are copied. All of us have mimicked other people's behavior, formally as in educational instruction or informally as in play.

Modeling is more clearly understood when examined in its component processes: attention, retention, motor reproduction, and motivation.

- *Attention* --refers to the filtering process, continuous and usually unconscious. What does one choose, from among a constant barrage of stimuli, to focus on?

- *Retention* --is accomplished through coding and storage of words (verbal coding) and pictures (visual coding).

- *Motor reproduction* --is the imitation of behavior. The desired behavior is physically, mentally, or emotionally rehearsed, engraving the external and impersonal experience one has observed onto one's own psychological makeup. Whereas earlier attention and retention had outlined the idea, motor reproduction furnishes the color and depth, effecting a realistic impression.

- *Motivation* -- is the final ingredient of modeling. When motivated, a student will execute this action by volition.

Social skills in a job context are of critical importance to a person's success. Grooming habits (e.g., cleanliness, style, and dress), speech (e.g., inflection, tone, volume, and vocabulary), bearing (e.g., posture, mannerisms, proximity, eye contact, and gestures), and appropriateness of remarks (e.g., spontaneity and emotions) are some examples. All these things reflect an internal awareness of self and environment. Competence in these skills can often make up for other deficits (e.g., academic) and lead to positive social interaction. On the other hand, incompetence can lead to exclusion, loneliness, and emotional disturbance. Many social learning theorists currently use modeling to teach basic skills to students. Modeling can be done "live," in daily living experiences, or symbolically, through role-playing or watching television.

The success of modeling, however, depends on the presence of several factors:

- The target behavior must be clearly identified so the student knows what behavior is important.
- The student must be interested enough to pay attention to the model.
- The student must have the opportunity to practice the target behavior.

Ultimately, a theory's value is measured by its ability to create changes rather than simply describe them. Social learning theory's emphasis on observation and feedback as the primary means by which individuals learn and change behavior makes it ideally suited for practical application.

Simulation Technology

A simulation is a representation of reality. In an educational setting simulations are a means to teach students about practical problems that they are likely to encounter in their lives. Simulations allow students to be actively involved in the solution to the problems presented to them.

In comparison to real-life situations, simulations offer certain advantages for training purposes. Variables can be manipulated, and their effects observed. Simulations have the advantage of time compression -- events that might take months or years to develop in reality can be compressed into minutes. Simulations provide consistency. All students are exposed to the same problems and have the same opportunities for learning. And, simulations demand active participation. Students make decisions and see the consequences of those decisions. This active involvement also promotes motivation, which is one of the most challenging aspects of education and training.

Social Skills On The Job will stimulate thinking about fourteen social behavior topics that students may not otherwise be exposed to before they are faced with the "real thing." Thoughtful questions and guided discussion will prepare students to meet them successfully.

Objectives and IEP Goals

Objectives

Evidence from a variety of sources indicates that social skills are highly related to job success. The ability to interact successfully with employers and co-workers may be of paramount importance not only for getting but also for keeping a job. Persons who are disabled often are subjected to a greater number of experiences that result in failure, which tends to increase their expectancy for failure. ***Social Skills On The Job*** will encourage students to succeed by giving them expectations and resources for acquiring, transferring, and generalizing specific social competencies.

Fourteen objectives were selected from teachers' suggestions made during the development phase:

1. Wearing appropriate clothes on the job.
2. Using good personal hygiene.
3. Calling in when sick.
4. Getting to work on time.
5. Greeting authority figures.
6. Using appropriate breaktime behavior.
7. Doing one's share of the work.
8. Maintaining the work schedule.
9. Admitting mistakes.
10. Responding to introductions
11. Knowing when to ask for help.
12. Knowing who to ask for help.
13. Dealing with heckling from a co-worker.
14. Dealing with criticism from an employer.

IEP Goals

The following examples are provided as general guides for the teacher who needs to input job-related social skills information to a student's individualized education program (IEP).

ANNUAL GOAL: Student will acquire social skills needed for obtaining and keeping a job.

OR

Student will acquire social skills needed for promoting appropriate on-the job relationships.

SHORT-TERM OBJECTIVES: [Use any or all of the 14 objectives listed in the previous section. One example is provided below.]

Student will participate in classroom discussions about getting to work on time, complete assigned practice materials, and take part in role-playing activities in order to identify, focus on, and practice using the target job related social skills behavior.

EVALUATION: Teacher observation of discussion, practice, and role-playing participation will be used to judge the level at which the objective is being met.

OR

Teacher observation of discussion and role-playing participation, along with grades on practice materials, will be used to judge the level at which the objective is being met.

DATES: [***Social Skills On The Job*** has been designed to be used during one semester of school. When it serves as a supplement to an existing social skills curriculum, use during two semesters may be more appropriate.]

Component Materials

The integrated ***Social Skills On The Job*** program consists of the following:

Package A	Package B
Teacher's Guide	Computer Software and Guide
Videotape Simulations	

The Teacher's Guide contains complete instructions and materials for conducting the videotape-discussion lessons and blackline masters of scripts and worksheets to support student practice activities. for students.

The videotape presents the social competency skills simulation and is intended for use by a group of students with the teacher controlling the tape and leading the students in discussion of each lesson's focus.

The computer software consists of one test diskette, one teacher utility diskette, and fourteen activity diskettes that use graphics to portray situations similar to those on the videotape. The software is intended for independent student use. The Computer Software Guide contains complete instructions for use and blackline masters of the computer screens for use in a print version.

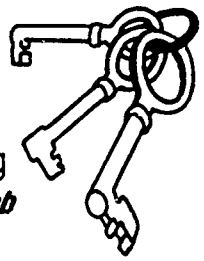
Chapter 2

Videotape-Discussion Lessons

Overview

Discussion and practice are essential tools for the instructional delivery of ***Social Skills On The Job***. The purpose is to promote social competency for job settings by:

- Discussing students' current beliefs and values about work.
- Examining those beliefs and values in terms of a goal:
  TO KEEP YOUR JOB.
- Guiding them to think about appropriate and inappropriate behaviors.
- Challenging them to think before they act -- in a cause-effect framework.
- Exploring the effects of subleties in body language, tone of voice, and facial expressions.



The teacher stands as the key to success in the process of presenting ***Social Skills On The Job*** This involves teacher skill in leading an active discussion -- allowing students to freely express their ideas while maintaining the focus of the lesson and directing them toward the overall goal of using appropriate behavior to keep their jobs. ***Social Skills On The Job*** requires an interactive instructional approach that relies heavily on direct participation from the teacher and students.

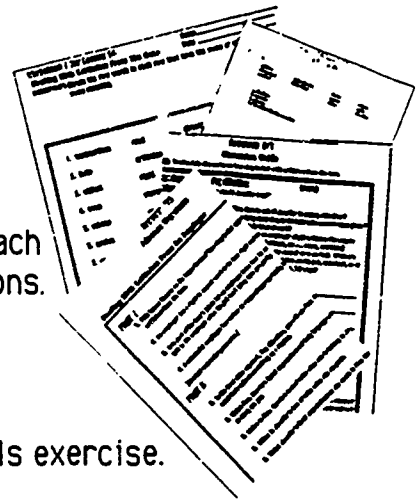
Students can assume independent leadership roles in the instructional delivery of ***Social Skills On The Job***. Using a regular schedule of presentation provides a framework for student operation. They know, for example, that every Monday is videotape-discussion day. This helps build a sense of organization, and frequently leads to a feeling of "ownership" and increased participation in the instruction. For some students, self-confidence is bolstered enough to say, "Hey! I could lead this leasson as well as the teacher." Such remarks are a very positive sign of student growth because they indicate a willingness to accept risk of failure associated with increased levels of responsibility. The importance of taking risks is addressed further in the Promoting Practice section of this chapter.

Positive reinforcement of such student initiative has benefits for the teacher, also. Students often will be more direct with their peers -- expecting their active participation. Although this may result from an implicit understanding that someone who has the courage to try being the teacher shouldn't be made to look bad, it can provide an important, different perspective to the discussions.

In addition, encouragement of student leadership pays off when a substitute teacher is in the classroom. Classes who are told that they know the organization and schedule of the lessons better than anyone else, and therefore, they are responsible for the learning that takes place when a substitute is present, usually rise to the challenge if students have practiced leadership roles.

Lesson Components

Social Skills On The Job has been designed to address a range of student functioning levels and the lesson organization needed to provide for individualization. Each lesson consists of six pages:



1 Advance Organizers
2 Discussion Guide
3 Suggested Related Activities
4-6 working copies of student worksheets

A suggested lesson delivery schedule and details of each part of the lesson are provided in the following sections.

Suggested Lesson Schedule

DAY 1
- ◊ Use Advance Organizers, Part 1.
- ◊ Conduct vocabulary/language skills exercise.
- ◊ Use Advance Organizers, Part 2.
- ◊ View video segment A to "Let's pause for discussion."
- ◊ Discuss segment-specific behavior and extend to related behaviors.
- ◊ View conclusion of video segment A.
- ◊ Use Advance Organizers, Part 3.
- ◊ Repeat above videotape-discussion steps for segment B.
- ◊ Assign homework (one of Additional Ideas, or use a worksheet if the Additional Idea will be done in class).

DAYS 2-3
- ◊ Review target behavior.
- ◊ Explain worksheet(s) to be completed.
- ◊ Assign video script or related practice activity.

[Number of days depends on students' skill levels. Use two days if both worksheets and the ***Social Skills On The Job*** computer software are being used. Students should be able to work on an independent, rotating schedule with the software, allowing the teacher to assist in the completion of worksheets and preparation of the practice activity.]

DAY 4
- ◊ Present Additional Idea (from Day 1) or do as in-class activity.
- ◊ Provide time for practice activity (from Days 2-3).

Advance Organizers

PART 1 Provides the lesson goal and statements about the target behavior.

PART 2 Sets the scene for video segment A.
Introduces the main characters.
Focuses attention on the dialogue and action to be viewed.

PART 3 Presents organizers for video segment B (in same pattern as for segment A).

[The teacher may want to make a transparency of Advance Organizers and use it as an organizational and focusing tool for the lessons.]

Discussion Guide

VIDEOTAPE SEGMENT Gives the title and beginning frame number for each segment -- A OR B.

DISCUSSION Question- is the question shown on the screen prior to the Pause for Discussion. It is intended as a "quick start" for the discussion. It is very direct question and every student should be able to respond.

These initial responses provide important information to the teacher in terms of "where the students are" in their views of the target behavior. This information is the teacher's preliminary guidance to the nature, structure, and direction of the remainder of the lesson. In other words, it enables the teacher to make a rapid assessment of "where he or she wants to go with the lesson." It helps identify individual:

- lack of information,
- misinformation, and
- attitudes detrimental to keeping a job.

Probes- provide segment-specific and general target behavior questions for generating discussion. Relating a personal experience can be helpful in increasing student interest and participation.

Since each video simulation represents only one specific behavior from a much broader range of behaviors, the teacher should generate supplementary questions regarding those related behaviors. Space is provided for adding related

behaviors that the teacher wants to include to meet the particular needs of the students in the class.

Lead-In- gives the statement to be used at the end of the discussion, before showing the conclusion of the video segment.

VOCABULARY Lists words from the video segments and worksheets that may need initial presentation or review. Following each list are ideas for language-related activities. These are provided as suggestions for the teacher who commonly links content lessons to basic skills practice.

WORKSHEET DESCRIPTIONS Presents the focus of each of the three student worksheets Following the list is identification of a related skill, which is provided as information for the teacher who commonly links content lessons to other skills practice.

THE TEACHER NEEDS TO PREVIEW THE WORKSHEETS BEFORE ASSIGNING THEM! EACH WORKSHEET MUST BE JUDGED IN TERMS OF ITS APPROPRIATENESS FOR AN INDIVIDUAL STUDENT.

Worksheets 1 and 2 for each lesson incorporate the focus content into language-related activities, such as sentence completion, scrambled sentences, synonyms, antonyms, spelling, and definitions. There also are puzzle-type and classifying activities. Answers are given on the teacher's working copy, and there is a complete answer key following Lesson 15 in this chapter.

Worksheet 3 for each lesson **DOES NOT** have "true" right and wrong answers (except Lesson 10). Activities call for making decisions, allocating time, completing dialogue, writing poetry, and giving directions. Having students discuss the reasons for their answers is the best approach for getting feedback. It also helps them sort their responses into more and less appropriate types of behavior. These worksheets are included for the teacher who commonly provides activities directed at higher order thinking skills.

ADDITIONAL IDEAS Offers two suggestions that can be used or adapted for homework, independent study, group work, or term projects. They include such things as art activities; interviewing; comparisons; panel discussions; and writing paragraphs, skits, short stories, and limericks. These are provided for the teacher who commonly uses homework or project-type assignments.

Using the Videotape

The simulation scenes of ***Social Skills On The Job*** are presented via videotape. A VHS format videocassette player is the only piece of equipment required for conducting the discussion-based lessons.

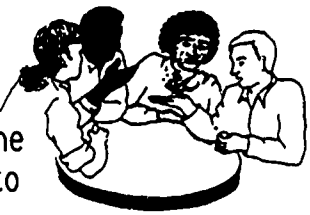
Become familiar with the controls and operation of the particular videocassette player that you will use. If you have a problem with the operation of your player, check to see that the proper switches have been turned on and the connector cables fit snugly into the power supply outlet. If problems persist, check the owner's manual for troubleshooting guides or contact the person in charge of media equipment for the school.

Careful treatment, use, and storage of the videocassette will help to prolong the tape's playing quality. Handle it with care as you would any videocassette tape. Guard it from high levels of humidity or dust, sunlight and heat, and magnetic fields.

To facilitate each lesson presentation, try to leave the videotape at the end of the previous lesson. However, if the tape is rewound, use the Fast Forward or Search function on your machine to find the desired lesson. The beginning frame number is given in brackets after each segment title in the lesson guides. Each segment is approximately three minutes long. During the Pause for Discussion, it is better to turn off the player than to use the Pause function. The sudden, automatic start of the tape after the timed break can be disruptive and detrimental to discussion.

Leading Discussions

The primary purpose of ***Social Skills On The Job*** is to generate discussion on a target behavior. Start with the question that is posed in each videotape segment, and then use the discussion probes as guides to expand and extend the topic. The teacher should adapt and add to them according to the students' and curriculum needs.



The segments are intended to simulate real work situations that call for social competency skills that many students lack. Students may react to some segments with a certain amount of bravado, with comments such as:

"There's no way I'd let a boss talk to me like that!"
"I'd tell her off!"
"I'd just quit!"
"So what if I make a mistake!"
"Who cares if you know how to greet some hot shot!"
"Who is he to tell me I can't talk!"

Often, such expressions represent how young workers react to difficult or unknown situations, and then they're puzzled when they lose their jobs. Throughout the 14 job-related social skills lessons, the teacher should guide the students by:

- discussing the feelings that may be involved in such situations,
- communicating about appropriate ways of responding, and
- providing time and assistance to plan and practice for dealing with such situations.

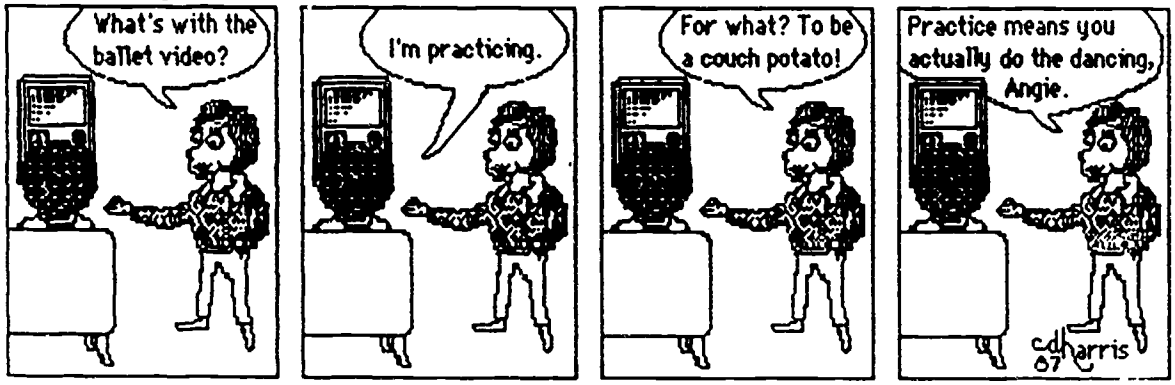
Students will be better prepared for social interactions that occur in the workplace and will be more successful in maintaining their jobs. The emphasis always should be on behaviors that will promote success in the workplace.

Promoting Practice[1]

It cannot be emphasized enough - practice is essential for learning or changing behaviors!

- Practice presents opportunities for exploration and growth in expressive skills, such as body language, tone of voice, and facial expressions.
- Practice provides for "trying on" different roles and leads to better preparation for survival in the real world of work, leisure, and family/community life.
- Practice enables people to build a repertoire of roles that can be used to meet the varying needs of interaction with others in today's multi-layered world.

Kate and Angie



If job-related social skills training is to be effective, then students must be given opportunities to build strengths that will help them succeed in the workplace. Every lesson in ***Social Skills On The Job*** should include personal exploration and reinforcement of the target behaviors through direct practice. In addition, high expectations and enthusiasm are needed to enhance student participation. Providing these opportunities is the teacher's responsibility.

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[1] This section incorporates many ideas from *Teaching Is Dramatic* by Martin Kimeldorf (1985, Ednick Communications, Inc., Portland, OR).

