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ABSTRACT

This volume, one of a series of curriculum guides compiled by the Colorado Workplace Learning Initiative: 1991-92, contains seven workplace literacy courses on enhanced basic skills involving decisions, teams, problem solving, and critical thinking. Introductory materials include a table of contents and a list of the curriculum topics covered by each of the eight guides. The seven courses are as follows: a goal-setting/decision-making workshop for the workplace; a course on stress management; a stress management workshop; a model for the development of responsive, high performance work teams; a course on "understanding your team"--feedback session on the Myers-Briggs Type Indicator; and two final courses on creative problem solving and critical thinking respectively. Each course contains some or all of the following information: title; abstract; overview; objectives; benefits; timing; setting and materials; notes; plan/syllabus/outline; conclusions; assignments; examinations; activities; handouts/worksheets; overheads/flipcharts; acknowledgements; bibliography; conclusions; and evaluation. (NLA)

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Volume VII: Enhanced Basic Skills - Decisions

**Teams
Problem-Solving
Critical Thinking**

Courses

**Goals/Setting Decision Making Workshop for the Workplace
Stress Management
Stress Management Workshop
Model for the Development of Responsive, High-Performance
Work Teams
Understanding Your Team: Feedback Session on the Myers-
Briggs Type Indicator
Creative Problem-Solving
Critical Thinking**

Curriculum Guides

Colorado Workplace Learning Initiative: Skills for Productivity and Career Enhancement (1991 - 92)

Contact: Colorado Community College & Occupational Education System (303-620-4000)

Volume I:	Basic Skills -	Math
Volume II:	Basic Skills -	English as a Second Language (ESL)
Volume III:	Basic Skills -	Reading Writing
Volume IV:	Basic Skills -	General Educational Development (GED)
Volume V:	Function Skills -	Computer Proficiency Safety Basics Spanish
Volume VI:	Enhanced Basic Skills -	Learning to Learn Career Planning
Volume VII:	Enhanced Basic Skills -	Teams and Teamwork Problem - Solving, Decision - Making, & Critical Thinking Stress Management
Volume VIII:	Enhanced Basic Skills -	Listening Skills Communications Speech Self-Esteem Individual Workplace Skills

SUMMARY OF CURRICULUM TOPICS SUBMITTED FOR "THE COLORADO WORKPLACE LEARNING INITIATIVE: SKILLS FOR PRODUCTIVITY AND CAREER ENHANCEMENT"
1991 - 1992 PROGRAM

The program is described on the attached abstract. Contained in this series of curriculum guides are the outlines and notes for the topics covered according to the basic skills needs of the business partners. For more information, contact Colorado Community College and Occupational Education System, 303-620-4000.

COMMUNITY COLLEGE OF AURORA	COMMUNITY COLLEGE OF DENVER	COMMUNITY COLLEGE OF DENVER-TECH CENTER	PUEBLO COMMUNITY COLLEGE	PIKES PEAK COMMUNITY COLLEGE
Basic Skills				
math	math	math	math	math
English as a Second Language (ESL)	ESL	ESL	ESL	ESL
writing	reading	reading	reading	reading & speed reading
	GED	GED	GED	writing (3 part)
Functional (Job) Skills				
computer proficiency	computer proficiency and basic software skills	computer proficiency	computer proficiency	*
Spanish			safety basics for the workplace	
			Spanish	
Enhanced Basic Skills				
career planning		learning to learn		learning to learn
teamwork	transfer techniques			career planning
problem-solving				understanding team development process and teams
stress management	stress management		problem-solving	problem-solving
listening skills	listening skills		stress management	
interpersonal communications	conflict resolution		listening skills	
			interpersonal communications	overview of communications and interpersonal communications
			speech	
		self-esteem in the workplace	self-esteem	
			individual workplace skills	

**GOAL SETTING/
DECISION MAKING
WORKSHOP
FOR
THE WORKPLACE**

**PUEBLO COMMUNITY COLLEGE
D. ALBER**

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GOAL SETTING/DECISION MAKING

Abstract

The Goal Setting/Decision Making seminar is designed to provide the student with an opportunity to consciously consider their priorities, make rational decisions, and set realistic goals for the future. Students in the workplace learning program may develop goal setting skills to perform the functions of their assigned tasks. The material in this seminar is designed to provide students with the necessary practice in typical problem solving, and decision making skills. Seminar sessions will be a combination of lecture, class discussion, printed material, classwork, or homework assignments.

