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Improved communication skills through customized training programs: An applied study of organizational development

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**IMPROVED COMMUNICATION SKILLS
THROUGH CUSTOMIZED TRAINING PROGRAMS:
AN APPLIED STUDY OF
ORGANIZATIONAL DEVELOPMENT**

by

Angela Autumn Betke

**A thesis submitted in partial fulfillment
of the requirements for the degree of**

Master of Arts

in

Communication Studies

**Greenspun School of Communication
University of Nevada, Las Vegas
May 1997**

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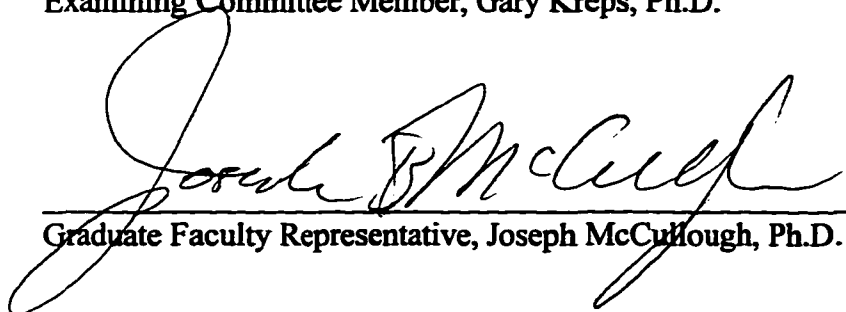
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ABSTRACT

As developmental training programs grow in organization life, customized training programs including observation, collaboration with management, data gathering, research of materials to be used, and evaluation become necessary. Using these, and other methods of research, consultants are able to develop programs which focus directly on the specific needs of an independent organization and its employees.

This research evaluated internal organizational communication problems “by facilitating discovery and examination of the underlying symbolic structures, constraints, and opportunities of organizational life” (Kreps, 1983; Schein, 1987; 1969). The data gathered was “generated by organizational communication research to provide insight into organizational phenomena and redirect their activities to better accomplish individual and organizational goals” (Kreps, 1989).

This organizational development program was developed to improve organizational communication among employees in a local company. Information gathered from basic skills assessments in the areas of English (reading comprehension and vocabulary) and mathematics, along with the readability level of company literature, were used to enhance employee development through a customized training program.

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CHAPTER 1

INTRODUCTION

Background

For as long as there have been businesses, there has been a lack of communication, at least to some degree, between employees and managers. In the past, and often still today, much communication in the corporate world has been one way from management downward to the company's employees.

However, in the last several decades, the competitive business world has caused management to look at the role training plays in remaining successful, and in some cases, operational. With the right kind of training comes increased knowledge which can, at least to some degree, reduce the ongoing communication problem between management and employees in the workplace. This study focuses on employee communication skills which may include several or all of the following: clear written communication, clear verbal communication, public speaking skills, increased vocabulary understanding, increased reading comprehension, problem solving skills, team building, listening skills, giving feedback, conflict resolution, and defusing. Communication problems also arise when there is a lack of basic skills. Therefore, this study will examine the most basic skills needed in all areas of organizational life: reading, writing, and mathematics.

This applied study was done to show improvement in employee communication skills based on a customized training program developed for a group of employees working in a manufacturing company. An applied study was administered to show the individual communication problems of a specific organization and how, through customized training, consultants and practitioners are able to design programs based on the individual needs of an organization.

Because of the long history of declining labor performance in this country “pervasive foreign encroachment on markets that have historically been U.S. dominated [has] led some workplace analysts to conclude that inadequacies in education have caused a decline in the quality of the U.S. work force” (Bishop, 1989). Studies such as this one have caused growing concern in the workplace where training is concerned. “Concerns over the competitiveness of U.S. labor in the globalized economy, the weak performance of labor productivity since 1973, and the widening gap between the earnings of high school graduates and college educated workers are among the reasons cited to support increases in training provided the U.S. work force” (Frazis, Herz, & Horrigan, 1995).

As world competition continues to grow, management has been forced to realize the connection between education and productivity/profits. In fact, employer-provided training in the U.S. has become so great that today it is known as the country’s ‘shadow educational system’ (1995 industry report). In 1995, employee training increased by 5 percent in this country from the previous year and continues to grow at a steady rate,

making it clear that employer-provided training is not only beneficial in the workplace, but essential.

Although training itself is on the rise, the question is whether or not the most useful training available is being provided. In 1993, the most common reason given by businesses for offering some kind of training was “training was necessary to provide skills specific to their organization (75%),” (Frazis, Herz, & Horrigan, 1995) causing employees to once again retrain for job-specific skills without first having a background in basic skills such as reading, writing, and mathematics. This system of training “does not provide the content needed for long-term skill enhancement found in other countries and gives low-skill U.S. workers an impediment” (Lynch, 1995). Management in this country must realize that without basic skills, employees are not necessarily going to be able to achieve competency in other workplace skills.

Studies indicate that, at least in manufacturing firms, those businesses that do have an employer-provided workplace education program believe that the basic skills of their employees are important and are more likely to promote from within. In addition, employers who provide workplace education programs are believed to be more forward looking in their thinking. These organizations also “report noticeable improvements in their workers’ abilities and the quality of their products” (Bassi, 1995).

As good as it is to know that many companies have come to realize the importance of basic skills and have implemented some type of training/education program to enhance employee skill level, many clearly have not. According to a 1996 study done by Olsten Corp., a staffing firm located in Melville, N.Y., “basic skills are

lacking in more than a quarter of all new hires and in almost four of 10 current employees" (*Training gap*, 1996). A separate study conducted in 1994 by the U.S. Department of Education concluded that approximately 90 million adults in this country are "functionally illiterate" (Chandersekaran, 1994).

CHAPTER 2

REVIEW OF LITERATURE

Employee Skill Level

No previous research was found in the area of customized training as it relates to basic skill enhancement to build communication in the workplace. Perhaps studies such as this go unpublished because very few organizations report using assessments to measure improvement. Or perhaps organizations who become involved in training programs which use assessments to show measurable improvement generally do not wish to have the skill levels of their employees published. Despite the positive results of this study, the organization involved has insisted on remaining anonymous. Another reason studies of this nature go unreported may be due to managements haste to train employees in work-specific areas, causing the benefits of training employees in basic skills such as English and mathematics to be overlooked.

While educators continue to focus on the development of basic skills, it is not enough. It is up to management in this country, in all areas of business, to realize that the overall quality of education in this country has continuously dropped at such a drastic rate that "a significant number of high school graduates need remedial work in grammar, mathematics, and basic problem-solving skills, before they are ready to take a job or college courses" (Chandersekaran, 1994). It is not only high school graduates who are

entering the work force that employers need to be concerned with. Many college students have been found to be lacking in these areas as well. The fact that “of approximately 13 million college students in 1989, more than 2 million were enrolled in remedial courses in reading, writing, or math,”(Chandersekaran, 1994) should indicate to employers of all types of industry the importance of continued development in the area of training programs which have proven to be beneficial to employee skill level, and thus beneficial to employers.

As organizational training becomes a necessity in many companies, it is important to consider what kind of training is best for each company and why. One important aspect that affects every business is “the effect of lower educational standards and the absence of a trained work force” (Mitroff, Mason, & Pearson, 1994). That effect is readily apparent “if employees cannot read, or the level of reading skills continues to drop precipitously” (Mitroff, Mason, & Pearson, 1994). It is important for each business to consider all of the alternatives available to them as an individual organization so that they may decide on the best, most efficient way to correct the problem.

While surveys reveal the 1995 budget for formal training was \$59.8 billion, it dropped to \$52.2 billion in 1996 (1995 industry report). This can only mean two things: Either U.S. organizations have decided to reduce training at a time when it is so obviously needed, or some U.S. organizations have found a way to make training more cost effective, thus lowering the overall training budget for employer provided training programs. Customized training is a perfect example of how “one system might be more

expensive to install than another but then prove cheaper to run, so that overall it would be the better bargain”(Davies, Hudson, Dodd, & Hartley, 1973).

Training: Past and Present

In the past, managers and consultants have been trained to concentrate on generalized training programs which intend to fix a variety of organizational problems with the same or similar solutions. This type of management education trains managers and consultants “to solve problems that are predicated on a simple, orderly, stable view of the world, and such problems, unlike those of the real world, generally have only one correct solution” (Kilmann, Saxion, Serpa & Assoc., 1985).

Other researchers believe that they have discovered the most efficient training strategy and that continual practice of this singular strategy will improve results. However, all organizations operate differently, and therefore, have different needs. Adopting a single strategy for all organizations because it has been successful in past instances may cause some researchers to adopt a “strategy which he has invariably found successful” (Annette, Duncan, Stammers, & Gray, 1971).

When programs of this type are implemented in a variety of organizations to improve a variety of problems, it is assumed “that all problems have but a single correct answer. This is generally not true in the real world” (Kilmann, Saxion, Serpa & Assoc., 1985). The result of continued belief in this line of thinking is a lack of useful programs which leaves students and practitioners of management “unprepared to face the kinds of challenges that the unthinkable presents. They are prepared neither intellectually nor

emotionally to face the immense challenges that the unthinkable poses” (Kilmann, Saxion, Serpa & Assoc., 1985).

In order to prepare researchers to accurately “identify and treat the dysfunctional processes at work,” (Mitroff, Mason & Pearson, 1994) researchers must first discover the specific problems of each individual organization and then develop and implement a customized training program suited to its needs. Ideally, the development and implementation of this type of program is “a process of information gathering to diagnose changing requirements of the organization and the people in it and to develop creative responses to the needs as they are discovered” (Brown & Wedel, 1974). Because of the continual process of change required to develop new and creative responses to group needs throughout the training process, it is impossible to measure every aspect of a customized training program. However, it is quite obvious that through measurable assessment consultants are able to analyze the basic skill (reading, writing, and mathematics) level of most employees in order to understand what method of training is best for improving those skills that may be causing a weakness in other areas. “The point is that tests which are criterion-referenced relate specifically to course objectives, and failure in them indicates clearly where instruction must be improved if objectives are to be realized” (Davies, Hudson, Dodd, & Hartley, 1973). A large part of the training problem may be due to the lack of training in basic skills. For example, a recent study indicates that in 1995 “less than 3 percent of all establishments offered formal training in basic reading, writing, arithmetic, and English language skills” (Frazis, Herz, & Horrigan, 1995). Perhaps even more disturbing was the lack of measurable assessment. The same

study revealed that “only 30 percent of establishments reported using specific measures such as fewer mistakes as [a] method of judging success and about 12 percent of establishments reported using written tests” (Frazis, Herz, & Horrigan, 1995).