Often, teachers are averse to planning and using practice activities. Sometimes, students also are reluctant about participating - at first. However, there is a progression of practice activities that works to overcome any initial hestitation. Overcoming this reluctance is related to a critical factor in student growth - risk taking. Risk is involved in so many of life's decisions. Fear of the risk involved can be positive - when it deters one from illegal pursuits, and negative - when it stops one from pursuing independent living skills. A familiar story is the teenager who wants to ask for a date, but never asks because the presumed response is "no." The fear of rejection prevents the teenageer from even trying - taking a risk.

The remainder of this section provides brief guidelines to help the teacher both overcome doubts and prepare the students for participation in direct practice activities. The levels suggest common games that are sequenced from low risk towards high risk ones. The teacher should adapt them to incorporate language and situations associated with job-related social skills. **The goal is to build the confidence of the teacher and students by working from familiar, low risk practice, to using the provided scripts, and towards trying improvisations and creation of original scripts.** Practicing a range of responses from the "worst imaginable" one to the "most desired," helps the student see that it is possible to deal with both ends of the continuum - and survive. The important message is that taking risks must be faced in life; many things are worth the risk involved; and thinking through the possible consequences helps overcome the fear associated with losing or rejection.

Level 1 GROUP EXERCISES — encourage working together
e.g., charades, pass-word, I'm Going to (city) and I'm Taking (object), add-on story with repetition, ABC memory game, word associations, 20 Questions, I Spy

Level 2 BODY WARM UPS — help with body limbering and reducing inhibitions
e.g., general calisthenics, imaginary jump rope, rolling wave (all hands up, first person brings hands down followed in succession by others until last person who brings them back up to start the wave in reverse)

Level 3 SENSORY TONING — promotes demonstration and experiential skills
e.g., blindfolded exploration of surroundings or guessing a voice, walking in mud, smelling and guessing spices, imaginary rope climbing, describing grab bag objects, timed memory recall of displayed objects

Level 4 PARTNER PLAY — enhances interaction skills
e.g., mirror images, imaginary tug-of-war, 3-legged race, act out simple 2-person skits, act out conclusion of provided scripts with teacher or student providing summary to "set the scene"

Level 5 SOLO FLIGHT — prepares for initiating individual ideas/situations
e.g., mime-type activities, reading/reciting poetry, leader for group game

LESSON TIPS

Grouping — A sense of "group" will emerge when students who work together don't know each other well:
1. Randomly assign partners or group members.
2. Say, "Pick a new partner-someone you don't usually work with."

Precoaching — The teacher models/demonstrates the skill first - especially helpful when practice is a new experience for students.

Side-Coaching — The teacher helps students improve performance by offering constructive hints or pointing out other student "models."

Introduction — **Ease any tension** with laughter - you could relate a relevant situation that you found yourself in at their age. **Establish an expectation of participation** in the activities and **reinforce benefits** that come from practice:

STORY: Has something ever happened to you and you just didn't know what to say or do? Then, afterwards you thought of something that would have been "perfect"? In fact, sometimes what you think of is so good that you wish the situation would happen again just so you could use it! You know that you'll be ready.

This is exactly the kind of thing we'll be doing in our practice activities. We'll plan some situations like what can happen on the job, and then we'll practice what to say and do, so you'll be prepared!

Scripts — When it's time to use the scripts, each can be followed as it appears, or adapted by the teacher or students to present a different slant on a particular social skill. Altering the situations will provide practice in dealing with appropriate behavior for a wider variety of interpersonal skills. Whatever the approach, role playing is optimally profitable if the students can "play the roles" as completely as circumstances will allow. Character name tags, props, such as an office desk, telephone, and cleaning equipment, simple costumes, and movement will facilitate effectiveness of the lessons.

Calling In When Sick

PART 1

1. This lesson focuses on the importance of calling your employer when you're sick and won't be going in to work.

2. The successful employee accepts responsibility for letting the boss know when an absence from work will happen.

3. The successful employee informs the employer before the work shift begins.

[Conduct vocabulary exercise.]

PART 2

4. In the first video segment, Sick Leave, you will see Robert, who deosn't feel well, sitting on his bed, trying to decide whether he should go to work.

5. Watch Robert's facial expressions as he tries to make his decision.

6. Listen to the change in Ms. Coppola's tone of voice as she talks to Robert.

[Show first part of segment 3A, Sick Leave. Lead discussion.]

PART 3

7. In the next video segment, A Wise Decision, you will see Bill, who doesn't feel well, talking to his mother about whether he should stay home from work.

8. Listen to the comment that Bill's mother makes about whether he should go to work.

9. Watch Bill's facial expressions as he tries to make his decision.

10. Listen to Mr. Hardy's tone of voice as he talks to Bill.

[Show first part of segment 3B, A Wise Decision. Lead discussion.]

Lesson 3

Discussion Guide

Purpose: To stimulate discussion about the importance of calling the employer when the worker is sick and will not be reporting to work.

Videotape Segment 3A: Sick Leave [858]

Discussion: Question - "What should Robert do?"

Probes -
1. What do you suppose Robert is thinking about in order to make his decision about whether or not to go to work?
2. Why is it important to let your boss know when you're sick and can't go to work?
3. Describe the sick leave policy where you work.
4. What should you do if you get sick after you're already at work?

Related Topics

_____

_____

_____

Lead-In - Let's watch the conclusion of Sick Leave and see how Robert handles the situation.

[Show second part of segment 3A.]

Videotape Segment 3B: A Wise Decision [1025]

Discussion: Question - "What should Bill do?"

Probes -
1. What might happen if Bill goes to work?
2. What considerations do you think Bill had in mind in order to decide whether or not to go to work?
3. Why did Mr. Hardy thank Bill for telephoning him?
4. What should Bill do if he feels sick tomorrow?
5. Can you do your best work when you are ill?
6. Do you get paid when you are absent from work due to illness?

Related Topics

_____

_____

_____

Lead-In - Let's watch the conclusion of A Wise Decision and see what Bill decides to do.

[Show second part of segment 3B.]

Suggested Related Activities for Lesson 3

Vocabulary

illness	decision	sick leave
sickness	depending	work shift
absence	responsibility	

1. definitions
2. synonyms
3. interpreting idiomatic expressions
   sick as a dog (horse)
   my head felt as big as a house
   my mouth was as dry as a bone

Worksheet Descriptions

1. Matching words with synonyms
2. Selecting appropriate word to complete a sentence
3. Deciding what to do in a given situation

Related Concept/Skill: use of context

Additional Ideas

1. Have a panel of company representatives speak on various leave policy plans.
2. Interview family members and friends about the sick leave policies at their places of employment.

[See Student Materials for blackline masters of scripts and student worksheets.]

Worksheet 1 for Lesson 3 Name _____

Calling In When Sick Date _____

DIRECTIONS: (1) Read the words in the left column.
(2) Find the word that means the same (synonym) as each in the right column.
(3) Write the letter of the word in the blank beside the appropriate number.

a. **absent**	e 1. sick
b. **decision**	b 2. choice
c. **dependable**	j 3. accountability
d. **early**	l 4. time
e. **ill**	a 5. gone
f. **late**	c 6. reliable
g. **mistake**	i 7. procedure
h. **phone**	h 8. call
i. **policy**	d 9. timely
j. **responsibility**	g 10. error
k. **rule**	k 11. regulation
l. **shift**	f 12. tardy

Worksheet 2 for Lesson 3 Name _____

Calling In When Sick Date _____

DIRECTIONS: Draw a circle around the word that best completes each of the following sentences.
Be sure to read all three words before you make your selection.

1. _____ should call your boss if you are going to be out sick.
   You **Your friend** **Your mother**

2. You must _____ before you take the day off.
   yell **repeat** **phone**

3. You may not be able to do your _____ if you are sick.
   directions **best** **mistakes**

4. You have a _____ to be at work every day.
   letter **problem** **responsibility**

5. Your boss _____ on you to do your work every day.
   likes **depends** **wonders**

6. One of the _____ of the workplace is that you should call and let someone know if you are sick and will be staying at home.
   rules **games** **jobs**

7. You must know the right _____ to call if you won't be reporting to work.
   school **person** **house**

8. Call _____ enough so the boss won't be expecting you to report to work.
   far **late** **early**

9. You must always call _____ your shift starts.
   during **before** **after**

10. If you phone your boss early, he or she will get someone _____ to do your work for the day.
    else **right** **better**

Worksheet 3 for Lesson 3

Calling In When Sick

Name _____

Date _____

You almost always have choices about what you want to do in a certain situation. Often, one choice is just as good as another. Below are four situations about sick leave decisions that could happen to you.

DIRECTIONS: (1) In each situation, you decide what you would do. Two choices are given as suggestions, or you can write your own idea on the blank line.
(2) Put a check (√) beside your choice.

1. You are home sick today and by afternoon you aren't feeling any better. What would you do?

   ___ I'd call my boss tomorrow morning to say that I won't be in.
   ___ I'd call my boss this afternoon to say that I won't be in tomorrow.
   ___ _____

2. You are at work and you begin to feel sick. What would you do?

   ___ I'd stay at work and hope that I didn't start feeling worse.
   ___ I'd tell my boss that I didn't feel well and wanted to go home.
   ___ _____

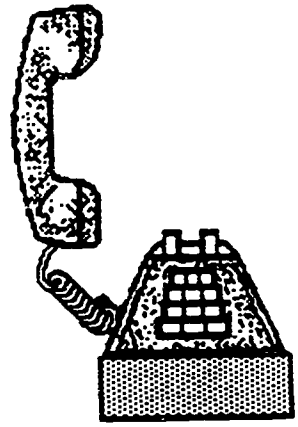
3. You've been out sick for a week. You still aren't well, but you don't have any more sick days. What would you do?

   ___ I'd stay home.
   ___ I'd go back to work.
   ___ _____

4. You were involved in an auto accident last night and got a big bump on your head. You were taken to the hospital and you have to stay a day for observation. What would you do?

   ___ I'd ask someone to call my boss and explain the situation.
   ___ I'd try to call my boss and explain the situation.
   ___ _____

Videotape Segment 5A
Sick Leave



Focus: To show the importance of calling the employer when you are sick and won't be reporting to work.

Characters: Robert, employee in a hotel
Ms. Coppola, manager of the hotel's housekeeping staff

Setting: Robert's bedroom and Ms. Coppola's office.

Narrator: Today, Robert is sick. He is trying to decide if he should go to work. He knows he has a responsibility to report to work every day, and he wants to be able to do his best work. But, if he is sick, he may not be able to do his best.

[*Robert is in bed. He sits up and turns on a light near his bed. Ms. Coppola is at her desk at the hotel.*]

Robert: [*as if to himself*] I really don't feel well today. I have a headache and my stomach hurts. If I go to work today I probably won't be able to concentrate and do my best.

Ms. Coppola: [*as if to herself*] I wonder where Robert is? It's almost nine. There is a lot of work to do today, and he isn't here yet.

Robert: [*as if to himself*] Gee, I don't know what to do. Ms. Coppola is depending on me to come in to work today. If I don't, she'll have to get someone else to do my job, but I just don't feel well.

[*Clock next to Robert's bed indicates that it's almost nine o'clock.*]

Narrator: What should Robert do?
Let's pause for discussion.

TEACHER LEADS STUDENTS IN DISCUSSION OF POSSIBLE SOLUTIONS.

Narrator: Let's see what happens.

[Robert sits up and begins to dial the telephone to call Ms. Coppola. Clock indicates that it's almost nine o'clock. Telephone conversation takes place.]

Ms. Coppola: Hello?

Robert: Hi, Ms. Coppola, this is Robert.

Ms. Coppola: Robert, where are you? It's almost nine!

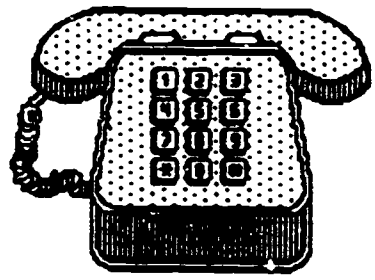
Robert: I'm sorry, but I feel sick and can't come to work today.

Ms. Coppola: Well, I'm sorry to hear that, Robert. Thanks for calling to let me know that you won't be in. We depend on you to be here every day to get your work done. I'll find someone else to fill in for you. I'm glad you called me early enough for me to be able to do that. Now take care of yourself. These viruses are going around making everyone sick. We need you back!

Robert: I'll see you soon, Ms. Coppola.

Videotape Segment 5B
A Wise Decision

Focus: To show the importance of calling the employer when you are sick and won't be reporting to work.



Characters: Bill, employee in an office
Bill's mother
Janet, employee in an office
Mr. Hardy, manager in the office

Setting: Bill's kitchen and Mr. Hardy's office.

Narrator: Having a job is very different than going to school. In school, if you don't feel well and don't go to class that day, you can have someone write a note for you to bring in the following day. Work is different. You must call work before you take the day off. This morning Bill doesn't feel well, and he's trying to decide if he should go to work.

[*Bill is in the kitchen getting a drink of water. His mother is making breakfast.*]

Bill: I feel sick today. I think I have a fever.

Mother: What makes you think you have a fever?

Bill: I feel all hot and sweaty, and I have chills.

Mother: Maybe you should stay home today and get well. Why don't you go back to bed?

Bill: There is a lot to do today. If I don't go into work, the work might not get done. Maybe I should go to work anyway.

Mother: Well, Bill, it's your decision.

[*Mr. Hardy, Bill's supervisor is at the office looking at Bill's empty desk and then at his watch. Janet passes by Mr. Hardy.*]

Mr. Hardy: Have you seen Bill yet?

Janet: No, I haven't seen him yet this morning.

Bill: What should I do?

Narrator: What should Bill do?
Let's pause for discussion.

TEACHER LEADS STUDENTS IN DISCUSSION OF POSSIBLE SOLUTIONS.

Narrator: Let's see what happens.

[*Bill is on the phone calling his office. Telephone conversation takes place.*]

Mr. Hardy: Hello?

Bill: Hello, Mr. Hardy, this is Bill. I don't feel very well today. I won't be coming in to work.

Mr. Hardy: Thank you for calling, Bill. That was the right thing to do. I hope you feel better by tomorrow.

Bill: Thanks, Mr. Hardy. Goodbye.

Worksheet 1 for Lesson 3 Name _____

Calling In When Sick Date _____

DIRECTIONS: (1) Read the words in the left column.
(2) Find the word that means the same (synonym) as each in the right column.
(3) Write the letter of the word in the blank beside the appropriate number.

a. absent	___ 1. sick
b. decision	___ 2. choice
c. dependable	___ 3. accountability
d. early	___ 4. time
e. ill	___ 5. gone
f. late	___ 6. reliable
g. mistake	___ 7. procedure
h. phone	___ 8. call
i. policy	___ 9. timely
j. responsibility	___ 10. error
k. rule	___ 11. regulation
l. shift	___ 12. tardy

Worksheet 2 for Lesson 3 Name _____

Calling In When Sick Date _____ _____

DIRECTIONS: Draw a circle around the word that best completes each of the following sentences.
Be sure to read all three words before you make your selection.

1. _____ should call your boss if you are going to be out sick.
   You **Your friend** **Your mother**

2. You must _____ before you take the day off.
   yell **repeat** **phone**

3. You may not be able to do your _____ if you are sick.
   directions **best** **mistakes**

4. You have a _____ to be at work every day.
   letter **problem** **responsibility**

5. Your boss _____ on you to do your work every day.
   likes **depends** **wonders**

6. One of the _____ of the workplace is that you should call and let someone know if you are sick and will be staying at home.
   rules **games** **jobs**

7. You must know the right _____ to call if you won't be reporting to work.
   school **person** **house**

8. Call _____ enough so the boss won't be expecting you to report to work.
   far **late** **early**

9. You must always call _____ your shift starts.
   during **before** **after**

10. If you phone your boss early, he or she will get someone _____ to do your work for the day.
    else **right** **better**

Worksheet 3 for Lesson 3 Name _____

Calling In When Sick Date _____

You almost always have choices about what you want to do in a certain situation. Often, one choice is just as good as another. Below are four situations about sick leave decisions that could happen to you.

DIRECTIONS: (1) In each situation, you decide what you would do. Two choices are given as suggestions, or you can write your own idea on the blank line.
(2) Put a check (√) beside your choice.

1. You are home sick today and by afternoon you aren't feeling any better. What would you do?

   ____ I'd call my boss tomorrow morning to say that I won't be in.
   ____ I'd call my boss this afternoon to say that I won't be in tomorrow.
   ____ _____

2. You are at work and you begin to feel sick. What would you do?

   ____ I'd stay at work and hope that I didn't start feeling worse.
   ____ I'd tell my boss that I didn't feel well and wanted to go home.
   ____ _____

3. You've been out sick for a week. You still aren't well, but you don't have any more sick days. What would you do?

   ____ I'd stay home.
   ____ I'd go back to work.
   ____ _____

4. You were involved in an auto accident last night and got a big bump on your head. You were taken to the hospital and you have to stay a day for observation. What would you do?

   ____ I'd ask someone to call my boss and explain the situation.
   ____ I'd try to call my boss and explain the situation.
   ____ _____

APPENDIX C

SUMMARIES OF FIELD TEST DATA

1. Observation Description Sheet
2. Observation Rating Sheet for Videotape/Discussion
3. Observation Rating Sheet for Computer Software Use
4. Rating Sheet for Individual Lessons
5. Student Information on Computer Software

SUMMARIES OF FIELD TEST DATA

1. Summary of Observation Description Sheets

Each teacher was observed at least 4 times. Detailed notes were kept on these observations. A summary of these data for each teacher is presented here.