The keys to goal setting and decision making in the workplace are completing a balance sheet, cash flow statement, and projected budget and expense plans.

OBJECTIVES

At the completion of this course the student should be able to:

- ▶ Learn To Deal With Change
- ▶ Recognize Irrational Thinking
- ▶ Identify Priorities
- ▶ Learn Techniques for Decision Making

TIME AND MATERIALS

Timing

The class will meet three times a week for a one hour session for a total of 3 hours of instruction. This course will be conducted in a seminar format.

Each session will consist of the following:

1. Presentation
2. Open Class Discussion
3. Written Classwork
4. Written Homework Assignments

Materials

Course Syllabus

Printed Informational Material

Printed Homework and/or Classroom Assignments

Paper and Pencil

COURSE PLAN

Daily Plan for Class

Introduction (And/or review of previous session)	5 Minutes
Presentation (Instruction)	30 Minutes
Class Discussion	20 Minutes
In Class Work Period	<u>5 Minutes</u>
TOTAL	60 Minutes

Total Program Plan

Introduction (And/or Review)	15 Minutes
Lecture	90 Minutes
Class Discussion	60 Minutes
In Class Work Period	<u>15 Minutes</u>
TOTAL	180 Minutes

WORKSHOP OUTLINE

GOAL SETTING/DECISION MAKING

GOAL: To learn effective ways to plan for positive life changes by setting long-range, realistic goals that allow taking charge of your life.

Session I

1. How do you make major decisions?
2. Dealing with change
3. Recognizing irrational thinking
4. Identifying priorities records

Session II

1. Identifying barriers to successful decision making
2. Developing sound goals and objectives

Session III

1. Learning the steps to rational decision making
2. Writing a long range goal with appropriate objectives and action steps
3. Discussing individual concerns, worries and options for problem solving

WORKSHOP SYLLABUS

6

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LESSON PLAN

- A. Course Title: Goal Setting/Decision Making B. Lesson 1
- C. Topic: Introduction to Making Major Decisions and Goal Setting
- D. Prerequisite: None
- E. Performance Objectives: How do you make major decisions?
Dealing with change
Recognizing irrational thinking
Identifying priorities records
Student will become familiar with the eight stages of
Decision Making/Goal Setting.
- Activity In class participation. Discussion of listing of priorities to
successful decision making/goal setting
- F. Resources Handout

LECTURE OUTLINE

A. Course Title:

Goal Setting

Lecture Number 1

- I. Introduction to Goal Setting
 - A. Attitude towards change
 - B. Self esteem in relation to goals

- II. Developing Own Techniques
 - A. Planning the tasks
 - B. Setting time lines
 - 1. Work list
 - 2. Personal list

- III. Gaining control of unexpected situations
 - A. Identify eight stages of decision making
 - B. Outline objectives
 - C. Develop progress report chart
 - D. Flexibility

LESSON PLAN

- A. Course Title: Goal Setting/Decision Making B. Lesson 2
- C. Topic: Barriers to Goal Setting
- D. Prerequisite: None
- E. Performance Objectives: Identifying barriers to successful decision making
Developing sound goals and objectives
- Activity In class participation
- F. Resources Handout

LECTURE OUTLINE

A. Course Title: Goal Setting/Decision Making Lecture Number 3

- I. Steps to Rational Decision Making/Goal Setting
 - A. Define the problem or decision
 - B. Establish goals and objectives
 - C. Monitor progress and take timely corrective action

- II. Recognizing and Correcting Ineffective Goals
 - A. Criteria for effective goals
 - B. Reinforcement of short and long term goals
 - 1. Internal resources
 - 2. External resources