When researchers begin to evaluate employees, there are two areas of concentration they focus on within an organization so that they may accurately identify these processes: information and knowledge. There is no denying that the lifeblood of every organization is accurate information and knowledge. It is the combination of these two items which is “required to produce quality products that can compete worldwide” (Mitroff, Mason & Pearson, 1994). Today’s corporations, who repeatedly “spend as much on training and educational programs as society does on all of its four-year and graduate education combined,” (Eurich & Boyer, 1985) know that in order to be competitive worldwide, they must provide their employees with educational programs.

Information, defined as the “communication or reception of knowledge or intelligence,” (Merriam-Webster, 1995) is an essential element in successfully operating any business. Managers/owners are expected to provide necessary information to employees so that they may do their jobs in an effective manner, and “theoretically, firms that adopt new practices must, by definition, train their workers in the skills required to carry out those practices. There is evidence, however, that many firms employ a number of these practices without formally providing their workers with additional skills” (Lawler, 1992). The second factor, knowledge, has also been continually overlooked. While there is still a sufficient amount of concern regarding whether employees are receiving wrong information, “the concern is not just that people get wrong or biased

information (the propagation of false consciousness), but that they lack the resources to assess what they have” (Deetz, 1992). Included in these resources is knowledge. In other words, it is not enough to allow employees access to necessary information. They require “access to the entire range of skills required to decode, encode, interpret, reflect upon, appraise, contextualize, integrate, and arrive at decisions respecting that information” (Simonds, 1989).

Sometimes researchers find that employees simply do not understand the information being presented to them. The point then, according to Deetz, is not to “produce a new theory of domination as knowledge, but producing ways of seeing and thinking and contexts for action in which groups can express themselves and act,” (Deetz, 1992) so that they may begin to gain knowledge through learning experiences which they are able to comprehend and convey.

Knowledge, which will be used interchangeably with understanding and comprehension, is defined as “understanding gained by actual experience or something learned and kept in the mind” (Merriam-Webster, 1995). Often, a lack of comprehension skills can cause communication difficulties within an organization. Both organizations and their members will surely benefit from improved communication skills once they are made aware that in order for organizations to be effective, each member must “be competent to use and coordinate internal and external organizational communication. Yet because many organization members do not appreciate the importance of communication in organizational life and have not developed competent communication strategies and

skills, there are many communication deficiencies in modern organizational practice” (Monge & Capella, 1980).

Because of this lack of knowledge, on the part of the employee, the importance of organization development as an applied area of study “in which data are gathered and theory is built around developing strategies for directing organization innovation,” (Kreps, 1990) has become increasingly evident.

The need for employees to be able to express themselves and act as individuals, or as individual groups, explains the necessity of customized training programs based on applied research. If researchers do not know the particular problems the organization is encountering, then how are they to correct them? As Brown and Wedel point out, “The particular approach must be taken in view of the unique characteristics of any given organization” (Brown & Wedel, 1974).

It is beneficial for researchers to learn as much about an organization and its employees as they possibly can enabling them to provide training in the areas needed, and so that they can alter that training to be most effective for the individuals within the organization. Otherwise, they are merely discoursing to a group of employees on the present situation which may have “little or nothing to do with their own preoccupations, doubts, hopes, and fears” (Deetz, 1992). Consultants cannot simply apply a single program to every organization. In doing so, they present only “our own view of the world” (Deetz, 1992). It is the job of every consultant to discuss with the employees, of any individual organization, his/her view along with those of the employees so that together they may come to some consensus which is understood by all.

Customized Training

Customized training through applied study has also made it possible for consultants to base their training on their perception of the problems within a particular organization. An outside consultant is unbiased and, through applied research, most likely to have the most accurate perception of the problem.

Without studying an organization before beginning a training program, instructors often find themselves training employees based on what management feels to be the area of concern. However, it is clear that most employees have work interests that are only partially and indirectly related to those of management and owners.

These interests include the quality of the work experience and work environment, mental health and safety, the skill and intellectual development of the worker, the carryover of thinking patterns and modes of action to social and political life, and the production of personal and social identity. Organizational life could be a site of political struggle as different groups try to realize their own interests, but the conflicts there are often routinized, thereby evoking standard mechanisms for resolution and reproducing presumed natural tensions (i.e., between workers and management) (Deetz, 1992).

Because neither managers nor employees are always in a position to “analyze their own interests, owing to the lack of adequate undistorted information or insight into fundamental process,” (Deetz, 1992) an independent consultant, who observes an organization, is clearly the best choice for an unbiased opinion of what communication problems exist in an organization and how they might best be solved. “In effect, no single stakeholder has the definite formulation of a problem” (Mitroff & Kilmann, 1984).

Education, when initiated by an internal member of the company, “can produce and reproduce the schemes of perception, thought, appreciation, and action preferred by the groups on whose behalf it is carried out,” (Deetz, 1992) namely management or owners. This type of educational training can cause more harm than good. If employees feel they have been forced into a training program which was developed by management, they often feel as though the training has an ulterior motive.

Some employees may begin to feel that management is trying to prove how low the skills of some employees are in order to justify letting them go after the training period. This type of situation creates resentment and fear of job loss in many employees which often results in an employees’ refusal to participate in classroom training. Because of this resentment and fear, employees do not increase their skills, and management, in turn, wastes what often amounts to be a significant amount of company funds.

Providing employees with an external source for training allows employees to gain some control over deciding where their limitations are, and what they feel is important in building their own skills. Generally, having this control to make one’s own decisions “increases the motivation to take up participatory opportunities in other settings” (Deetz, 1992). Researchers have found this to be true in education as well.

However, empowering employees to make their own decisions when possible does not mean that management participation is not extremely important and often essential. *The new face of training*, a recent article in *Training & Development* magazine, clearly states that “it’s important to have a powerful, high level person in the organization lead the project” (Keith & Payton, 1995). It is senior management

involvement, according to *Quality Training: What Top Companies Have Learned*, which “elevates the status of the training process” (The Conference Board, 1991). Collaborating with management allows management to continually process “information from which they pick up clues as to how well the organizational mission has been stated, how it is being carried out, and finally, how to improve or become more effective in reaching goals and objectives” (Brown & Wedel, 1974). At the same time, management participation allows researchers to exchange ideas with management and make suggestions about implementing relevant training programs based on data gathered through a variety of research methods. When researchers are able to work with members of management as well as the employees participating in the training program in order to continuously improve such a program, “each picks up an aspect of the problem that the others may neglect. Coping with corporate tragedies thus consists of learning how to seek out radically different perceptions of the important issues in the first place and in learning how to integrate them productively in the second place” (Mitroff & Kilmann, 1984). “Members of the Conference Board’s U.S. Quality Council start with corporate strategy and build their training programs by assessing needs through a simultaneous ‘top-down and bottom-up’ process” (The Conference Board, 1991). It is through this process that consultants are able to “identify training needs at every level of the organization to be supported by quality training” (The Conference Board, 1991).

Data Gathering

Observing the physical plant is one such method that can be used to gather valuable information. Through the observation of the physical plant, consultants are able to get a feel for the work environment of different employees and the atmospheres that surround those environments.

Observing the actual employees of an organization is another invaluable method of gathering data in order to determine appropriate training. After all, effective training is built not only by observing the work of an organization, but “of the capacities and potential of the people available to do it” (Annette, Duncan, Stammers, & Gray, 1971). Employees, especially when observed in their natural environment, have a tendency to unknowingly provide consultants with a variety of information. Such information may include how employees interact with one another, how well they work as a team, who the leaders are, which employees have strong/opinionated personalities, and what employees fear most about training programs in relation to their jobs.

• The company literature is yet another way in which researchers and/or consultants are able to determine possible paths to developing a training program that will be beneficial to both management and employees. If employees are unable to clearly determine the meaning of written communications within the organization, they are also likely to have verbal communication deficiencies. “The spoken word and the written word perform important and complementary functions in organizational life” (Kreps, 1986).

Data gathering is, ideally, a continuous process in which consultants are able to continually learn through added and/or altered information. When a consultant develops a customized training program based on a variety of data gathering methods, it should be understood that, as time passes and things within the organization change, the consultant will make an effort to continually shape and alter the training program so that it provides the most valuable skills and tools for the employees in that program. This process itself is what makes the training program customized.

This research is concerned with the advantages of customized training programs developed through applied study versus generalized training programs to enhance employee communication skills through basic skills training, as well as employee perception of training as a communication builder and intends to prove the following:

R1: Customized training programs, developed through applied study, are more beneficial to employees than generalized training programs.

R2: Employees generally do not feel that training is essential in building communication skills in the work place.

CHAPTER 3

METHOD

Employee Training

This thesis is an applied study that uses a case study approach to assess communication problems in a local manufacturing company so that those communication skills that are deficient may be improved upon through a customized training program based on basic skill enhancement and developed in response to observation of this specific company and research in the area of organizational communication training. Gerald R. Adams and Jay D. Schvaneveldt (1991) define the case study approach as “an in-depth study of one or a limited number of cases in which each case is treated as a whole. The case study approach is particularly helpful when deeper understanding is needed and when there is little concern about generalizing to a large population” (Adams & Schvaneveldt, 1991).

While employed as an independent consultant for the continuing education department of the Community College of Southern Nevada, an opportunity arose to observe a local manufacturing company and develop a customized training program to fit its needs. After several months, a training program was designed based on observation, research, employee skill level, and management concerns in order to improve communication skills through organizational development.

The training for this organization consisted of programs concentrating on improving employee skills enabling them to communicate more effectively with members of management and, more importantly, with each other. This training included English, math, public speaking, and team building.

Employees were pre-tested in English (vocabulary and reading comprehension) and math skills (basic arithmetic) in order to determine their skill level. They were not tested for public speaking skills or team building skills. Public speaking was included in the program because of the overall fear of employees to engage in public speaking and the growing necessity of public speaking in their jobs.