Teacher 1. High school EMR class. Data are based on six separate observations, averaging about forty-five minutes.

- Spacious, well-equipped class.
- Extensive discussions before and after videotape vignettes
- Used worksheets
- Class enjoyed lesson, high participation; attentive
- Teacher very expressive
- At least one time disc speed was so fast no one could understand what computer was saying
- Extensive use of worksheets and extra activities

Teacher 2. Juniors and Seniors EMR class. Data are based on seven separate observations, averaging about 40 minutes.

- No facility to show videotape in room; need to be in media center--students embarrassed to watch in that setting
- Students said program too simple
- Videotape vignettes too short and too repetitive; embarrassing; strongly disliked videotape
- Much too easy for this class; students apathetic, offended by program; students are at higher levels of functioning (some have jobs). Teacher thought would be good with TMR class and had actually tried it with one

- Showed entire videotape to class in one setting and they felt too childish
- Students incorrectly inputting answers on computer software because they said it infers they are stupid and thus they will behave that way; students say program is geared toward stupid people
- Computer lessons boring

Teacher 3. Juniors and Seniors EMR class. Data are based on six separate observations, averaging about sixty minutes.

- Teacher felt lessons too simple for her class; observer agrees
- Students like working with computer, but lessons boring
- Class interaction and participation varied; observer reports maybe due to emotional mood shifts in students

Teacher 4. Juniors and Seniors EMR class. Data are based on eight separate observations, averaging about fifty minutes.

- Class consists of high level functioning students, many have been employed
- Students expressed positive feelings for program
- Computer software not difficult enough, too slow, needs to be more of a challenge
- Cooperative and highly motivated class
- Teacher suggests some of the bosses should be more negative
- Teacher expressed surprise that at the midpoint meeting other teachers expected program to provide everything for the lessons. She did not feel that way.

Teacher 5. EMR, CP and brain-injured class. Data are based on nine separate observations, averaging about 57 minutes.

- Class has handicapped ramp; two teacher aids to help with physically handicapped
- High motivation for videotape
- Computer software too simple and boring
- Teacher feels better for low EMR or high level TMR

- Good discussions and class participation
- Introduces vocabulary on board before videotape vignettes
- Scene with vacuum too easy; she needs to plug it in

Teacher 6. EMR ninth grade class. Data are based on six separate observations, averaging about fifty-six minutes.

- Students enjoyed computer; challenge; reiterated this point, even though some thought they were too easy
- Teacher felt uncomfortable with computer
- Teacher was somewhat uncomfortable with observers

Teacher 7. EMR, LD and ED grades 10 to 12 class. Data are based on four separate observations, averaging about fifty-six minutes.

- Videotape player and computer in classroom
- Students in this career center half day; other half in high school
- Class basically set up on an individual basis
- Students like videotape
- Computer discs too easy, yet fun
- Teacher disorganized in her presentation

2. Observation Rating Sheet for Videotape/Discussion

Rating sheets were completed on 25 different observations representing various videotape lessons. In general, teachers used the videotape with ease and were able to lead discussions prior to and after the class watched the videotape vignettes. Attentiveness by students and classes varied. It appears that the ability to lead discussions and to get students involved is greatly dependent on the skill of the teachers.

3. Observation Rating Sheet for Computer Software Use

Rating sheets were completed on 15 different observations representing various computer software segments. Students were usually able to use the software by themselves. Opinions varied as to the degree to which they enjoyed using the computer. Some responded they usually enjoyed it and found it helpful while others said they rarely enjoyed it or found it helpful. Comments made reflect differing views: strongly disliked to perform task; too easy and offended them; too simple; students want to work more and more with computer; all students extremely enjoy computer; students enjoyed computer software; thought computer lessons extremely helpful.

4. Rating Sheet for Individual Lessons

The table below summarizes teachers' ratings on individual lessons according to four dimensions.

Table 4

Mean Responses of Teachers' Rating on Individual Lessons
(1=above average, 2=average, 2=below average)

Lesson Number: 1

Material	Importance	Technical Quality	Interest	Effectiveness
Video A	1.14	1.00	1.29	1.57
Video B	1.14	1.14	1.14	1.29
Software	1.71	2.29	1.71	2.14
Worksheets	1.57	1.66	1.66	1.50
Guide	1.29	1.14	1.40	1.33

Lesson Number: 2

Material	Importance	Technical Quality	Interest		Effectiveness
Video A (important and needed lesson)	**1.14**	1.57		1.29	1.29
Video B	**1.14**	1.43	1.43	1.29	
Software (talked too fast; too low for majority; blips and misses; too easy)	1.57	**2.00**	1.57	1.57	
Worksheets	1.57	1.57	1.57	1.57	
Guide	1.57	**1.14**	1.43	1.29	

Lesson Number: 3

Material	Importance	Technical Quality	Interest	Effectiveness
Video A	**1.00**	1.43	1.29	1.14
Video B	**1.00**	1.14	1.29	1.14
Software	1.43	**2.00**	1.57	1.86
Worksheets	1.57	1.57	1.71	1.71
Guide	1.43	1.43	1.43	1.43

Lesson Number: 4

Material	Importance	Technical Quality	Interest		Effectiveness
Video A	**1.29**	1.57		**1.29**	**1.29**
Video B	**1.29**	1.43	1.43	1.57	
Software	1.43	**2.00**	1.57	1.86	
Worksheets	1.43	1.33	1.57	1.57	
Guide	1.86	1.57	1.57	1.57	

Lesson Number: 5

Material	Importance	Technical Quality	Interest		Effectiveness
Video A (students know skill; hard to discuss)	1.86	1.43		2.00	1.43
Video B	1.57	**1.14**	1.71	1.57	
Software (too easy; bleeps)	1.57	**2.14**	2.00	**2.14**	
Worksheets (worksheet difficult)	1.57	1.43		1.57	1.43
Guide	1.43	1.43		1.29	1.29

Lesson Number: 6

Material	Importance	Technical Quality	Interest		Effectiveness
Video A (voice not clear, poor verbal discussion; touch lesson)	1.43	1.43		1.57	1.71
Video B	1.43	**1.29**	1.71	1.71	
Software	1.66	**2.20**	1.83	2.00	
Worksheets	1.66	1.60	1.66	1.33	
Guide	1.43	1.43	1.43	1.43	

Lesson Number: 7

Material	Importance	Technical Quality	Interest		Effectiveness
Video A (good topic)	**1.00**	1.29		1.16	1.16
Video B	**1.00**	1.43		1.16	1.33
Software (speeds up as more use it)	1.20	**2.40**	1.40	2.00	
Worksheets	1.16	1.40	1.60	1.60	
Guide	1.40	1.40	1.40	1.40	

Lesson Number: 8

Material	Importance	Technical Quality	Interest	Effectiveness
Video A	1.16	1.33	1.16	1.33
Video B	1.00	1.16	1.00	1.16
Software (stopped in middle; blips)	1.50	2.33	1.66	1.66
Worksheets (worksheets 2 and 3 confusing; worksheets 1 and 2 good)	1.16	1.16	1.33	1.66
Guide	1.00	1.16	1.16	1.16

Lesson Number: 9

Material	Importance	Technical Quality	Interest	Effectiveness
Video A	1.00	1.28	1.14	1.14
Video B	1.00	1.33	1.16	1.16
Software (bleeps; poor sound; inaudible)	1.16	2.33	1.50	1.83
Worksheets	1.83	1.83	2.00	2.00
Guide	1.16	1.16	1.16	1.16

Lesson Number: 10

Material	Importance	Technical Quality	Interest	Effectiveness
Video A	1.43	1.29	1.43	1.43
Video B	1.43	1.14	1.43	1.43
Software (continued problems; poor sound; stopped several times)	1.66	2.50	1.83	2.00
Worksheets (good worksheets)	1.00	1.00	1.00	1.00
Guide	1.16	1.16	1.16	1.16

Lesson Number: 11

Material	Importance	Technical Quality	Interest	Effectiveness
Video A	**1.16**	1.33	1.50	1.50
Video B	**1.16**	1.33	1.50	1.50
Software	1.80	**2.20**	1.60	1.80
Worksheets	1.80	1.60	1.66	1.66
Guide	1.40	1.40	1.60	1.40

Lesson Number: 12

Material	Importance	Technical Quality	Interest	Effectiveness
Video A (redundant)	1.43	1.43	1.57	1.57
Video B (3 said girl should have plugged in vacuum)	1.57	1.57	1.71	1.86
Software (didn't work; students getting bored, too easy)	1.60	**2.50**	--	--
Worksheets	1.43	1.33	**1.29**	**1.29**
Guide	1.50	1.33	1.50	1.33

Lesson Number: 13

Material	Importance	Technical Quality	Interest	Effectiveness
Video A (really important; really responded)	**1.00**	1.29	1.14	**1.00**
Video B	1.14	1.43	1.14	1.14
Software (voice speed and quality poor; blips)	1.33	**2.33**	1.83	1.66
Worksheets (good worksheet)	1.50	1.40	1.66	1.80
Guide	1.33	1.33	1.33	1.33

Lesson Number: 14

Material	Importance	Technical Quality	Interest	Effectiveness
Video A (important topic)	1.00	1.33	1.16	1.16
Video B	1.00	1.14	1.14 1.14	
Software (didn't work)	1.10	2.40	1.60	1.60
Worksheets	1.40	1.20	1.20	1.20
Guide	1.16	1.16	1.16	1.16

n=7; in a very few cases, n<7 for a particular question

5. Student information on computer software

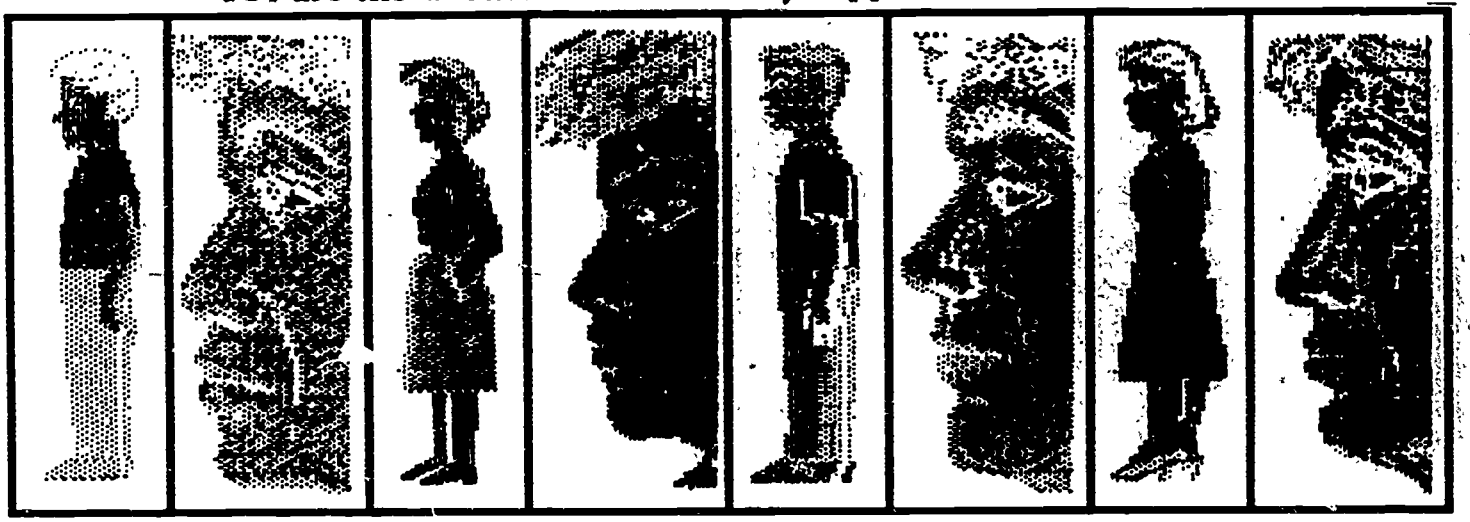
Summary data representing 556 student uses of computer software were provided. Since some students completed a lesson more than once, number of lessons completed by students is slightly inflated. The number of students for each lesson varied, ranging from 55 on lesson 8 to 19 on lesson 12.

Data for all questions for each lesson are summarized according to three types of responses: answered incorrectly, answered correctly, aborted the program. By far the most frequent response to each question was a correct answer on the first trial, ranging from 91 per cent to 68 percent with most responses at about 75 percent. A small proportion of students aborted the program. And in very rare circumstances students answered incorrectly.

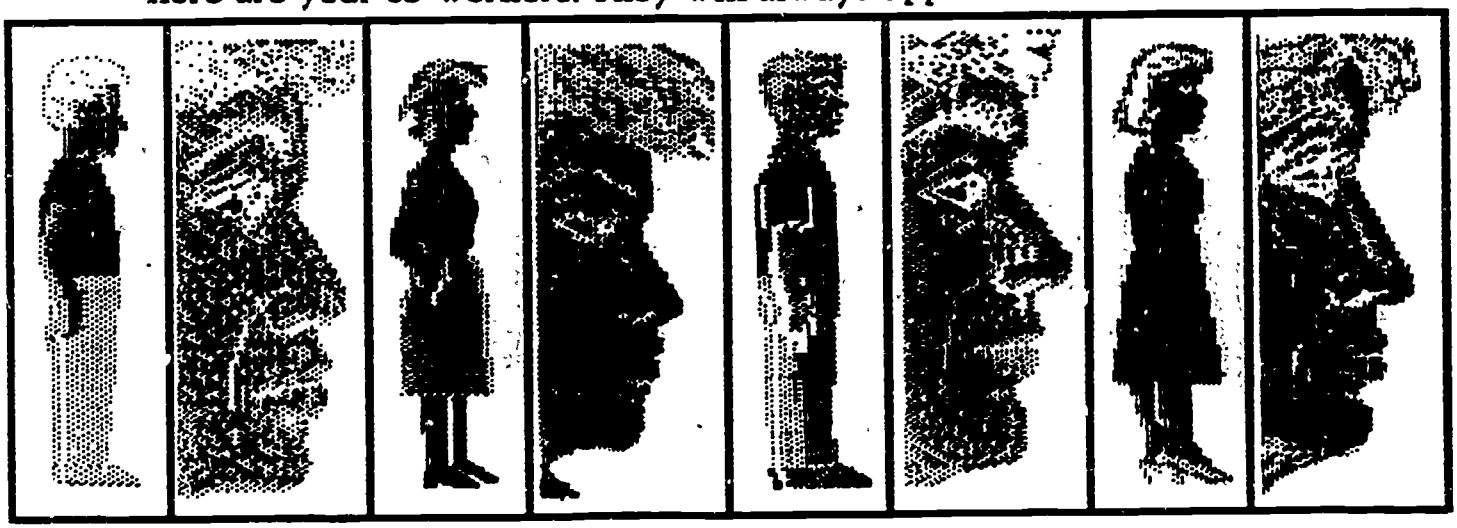
Independent Student Lessons

For each discussion lesson of ***Social Skills On The Job***, there is a set of activities for you to complete on your own. For variety, there are several different characters for each role of worker, co-worker, and boss.

You are the worker. You will always appear on the right side.



Here are your co-workers. They will always appear on the left side.



Independent Student Lessons

[continued]

Your bosses, too, will always appear on the left side.

Each activity has four graphic vignettes (short scenes). Each of them is set up alike.

Page 1: The dialogue begins. In box one, on the left, the boss or co-worker speaks first. In box two, on the right, you respond. In box three, again on the left, is the reaction to your comment. Then, you are asked this question: "What should this worker say?"

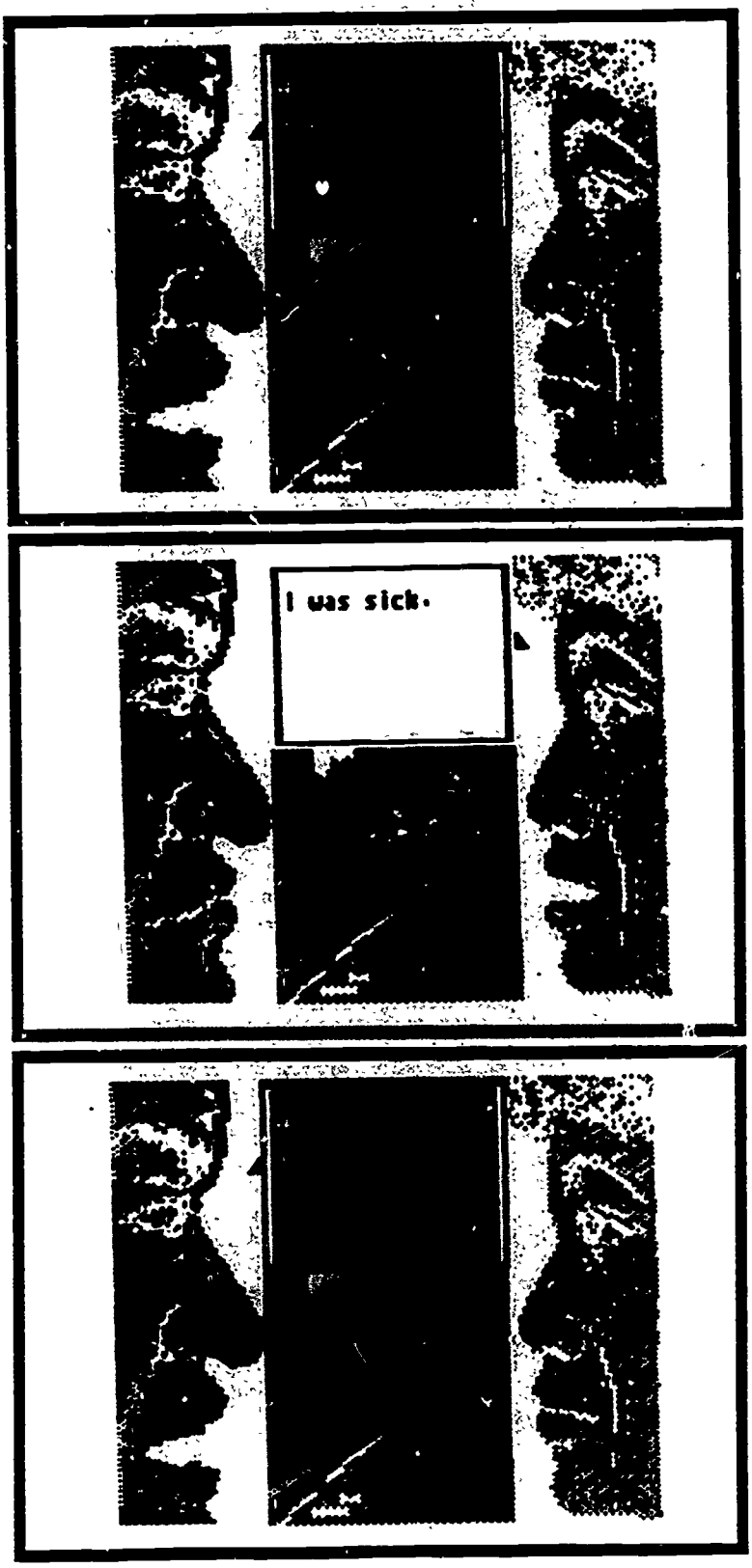
Page 2: You are given three possible choices for your next line. They are lettered A, B, and C. Circle the letter of the response that is the closest to what you might say in a similar situation.