- III. Importance of Remaining Focused
 - A. Causes of failure
 - 1. Poor planning
 - 2. Procrastination
 - B. Evaluate
 - 1. Record progress report
 - 2. Flexibility

LESSON PLAN

- A. Course Title: Goal Setting/Decision Making B. Lesson 3
- C. Topic: Writing a Long Range Plan
- D. Prerequisite: None
- E. Performance Objectives: Learning the steps to rational decision making
Writing a long range goal with appropriate objectives and action steps
Discussing individual concerns, worries and options for problem solving
- Activity In class participation
- F. Resources Handout

BENEFITS OF GOAL SETTING/DECISION MAKING

1. Personal Improvement
2. Critical Thinking
3. Problem solving
4. Application to Workplace
5. Long-range goals
6. Control over Life situations
7. Adaptation to Change

STRESS MANAGEMENT

Course Overview

The pace of life and work, as we approach the end of the twentieth century, becomes daily more hectic and more wearing on the individual. This is equally true in the home as it is in the workplace. The manifestations of stress, both physical and mental, appear not to favor one sex over another, one age group over another or one social stratum over another; they are with us everywhere and at all times. Stress is a natural reaction to internal or external stimuli which give rise, in all of us, to feelings of inadequacy or inability to control those stimuli. The purpose of the present class is to help individuals recognize that stress is normal, almost universal in our society and above all, controllable. Course assignments provide the opportunity for students to gain practical experience with the material being covered and its relevance to personal circumstances. They also allow course participants to share situations they feel are relevant with other class members. Course handouts provide a reference and guidebook for post-course study, in particular the development of a personal stress management plan.

Objectives

By the end of the first workshop segment you will be able to:

- Recognize the symptoms and causes of stress
- Understand that stress is normal, inevitable and controllable
- Identify strategies for dealing with stress

At the end of the second segment you will be able to:

- Evaluate and change your lifestyle to reduce stress
- Make reasoned choices of what aspects you want to change
- Make short and long-range stress management plans
- Control stress so that it becomes a source of inspiration rather than fear

Timing

The course is designed to be given in two classroom segments of two hours each.

Materials

You will need:

- Presentation facilities
- OHP and screen
- Flipchart or whiteboard
- Workshop notes: "Stress is for Everyone"
- OHP foils 1- to 1- for session 1 and 2- to 2- for session 2
- Handouts 1- to 1- and 2- to 2-
- Assignments 1- to 1- and 2- to 2-
- Video: "How to Manage Stress", Channing L. Bete for session 1
- Audio tape "Centering Technique (Short Version)" by Alexander Everett for session 2 (optional).

Plan for Workshop Session 1

1. *5 mins.*

Brief introduction to the workshop. Start, using OHP 1-1, by introducing yourself. If the group is small, ask the members to do the same. Set the ground rule, especially in a corporate environment, that course participants are to set aside considerations of hierarchy and rank. Group members may share personal experiences and feelings at their own level of comfort; there are no "taboo" subjects, but no-one is obliged to discuss matters they regard as sensitive. All matters discussed within the course context are to remain confidential within the group.

Put up OHP 1-2 and explain the objectives for this first session. The general principles outlined in today's discussion will be used at the next, to help participants formulate a personal strategy to minimize the deleterious effects of stress.

2. *15 mins.*

Workshop briefing using Workshop Notes 1-1 and OHPs 1-3 to 1-6. Discuss job burnout, its manifestations and the factors which lead to it. Relate it to domestic manifestations, depression, inability to cope, family violence, divorce.

3. *15 mins.*

Handout 1-1. Distribute and project the Life Change Stress Scale (Handout 1-1/1). Ask participants to score the sheet in private. The rationale of the exercise is to show that life has both a continuum of stressful conditions which are more or less constant, such as the daily commute, conditions at work etc. and isolated stressful occurrences which can precipitate stress crises in an otherwise manageable lifestyle.