Although no pre-testing was done on team building skills, they were included as another major part of this customized training package. This need was determined by observation of employee interaction and by the unmistakable "cry for help" that came from employee supervisors. Team building training was conducted through the use of the Myers-Briggs Type Indicator (MBTI).

- In order to effectively assess the problems of this company, I spent several months collaborating with management, observing the physical plant, the employees, and the company literature. This process enabled me to gain an inside understanding of the company and its employees. An additional 60 hours was also spent researching different training programs in order to determine which programs would be most useful to this organization.

While there is much to be learned through data gathering before the training program begins, it is also important for customized training consultants to continually

gather data throughout the training process. The benefits of gathering data during training programs are an invaluable way in which consultants are able to simultaneously implement a well thought out program and, at the same time, learn from observing 'real' interaction and responses of employees while they are going through the training process. For example, once the program was developed and the subject matters determined, training times were determined, a schedule was made, and training classes began. However, when the third group of employees entered the training program, they seemed to be having a somewhat more difficult time with certain parts of the program and its materials than the first two groups. The most obvious and consistent difficulty was in the subject of mathematics. Because of this, I altered the class materials for the first week in mathematics and along with it, my teaching style. One example is the multiplication chart which was brought in to help this particular group relearn their multiplication and at the same time, reduce their anxiety about their lack of basic mathematic skills.

Previous to this particular group, the multiplication chart was not used, but based on the positive responses provided by the class, all of the employees in the following groups were provided with the multiplication chart. While those who knew their multiplication tables did not need the multiplication chart, those who did not were grateful to have it. This one chart, which previously seemed unnecessary, proved beneficial in at least two ways: 1) It made learning multiplication and division easier because employees were able to see in their minds how the process worked through the use of a visual aid (the multiplication chart) and 2) It reduced the stress caused by their fears. They feared that they would not be able to figure multiplication problems up to

twelve, and they feared that their fellow employees would ridicule them for not knowing their times tables to begin with. This second fear alone was able to motivate nearly all of the students in the program to take the chart home and practice their multiplication tables during their free time.

Multiplication Chart

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

Over 160 hours were spent training each group of employees in this company. There were six groups of approximately 15 employees for a total of 88 employees. Total time spent on classroom training at this organization was 960 hours. Of those 160 training hours per group, 92 included English, math, and public speaking skills. An additional 48 hours of training consisted of team-building through the use of the Myers-Briggs Type Indicator (MBTI). "The MBTI is a tool that helps people in organizations understand themselves and others, appreciate individual strengths and differences, clarify team decision making and communication styles, and encourage conflict resolution" (Amadei & Wade, 1996). The remaining 20 hours of training consisted of five four-hour classes in Leadership, Decision Making, Stress Management, Conflict Resolution, and Creative Thinking.

Training in the area of English consisted of grammar, spelling, vocabulary skills, reading comprehension, and writing skills and was developed based on employees' scores of the Advanced Placement Indicator which was used to measure their vocabulary and reading comprehension. Employee training in English skills consisted of: how to use a dictionary, how to use a thesaurus; how to use punctuation properly including commas, semicolons, apostrophes, dashes, parenthesis, and capital letters; how to improve their vocabulary through the use of antonyms and synonyms; and the meanings and spellings of homonyms. Other training in English skills included the use of reading comprehension workbooks, different formats for making business writing simple for both the writer and the reader, and overall writing skills through the use of a daily journal and/or writing assignments.

The reading comprehension workbooks, *Single Skills: A Concentration and Comprehension Series* were developed by Walter Pauk, Ph.d., in 1985 at which time he was the Director of the Reading Research Center at Cornell University. The *Single Skills Series* consists of six workbooks: subject matter, main ideas, supporting details, conclusions, clarifying devices, and vocabulary which were designed to increase concentration and reading comprehension. "In addition to teaching these all-important components, the *Single Skills Series* does one more essential thing: It teaches concentration" (Pauk, 1985). One particular advantage of using the *Single Skills Series* in organizational training is that all six workbooks are available in a number of grade levels, yet they all look the same. Therefore, it is possible to have one student working on a 12th grade level workbook while another student in the same class is working on a 8th grade level workbook, and nobody except the instructor can tell the difference.

The three formats for business writing were the Good News Format, the Bad News Format, and the Aim Format. Sample topics for writing a business letter using the Good News Format were: 1) Your order is ready, 2) Your refund is enclosed, 3) Your application for membership has been accepted, 4) Your policy has been renewed, and 5) I would like to place an order. Sample topics for writing a business letter using the Bad News Format were: 1) Your order has been delayed, 2) I am unable to process your refund, 3) Your application for membership has been denied, 4) Your policy has been canceled, and 5) I will no longer be needed your product/services. Sample topics for writing a business letter using the Aim Format were: 1) I am interested in a joint business venture, 2) Request for reimbursement for company related expenses, 3) Request for

company to absorb the charges of an upcoming out of town seminar that is work related, and 4) Applying for a new job. Using these three simple formats for business writing enabled the employees in this training program to develop better writing skills in a short period of time. These formats were used to help employees write business letters that pertain to work related subjects as well as personal business letters that employees needed to write outside the work place.

Mathematics training consisted of basic math skills (including word problems) of decimals, fractions, percentages, and basic algebra based on employees' scores of the Brigance Math Comprehension Grade Placement assessment. This assessment tool was used to measure basic mathematics skills such as addition, subtraction, multiplication, and division of whole numbers, decimals, and fractions. The metric system was also included in the mathematics portion of the training based on the need and desire of the majority of employees to learn the metric system which they use everyday in their work. It is precisely through this type of combined interests of the employees, members of management, and consultant that "training curricula and courses help employees and managers link corporate priorities first to quality concepts and techniques and then to job-related tasks, problems and work processes" (The Conference Board, 1991).

After many hours of observation and research, it became clear that most employees had a fear of public speaking. In fact, nearly all of the employees at this particular company included public speaking as one of their worst subjects. Because of this fear, public speaking skills were incorporated into the customized training program. Training of public speaking skills included written organizational development of

presentations as well as verbal and nonverbal presentation skills. Employees learned the uses of different methods for delivering speeches including: impromptu, outline, and manuscript in addition to a variety of formats for intended speaking purposes including: introductory, informative, descriptive, and persuasive.

Adult Placement Indicator

The Adult Placement Indicator (API) was used to place employees at a general reading grade level in a fairly short period of time. The API was designed for adult education and measures reading ability which serves as a placement tool for training programs. "The API consists of a vocabulary and comprehension section with a total of 100 questions" (Copeman & Ribarchik, 1995) which start out easy and increase in difficulty throughout. It is a 20 minute timed test in which employees silently answer questions that estimate their ability to make correct responses, thereby demonstrating understanding, in the areas of vocabulary and reading comprehension. "To obtain a student's total score, the vocabulary and comprehension scores are totaled and the grade equivalency level is derived from the grade placement chart" (Copeman & Ribarchik, 1995). The API does not provide information about speed versus accuracy. For example, an employee may have answered 38 items and gotten them all correct, or an employee may have answered 50 items but only answered 38 of the 50 correctly. In both cases, the score is 38 correct out of 50 possible.

The API is a criterion-referenced tool containing material that has been graded for difficulty. Prior to field testing, professional readers from different parts of the country

evaluated the API's format and general content. There are factual and historical items as well as articles on minorities (African-Americans, Native Americans, women). Interest and readability were also used as criteria for the selections (Copeman & Ribarchik, 1995).

Brigance Computational Skills Grade Placement

The Brigance Computational Skills Grade Placement (Brigance) was used to quickly identify basic arithmetic competencies of employees. It was designed to measure computational and comprehension skills in addition, subtraction, multiplication, and division. The style of the assessment was simple enough that the results were easily explained to employees, and were useful in identifying the present skill level of individual employees. The Brigance has been field tested and critiqued by over one hundred people in fifty-five programs throughout the United States as well as two in Canada.

Self-Report

In addition to the assessments used to measure employee improvement, this study also looked at employee perceptions of the importance of training, the communication environment at work and employee job satisfaction through the use of a twelve statement survey using a simple Likert scale for participant responses. Participants for this portion of the study consisted of employees of a local manufacturing firm who had previously been involved in and completed a customized training program to improve employee

communication skills. Now that the training is over, employees who wished to see the difference between their pre-test scores and post-test scores were scheduled for an appointment. At that time, each employee was asked to participate in the employee perception study by filling out a survey. The Likert scale survey, which asks participants to circle a number (1 through 5) to determine employee opinions about each statement, consisted of 12 statements about how employees feel about the communication environment at work, the value of training, and their job satisfaction. Options available to participants were as follows: 1)Strongly disagree, 2)Disagree, 3)Undecided, 4)Agree, and 5)Strongly Agree. Before the survey was distributed to employees, the researcher explained the purpose of the study to the participants and informed them that their participation was voluntary and their contribution confidential. A copy of the informed consent form, along with a copy of the survey were turned in and approved by the Human Subjects Office. A copy of the survey, the informed consent form, a description of the study and its subjects, as required by the Human Subjects Office, and the results of the survey are included at the end of this study.

Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator (MBTI), which was implemented in the team building training, indicates “that people tend to have differential preferences for certain modes of coping and developing, which they have to exercise in order to do well and feel well in their work and life situation” (Nordvik, 1996). Developed in the 1940s, the MBTI is used to assess personality traits and is “based on the ideas of Swiss psychologist Carl Jung”

(Moad, 1995). One area in particular “where it can be most effective is team-building. MBTI can be applied to identify the personality types of potential members and to mix individuals with personality types that are needed for a successful team effort” (Hildebrand, 1995). It is a superior program that has been used successfully in organizational development programs for major businesses for a number of years. Even researcher who prefer other assessment agree that “it appears to be a reasonably valid instrument which is potentially useful for a variety of purposes” (Carlyn, 1977). Another area in which the MBTI may be used is “to ferret out anxiety, competitive attitudes and emotions that are usually suppressed by team members” (Hildebrand, 1995). While in 1995 “about 2.5 million people per year [took] the most well-known test, the MBTI, a 1996 article found in Journal of Management estimated that “over three million people a year . . . complete the Myers-Briggs Type Indicator,” (Gardner & Martinko, 1996) indicating that its use continues to grow.