Page 3: The appropriate answer is shown and a final comment is made by the boss or co-worker. There also is a message to read if you've chosen one of the inappropriate responses.

Be aware! Bosses and co-workers are sometimes tired and angry. Be careful of your responses.

Lesson 3
Calling In When Sick

Vignette 3A: Read the following conversation between a boss and a worker.



What should this worker say?

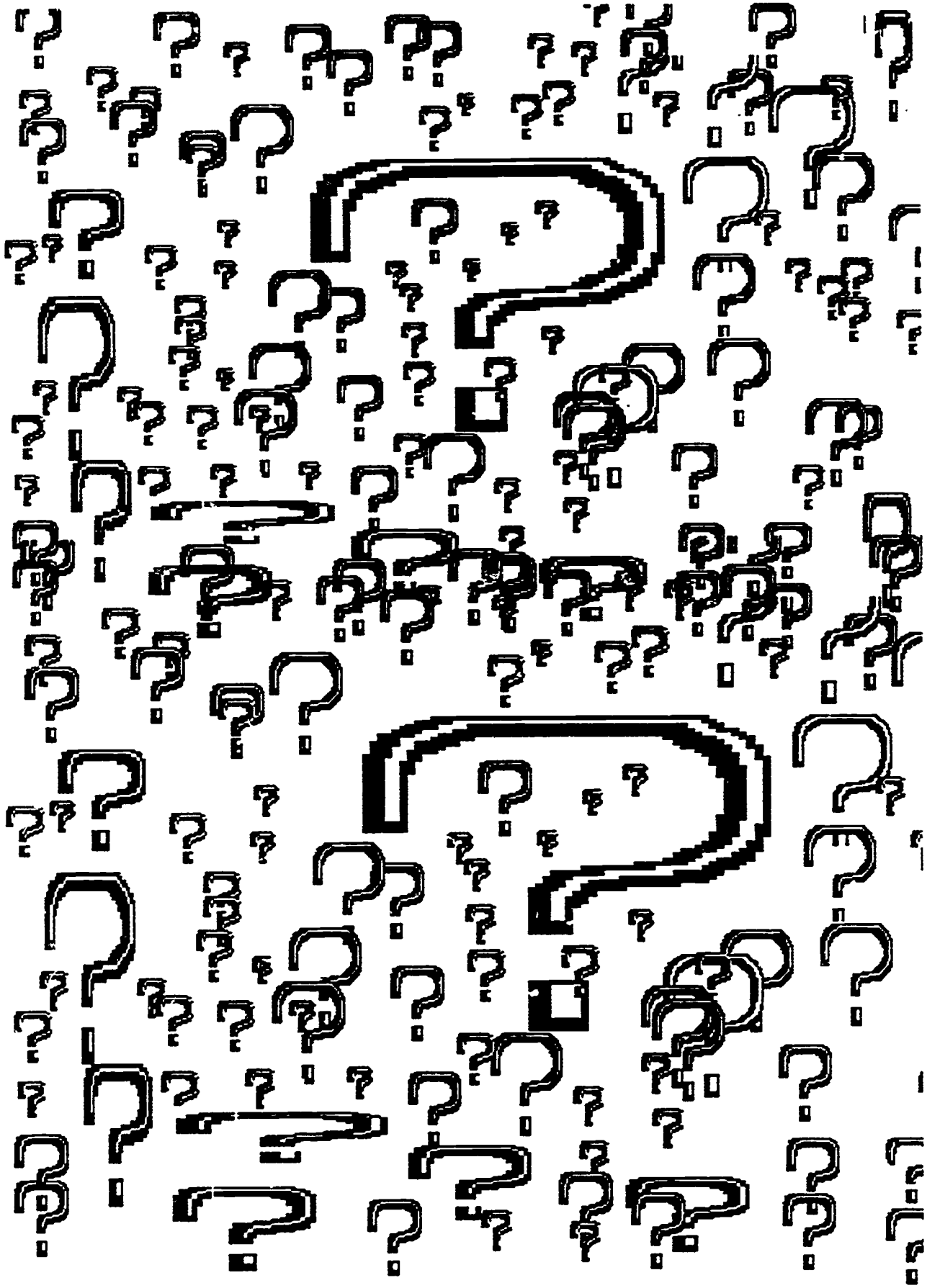
Vignette 3A: Choose the worker's response that you think is most appropriate and write the correct letter on your answer sheet.

A

B

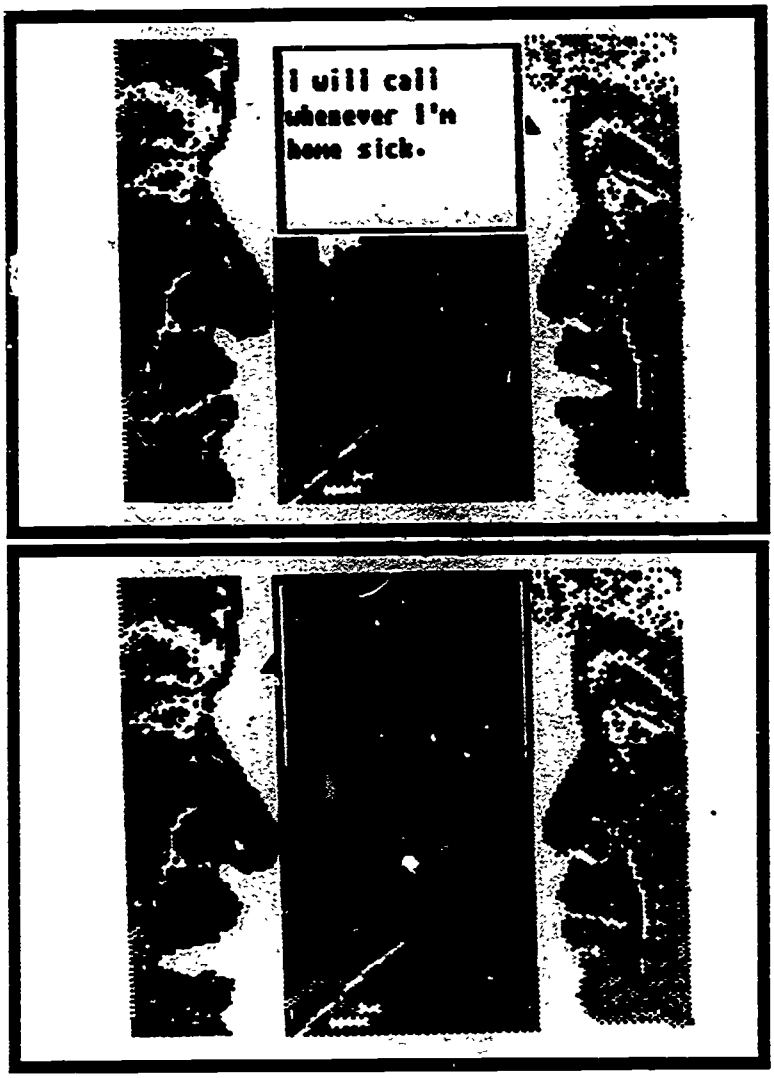
C

Turn the page to check your answer.



Vignette 3A: Check your answer.

If you selected A, congratulations! It's the most appropriate response . this situation.

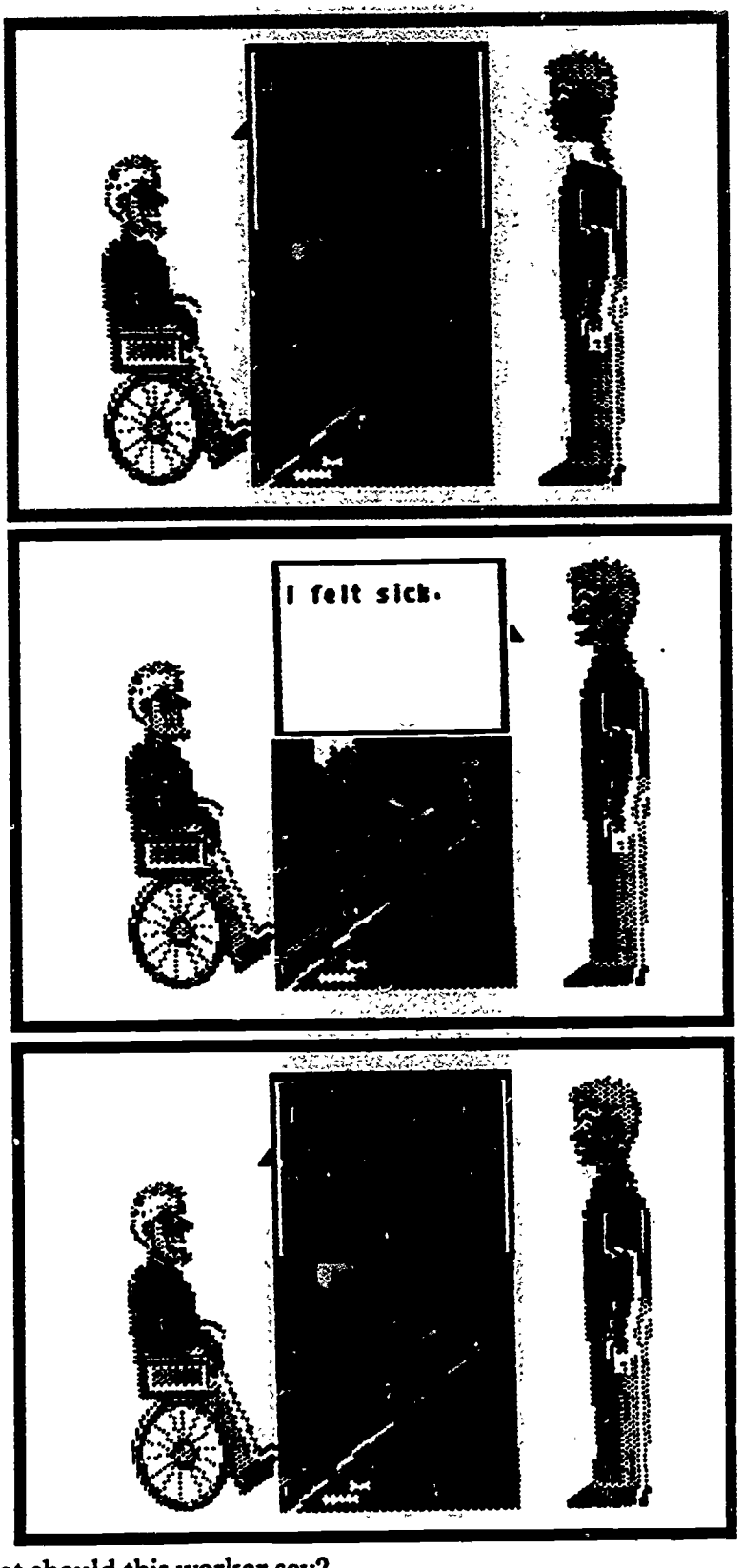


If you selected B, this is not the best answer. This response is inappropriate and might make your boss think you don't take your job seriously enough.

If you selected C, this is not the best answer. You must accept responsibility for following the work rules. Stress the importance of the message if you need to ask someone else to call for you.

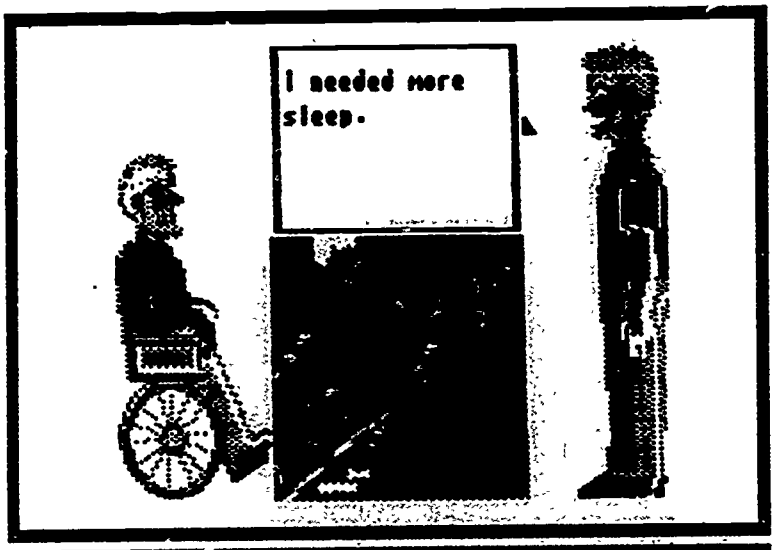
Lesson 3
Calling In When Sick

Vignette 3B: Read the following conversation between a boss and a worker.



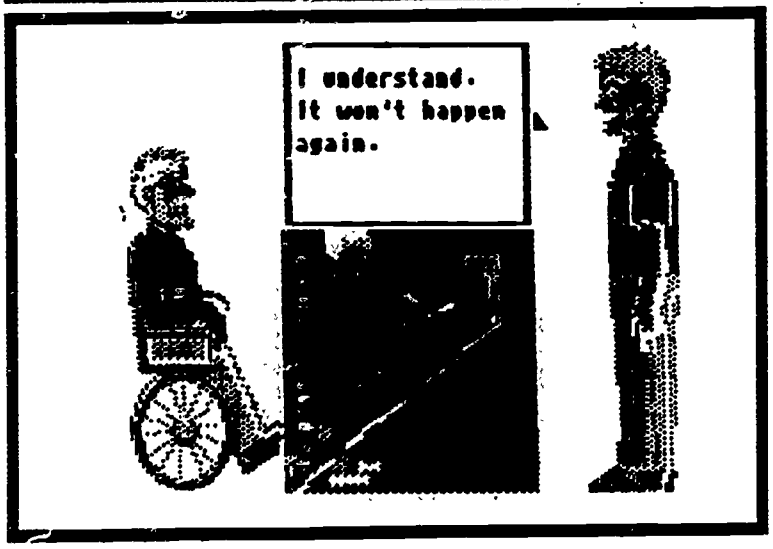
What should this worker say?

Vignette 3B: Choose the worker's response that you think is most appropriate and write the correct letter on your answer sheet.