When ready, distribute and project "Life Change Scores" sheet (Handout 1-1/2) and ask participants to check their scores against the information given. Ask if any of the class would care to share their score (NOT its causes) and what thoughts the information on the score sheet has stimulated.

Distribute Handout 1-1/3 and discuss in group.

4. *15 mins.*

Workshop briefing using OHPs 1-7 to 1-9. Cover what is to be gained from managing stress effectively, what the basic signs are in ourselves and others, and what the consequences of not managing stress may be. Distribute handout 1-2.

5. *30 mins.*

Distribute and project Assignment 1-1, for workplace stress. If audience is larger than 5 persons, divide participants into two or more groups. Allow 15 minutes for completion, then reassemble for discussion. Solicit input and collate the results in three columns on flipchart or whiteboard. Encourage participants to express their

feelings. Remind the group that we all have different perceptions of stressors, depending on upbringing, conditioning, value system, even ethnic origin. Use OHPs 1-10 to 1-12 to summarize.

6. *20 mins.*

Video: "How to Manage Stress": Channing L. Bete

7. *15 mins.*

Plenary: Questions from the video. Overview of stress strategies using OHPs 1-13 to 1-15 (business stress) and 1-16 (people-and family-related stress). Remind the group that stress is not the prerogative of any particular group; bear in mind that subordinates and children can be stressed too. By formulating a plan to cope with our own stress, we can help those who depend on us to deal with their stress too.

8. *5 mins.*

Questions and review. Distribute Handout 1-3 to be completed prior to Session 2.

Workshop Notes - Stress is for Everyone

With all the pressures of modern life and work it is easy to fall into the trap of expecting ourselves and others to be "super-people". We exist in a world in which we expect to fit a career, family obligations, social duties, financial pressures, household chores and educational aspirations all into a day, at the end of which we try to snatch some of this "leisure time" everyone tells us we should enjoy. We then try to put the day behind us and get some sleep, usually too little, because we lie awake and fret about what we didn't get done during the day. We regard being worried, irritable, indigestion-prone and "having an off day" as normal. The media tell us that "tension headaches" are something everyone gets and that one or another medication is the answer. We live with the feeling that we are a couple of steps behind, that things would be so different if only there were a few more hours in the day, we had a few more dollars in the bank, got the promotion we want or were as smart, successful or good-looking as someone we know. Stress is essentially a feeling that we aren't fully in control, that we can't cope and that we aren't living up to what we or others expect of us. Worse still, we then blame ourselves for the problem and begin to dislike the person we are.

The problem does not cure itself. The more we ignore the signs of stress, the greater becomes the internal pressure and the less capable we feel to break out of the cycle. Brick by brick, we can build a wall around ourselves in this way. We dismiss the promptings and warning signals of our own body and mind as undesirable or irrational and tell ourselves or are told by others to "snap out of it!" Without meaning to do so, we create a false picture of ourselves to ourselves, loved-ones and co-workers or staff, because we lose sight of the real needs involved, our own and other people's. Our unwillingness to take note of these promptings and deal with situations undermines our feeling of self-worth and capability and can leave us depressed and sometimes desperate.

This inability or unwillingness to recognize the problem and work actively to cure it can herald the onset of severe stress, job burnout, mental or physical manifestations of illness in ourselves or others. Stress is not just a "fashionable" disease. It is a real killer which is responsible for the loss to the nation through stress-related illness of 2 per cent per year of GNP. Available information suggests that some 200 million working days are lost annually in the US, with a cost in the region of \$15 billion. The newspapers carry stories increasingly frequently of people who cause death and mayhem to themselves and others in stress-related episodes. Employees suffering from stress can also be disruptive to the workplace, affecting their own and co-workers' output. Clearly, managers must take steps to reduce the impact of stress in the workplace if only from considerations of cost. In our domestic environment, we need to be aware of factors which prevent us from living a balanced life and manage them effectively. Being alert to the needs of those who work with us and for us and keeping ourselves as stress-free as possible is the start of the process.