CHAPTER 4

RESULTS

In this applied study, collaboration with upper management in the organization allowed for a straightforward way of determining whether a customized training program would be more beneficial to employees than a standardized program. Based on past training, management was able to estimate the cost of previous employer-provided training as well as employee improvement from that training. From this information, members of management were able to anticipate outcomes from further training. They anticipated that, based on the length, cost, and employee improvement of previous training, and the length and cost of this customized training program, this program would be able to increase employees basic skills by approximately one grade level overall.

A comparative study was done on the English and mathematics portions of the training program in order to show measurable improvement. Some improvement was, of course, expected. Management anticipated an average increase of approximately one grade level for the entire population involved in the training program. However, in this case, the scores for both English and mathematics skills had improved by an average of approximately two grade levels by the end of the training program. Employees' post-test scores in reading comprehension were significantly higher than their pre-test scores: mean pre-test scores = 9.10, mean post-test scores = 11.15, $t = 11.08$, 34 df, $p < .001$, and

employees' post-test scores in vocabulary were significantly higher than their pre-test scores: mean pre-test scores = 9.5, mean post-test scores = 11.6, $t = 8.92$, $df = 34$, $p < .001$. Employees' post-test scores in mathematics were also significantly higher than their pre-test scores: mean pre-test scores = 5.8, mean post-test scores = 7.4, $t = 7.3$, $df = 34$, $p < .001$.

A comparative study was not done on the public speaking portion of the training because it would be impractical to test all the employees on their public speaking skills. However, after the training, nearly all of the employees involved said that: 1) they felt their public speaking skills had improved, 2) they felt the public speaking skills of the others involved in the training had improved, and 3) they felt more confident in their ability to give presentations.

Several of the 88 employees who participated in this customized training package were not employed by the company at the time of the initial assessment; therefore, those employees were not included in the overall improvement scores. Measurable assessments were only possible for those employees who were employed by the company at the time of the initial assessment, were present the day the initial assessment was given, completed the four week training program, and participated in the final assessment which took place the final day of the training program. Of the 88 employees involved in the training, 54 employees met all of these requirements. The results of this study are based on the measurable assessments in the areas of vocabulary, reading comprehension, and mathematics of those 54 employees.

While the number of variable items and cases are less than ideal for such data

reduction, a Factor Analysis was computed. Using the Varimax method, four factors were elicited. Factor I, "Communication and Job Satisfaction" has an Eigenvalue of 4.11 with 34.2% of the variance; Factor II, "Quality of Life and Self Improvement" has an Eigenvalue of 1.99 with 16.6% of the variance; Factor III, "Building Communication and Job Performance" has an Eigenvalue of 1.39 with 11.6% of the variance; and Factor IV, "Respect and Teamwork" has an Eigenvalue of 1.13 with 9.4% of the variance.

The instrument, which is composed of twelve items, consists of four separate sub scales. These sub scales were created through the use of Varimax Factor Analysis, and the following factors were created:

<p>(Communication Improvement)</p> <p>Statement Verbal communication with the manager by association</p> <p>Statement Written communication with the manager by association</p> <p>Statement I like my supervisor</p>	<p>II</p> <p>Communication Improvement</p> <p>Communication with the supervisor</p> <p>Communication with the supervisor</p> <p>Communication provides improvement</p> <p>$r = .77$</p>
<p>(Building Teamwork)</p> <p>Statement Training and communication</p> <p>Statement My job is to help others</p> <p>Statement My job is to help others</p> <p>Statement My job is to help others</p>	<p>IV</p> <p>Teamwork</p> <p>Teamwork with the supervisor</p> <p>Teamwork with respect to me.</p> <p>Teamwork as a team</p> <p>$r = .52$</p>

**VARIMAX FACTOR ANALYSIS
CHART I**

<p style="text-align: center;">FACTOR I (Communication & Job Satisfaction)</p> <p>Statement #1: Verbal communications from management are Clearly understood by associates.</p> <p>Statement #2: Written communications from management are Clearly understood by associates.</p> <p>Statement #12: I like my job.</p> <p style="text-align: right;">Reliability = .72</p>	<p style="text-align: center;">FACTOR II (Quality of Life & Self Improvement)</p> <p>Statement #3: My employer is concerned with the quality of life of their employees at Work.</p> <p>Statement #4: My employer is concerned with the quality of life of their employees at Home.</p> <p>Statement #11: Working for this organization provides me with opportunities to improve myself.</p> <p style="text-align: right;">Reliability = .77</p>
<p style="text-align: center;">FACTOR III (Building Comm. & Job Performance)</p> <p>Statement #8: Training is essential in building communication in the work place.</p> <p>Statement #9: My job performance is directly related to my ability to communicate effectively with Other Associates.</p> <p>Statement #10: My job performance is directly related to my ability to communicate effectively with Members of Management.</p> <p style="text-align: right;">Reliability = .75</p>	<p style="text-align: center;">FACTOR IV (Respect & Teamwork)</p> <p>Statement #5: I respect the associates I work with.</p> <p>Statement #6: The associates I work with respect me.</p> <p>Statement #7: Associates work better as a team.</p> <p style="text-align: right;">Reliability = .52</p>

This study also involved employee perception of improved communication skills in the same organization. After the training program was completed, employees who had been involved in both the pre-assessments and the post-assessments for vocabulary, reading comprehension, and mathematics skills were scheduled for a voluntary appointment to review their improvement. At that time, each employee was asked to participate in the study by answering a questionnaire. The questionnaire consisted of 12 statements about how employees felt about the communication environment at work, whether or not employees were satisfied with their jobs, and their opinions on training as an effective way to build communication skills in the work place. Of the 54 employees who completed both the pre-assessment and the post-assessment, 35 made an appointment to review their improvement. All 35 willingly participated in the employee perception survey.

This self-report survey was developed based on a collection of experience gathered from working with employees in various organizations, which clearly indicates the important role employee perception plays in employer-provided training, and on collaborating research. "If the participants' expectations can be satisfied, the development subsystem will obtain positive outputs from the individual, i.e., the individual will return to his unit praising the program attended. This positive attitude will make the individual more likely to pursue development program participation in the future. He/she will also encourage peers to attend development programs" (Vaught, Hoy, & Buchanan, 1985).

A self-report survey was also created in order to determine employee perceptions of the training program. The survey was first piloted by a graduate class from the Greenspun School of Communications at the University of Nevada, Las Vegas. Twenty students were asked to read through the survey, consider each statement carefully, and then provide comments and suggestions to improve the survey. Based on those comments and suggestions, the survey was revised to its present state.

At this time, only six of the nine classes anticipated by the company have been conducted. The additional three classes have been tentatively scheduled for some time in 1997 to be determined at a later date.

The mean score and standard deviation for each statement in the self-report survey are listed on the chart that follows:

EMPLOYEE SELF-REPORT
CHART II
(Mean Score and Standard Deviation)

STATEMENT	MEAN	STANDARD DEVIATION
1. Verbal communications from management are Clearly understood by associates.	3.26	1.09
2. Written communications from management are Clearly understood by associates.	3.57	1.14
3. My employer is concerned with the quality of life of their employees at Work.	3.51	.89
4. My employer is concerned with the quality of life of their employees at Home.	2.71	.89
5. I respect the associates I work with.	4.03	.51
6. The associates I work with respect me.	3.77	.65
7. Associates work better as a team.	3.80	1.08
8. Training is essential in building communication in the work place.	4.51	.66
9. My job performance is directly related to my ability to communicate effectively with Other Associates.	4.23	.77
10. My job performance is directly related to my ability to communicate effectively with Members of Management.	3.94	.91
11. Working for this organization provides me with opportunities to improve myself.	3.91	.78
12. I like my job.	4.03	.71

Most employees tended to disagree with number four which states that the employer is concerned with the quality of life of their employees at home. The mean score is 2.71 for this statement, and this result was expected. However, the strongest agreement among the statements is statement number eight: Training is essential in building communication in the work place. The overwhelming response to this statement was unexpected and disproves the second research statement in this study with staggering results. The mean score is 4.51 which is a pleasant surprise because employees who feel training is essential in building communication in the work place are more likely to participate willingly in organizational training. And, in most cases, willing participants of organizational training learn more than those who would prefer to not be involved. There are also positive correlational results between: 1) Employees who are provided with opportunities to improve themselves and employees who like their jobs (Statement 11 & Statement 12: $r=.48$; $p < .01$, 2) Employees who are provided with opportunities to improve themselves and employees who respect the other employees they work with (Statement 11 & Statement 5: $r=.45$; $p < .01$, and 3) Employees who feel they are receiving clearly understood verbal communications from management and employees who like their jobs (Statements 1 & Statement 12: $r=.49$; $p < .01$). These results indicate that employees who receive clear communication from management and who are given the opportunity to improve themselves like their jobs.

In order to determine whether the male employees differed from the female employees in their self reports of communication and job satisfaction, independent t-tests were run. Only one statistically significant difference was found. On statement number

six, "The associates I work with respect me," the following results were found. Male employees had a mean score of 4.1176, standard deviation = .485 while female employees had a mean score of 3.4444, standard deviation = .616. The mean difference = .6732. Levene's test for equality of variances was used to determine the following results: $f = 5.723$, $p = .023$. Perhaps this is due to the overall lack of self-esteem often found in women who hold lower level, or manufacturing, positions.

CHAPTER 5

DISCUSSION

R1

Much of the literature revealed that most organizations who provide training do, in fact, hire outside sources to train in certain areas of employer-provided training programs. "Help from outside experts or quality gurus can be valuable when designing or improving courses or soliciting technical expertise" (The Conference Board, 1991). The literature does not indicate, however, that research has been done in the area of customized training programs as more beneficial than standardized training programs. Instead, it speaks of the "many methods of task analysis [that] have been devised over the years" (Annette, Duncan, Stammers, & Gray, 1971). Even so, they argue that "there is a clear need for new research to explore other ways of approaching task analysis for training purposes" (Annette, Duncan, Stammers, & Gray, 1971). While it is clear that new training methods are needed, it has become increasingly difficult to produce new, innovative training methods that are original and, at the same time, comparable to traditional methods. "One of the standard problems facing anyone introducing a new technique is the question of how it compares with traditional methods" (Davies, Hudson, Dodd, & Hartley, 1973). Certainly, this is a problem.