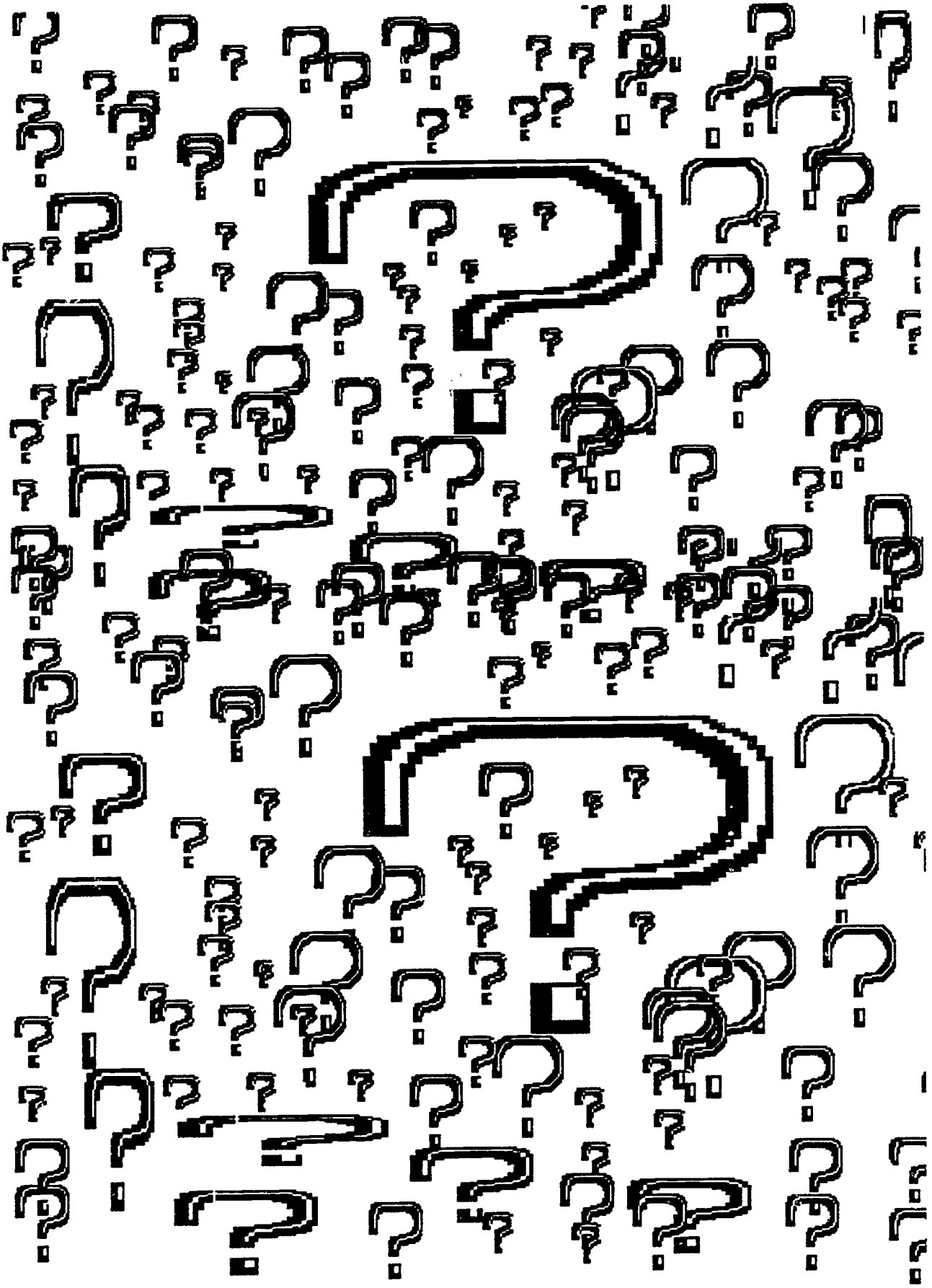
A

B



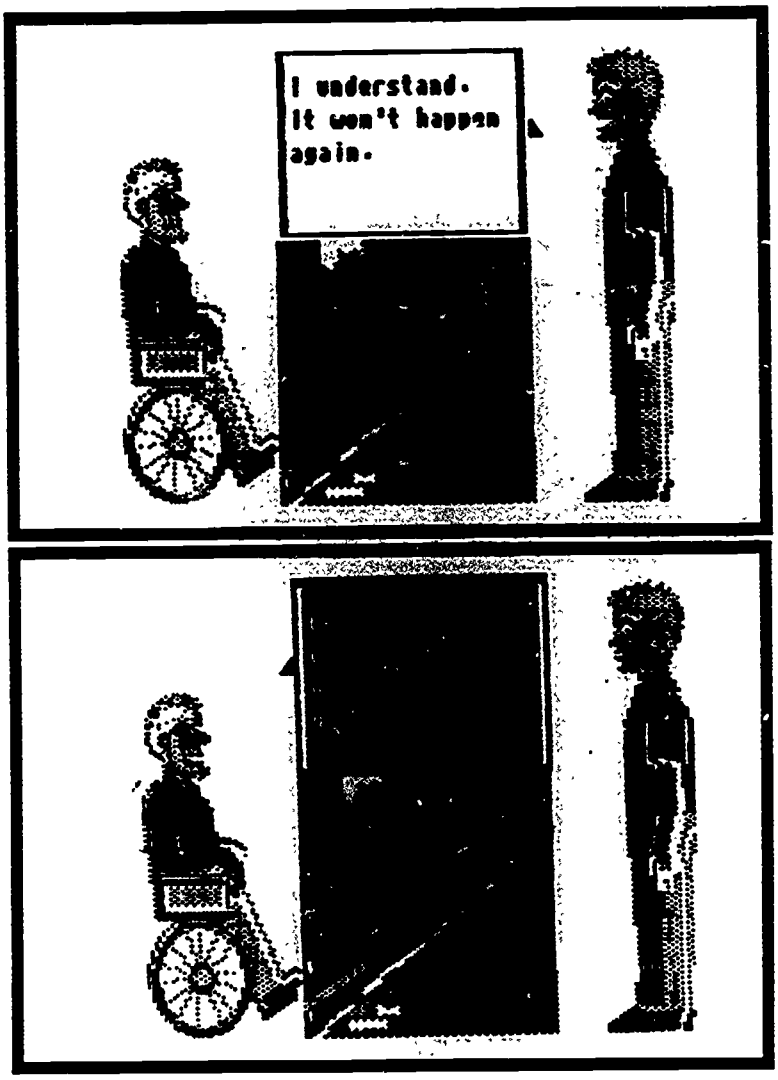
C

Turn the page to check your answer.



Vignette 3B: Check your answer.

If you selected C, congratulations! It's the most appropriate response in this situation.

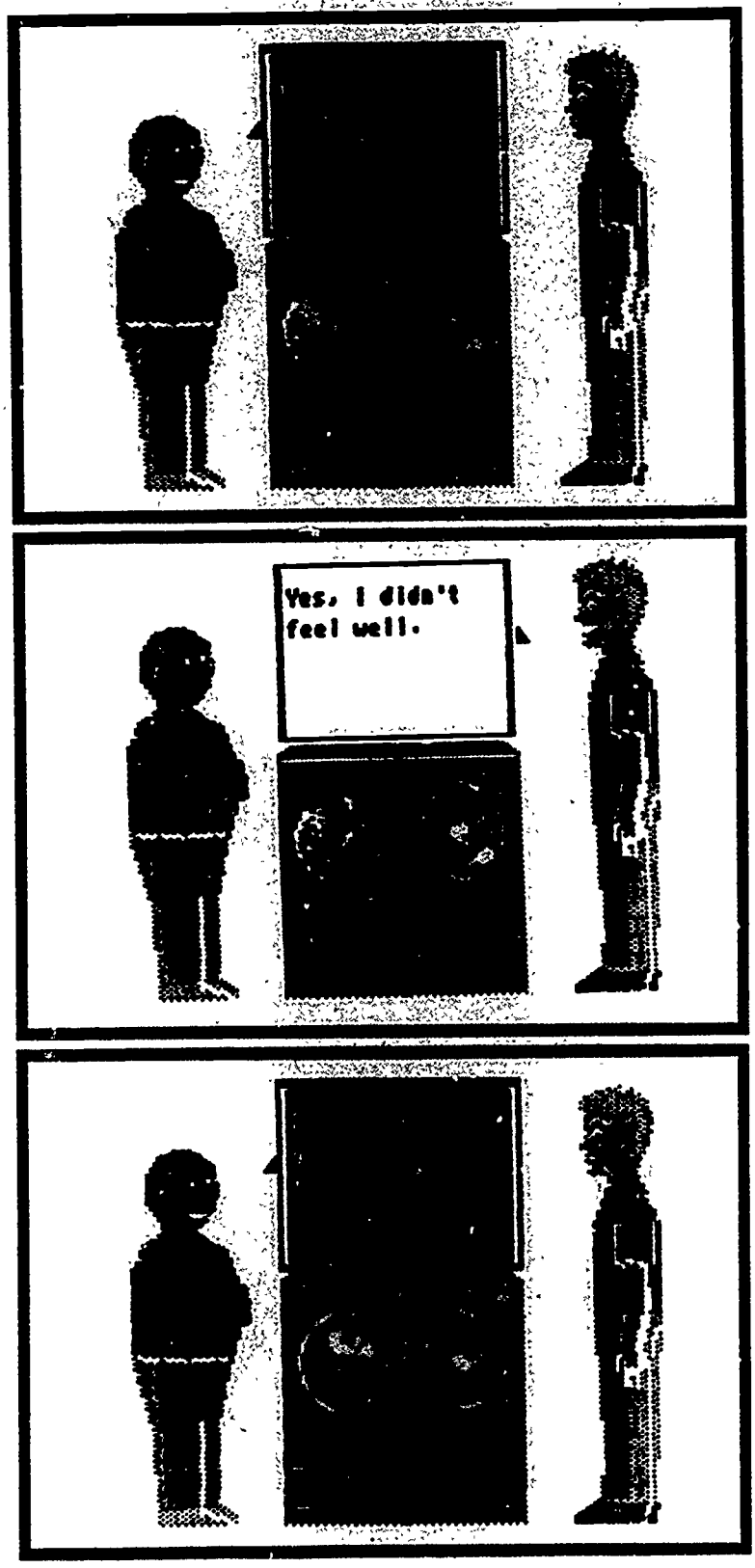


If you selected A, this is not the best answer. Regardless of illness, you must accept responsibility for letting the boss know that you will be out sick.

If you selected B, this is not the best answer. You are trying to excuse yourself of responsibility for the problem.

Lesson 3
Calling In When Sick

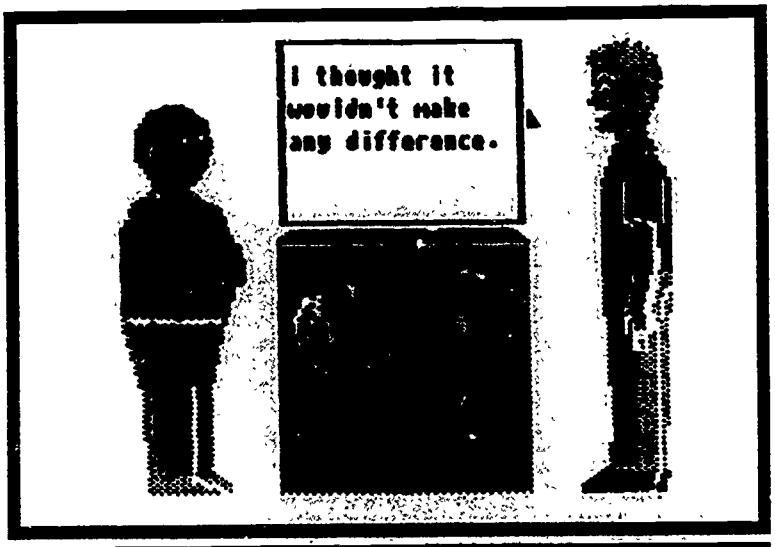
Vignette 3C: Read the following conversation between a boss and a worker.



What should this worker say?

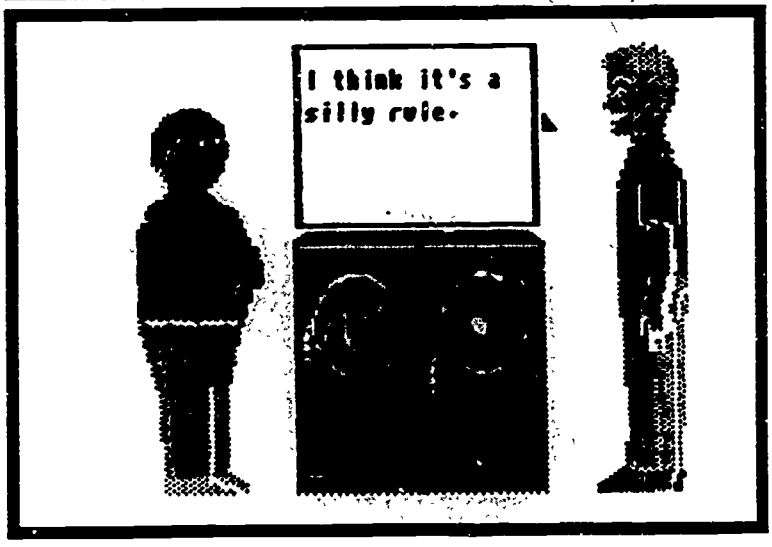
115

Vignette 3C: Choose the worker's response that you think is most appropriate and write the correct letter on your answer sheet.



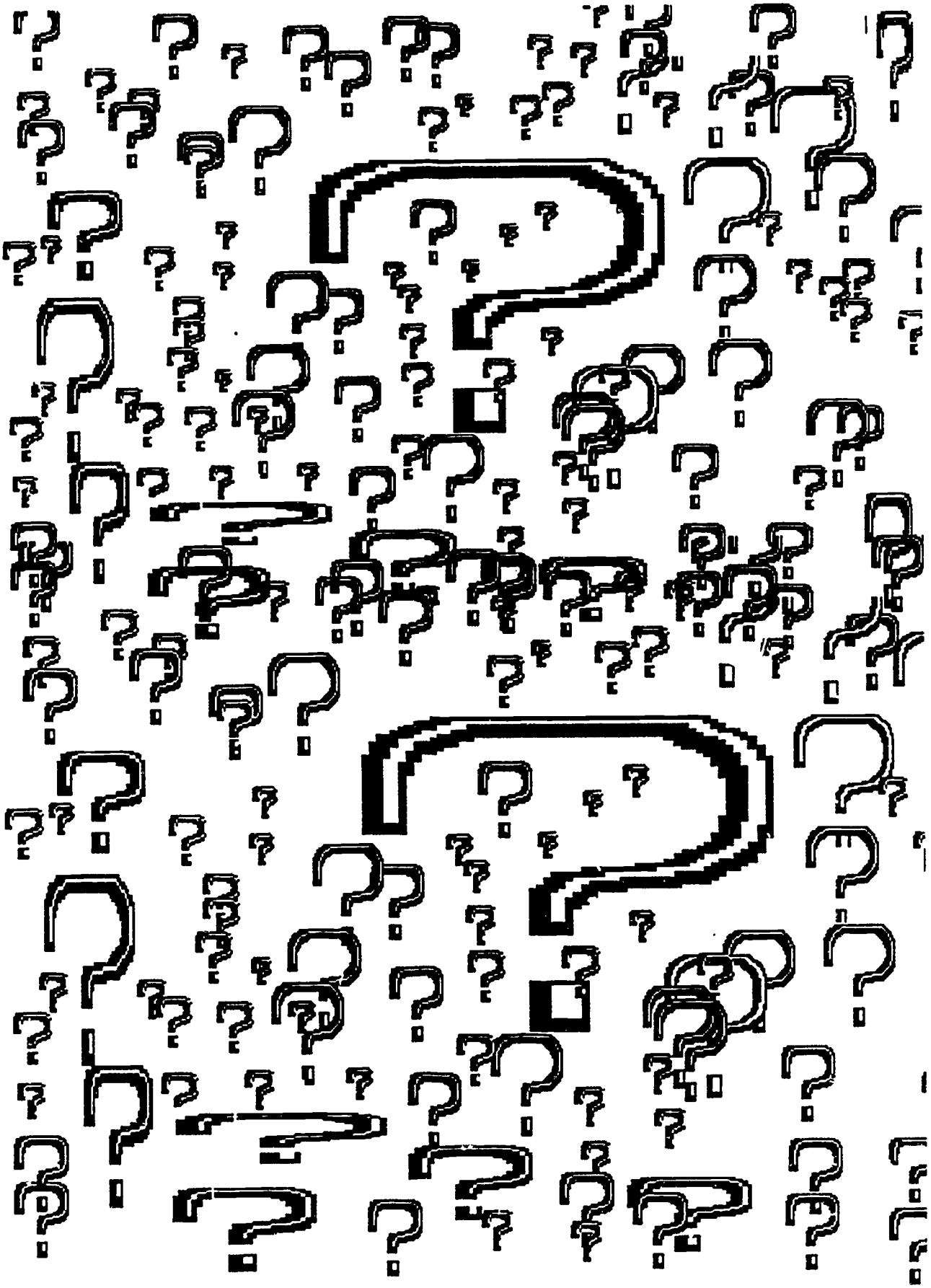
A

B



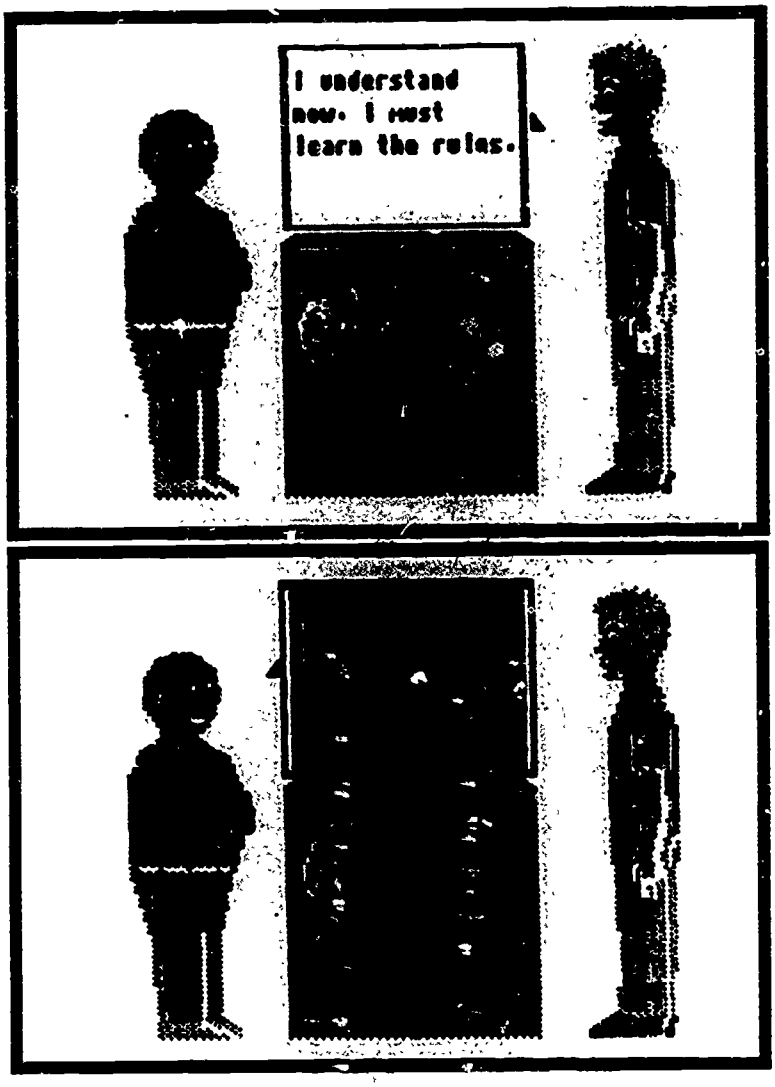
C

Turn the page to check your answer.