On a day-to-day basis we should watch for the early warning signs in ourselves and others, and investigate them before they develop into full-blown illness. All of us have a responsibility not only for our own safety and health, but also for that of those who work

alongside us. In Scandinavia and the USA (both areas with notoriously high indices of heart-disease, suicide and violent crime) a great deal of attention is being shown to alleviating the conditions which cause stress. Several US Companies have been the object of litigation brought by employees suffering from problems they have alleged were caused by stressful conditions in the workplace.

Prevention is better than cure and we need to understand what it is that makes life stressful for us and others in order to minimize the problem. At work, we need to make sure that there is a match between the expectations we and our co-workers have of ourselves and the company we work for, the work environment itself and the type of work being performed. Elsewhere we need to learn to balance our expectations with our abilities and our goals with our needs, in order to regain the necessary perspective and degree of control. We have to take charge. There will always be stimuli in our lives which cause stress. Our aim is to be knowledgeable enough to recognize it and manage it, so that life becomes a question of Management by Exception rather than Crisis Management.

Plan for Workshop Session 2

1. *10 mins.*

Review Handout 1-3. Ten "B" personality traits are imbedded in the questions. Discuss Type "A" and "B" personality traits and their relative stress impact. Distribute Handout 2-1.

2. *10 mins.*

Workshop Briefing using Workshop Notes 2-1, title OHP 2-1 and theme OHPs 2-2 and 2-3. Distribute Handout 2-2 and discuss ways to reduce Type "A" tendencies.

3. *20 mins.*

Distribute Assignment 2-1a. Explain that we are going to execute three assignments in sequence. Ask participants to list briefly at least two or three stressors in each of the four stress categories.

Distribute Assignment 2-1b. Ask participants to review the stressors they listed in Assignment 2-1a and rank the "top five" in descending order.

Distribute Assignment 2-1c. Ask participants to take the "top" stressor from their list and work with it to complete questionnaire 2-1c. When all are ready, invite conjecture from the floor as to what each of the participants has just done. Explain that we defined the scope of the problem in 2-1a, prioritized the points of the problem in 2-1b and took the first step to implementing a solution to the first point in 2-1c. In other words, we have formulated a stress management procedure, built a stress management plan around it and implemented the first step in ten minutes. (Confucius: "The longest journey begins with but a single step"). Explain that the danger from stress is not the crisis itself, but the feeling of helplessness and inevitability. Our stress load may seem insurmountable, but if we can break it into manageable pieces, we can cope.

4. *60 min.*

Workshop Briefing - A sixfold approach for stress management planning.

Physical approach: Exercise, OHPs 2-4 to 2-7. Distribute Handout 2-3 as tool for designing an exercise program. Nutrition, OHPs 2-8 to 2-12. Distribute Handout 2-4 as tool for each participant to evaluate nutrition habits.

Social Approach: OHPs 2-13 and 2-14. Define and explain the necessity of support systems.

Mental Approach: OHP 2-15, Assignment 2-2 (5 min.)

Intellectual Approach: OHP 2-16. Dwell heavily on guarding personal time and using it for personal life-enrichment.

Emotional Approach: OHP 2-17, Handout 2-5 for discussion (5 min.)

Spiritual Approach: OHP 2-18, Handout 2-6 for discussion; relaxation, meditation, prayer.

5. *15 mins.*

Meditation: Audio Tape "Centering Technique: Short Version" Alexander Everett. Everett's tape uses a technique he calls the "Rainbow Method" to help people relax and center.

6. *5 mins.*

Distribute handout 2-7: these are hints for developing a short- and long-range stress management plan.

Plenary: Show OHPs 2-19 and 2-20.

Questions and Review.

Participant evaluation

Workshop Notes - Everyone Can Manage Stress.

In the first segment of our class, we looked at factors which cause stress in our lives both in family and workplace situations. We discovered that stress is commonplace, that there is no particular age group, sex, profession or society that enjoys freedom from stress, but that individually we perceive different stressors in different ways and that stressful circumstances for one person may well not be stressful for another. Whether a situation is disastrous for us or merely a ripple in an otherwise undisturbed universe depends very strongly on the kind of person we are, our physical and mental well-being and the degree to which we have anticipated and planned for stressful situations.