Another area of considerable argument is that measurable results can not be shown in training programs. This is ridiculous. "It has been stated that the *main* goal of evaluation is to determine whether or not instruction has succeeded, and to assess the advantages and limitations of the methods used" (Davies, Hudson, Dodd, & Hartley. It is, therefore, beneficial for trainers/consultants to evaluate training programs at every possible opportunity. "Proving the relevance, practicality and effectiveness of training courses encourages management to increase its support of the training function," (Fisher & Weinberg, 1994) yet very few organizations report using assessments to show the effectiveness of their training programs. It is clear that "despite the fact that most training professionals and researchers emphasize the importance of evaluating training programs, many companies embrace only the intent and fail in the implementation" (Fisher & Weinberg, 1994). After reviewing the literature which clearly states the importance of measurable assessment, "one can only conclude that the objections are obfuscations put forth by people who don't have the energy, imagination or courage to evaluate their training" (Fitz-enz, 1994).

Results of this study show customized training to be more beneficial in that management believed that a standardized training program of this length and cost would improve their employees basic skill levels in the areas of English (vocabulary and reading comprehension) and mathematics by approximately one grade level. The results of the assessment tools used in this study indicate an overall improvement of approximately two grad levels. Even though it is continuously said that "ascertaining the overall effectiveness of quality training remains a challenge," (The Conference Board, 1991) it is

important to realize that it is not impossible . “The enduring belief that you can’t quantify the benefits of a corporate training program has been punctured many times over the years. Yet the myth persists. We still hear incessantly that the effects of training interventions -- especially ‘soft-skills’ training -- cannot be traced objectively and quantitatively to an organizations’ bottom line,” (Fitz-enz, 1994) yet it is just not true. The effectiveness of a training program can be traced both objectively and quantitatively to any organization’s bottom line. However, to do this it becomes necessary to do away with the age old question, “How can we prove beyond the shadow of a doubt that a given training program produced a given result, [and instead ask] What will we accept as persuasive evidence that the program produced the results” (Fitz-enz, 1994). The answer according to Fitz-enz is, “We will accept the informed judgment of the line manager. Only the manager knows the vagaries of the work environment. If we assume that the manager is competent and honest, then that person’s testimony must be acceptable” (1994).

While further study is needed to prove the reliability of such benefits of customized training, improvement of approximately twice what was expected by management shows customized training to be a innovative and beneficial approach to organizational training programs.

“Several attempts have been made to evaluate the cost benefits of introducing training schemes, and results are commonly quoted in terms of savings in trainee and instructor time” (Davies, Hudson, Dodd & Hartley, 1973). However, in this applied study, the opposite approach was used. Both employees and instructors were scheduled

to participate in the same allotted time given to previous standardized programs. To further show the cost effectiveness of customized training, the cost of this program was estimated to be the same as previous standardized training programs. With results that show 100% more improvement than expected, one must believe that "only by evaluation can an organization be reasonably certain that development resources are being effectively and efficiently spent. Other reasons for evaluating programs are assurance that the programs offered match organizational needs, future program improvement, and assurance of human capital development in the short and long run" (Vaught, Hoy, & Buchanan, 1985).

R2

While employees are encouraged to participate in employer-provided training programs, it was not believed that employees would find training *essential* to building communication in the work place. However, after reviewing the results of the employee self-report survey in which statement number eight reads "Training is essential in building communication in the work place," it is clear that employees strongly agree that training is, in fact, *essential* in building communication in the work place.

CHAPTER 6

LIMITATIONS

Limitations include using a sample public. Because the employees involved in the program were, for the most part, voluntary, some bias may be present. Researchers know that volunteers are more likely to do well or at least want to do well, whereas if all employees were required to take part in organizational training programs, researchers would likely see a decrease in scores after training due to the fact that people who do not perceive themselves as doing well in the training probably would not volunteer. The same can be said of those who returned to the instructor/researcher to get an overview of their improved skill level based on pre and post assessments, and in turn, participated in the employee perception survey. Those who may have thought they did not do so well may have chosen to decline the invitation to return and see their assessment scores. As a result, they were not given the opportunity to participate in the employee perception survey.

Another limitation is the relatively small sample used in this study. Of the nine four-week training classes anticipated, only six have been completed at this time. Therefore, the results of this study are based only on the test scores of participants in those six classes. It is also limited to those participants who were employed by the company at the time of the pre-test (July/August of 1995) due to the fact that I cannot

show whether there has been any measurable improvement or lack thereof based on post-test scores in employees who did not pre-test.

CHAPTER 7

FUTURE RESEARCH

Future research may include improved communication skills in members of management through the use of organizational training. Because members of management are believed to be more difficult to replace during a lengthy training period, they are often the last to become involved in organizational training programs. However, “employees agree that the better the manager’s communication, the more satisfied the employees are with all aspects of their work life. And satisfied employees -- it is widely agreed -- are more productive employees” (Whitworth, 1990). It would also be worth considering whether members of management retain less during training than employees because often their appearance in such training programs is optional, causing them to miss sometimes several segments of the training, or if members of management retain more during similar training programs due to the fact that they are usually more educated than the non-management employees. Do they grasp the concepts more easily and in less time, requiring their participation in such programs to be less lengthy?

Further study in the area of basic skills training is another area of major concern which appears to be just surfacing in the world of research. Although it has become clear to most organizations that some type of employer-provided training is beneficial to both the employee and the employer, little has been discovered about the importance of

implementing customized training programs consisting of basic reading, writing, and mathematic skills which are at the very core of the learning process. Without these skills, employees will never fully comprehend and absorb the intended information of additional training.

PART ONE: VOCABULARY

DIRECTIONS TO THE STUDENT: read orally by the administrator

- A. Do not turn this page of the API booklet until you are told to do so.
- B. There are 50 questions on this part of the indicator.
- C. You are not expected to know all the answers. Try to do as many as you can in the amount of time given.
- D. Do not mark in the booklet. Mark only on the answer sheet.

Here is a practice exercise.

Another word for acre is _____.

- a) cause b) land c) soft d) wreck

Look at your answer sheet and find the Practice Exercise. Mark the space on the answer sheet that has the same letter as the answer you chose. You should have marked the letter, "b", land.

- E. If you have any questions, ask them now.
- F. You have 5 minutes for this part of the API. Continue answering questions until you come to the stop sign or until you are told to stop.



1. A bird _____.
a) colors b) flies c) reads d) smiles
2. Bees make _____.
a) cookies b) flowers c) grass d) honey
3. A tail is at the _____.
a) barn b) end c) game d) ground
4. In the morning we eat _____.
a) breakfast b) dinner c) lunch d) supper
5. Libraries are for _____.
a) camping b) hunting c) reading d) singing
6. To travel fast is to go by _____.
a) airplane b) foot c) monkey d) wagon
7. The calendar divides the year into _____.
a) hours b) months c) today d) winter
8. A round dish is a _____.
a) bowl b) glass c) knife d) tube
9. People have ten _____.
a) cheeks b) ears c) fingers d) noses
10. To stop is to _____.
a) brake b) free c) pound d) rule
11. Earth is a _____.
a) month b) planet c) ribbon d) vegetable
12. A number of pages together make a _____.
a) book b) custom c) pattern d) stampede
13. Eagles _____.
a) demand b) soar c) whip d) wink
14. A doctor has patients to _____.
a) dread b) frame c) haunt d) heal
15. Most people obey the _____.
a) calendar b) dictionary c) law d) town
16. A burglar is a _____.
a) bride b) captive c) monk d) thief
17. A flag is a _____.
a) banner b) challenge c) district d) rudder
18. A thimble is used in _____.
a) cooking b) eating c) reading d) sewing
19. A schooner is a type of _____.
a) airplane b) boat c) car d) train
20. A toboggan is used on _____.
a) cement b) dirt c) gravel d) snow

21. Attractive means _____
a) beautiful b) eternal c) modern d) ugly
22. We applaud what we _____
a) abuse b) devour c) like d) trace
23. Livestock is _____
a) cattle b) ivory c) money d) rubbish
24. A tropical cyclone is similar to a _____
a) dock b) hurricane c) snowstorm d) volcano
25. A hatchet can _____
a) knead b) pull c) rake d) split
26. Disinfectant is for _____
a) cleaning b) exhaling c) postage d) storms
27. An anniversary is usually a _____
a) boundary b) celebration c) demerit d) falsehood
28. To keep apart is to _____
a) disagree b) join c) replace d) separate
29. Milk is processed at a _____
a) dairy b) dungeon c) monopoly d) pyramid
30. Mahogany is a _____
a) lichen b) pulley c) shrub d) wood
31. Clutter is _____
a) boredom b) chaos c) gaudy d) permanent
32. Buoyancy means to _____
a) float b) invade c) listen d) pull
33. Velocity means _____
a) exactness b) quickness c) safety d) slowness
34. Something strenuous is _____
a) easy b) good c) hard d) soft
35. A furlough is a _____
a) future b) leave c) maze d) visor
36. The veranda is a pleasant place to _____
a) emigrate b) jaunt c) relax d) suffocate
37. To amputate is to _____
a) emphasize b) prescribe c) remove d) salvage
38. A person who is famished is _____
a) deceased b) hungry c) peculiar d) thrifty
39. Contraction means _____
a) circling b) lengthening c) proceeding d) shortening
40. An autobiography is a story about _____
a) fabric b) monarchy c) oneself d) violence

41. A vendor is a person who _____.
a) irks b) obstructs c) predicts d) sells
42. To liquidate is to _____.
a) celebrate b) eliminate c) graduate d) produce
43. Thermal pertains to _____.
a) cold b) food c) heat d) water
44. Contraband is _____.
a) illegal b) luxurious c) musical d) tolerable
45. Simultaneous is another word for _____.
a) praise b) together c) whole d) vanish
46. A misdemeanor is a _____.
a) crime b) dynasty c) novel d) tragedy
47. To be tranquil means to be _____.
a) awkward b) energetic c) noisy d) quiet
48. Fraudulent means the same as _____.
a) deceitful b) gauntlet c) lubricant d) malignant
49. Meticulous means _____.
a) asset b) careful c) lethal d) sloppy
50. Government is a _____.
a) bureaucracy b) fiasco c) habitat d) manor



PART TWO: COMPREHENSION

DIRECTIONS TO THE STUDENT: read orally by the administrator

- A. Do not turn this page of the API booklet until you are told to do so.**
- B. There are 50 questions in this part of the indicator.**
- C. Read each paragraph through completely and then answer the questions below it. You may look back at the paragraph you have read. Do not spend too much time on a paragraph. If you finish the indicator early, you may go back and work on the more difficult questions.**
- D. Do not mark in the booklet. Mark only on the answer sheet.**
- E. If you have any questions, ask them now.**
- F. You have 15 minutes for this part of the indicator. Continue answering the questions until you come to the end of the indicator or until you are told to stop.**



A

The strawberry plant is small.
It grows close to the ground.
It is planted in rows.
The flowers are pretty.
The fruit is red.
It is good to eat.