Vignette 3C: Check your answer.

If you selected B, congratulations! It's the most appropriate response in this situation.

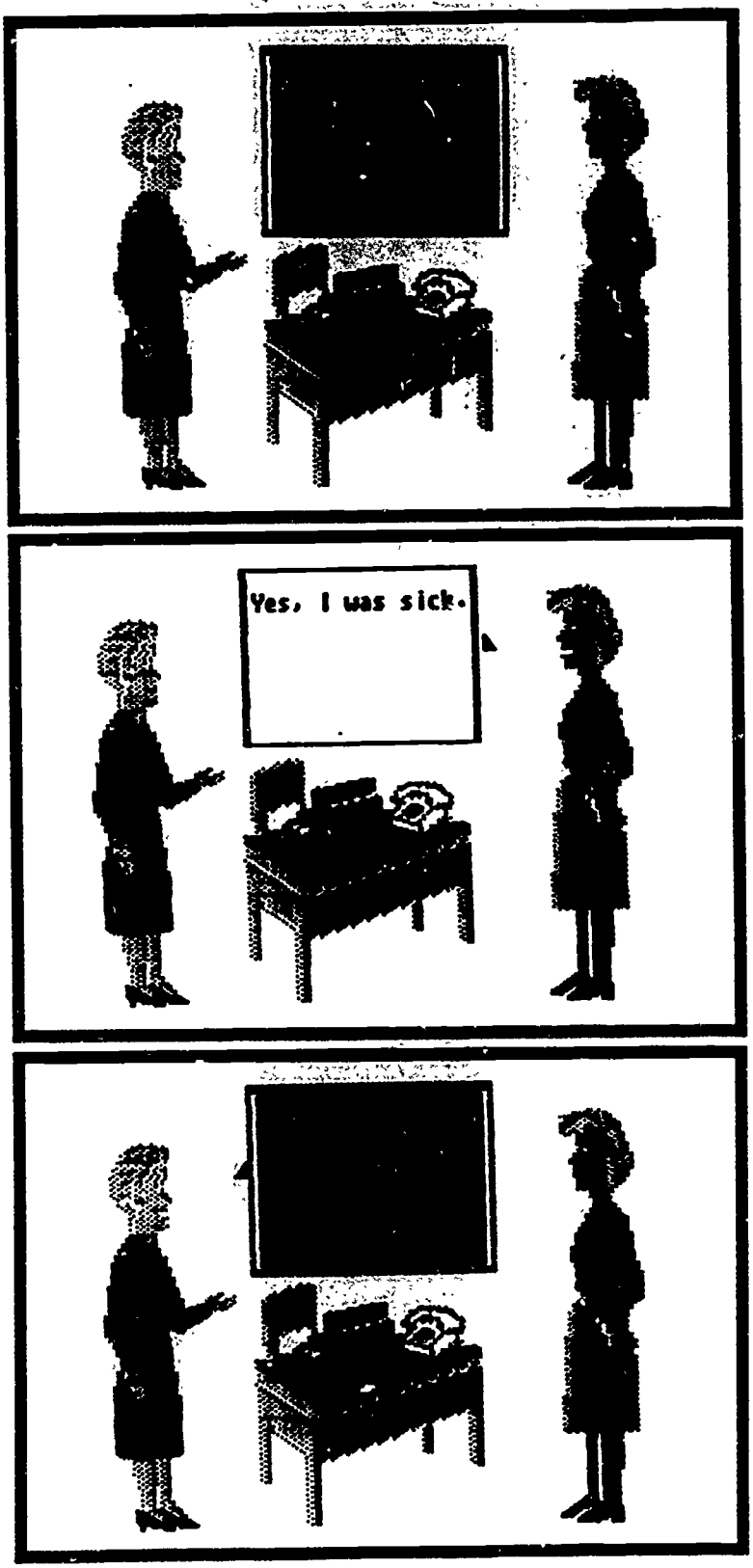


If you selected A, this is not the best answer. This is a poor excuse and shows that you aren't accepting responsibility for yourself.

If you selected C, this is not the best answer. This response is rude and shows disregard for the rules of the workplace.

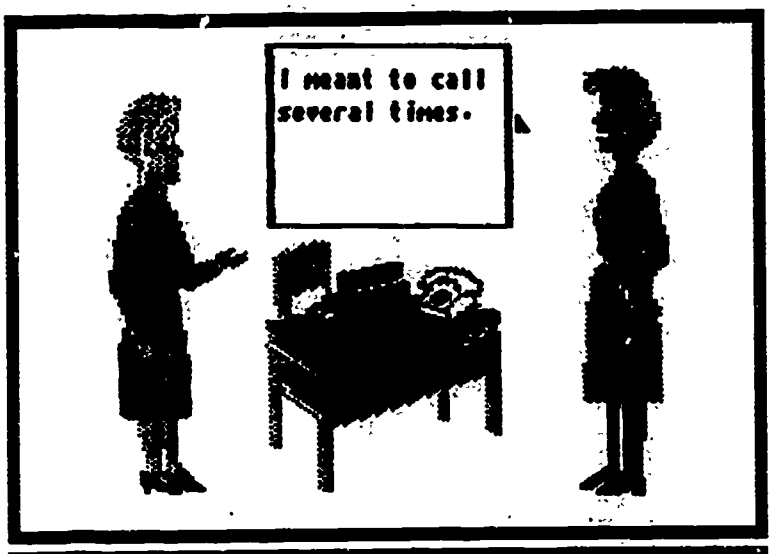
Lesson 3
Calling In When Sick

Vignette 3D: Read the following conversation between a boss and a worker.



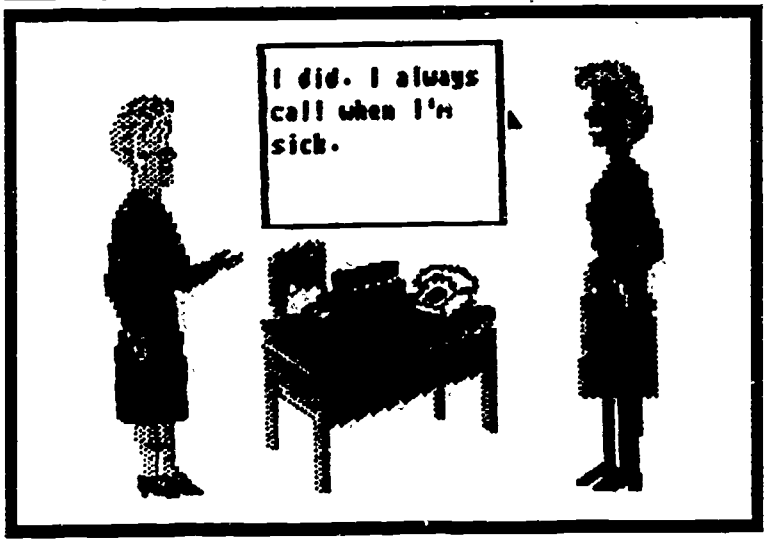
What should this worker say?

Vignette 3D: Choose the worker's response that you think is most appropriate and write the correct letter on your answer sheet.



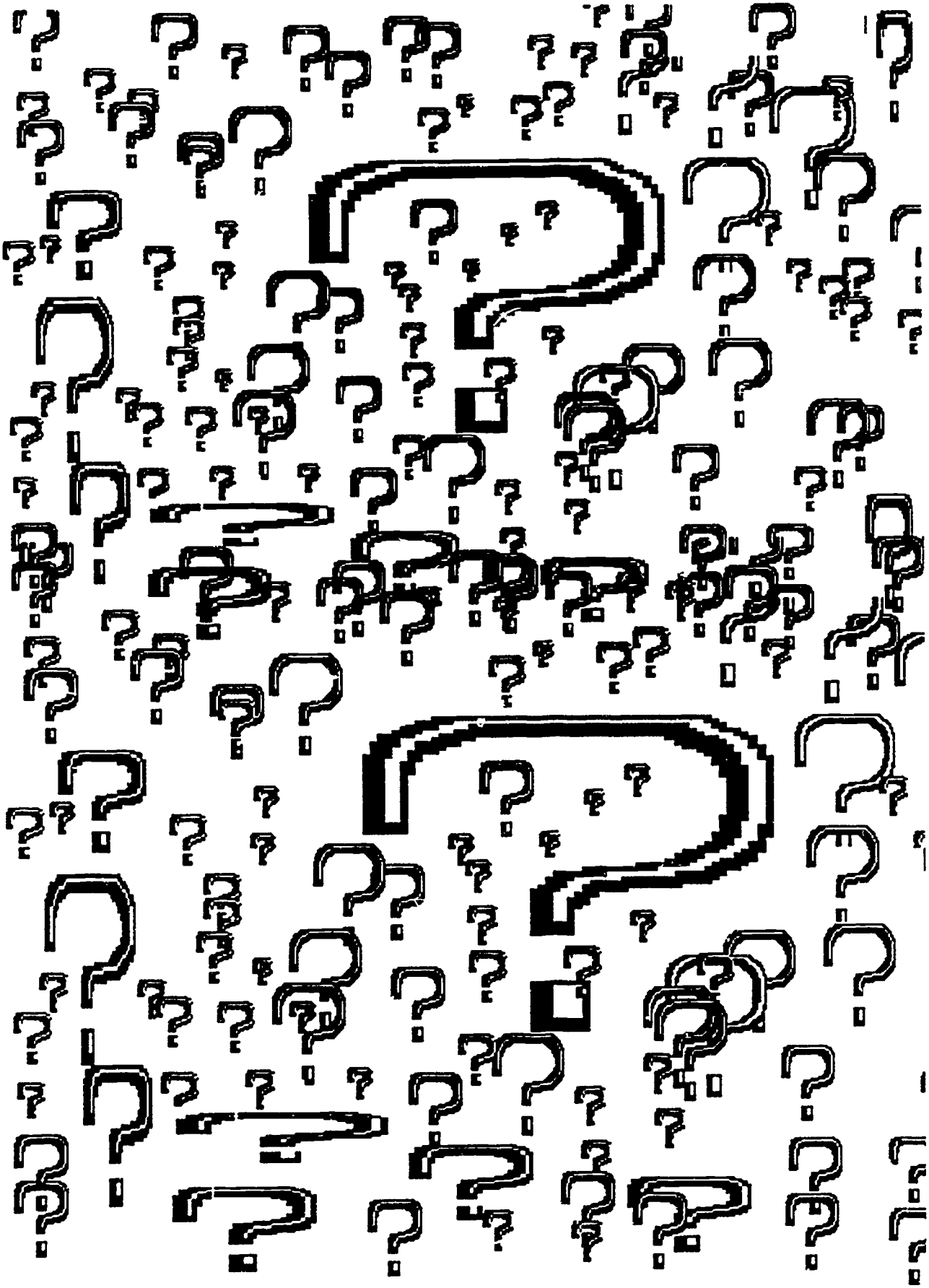
A

B



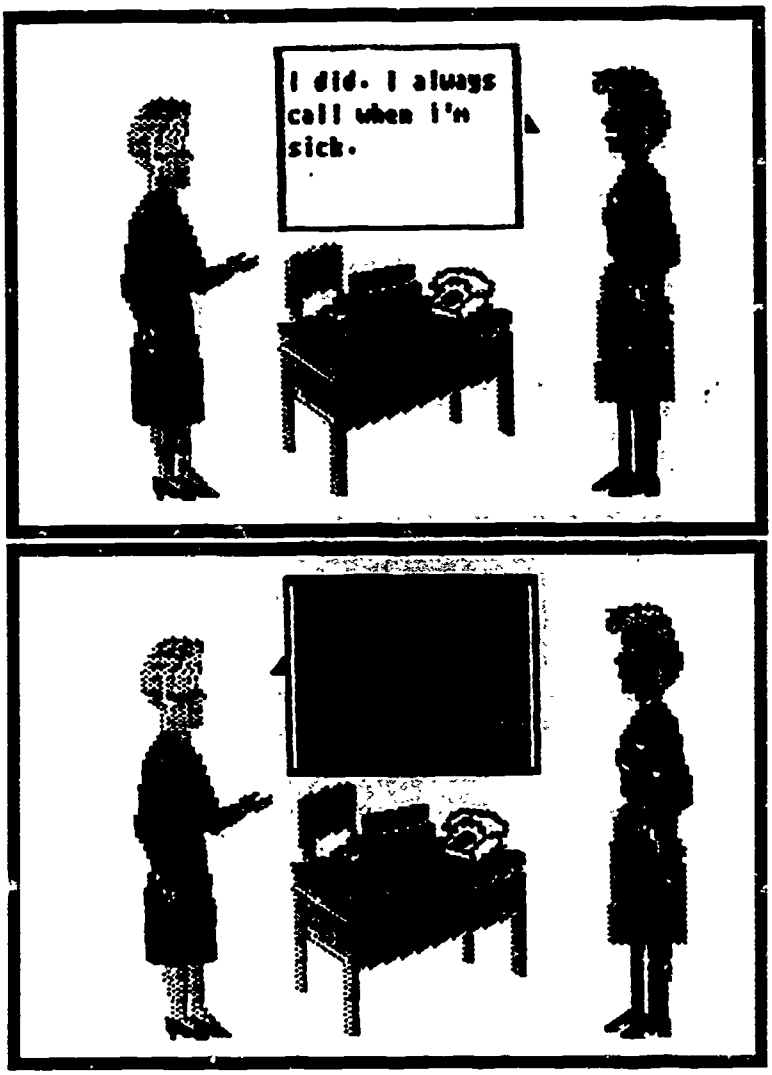
C

Turn the page to check your answer.



gnette 3D: Check your answer.

If you selected C, congratulations! It's the most appropriate response in this situation.



If you selected A, this is not the best answer. Your had good intentions, but you still didn't follow the rules of the workplace.

If you selected B, this is not the best answer. You are trying to excuse yourself of responsibility for the problem.

APPENDIX D

ASSESSMENT INSTRUMENTS

- Modified Directions for Administering SPIB-R and Statements for Subtests 4 and 8
- SPIB-R Subtest 4 - Job Related Behavior
- SPIB-R Subtest 8 - Hygiene and Grooming
- SPIB-R Student Profile Sheet
- Guidelines for Completing the VARS
- VARS Scale 1 - Verbal Manners
- VARS Scale 3 - Attendance and Punctuality
- VARS Scale 4 - Interpersonal Behavior
- VARS Scale 6 - Grooming and Personal Hygiene
- VARS Profile Form

PART 3

Directions for Administering SPIB-R

Before actually administering the battery, it is important that the examiner read Part 2 of this manual thoroughly. It offers some suggestions on how to prepare for administering SPIB-R. It will acquaint the examiner with a number of important aspects of testing, such as getting the students comfortable, repeating items, guessing, and rules about explaining words to students during a test.

Three aspects of test administration are included in this part of the manual: (1) completing the student identification form on the back cover of the test book, (2) administering the sample items, and (3) administering each of the nine tests. This part should be read and understood completely by the examiner before any tests are administered. A small facsimile of the appropriate pages of the student's test book is inserted at the beginning of administration directions for each test. Examples of item art are inserted at appropriate places in the directions to aid the examiner. Directions to be read aloud to the students are preceded by the word SAY. The actual words to be read aloud are printed in blue. Information or directions to be read silently by the examiner are printed in black.

STUDENT IDENTIFICATION

The examiner should enter the students' names on the back cover of the test books before distributing them. In addition, the following information should be provided either by the student or the teacher. If the student provides the information, it should be checked by the teacher for accuracy.

Enter student ID number by NAME.

- Print the student's grade on the line labeled GRADE.
- On the line labeled TEST DATE, print the month day and year.
- Print the teacher's name on the line labeled TEACHER.
- Print the name of the school on the line labeled SCHOOL.
- Draw an appropriate circle around M or F for MALE or FEMALE.
- Print the month, day and year of the student's birthday on the line labeled BIRTH DATE.

SAMPLE ITEMS

Inside the cover of the test book are five sample items. The first four items should be given just before administering the first test. The fifth item should not be given until administration of Test 9, Functional Signs. During these practice exercises, the examiner and proctors should check each student's performance, and work with those who require help in the mechanics of taking tests. ***Any student unable to answer the first four sample items correctly should not be tested until the item format is understood.***

After each student's test book has been appropriately identified, distribute the books and make certain that each student has the correct book. Also be sure that each student has at least two No. 2 pencils with an attached eraser.

ADMINISTERING THE SAMPLE ITEMS

From this point on, the directions to be read aloud to the students are printed in blue and preceded by the word SAY. *Only* those parts printed in blue should be read aloud to the students. Do *not* read aloud any material that is printed in black.