1. Where does the strawberry grow?
 - a. above the boat
 - b. above the sky
 - c. below the pond
 - d. close to the ground
2. What is a strawberry?
 - a. a ball
 - b. a cookie
 - c. a fruit
 - d. a pony

B

Cucumbers grow in dirt.
Gardeners start the plants from seed.
They plant them each year.
Cucumbers need lots of room to grow.
They grow on vines.
Cucumbers are green and full of seeds.
They grow when it is warm.
They are easily killed by frost.
Cucumbers are used for pickles.
Some people eat them raw.

3. Where do cucumbers grow?
 - a. gardens
 - b. green
 - c. pickles
 - d. stores
4. How often are cucumbers planted?
 - a. every four years
 - b. every other year
 - c. every two years
 - d. every year
5. How can cucumbers be killed?
 - a. by the frost
 - b. by the pickles
 - c. by the seeds
 - d. by the vine

go on to next page

C

The zoo has many living things.
Birds, snakes and apes live there.
It is where some of us saw our first bear and lion.
Most animals are kept in cages.
Some live in open areas.
Children can touch some of the animals.
The zoo is a good place to learn about animals.

6. What is in a zoo?
 - a. airplanes
 - b. bears
 - c. cities
 - d. farms
7. Who can touch the animals?
 - a. children
 - b. money
 - c. stamps
 - d. trains
8. Where do most zoo animals live?
 - a. in boats
 - b. in cages
 - c. in mountains
 - d. in wagons

D

The Olympic Games, in which amateur athletes compete, are held every four years. These games are held in a different country each time. Both men and women now take part in sports such as swimming, track and biking. The players spend a long time training. Only the best players can win gold medals. In present times, players from the United States have won more medals than players from any other country.

9. Who plays in the Olympic Games?
 - a. amateurs
 - b. firefighters
 - c. pilots
 - d. sailors
10. How often are the Olympic Games played?
 - a. every 2 years
 - b. every 4 years
 - c. every 7 years
 - d. every 10 years
11. What has happened to the players in the United States?
 - a. they have cried more
 - b. they have fallen more
 - c. they have lost more
 - d. they have won more

go on to next page

E

Have you ever been without a pencil or pen? Not many of us have. It's difficult to even think of a time when there were no pencils, typewriters or word processors. Not long ago, having something to write with was worth its weight in gold. Chalk and slates were used for school work. Charred wood or charcoal could be used for writing, if necessary. Today's pencil dates back to 1564 when the British found a graphite deposit that was pure enough to be cut into sticks and sold for writing. Today, the lead in a pencil is a mixture of graphite and clay that is blended to write clearly. The lead sticks are sandwiched into slotted wood boards which are glued together. The market for pencils is enormous. We buy them for home, school and work; work and businesses give them away as a form of advertising.

12. What was an early writing tool?
 - a. boards
 - b. candles
 - c. charcoal
 - d. gold
13. What is this paragraph about?
 - a. the development of the pencil
 - b. the exporting of the pencil
 - c. the sharpening of the pencil
 - d. the storing of the pencil
14. What has happened to the pencil?
 - a. it has been a secret weapon
 - b. it has been made of silk
 - c. it has been used by many people
 - d. it has not been used since 1564

F

Charles Drew died at the age of forty-five. In those few short years, he did more for mankind than most people could ever hope to do. Born in 1904, he lived in a time when it was difficult to be black. He proved again and again that color could not hold a person back. In 1933, he earned his Doctor of Medicine degree, and as a member of a research team, he began to study blood. After World War II began, there was a great need for blood. At that time, whole blood spoiled in about a week, but the plasma in the blood remained fresh. Why not just use the plasma for transfusions? This worked and it was not necessary to check for blood type. This made it possible to ship large amounts of blood which saved thousands of lives during the war.

15. What contribution did Charles Drew make to science?
 - a. the discovery of whole blood
 - b. the naming of blood types
 - c. the spoiling of whole blood
 - d. the use of plasma in transfusions
16. What degree did Charles Drew earn?
 - a. Doctor of Dentistry
 - b. Doctor of Medicine
 - c. Doctor of Podiatry
 - d. Doctor of Psychiatry

go on to next page

17. Why did Charles Drew study blood?
- a. to become famous
 - b. to end the war
 - c. to graduate
 - d. to save lives

G

Honeybees are the only bees that make honey and wax that can be used by man. Honeybees live and work together in a colony which consists of thousands of bees. There is one queen, who lays eggs. Many workers, all female, gather food, take care of the young and do housekeeping tasks. The drones, or males, only job is to fertilize the queen. The honeybee has a body that consists of a head, chest and abdomen. The color of a honeybee varies from black to shades of brown. Bees do not have ears, but they have plenty of eyes. Bees can only see four colors, one of which is ultraviolet. Many flowers reflect ultraviolet light. The bee uses its tongue to suck water, nectar and honey into its mouth.

18. How do bees find the flowers?
- a. the flowers are black and blue
 - b. the flowers have eyes and ears
 - c. the flowers live in a colony
 - d. the flowers reflect ultraviolet light
19. What is special about honeybee's honey?
- a. it can be made at home
 - b. it can be used by man
 - c. it is grown on trees
 - d. it is planted
20. What is true about honeybees?
- a. they are all the same color
 - b. they have ears
 - c. they have eyes
 - d. they live alone

H

Every American Indian tribe had a name for itself. When the Europeans arrived, they grouped them together and called them Indians. They spoke many different languages and lived different ways. Each group of Indians is called a tribe. The Apaches have their home in New Mexico and Arizona. The word "Apache" means "fighting men". They resisted the people who were passing through their land while traveling to California. Many wars were fought and the Apaches showed daring and skill in warfare. Since 1924, the American Indian has been a citizen of the United States. Today, Indians may choose where they live, but more than half of them live on reservations. Many still practice tribal customs and ways of life. Although many farm, others work in nearby factories. Indians are now asking for a stronger voice in their future.

21. What does the word "Apache" mean?
- a. American Indians
 - b. fighting men
 - c. strong voice
 - d. tribal customs

go on to next page

22. Why aren't Indians all the same?
- a. they live together
 - b. they come from Europe
 - c. they live different ways
 - d. they speak the same language
23. Why were Indians known for fighting?
- a. they enjoyed war
 - b. they did not want people on their land
 - c. they liked peace
 - d. they wanted to be citizens

I

In 1865, the United States was a nation that lived off the land. Fifty years later, it was a great industrial nation. The United States had large cities and factories. It also had natural resources such as water, timber, coal, petroleum and iron ore that were necessary for industry. These resources, in turn produced the power, oil and steel to build the new products people wanted to purchase. With this age, a better technology was developed with which to make use of the phonograph, electric light, telephones and automobiles. Men also became rich and powerful during the industrial age. Andrew Carnegie controlled the steel industry; John D. Rockefeller was king of the oil industry and Henry Ford mass-produced the automobile.

24. Why is the United States called an industrial nation?
- a. it has cities and factories
 - b. it has restaurants
 - c. it has rich men
 - d. it is an agricultural country
25. What is not a natural resource?
- a. coal
 - b. petroleum
 - c. telephones
 - d. water
26. What is not necessary for industrial goods?
- a. bakeries
 - b. factories
 - c. natural resources
 - d. technology

J

Women have been influential in world affairs. There have been queens and rulers of nations who had great power. In America, however, voting was important because of the type of government it had. Congress had left the decision of women's suffrage, or the right to vote, up to the discretion of the individual states. In the 1830's, conditions were right for women to persuade the states to grant them this right. One of the leaders of the movement was Susan B. Anthony who was arrested for voting in 1872. The trial attracted nationwide attention to the suffrage movement. In the 1890's, several states gave the women the right to vote. It was not until World War I that a woman suffrage amendment was submitted to the House of Representatives. In August 1920, Amendment 19 became law. Women had the right to vote.

go on to next page

27. Why are laws passed?
- a. to bring the President happiness
 - b. to give the Congress work
 - c. to make people slaves
 - d. to protect the rights of people
28. What does the word "suffrage" mean?
- a. to be arrested
 - b. to be born free
 - c. the right to vote
 - d. the state's rights
29. When was the woman's suffrage amendment passed?
- a. 1830
 - b. 1872
 - c. 1890
 - d. 1920

K

The volcano is one of nature's wonders which is found in many parts of the world. After slumbering for 123 years, Washington's Mount St. Helens, literally blew its top and caused irreparable damage to the face of the earth. An eruption can cause panic when it is near a town or city. Volcanologists and seismologists are constantly studying the earth's surface looking for signs that could cause volcanoes. When molten rock, beneath the earth's crust, is pushed to the surface by the pressure of gasses, we have an eruption. An eruption could consist of volcanic gasses, ash or lava that could engulf a field, home or city. Volcanoes are not all bad because volcanic ash can be rich in calcium, potassium and phosphorus. This ash can fertilize the soil thus benefiting the local vegetation. Volcanic action can also form diamonds, soda and sulphur. Volcanoes have also built great land masses enhancing our natural landscape.