SAY: Today we will ~~begin taking some~~ take two tests that will tell us what you know most about and what you need to work on harder in school. You will find some of the questions easy and some hard. You are not expected to know the answers to all the questions.

If proctors are present:

SAY: We have some people in the room who will help us today. They are _____

_____ _____.

Name the proctors.

SAY: Before we begin testing, turn to Page 2 of the test book.

Pause.

SAY: You will see the numbers 1, 2, 3, 4, and 5. These are item numbers. I will read an item number and a sentence twice. If you think the sentence that I read is *true,* mark an X over the word, True, with your pencil. If you think the sentence is *false,* mark an X over the word, False. Wait until I read the sentence for the second time before you mark your answer. Watch me as I show you on the blackboard.

Write: TRUE FALSE on the blackboard and show the students what is meant by "mark an X." Indicate to the students that it is important to make the mark *dark* and that it should not extend very far beyond the word that is marked. Also, explain that if a student wishes to change an answer, the first mark should be erased *completely* before the other mark is made.

When the examiner feels that the directions are understood, erase the example and go on to the first sample item.

SAY: Let's try Number 1.

Number 1. Going to school is important for a person your age.

Repeat the number and the item.

Every student's answer must be checked.

SAY: Because going to school is important, this is a true statement. You should have placed your mark over the word True.

Demonstrate, using the blackboard. Erase the example before going on.

SAY: Number 2. It is safe to cross a street against a red light, because cars will stop for you.

Repeat the number and the item.

Every student's answer must be checked.

SAY: It is not safe to cross the street on a *red* light, even though cars might stop for you. So the answer for Number 2 is False.

Demonstrate, and then erase.

SAY: Number 3. You should always wear a coat.

Repeat the number and the item.

Every student's answer must be checked.

SAY: You should not *always* wear a coat, because sometimes it will be too warm. So the answer to Number 3 is false.

We will stop here, since the tests we're taking are true-false questions.

~~Demonstrate, and then erase.~~ Turn to page 8.

STOP

SAY: Number 4 is different from Numbers 1, 2, and 3. I will read a sentence and you will mark an X in the box under the picture that answers the sentence correctly.

SAY: Number 4. Mark an X under the picture that shows the safest way to reach the light bulb.

Repeat the number and the item.

Every student's answer must be checked.

SAY: Because using a stepladder is safer than using a chair for reaching the light bulb, the box under the person on the ladder should be marked with an X.

Do you have any questions?

Pause. Answer any questions.

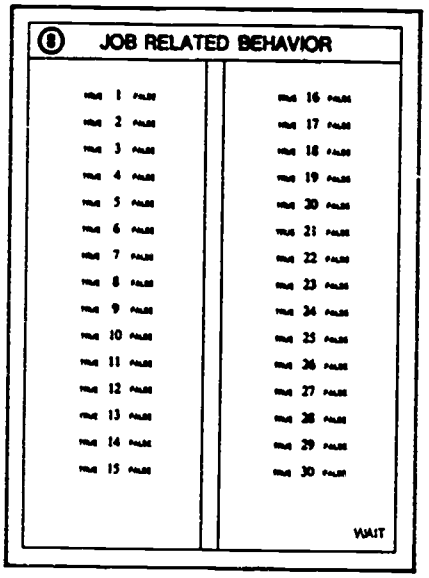
SAY: We will not do Number 5 until later.

Pause.

SAY: Listen carefully to some important things you must remember when taking the test.

First, if you don't know the right answer, think about it and make your best guess. Do not just mark an answer without listening to the sentence.

TEST 4 JOB RELATED BEHAVIOR



~~SAY: Open you test book to Page 8.~~

✱ Make certain that all students are on the right page.

Read all of pages 27, 28, 29.

SAY: This test is about jobs and how people behave on the job. Don't forget:

- Make your best guess if you don't know the answer to a question.
- Make sure that the only pencil marks are on the answer that you choose.
- Listen carefully, because I can only read each sentence twice.

Review the test-taking procedures with students if necessary.

SAY: Number 1. Your boss cannot fire you if the people you work with like you. *Repeat item.*

Number 2. A boss can put you in charge of fellow workers. *Repeat item.*

Number 3. If your boss likes your work, then you can be sure that you will get a raise in pay. *Repeat item.*

Number 4. If your boss inspects your work, he probably does not like you. *Repeat item.*

SAY: Number 5. When your work is not satisfactory, your boss should tell you about it. *Repeat item.*

Number 6. Your boss can fire you if you often come to work late. *Repeat item.*

Number 7. Your boss does not have to be your good friend. *Repeat item.*

Number 8. If you make a mistake at work that you cannot correct, you should tell your boss about it. *Repeat item.*

Number 9. If you need certain supplies to do your job, you should wait until they run out before you ask for more. *Repeat item.*

Number 10. If you are having problems with fellow workers, you should usually keep it to yourself and say nothing. *Repeat item.*

Number 11. Your boss should be told about unsafe working conditions. *Repeat item.*

Number 12. You should tell customers or visitors about problems that you are having with your boss. *Repeat item.*

Number 13. If you do not know how to do a job, you should try to do the best you can without asking for help. *Repeat item.*

Number 14. Some jobs become dangerous if you do not ask for help when you need it. *Repeat item.*

Number 15. If you do not understand how to do a job after your boss explains it, you should ask to hear the directions again. *Repeat item.*

Direct students to the next column for Number 16.

SAY: Number 16. Asking for help is a waste of time because it keeps you from getting your job done. *Repeat item.*

Number 17. Sometimes you have to ask questions about your job, even though you have listened to the instructions carefully. *Repeat item.*

Number 18. If you need help and your boss is not around, it is often O.K. to ask a fellow worker for help. *Repeat item.*

Number 19. On some jobs, you cannot finish your work unless other people also do theirs. *Repeat item.*

Number 20. Whenever you finish a job your boss has given you, you should take a break until he tells you what to do next. *Repeat item.*

Number 21. On some jobs, it is necessary to hide mistakes to do your work properly. *Repeat item.*

Number 22. You could lose your job if you frequently do not complete your work on time. *Repeat item.*

Number 23. It is usually important to work as quickly as you can, even if you make mistakes. *Repeat item.*

Number 24. It is all right to make mistakes because you can always do the job again. *Repeat item.*

SAY: Number 25. It is all right to feel angry at a fellow worker, as long as you still do your work. *Repeat item.*

Number 26. If you do not like the way fellow workers are doing their job, you should make them do it differently. *Repeat item.*

Number 27. Sometimes when you disagree with a person you work with, you both have to "give in" a little. *Repeat item.*

Number 28. If someone besides your boss asks you for help at work, you should say no. *Repeat item.*

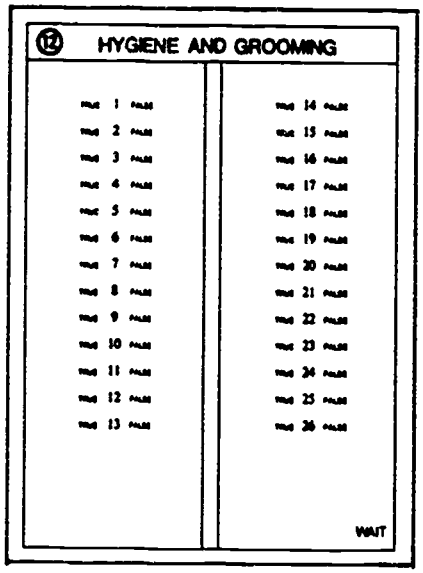
Number 29. The people you work with must be your friends. *Repeat item.*

Number 30. You can be fired for not getting along with fellow workers. *Repeat item.*

SAY: This is the end of the test on Job Behavior. ~~Close your test book. Are there any questions?~~ Turn to page 12.

Allow discussion.

TEST 8 HYGIENE AND GROOMING



~~SAY: Open your test book to Page 12.~~

* Make certain that all students are on the right page.

Read all of pages 43 & 44.

SAY: This test is about keeping clean and staying healthy. Remember:

- Make your best guess if you don't know the answer to a question.
- Make sure that the only pencil marks are on the answer that you choose.
- Listen carefully, because I can only read each sentence twice.

SAY: Find Number 1.

Number 1. Taking a bath or shower is a waste of time if your body does not look dirty. *Repeat item.*

Number 2. If you chew sugarless gum, you do not need to brush your teeth every day. *Repeat item.*

Number 3. Some soaps can irritate your skin. *Repeat item.*

Number 4. Fingernails should be cut as close to your skin as possible. *Repeat item.*

SAY: Number 5. If you want to have a mole or a wart removed, you should see a doctor. *Repeat item.*

Number 6. Some soaps and shampoos can cause your eyes to burn. *Repeat item.*

Number 7. You should not go to doctors or dentists, becaue they cost too much. *Repeat item.*

Number 8. You should go to the doctor only when you are sick. *Repeat item.*

Number 9. Doctors at the Public Health Office charge a lot of money. *Repeat item.*

Number 10. Being overweight can cause health problems. *Repeat item.*

Number 11. All cuts and scratches should be treated by a doctor. *Repeat item.*

Number 12. Headaches might be a sign of eye trouble. *Repeat item.*

Number 13. You can always tell when you need glasses. *Repeat item.*

Direct students to the next column for Number 14.

SAY: Number 14. Exercise is only good for young people. *Repeat item.*

Number 15. If your body looks clean, then you know it will smell clean. *Repeat item.*

Number 16. A dirty body can lead to poor health. *Repeat item.*

Number 17. If your gums bleed, you are probably brushing your teeth too often. *Repeat item.*

Number 18. Washing your body can help prevent disease. *Repeat item.*

Number 19. Wearing dirty clothes all of the time can cause sores on your body. *Repeat item.*

Number 20. If you brush your teeth after every meal, you will not need to go to the dentist. *Repeat item.*

Number 21. Covering your mouth when you cough is necessary only when you are sick. *Repeat item.*

Number 22. Deodorants help keep your body clean. *Repeat item.*

Number 23. If you use a mouthwash regularly, you do not need to brush your teeth very often. *Repeat item.*

Number 24. Shaving can irritate your skin. *Repeat item.*

Number 25. You do not need to wash with soap and water if you use perfume or aftershave lotion. *Repeat item.*

Number 26. Deodorant and hair sprays can hurt your eyes. *Repeat item.*

SAY: This is the end of the test on Hygiene and Grooming. Close your test book. Are there any questions?

Allow discussion.

When you have completed the VARS for each student please return both sets of tests in the provided envelope.

8 JOB RELATED BEHAVIOR

TRUE 1 FALSE

TRUE 2 FALSE

TRUE 3 FALSE

TRUE 4 FALSE

TRUE 5 FALSE

TRUE 6 FALSE

TRUE 7 FALSE

TRUE 8 FALSE

TRUE 9 FALSE

TRUE 10 FALSE

TRUE 11 FALSE

TRUE 12 FALSE

TRUE 13 FALSE

TRUE 14 FALSE

TRUE 15 FALSE

TRUE 16 FALSE

TRUE 17 FALSE

TRUE 18 FALSE

TRUE 19 FALSE

TRUE 20 FALSE

TRUE 21 FALSE

TRUE 22 FALSE

TRUE 23 FALSE

TRUE 24 FALSE

TRUE 25 FALSE

TRUE 26 FALSE

TRUE 27 FALSE

TRUE 28 FALSE

TRUE 29 FALSE

TRUE 30 FALSE

(12) HYGIENE AND GROOMING

TRUE 1 FALSE

TRUE 2 FALSE

TRUE 3 FALSE

TRUE 4 FALSE

TRUE 5 FALSE

TRUE 6 FALSE

TRUE 7 FALSE

TRUE 8 FALSE

TRUE 9 FALSE

TRUE 10 FALSE

TRUE 11 FALSE

TRUE 12 FALSE

TRUE 13 FALSE

TRUE 14 FALSE

TRUE 15 FALSE

TRUE 16 FALSE

TRUE 17 FALSE

TRUE 18 FALSE

TRUE 19 FALSE

TRUE 20 FALSE

TRUE 21 FALSE

TRUE 22 FALSE

TRUE 23 FALSE

TRUE 24 FALSE

TRUE 25 FALSE

TRUE 26 FALSE

WAIT

STUDENT PROFILE SHEET

NAME _____

GRADE _____ TEST DATE _____

TEACHER _____ SCHOOL _____

SEX M F BIRTH DATE _____

SOCIAL AND PREVOCATIONAL INFORMATION BATTERY - REVISED

Test	Possible Score	Raw Score	Percent Correct*	Reference Group Mean Percent Correct		Reference Group Percentile Rank*
				Jr High	Sr High	
Purchasing Habits	36			68	76	
Budgeting	33			66	74	
Banking	31			61	72	
Job Related Behavior	30			65	72	
Job Search Skills	32			65	74	
Home Management	33			66	74	
Health Care	30			71	77	
Hygiene and Grooming	26			72	79	
Functional Signs	26			70	79	
Total Battery	277			67	75	

Comments _____

_____

*See Tables in Part 4, *Examiner's Manual* for converting scores, and Part 5 for interpreting scores.

Guidelines for Completing the VARS

Experimental Phase
1988-89
Social Skills On The Job

The VARS is a tri-fold sheet. Figures 1 & 2 show views of each side of the unfolded instrument.

Ⓐ VARS cover--Please complete 5 items:
Name (use student ID code only) Date (month/day/year)
Sex M F (circle one) Age (in years) Birthdate (month/day/year)

Ⓑ Directions--Please read. Briefly, on each subscale you will be rating a target student in terms of your observations of him/her in the classroom. For each numbered statement, circle the whole box of the appropriate rating. [Disregard numbers in the boxes.]

For data collection purposes, complete the following 4 subscales:
[See highlighting on Figures 1 & 2.]

Ⓒ Verbal Manners (VM)
Ⓓ Grooming & Personal Hygiene (GP) } [see Fig. 2]
Ⓔ Interpersonal Behavior (IB)
Ⓕ Attendance & Punctuality (AP) [see Fig. 1]

- Since the VARS subscales serve as part of the pretest data, it is important that you complete them before the actual use of the materials begins.
- Please return the completed scales in the attached envelope.
- Macro team will do the scoring and return the information to you.

NOTE: If, for your own information and purposes, you'd like to complete all 6 subscales, that is fine. Macro will score the additional subscales for you and provide the information.

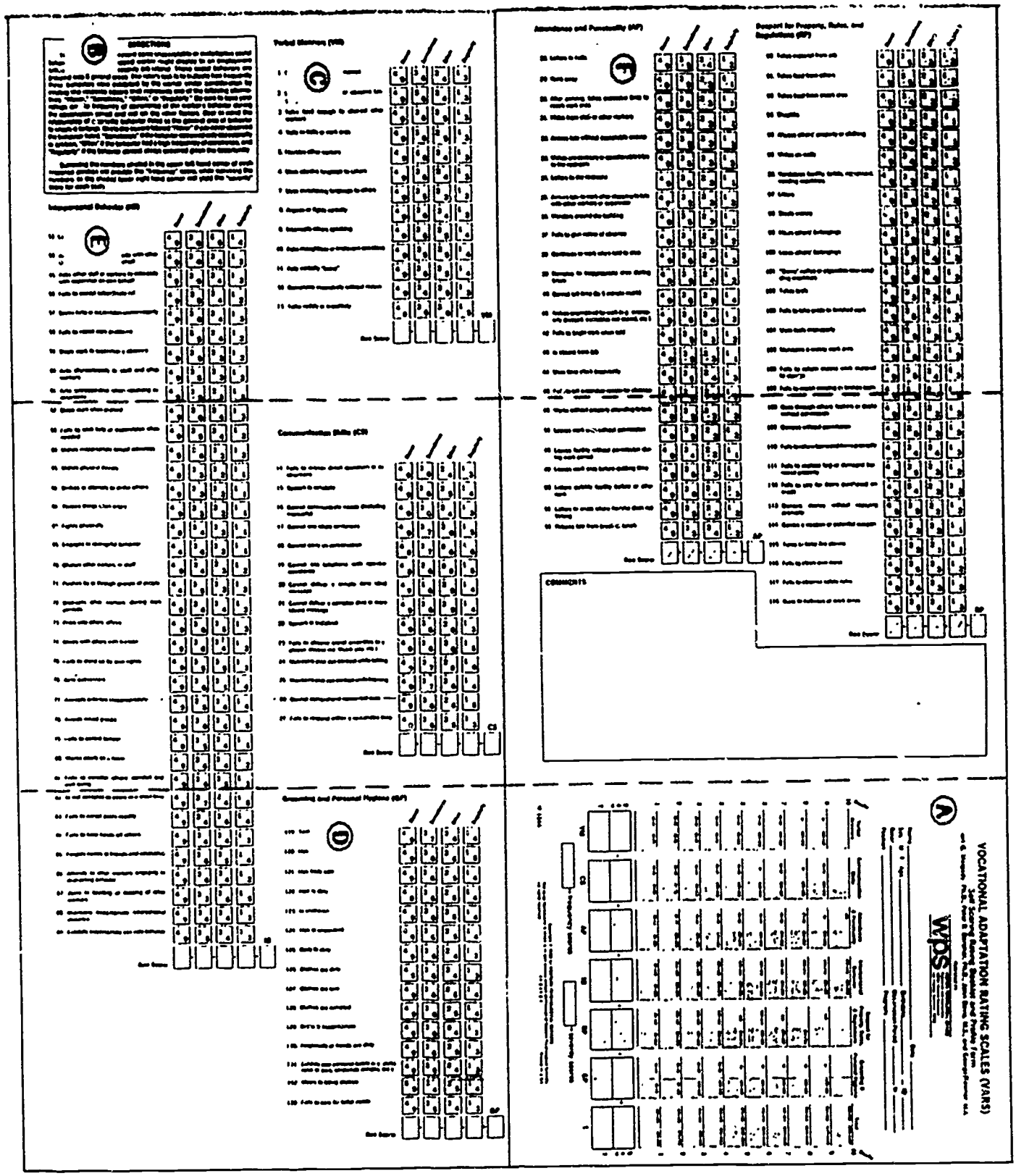


Figure 1

Figure 2

DIRECTIONS

The following pages present some unacceptable or maladaptive social behaviors that a handicapped worker might display in an employment setting that are not necessarily job-related. These social behaviors are grouped into 6 general areas. The rater's task is to indicate how frequently these behaviors were exhibited by the worker under consideration by circling the response square that represents one of the following alternatives: "Never," "Sometimes," "Often," or "Regularly." Be sure to base your ratings on the frequency of occurrence of the worker's behavior during the observation period and not on any other factors. Bear in mind the relationship of a specific behavior listed to the general area of behavior to which it belongs. Circle the square labeled "Never" if you never observed the behavior listed, "Sometimes" if the behavior occurred only occasionally or seldom, "Often" if the behavior had a high frequency of occurrence, and "Regularly" if the behavior almost always occurred given the opportunity.