30. Why are eruptions beneficial?
- a. they cause damage
 - b. they engulf a city
 - c. they fertilize the soil
 - d. they push out the molten rock
31. What is the best word to summarize this paragraph?
- a. damage
 - b. gasses
 - c. vegetation
 - d. volcanoes
32. What can volcanic ash be rich in?
- a. crust
 - b. landscapes
 - c. phosphorus
 - d. rock

go on to next page

L

It had always been the fantasy of man to be able to remain underwater for extensive periods of time. On account of his lungs and the forces of gravity, he could only ponder what it would be like to conquer an aquatic expanse. One of the first successful submarines was designed as a war machine during the American Revolution. In 1800, Napoleon rejected a version built by Robert Fulton. Its maximum speed was two knots. It was not until 1900 that the U.S. Navy accepted its first submarine and by the Second World War, the number approached 300. Nuclear power brought with it the ability to have a submarine operate under water for long periods of time. The development of the submarine has been long and difficult but now man can truly say he has conquered the sea.

33. What were the first submarines used for?
- a. flying
 - b. hunting
 - c. peace
 - d. war
34. Why was Fulton's submarine rejected?
- a. it was painted green
 - b. it was too big
 - c. it was too slow
 - d. it would not sink
35. What is a true statement about the submarine?
- a. it does not work
 - b. it is a useful invention
 - c. it replaces all other ships
 - d. no one uses it

M

The redwood is a magnificent forest tree that grows along the West Coast of the United States from central California to southern Oregon. Known worldwide for its size and grandeur, this perennial tree is generally believed to be the tallest among living plants. Its trees are majestic and few people fail to be impressed when standing beneath them. One of the tallest redwoods, located on an alluvial deposit of flood-washed silt, ascends to an elevation of nearly 400 feet. It is designated as the "Tall Tree". The trunk of the redwood, which is four to six feet in diameter, is tapered and covered with a fibrous bark which is virtually fireproof in adult specimens. The trunk also has extensive curls which are admired for their beautiful grain and often used for veneer. The lumber from the tree itself is a deep-red color and has much value for decorative purposes.

36. In which section of the country are redwoods found?
- a. the East Coast
 - b. the northern states
 - c. the Old South
 - d. the West Coast

go on to next page

37. What words best describe the meaning of bark?
a. beautiful cones
b. fibrous bark on the trunk
c. growth on a tree
d. stump of the tree
38. For what is the redwood tree known?
a. its benches of silt
b. it's grown in the East
c. its short stature
d. its size and grandeur

N

Despite the abundance of spiders in our environment, few people are knowledgeable about them. The word "spider" is a common name given to insect-like animals. The head and chest of the spider form one segment; it has no developed wings, but it does have eight legs. Spiders are found almost everywhere, including houses, fields, meadows, marshes and even on mountain tops. Spiders are carnivorous. They feed almost exclusively on prey which they have caught for themselves. They look for other arthropods, mainly insects. It is through their consumption of insects that the spider is invaluable to man and to the balance of nature. The dust-catching webs found in houses belong to the spider who is rendering a service by trapping flies and mosquitoes. The spider's web is usually for prey, but spiders also spin webs to make their homes. Two well-known spiders are the tarantula and the black widow. The former is fearsome to look at, but not poisonous. The latter is poisonous and, a victim of its bite, must seek immediate medical attention.

39. Which sentence describes a spider?
a. they are few in number
b. they are flesh-eating
c. they are of no value
d. they depend on others for food
40. Which statement is not true?
a. spiders eat insects
b. spiders live almost everywhere
c. spiders remain on the ground
d. spider webs are dust-catchers
41. What is the main idea of the story?
a. spiders are dangerous
b. spiders are important to nature's balance
c. spiders are rare and poisonous
d. the black widow is poisonous

go on to next page

O

A castle was originally a fortified residence for kings and queens and other nobility in feudal times. Many people think of castles in an idealistic way with the structure high on a hill dominating the distant plains, overlooking rivers and rising up like citadels. The real attractions were the dungeons, the underground passages and the mysterious castles themselves. Actually, castles in medieval times were loathed and feared by the local villagers because they represented terror and violence. The soldiers of the castle were known to abduct and imprison local townspeople, forcing them to work inside the castle walls. Conditions in the castle were appalling: they were dark and foreboding. The thick stone walls, making up the circumference of the castle grounds, kept the enemy out. Those inside stayed not a moment longer than necessary. However castles are looked at or thought about, there can be few things commanding wider interest than the castles of the world.

42. Which word is true about castles?
- a. cheerful
 - b. dark
 - c. modern
 - d. small
43. Which term best describes medieval times?
- a. Middle Ages
 - b. Modern Times
 - c. Revolutionary Times
 - d. Romantic Legends
44. How would you describe a castle?
- a. a cave
 - b. a fortified area
 - c. a small house
 - d. a village

P

A swamp is a soggy area which is extremely humid and has stagnant water with a slow moving current. Swamps range in size from small mountain bogs to extensive coastal plains or river swamps. They are principally composed of dominant trees and high shrubs. The submerged vegetation stimulates the decay of organisms and prevents the accumulation of organic materials. These wet lowlands include sphagnum moss, various algae and vascular plants. Swamps are important preserves for wildlife, including large land animals, such as deer and bears; also, many species of reptiles - turtles, snakes and alligators - seem to love these quiet wetlands. Swamps, which include the Dismal Swamp of North Carolina and Virginia, the Okefenokee Swamp of Georgia and the Florida Everglades, are abundant along the coastal plains of the southeastern United States.

45. Why are swamps important?
- a. to build houses
 - b. to grow crops
 - c. to flood streets
 - d. to protect wildlife

go on to next page

46. Which word best describes a swamp?
- a. arid
 - b. frigid
 - c. humid
 - d. temperate
47. What statement is not true?
- a. a swamp is a soggy area
 - b. swamps are abundant in the southwest
 - c. swamps contain moss and algae
 - d. the Okefonokee Swamp is located in Georgia

Q

Venice, the one city in the world where everything is extraordinary, is a seaport city located in northern Italy on the shores of the Adriatic Sea. In its prime, Venice was a great sea power, and actually, had its own warships and controlled much of the surrounding land. Venice is a seaport city in Italy and is known throughout the world for its impressive churches. For centuries, this city has enchanted travelers from all over the world. Built over a sprawling archipelago, the city consists of numerous islands separated by canals, called the silent streets. To travel these waterways, one must move in a romantic and picturesque boat called a gondola. Lining the canals and reflecting in their waters are magnificent buildings, elegant palaces and stately churches, all with their ancient cupolas, leaning towers and marble facades. These structures are considered to be among the most beautiful in the world. The museums and libraries possess priceless relics and manuscripts that are distinctively Venetian. Today, tourism is the primary economic activity of the islands of Venice.

48. What does archipelago mean?
- a. a large body of water
 - b. many islands
 - c. one who plans buildings
 - d. the distance from the mainland
49. Where is Venice located?
- a. in Southern Italy
 - b. in the Italian mountains
 - c. on a group of islands
 - d. on the northern shores of Antarctica
50. Which occupation provides most of the Venetians with a livelihood?
- a. pricing relics
 - b. providing for the tourist trade
 - c. swimming in the canals
 - d. translating manuscripts



NAME: _____

GRADE LEVEL: _____

DATE: _____

DIRECTIONS: Write the answer for each exercise. Be sure to do as the signs tell you. Do as many of the exercises as you can.

NAME: _____

1.a. $\begin{array}{r} 6 \\ +9 \\ \hline \end{array}$

b. $\begin{array}{r} 27 \\ -16 \\ \hline \end{array}$

c. $\begin{array}{r} 8 \\ 8 \\ +4 \\ \hline \end{array}$

d. $\begin{array}{r} 69 \\ -27 \\ \hline \end{array}$

2.a. $\begin{array}{r} 683 \\ +782 \\ \hline \end{array}$

b. $\begin{array}{r} 32 \\ -16 \\ \hline \end{array}$

c. $\begin{array}{r} 23 \\ \times 2 \\ \hline \end{array}$

d. $6\overline{)24}$

3.a. $\begin{array}{r} 6324 \\ -2468 \\ \hline \end{array}$

b. $\begin{array}{r} \frac{3}{5} \\ -\frac{1}{5} \\ \hline \end{array}$

c. $\begin{array}{r} 14 \\ \times 7 \\ \hline \end{array}$

d. $32\overline{)160}$

4.a. $\begin{array}{r} \frac{1}{3} \\ +\frac{1}{3} \\ \hline \end{array}$

b. $\begin{array}{r} 6002 \\ -1378 \\ \hline \end{array}$

c. $\begin{array}{r} 273 \\ \times 56 \\ \hline \end{array}$

d. $50\overline{)910}$

5.a. $\begin{array}{r} 7\frac{1}{4} \\ +2\frac{5}{8} \\ \hline \end{array}$

b. $\begin{array}{r} 30. \\ -2.2 \\ \hline \end{array}$

c. $8 \times 1\frac{1}{2} =$

d. $5\frac{1}{3} \div \frac{1}{3} =$

6.a. $\begin{array}{r} 2\text{ ft. } 5\text{ in.} \\ +1\text{ ft. } 9\text{ in.} \\ \hline \end{array}$

b. $\begin{array}{r} .36 \\ -.262 \\ \hline \end{array}$

c. $\begin{array}{r} 100 \\ \times .015 \\ \hline \end{array}$

d. $7\overline{)498}$

7.a. $\begin{array}{r} 4\text{ yd. } 1\text{ ft. } 2\text{ in.} \\ +2\text{ yd. } 2\text{ ft. } 6\text{ in.} \\ \hline \end{array}$

b. $\begin{array}{r} 9.7 \\ -5\frac{3}{5} \\ \hline \end{array}$

c. $\begin{array}{r} .004 \\ \times .008 \\ \hline \end{array}$

d. $12.4 \div \frac{2}{3} =$

**EMPLOYEE ASSESSMENTS
VOCABULARY
PAGE 1 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
001	10.2	12.0	1.8
002	10.4	12.0	1.6
003	9.6	11.6	2.0
004	9.0	12.0	3.0
005	12.0	12.0	0.0
006	10.4	12.0	1.6
007	12.0	12.0	0
008	9.6	11.4	1.8
009	8.4	12.0	3.6
010	10.0	11.6	1.6
011	9.4	11.8	2.4
012	8.8	12.0	3.2
013	9.0	12.0	3.0
014	7.8	12.0	4.2
015	8.4	10.2	1.8
016	9.4	12.0	2.6
017	9.6	12.0	2.4
018	7.0	10.8	3.8
019	12.0	12.0	0.0
020	7.8	12.0	4.2

**EMPLOYEE ASSESSMENT
VOCABULARY
PAGE 2 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
21	10.4	12.0	1.6
022	11.0	12.0	1.0
023	12.0	12.0	0.0
024	11.0	12.0	1.0
025	8.0	11.6	3.6
026	5.4	11.6	6.2
027	10.0	11.8	1.8
028	10.8	11.8	1.0
029	9.6	11.8	2.2
030	8.8	11.4	2.6
031	9.6	12.0	2.4
032	3.8	6.2	2.4
033	7.8	12.0	4.2
034	7.4	11.4	4.0
035	8.8	11.6	2.8
036	8.4	12.0	3.6
037	11.6	11.4	-0.2
038	10.8	11.8	1.0
039	7.8	11.6	3.8
040	9.6	12.0	2.4

**EMPLOYEE ASSESSMENT
VOCABULARY
PAGE 3 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
041	9.6	12.0	2.4
042	9.0	10.8	1.8
043	7.0	9.6	2.6
044	5.8	10.6	4.8
045	12.0	11.8	-0.2
046	10.2	11.4	1.2
047	9.8	11.2	1.4
048	9.6	11.6	2.0
049	10.6	12.0	1.4
050	11.4	11.8	0.4
051	5.8	8.8	3.0
052	7.8	12.0	4.2
053	7.2	11.2	4.0
054	9.2	11.4	2.2

**EMPLOYEE ASSESSMENT
READING COMPREHENSION
PAGE 1 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
001	10.4	12.0	1.6
002	9.2	11.2	2.0
003	10.0	11.4	1.4
004	11.0	11.6	0.6
005	10.6	11.4	0.8
006	9.0	12.0	3.0
007	9.6	11.8	2.2
008	8.8	10.4	1.6
009	8.6	11.2	2.6
010	8.6	11.0	2.4
011	10.6	11.6	1.0
012	11.0	11.8	0.8
013	7.6	10.4	2.8
014	8.6	10.8	2.2
015	7.6	8.6	1.0
016	9.2	11.0	1.8
017	10.4	11.8	1.4
018	8.4	10.0	1.6
019	10.0	11.8	1.8
020	9.6	11.8	2.2

**EMPLOYEE ASSESSMENT
READING COMPREHENSION
PAGE 2 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
21	10.0	11.6	1.6
022	10.2	10.6	0.4
023	11.8	12.0	0.2
024	8.8	11.2	2.4
025	7.6	11.0	3.4
026	9.0	11.6	2.6
027	10.8	11.6	0.8
028	10.2	10.6	0.4
029	11.0	11.0	0.0
030	8.6	10.0	1.4
031	9.4	11.4	2.0
032	5.0	7.0	2.0
033	7.6	10.2	2.6
034	7.6	10.4	2.8
035	7.4	10.4	3.0
036	8.8	12.0	3.2
037	9.6	12.0	2.4
038	9.0	11.4	2.4
039	9.0	10.8	1.8
040	9.0	10.6	1.6

**EMPLOYEE ASSESSMENT
READING COMPREHENSION
PAGE 3 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
041	9.4	12.0	2.6
042	8.4	11.2	2.8
043	7.2	9.0	1.8
044	6.0	8.8	2.8
045	9.0	12.0	3.0
046	9.0	11.6	2.6
047	8.4	11.6	3.2
048	11.0	11.8	0.8
049	10.2	11.8	1.6
050	7.6	11.6	4.0
051	5.4	6.6	1.2
052	8.2	12.0	3.8
053	7.0	11.8	4.8
054	7.4	11.2	3.8

**EMPLOYEE ASSESSMENT
MATHEMATICS
PAGE 1 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
001	4.5	8.0	3.5
002	6.0	8.0	2.0
003	5.5	8.0	2.5
004	4.5	8.0	3.5
005	3.5	8.0	4.5
006	7.0	8.0	1.0
007	5.5	7.0	1.5
008	5.5	7.0	1.5
009	4.0	7.0	3.0
010	5.5	7.0	1.5
011	7.0	8.0	1.0
012	7.0	8.0	1.0
013	4.0	6.0	2.0
014	4.5	8.0	3.5
015	4.0	8.0	4.0
016	8.0	8.0	0.0
017	5.5	8.0	2.5
018	4.0	7.0	3.0
019	8.0	8.0	0.0
020	8.0	8.0	0.0

**EMPLOYEE ASSESSMENT
MATHEMATICS
PAGE 2 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
021	8.0	8.0	0.0
022	8.0	8.0	0.0
023	8.0	8.0	0.0
024	7.0	8.0	1.0
025	3.5	6.0	2.5
026	4.0	8.0	4.0
027	5.5	8.0	2.5
028	5.5	8.0	2.5
029	4.0	6.0	2.0
030	5.0	8.0	3.0
031	7.5	8.0	0.5
032	3.0	4.0	1.0
033	4.5	8.0	3.5
034	4.0	5.0	1.0
035	6.5	8.0	1.5
036	4.0	8.0	4.0
037	4.5	8.0	3.5
038	4.5	8.0	3.5
039	4.5	8.0	3.5
040	4.5	5.0	0.5

**EMPLOYEE ASSESSMENT
MATHEMATICS
PAGE 3 OF 3**

EMPLOYEE NUMBER	PRE- ASSESSMENT	POST- ASSESSMENT	EMPLOYEE IMPROVEMENT
041	8.0	8.0	0.0
042	4.5	6.0	1.5
043	4.5	5.0	0.5
044	4.0	7.0	3.0
045	7.0	8.0	1.0
046	6.5	8.0	1.5
047	8.0	8.0	0.0
048	5.5	8.0	2.5
049	6.5	8.0	1.5
050	4.5	8.0	3.5
051	3.5	3.0	-0.5
052	4.5	8.0	3.5
053	5.5	7.0	1.5
054	5.5	8.0	2.5

SELF REPORT SURVEY

		Strongly disagree	Disagree	Undecided	Agree	Strongly agree
1.	Verbal communications from management are Clearly understood by associates.	1	2	3	4	5
2.	Written communications from management are Clearly understood by associates.	1	2	3	4	5
3.	My employer is concerned with the quality of life of their employees at Work.	1	2	3	4	5
4.	My employer is concerned with the quality of life of their employees at Home.	1	2	3	4	5
5.	I respect the associates I work with.	1	2	3	4	5
6.	The associates I work with respect me.	1	2	3	4	5
7.	Associates work better as a team.	1	2	3	4	5
8.	Training is essential in building communication in the work place.	1	2	3	4	5
9.	My job performance is directly related to my ability to communicate effectively with Other Associates.	1	2	3	4	5
10.	My job performance is directly related to my ability to communicate effectively with Members Of Management.	1	2	3	4	5
11.	Working for this organization provides me with opportunities to improve myself.	1	2	3	4	5
12.	I like my job.	1	2	3	4	5

HUMAN SUBJECTS REVIEW

DESCRIPTION OF STUDY: RESEARCH PROJECT

The subjects in this study will consist of employees of a local manufacturing company who have been involved in a customized training program to improve employee communication skills. Now that the training is over, employees who wish to see the difference between their pre-test scores and post-test scores will be scheduled for an appointment. At that time, each will be asked to participate in the study by answering a questionnaire. The questionnaire consists of 12 questions about how employees feel about the communication environment at work and their job satisfaction.

1. **SUBJECTS:** Subjects for this study are voluntary; however, because the classes consisted of a fairly equal amount of men and women, there is a good chance that the percentage of men and women who make an appointment to see their test scores will be similar. Subjects are voluntary and will not be paid.
2. **PURPOSE, METHODS, & PROCEDURES:** The purpose of this study is to determine if employees who have been through a communication training program find the communication between employees and members of management and communication between employees and other employees satisfactory. To do this, a questionnaire has been developed, using a Likert type scale. The questionnaire is included in this proposal for your inspection.
3. **RISKS:** The risk involved in this study is minimal. Some employees may feel that they are being asked question about management that might get back to management. This may cause some psychological effects, especially stress concerning their livelihoods. However, I will make it clear that this study is strictly for UNLV research, is confidential, and is not available to member to management. Furthermore, I will make it clear that this study is voluntary.
4. **BENEFITS:** The benefits to the individual subjects are future training programs. Based on the results, I can continue to develop the best possible communication training courses to fit the needs of this company's employees. The results of this survey will indicate what areas of communication employees are most dissatisfied with and what areas they will need to concentrate on in future training programs.

5. **RISK-BENEFIT RATIO:** The risks to the individuals in this study are extremely minimal and the benefits are great. There may be some concern on the part of the employee based on the questions being asked and their fear that members of management might see them. However, after I have explained that this study is confidential and voluntary, I believe it will calm their fears and make them more willing to participate in the study. Furthermore, in the long run, they will learn that their answers were not given to management, and this will instill further trust in me which will enable me to provide them with the best communication training possible based on their individual needs.

6. **COSTS TO SUBJECTS:** There is no cost to anyone other than the research. Costs for the research are minimal based on copies of the questionnaire and travel time to meet with employees.

7. **INFORMED CONSENT:** Informed consent will be obtained by the research before giving the subject a copy of the questionnaire. Because all of the subjects are adults who will be volunteering for the study, they will not be required to sign a consent form. Instead, the research will read a description of the study and ask for consent verbally. If they do not consent, they will not answer the questionnaire. A copy of this is included for your inspection.

PERMISSION TO SURVEY EMPLOYEES FOR SELF-REPORT

My name is Autumn Betke, and I am a graduate student at the University of Nevada, Las Vegas doing research on organizational communication.

The study you are being asked to participate in involves communication and communication development in organizations through customized training programs. You will be asked to answer 12 questions about written and verbal communication between yourself and other employees or members of management, communication training, and overall job satisfaction. You have been chosen for this study because you have completed a four week training program based on communication skills in your organization.

The results of this study will be used to determine future training programs in your organization, as well as others. The questionnaire will take approximately two minutes, but there is no time limit. Please take your time and be honest. There are no right or wrong answers.

The purpose of this study is to obtain information which will improve organizational communication programs and will, therefore, improve organizational communication. The results of this study are completely confidential and will not be viewed by other employees or members of management.

If you have further questions about the rights of research subjects, please call the Office of Sponsored Programs at 895-1357.

Again, your participation is voluntary. Whether you decide to participate or not, I thank you for coming in today.

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