Summing the numbers circled in the upper left-hand corner of each response position will provide the "frequency" score, while summing the numbers in the shaded lower right-hand corner will yield the "severity" score for each scale.

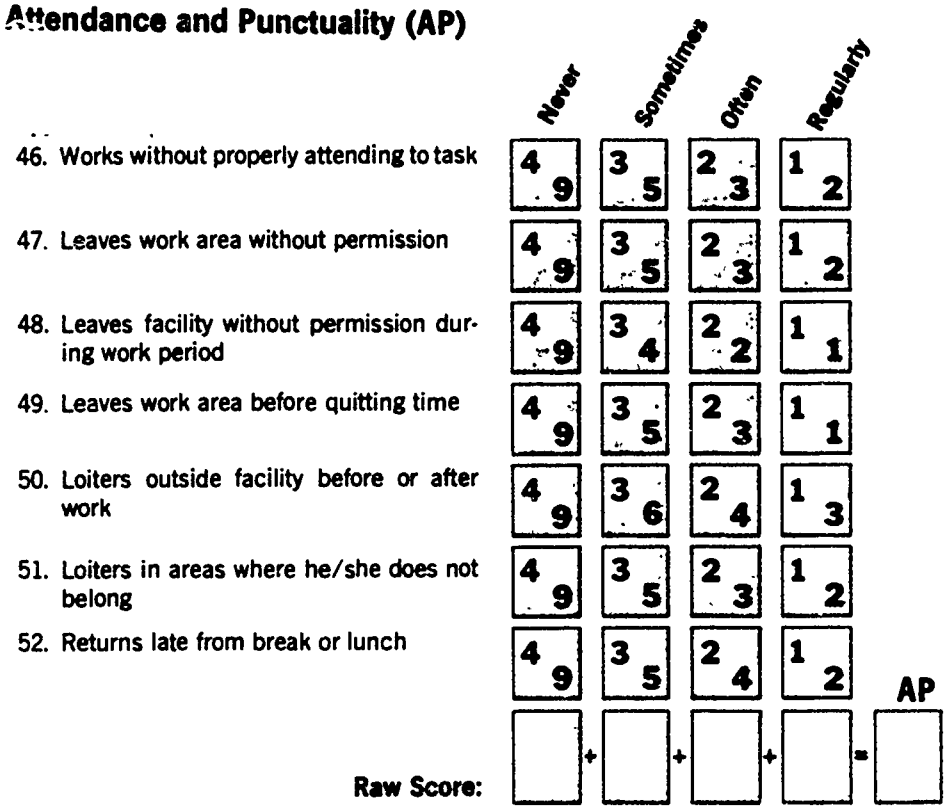
Verbal Manners (VM)

	Never	Sometimes	Often	Regularly
1. Calls others derogatory names	4 9	3 6	2 4	1 3
2. Uses profane, vulgar, or obscene language	4 9	3 6	2 4	1 3
3. Talks loud enough to distract other workers	4 9	3 6	2 5	1 3
4. Yells in halls or work area	4 9	3 6	2 5	1 3
5. Heckles other workers	4 9	3 6	2 4	1 3
6. Uses abusive language to others	4 9	3 6	2 4	1 3
7. Uses threatening language to others	4 9	3 5	2 3	1 2
8. Argues or fights verbally	4 9	3 6	2 4	1 2
9. Interrupts others speaking	4 9	3 6	2 5	1 4
10. Asks thoughtless or irrelevant questions	4 9	3 6	2 5	1 4
11. Acts verbally "bossy"	4 9	3 6	2 5	1 4
12. Complains excessively without reason	4 9	3 6	2 5	1 3
13. Talks rudely or impolitely	4 9	3 6	2 6	1 5
Raw Score:	+	+	+	= VM

Attendance and Punctuality (AP)

	Never	Sometimes	Often	Regularly
28. Loiters in halls	4 9	3 5	2 4	1 2
29. Runs away	4 9	3 5	2 2	1 1
30. After arriving, takes excessive time to reach work area	4 9	3 5	2 3	1 1
31. Hides from staff or other workers	4 9	3 4	2 2	1 1
32. Arrives late without acceptable excuse	4 9	3 5	2 3	1 1
33. Makes unnecessary or questionable trips to the restroom	4 9	3 5	2 3	1 2
34. Loiters in the restroom	4 9	3 5	2 3	1 1
35. Arrives late to work after stopping to talk with other workers or supervisor	4 9	3 5	2 3	1 2
36. Wanders around the building	4 9	3 5	2 3	1 1
37. Fails to give notice of absence	4 9	3 5	2 3	1 2
38. Continues to work when told to stop	4 9	3 6	2 4	1 3
39. Remains in inappropriate area during break	4 9	3 6	2 4	1 2
40. Cannot tell time (to 5 minute mark)	4 9	3 6	2 5	1 4
41. Arrives unprepared for work (e.g., improperly dressed, carriables not stored, etc.)	4 9	3 6	2 4	1 2
42. Fails to begin work when told	4 9	3 5	2 3	1 2
43. Is absent from job	4 9	3 5	2 3	1 1
44. Uses time clock incorrectly	4 9	3 5	2 4	1 3
45. Fails to tell supervisor reason for absence	4 9	3 5	2 3	1 2

Attendance and Punctuality (AP)



Interpersonal Behavior (IB)

	Never	Sometimes	Often	Regularly
53. Laughs inappropriately	4 9	3 6	2 6	1 4
54. Asks supervisor to intercede with other staff or workers on own behalf	4 9	3 6	2 4	1 3
55. Asks other staff or workers to intercede with supervisor on own behalf	4 9	3 6	2 4	1 3
56. Fails to accept subordinate role	4 9	3 5	2 4	1 2
57. Seeks help or supervision unnecessarily	4 9	3 6	2 4	1 3
58. Fails to report work problems	4 9	3 5	2 4	1 2
59. Stops work in supervisor's absence	4 9	3 5	2 3	1 2
60. Acts discourteously to staff and other workers	4 9	3 5	2 3	1 2
61. Acts uncooperative when receiving instructions	4 9	3 5	2 3	1 2
62. Stops work when praised	4 9	3 6	2 4	1 3
63 Fails to seek help or supervision when needed	4 9	3 5	2 4	1 2
64. Makes inappropriate sexual advances	4 9	3 6	2 3	1 2
65. Makes physical threats	4 9	3 3	2 2	1 1
66. Strikes or attempts to strike others	4 9	3 3	2 2	1 1
67. Throws things when angry	4 9	3 3	2 2	1 1
68. Fights physically	4 9	3 4	2 2	1 1
69. Engages in revengeful behavior	4 9	3 4	2 2	1 1
70. Chases other workers or staff	4 9	3 4	2 3	1 2
71. Pushes by or through groups of people	4 9	3 5	2 3	1 2
72. Distracts other workers during work periods	4 9	3 6	2 4	1 3
73. Pries into others' affairs	4 9	3 6	2 5	1 3
74. Mixes with others with friction	4 9	3 6	2 4	1 2
75. Fails to stand up for own rights	4 9	3 6	2 5	1 3

Interpersonal Behavior (IB)

	Never	Sometimes	Often	Regularly
76. Acts subservient	4 9	3 6	2 5	1 4
77. Accepts criticism inappropriately	4 9	3 6	2 6	1 4
78. Avoids mixed groups	4 9	3 6	2 6	1 5
79. Fails to control temper	4 9	3 5	2 4	1 2
80. Works poorly on a team	4 9	3 6	2 4	1 2
81. Fails to consider others' comfort and well-being	4 9	3 6	2 5	1 3
82. Is not accepted by peers in a short time	4 9	3 7	2 6	1 5
83. Fails to accept peers readily	4 9	3 6	2 6	1 4
84. Fails to keep hands off others	4 9	3 6	2 4	1 3
85. Forgets names of friends and associates	4 9	3 6	2 5	1 4
86. Attends to other workers engaging in distracting behavior	4 9	3 6	2 4	1 2
87. Joins in taunting or teasing of other workers	4 9	3 7	2 6	1 5
88. Maintains inappropriate interpersonal distance	4 9	3 6	2 4	1 3
89. Exhibits inappropriate sex-role behavior	4 9	3 5	2 4	1 3

Raw Score:		+		+		=	**IB**

Grooming and Personal Hygiene (GP)

	Never	Sometimes	Often	Regularly
119. Teeth are not brushed	4 9	3 7	2 6	1 4
120. Has halitosis	4 9	3 6	2 6	1 4
121. Has body odor	4 9	3 6	2 5	1 4
122. Hair is dirty	4 9	3 6	2 5	1 4
123. Is unshaven	4 9	3 6	2 5	1 4
124. Hair is uncombed	4 9	3 6	2 5	1 4
125. Body is dirty	4 9	3 6	2 4	1 3
126. Clothes are dirty	4 9	3 6	2 4	1 3
127. Clothes are torn	4 9	3 6	2 5	1 4
128. Clothes are rumpled	4 9	3 6	2 5	1 4
129. Dress is inappropriate	4 9	3 6	2 4	1 3
130. Fingernails or hands are dirty	4 9	3 6	2 5	1 3
131. Exhibits poor personal habits (e.g., picks nose or ears, scratches armpits, etc.)	4 9	3 5	2 4	1 3
132. Wears ill-fitting clothes	4 9	3 6	2 5	1 4
133. Fails to care for toilet needs	4 9	3 5	2 4	1 3

								GP
Raw Score:		+		+		+		=	

VOCATIONAL ADAPTATION RATING SCALES (VARS)

Self-Scoring Rating Booklet and Profile Form

Robert G. Malgady, Ph.D., Peter R. Barcher, Ph.D., John Davis, M.S., and George Towner, M.A.

Published by

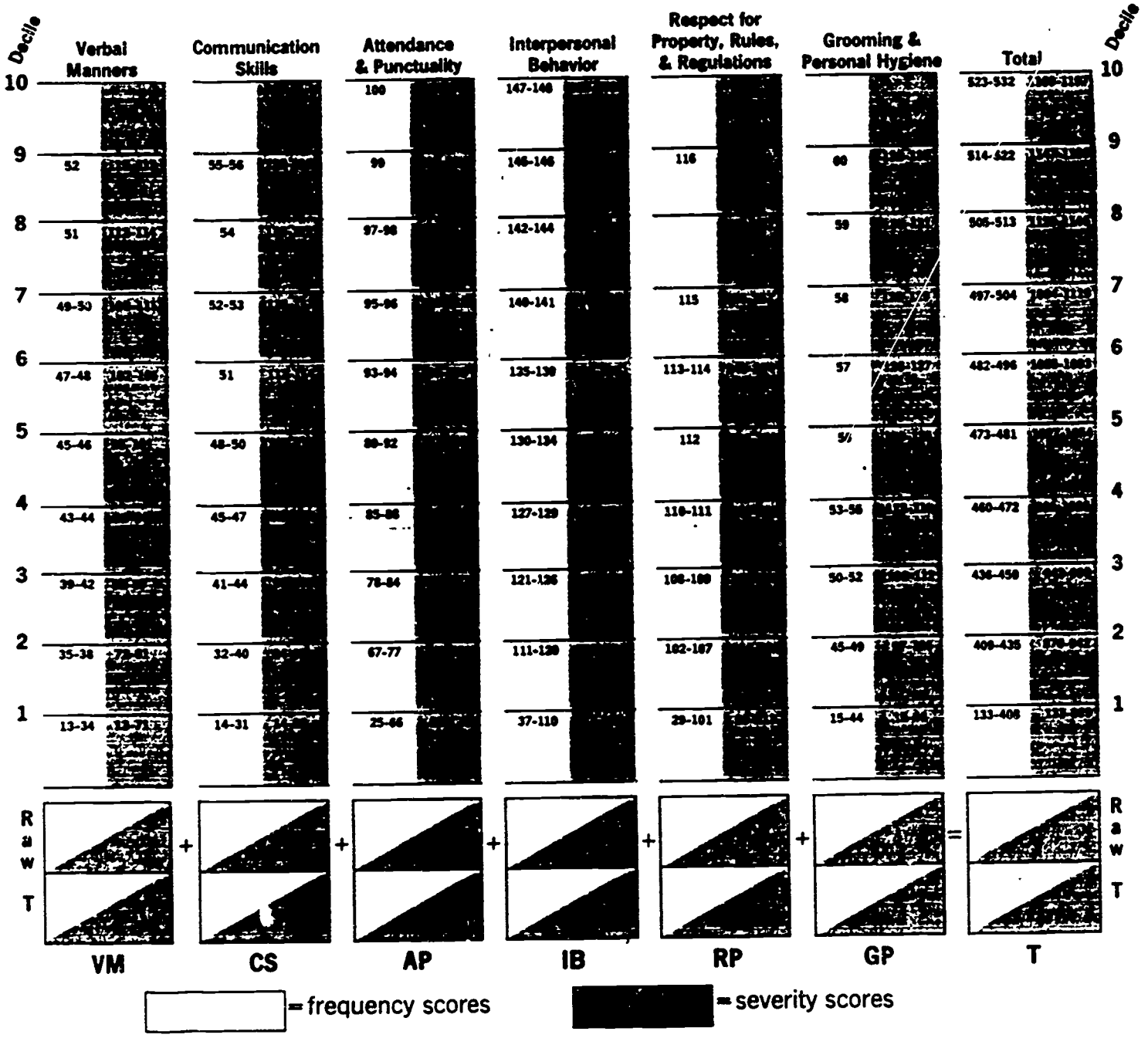
WPS WESTERN PSYCHOLOGICAL SERVICES
Publishers and Distributors
12031 Wilshire Boulevard
Los Angeles, California 90025

Name _____ Date: _____

Sex: M F Age: _____ Birthdate: _____ IQ: _____

Rater: _____ Observation Period: _____ to _____

Position: _____ Program: _____



3 4 5 6 7 8 9

Printed in U.S.A.

4A

APPENDIX E

TABLE E.1 - ANALYSIS OF COVARIANCE FOR SPIB-R SUBTESTS 4 AND 8

TABLE E.2 - ANALYSIS OF COVARIANCE FOR VARS SCALES 1, 3, 4, AND 6

Table E.1 - Analysis of Covariance for SPIB-R

Source	Sums of Square	df	Mean Square	F	Sig of F
Subtest 4, Posttest Scores--Job Related Behavior					
Covariate Pretest - Job Related Behavior	811.67	1	811.67	6.45	.01
Main Effect [E1, E2, C]	315.73	2	157.86	1.25	.29
Residual	25432.53	202	125.90		
Total	26559.93	205			
Subtest 8, Posttest Scores--Hygiene and Grooming					
Covariate Pretest - Hygiene and Grooming	644.34	1	644.34	8.10	.01
Main Effect [E1, E2, C]	165.49	2	82.75	1.04	.36
Residual	16060.27	202	79.51		
Total	16870.10	205			

Table E.2 - Analysis of Covariance for VARS

Source	Sums of Square	df	Mean Square	F	Sig of F
Scale 1, Posttest Scores--Verbal Manners					
Covariate					
Pretest - Verbal Manners	5303.28	1	5303.28	10.73	.00
Main Effect [E1, E2, C]	1883.32	2	941.66	1.91	.15
Residual	99816.16	202	494.14		
Total	107002.76	205			
Scale 3, Posttest Scores--Attendance and Punctuality					
Covariate					
Pretest - Attendance and Punctuality	3031.93	1	3031.93	1.53	.22
Main Effect [E1, E2, C]	11204.36	2	5602.18	2.82	.06
Residual	400955.01	202	1984.93		
Total	415191.30	205			
Scale 4, Posttest Scores--Interpersonal Behavior					
Covariate					
Pretest - Interpersonal Behavior	53207.77	1	53207.77	12.84	.00
Main Effect [E1, E2, C]	11612.79	2	5806.39	1.40	.25
Residual	836852.74	202	4142.84		
Total	901673.30	205			
Scale 6, Posttest Scores--Grooming and Personal Hygiene					
Covariate					
Pretest - Grooming and Personal Hygiene	4459.56	1	4459.56	6.03	.02
Main Effect [E1, E2, C]	3215.94	2	1607.97	2.17	.12
Residual	149491.74	202	740.06		
Total	157167.25	205			