In order to cope with new stressful events, we need to rid ourselves of the negative results of prior stressful situations. In many cases, this means evaluating the way we are and making the changes we see as necessary to strengthen our ability to deal with stress. Whether this is to be done from a physical aspect, by changing destructive behavior patterns, or a mental point of view, by learning to reinforce the best aspects of our self-image, we need to plan our lives in such a way that we are "our own best friends" and the impact of stress is minimized.

As we discovered in the first segment, however, we cannot deal with the situation merely by "getting ourselves together" or "snapping out of it". As long as we allow our old thought and behavior patterns to render us immobile and ineffective, we will continue to be victims of rather than victors over stress. Our approach must be broad-based, reasoned and effective, and encompass all aspects of our life. We need to put a plan together today and to implement it now. We need to know where we want to get to and what it will take and how long it will be before we get there. Only when we step back from the problem and see for ourselves in concrete terms how much changing our lives will benefit us, will we be able to become "self-actualizing" as Dr. Wayne Dyer calls it.

This course proposes a six-faceted approach to formulating a stress-management plan. A plan, by definition, is a vision of the future as we would like it to be. In defining the plan, we need to see ourselves as "in charge" of our lives from this day forward, rather than waiting for the next blow, like wounded animals. In implementing it, we may well find that we no longer have to strive for goals which continually elude us; they may well come to us.

**STRESS MANAGEMENT
WORKSHOP
FOR
THE WORKPLACE**

**PUEBLO COMMUNITY COLLEGE
D. ALBER**

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STRESS MANAGEMENT IN THE WORKPLACE

Abstract

The Stress Management Workshop is designed to provide the student an opportunity to develop alternatives to control and cope with stress in the workplace and at home. Through selected activities the student will be able to identify stress factors.

The student will be able to identify common stressors, personal stress factors, and the symptoms of stress. The workshop will include class discussion and written work on stress reducers, techniques, attitude, and lifestyle changes.

The material in this unit is designed to provide the student with the necessary practice in solving typical problems leading to stress. Each student will complete a personal stress reduction plan.

OBJECTIVES

Stress Management - WPL

At the completion of this course, the student should be able to:

- ▶ Learn to control and cope with stress in workplace and personal life situations.
- ▶ Identify the stressful situations/aspects of his/her personal life and workplace.
- ▶ Understand the signals/consequences of negative stress.
- ▶ Learn techniques for controlling/coping with the negative impacts of stress.
- ▶ Set personal goals and objectives.

TIME AND MATERIALS

Timing

Stress Management will meet three times a week, for one hour each session for a total of three hours of instruction. This course will be conducted in a workshop format.

Each session will consist of the following:

1.	Presentation	30 Minutes
2.	Open Class Discussion	20 Minutes
3.	Written Class work	<u>10 Minutes</u>
	TOTAL	60 Minutes

Materials

Course Syllabus

Printed Informational Material

Printed Homework and/or Classroom Assignments

Paper and Pencil

WORKSHOP PLAN

Daily Plan for Class

Introduction (And/or review of previous session)	5 Minutes
Presentation (Instruction)	25 Minutes
Class Discussion	20 Minutes
In Class Work Period	<u>10 Minutes</u>
TOTAL	60 Minutes

Total Program Plan

Introduction (And/or Review)	15 Minutes
Lecture	75 Minutes
Class Discussion	60 Minutes
In-Class Work Period	30 Minutes
TOTAL	<u>180 Minutes</u>

WORKSHOP OUTLINE

STRESS MANAGEMENT

At the completion of this course the student should be able to learn to control and cope with stress in his/her personal life and workplace.

Session I

- A. Identify the stressful situations/aspects of your personal life and workplace.
- B. Understand the signals/consequences of negative stress.

Session II

- A. Learn techniques for controlling/coping with the negative impacts of stress.
- B. Help to make reasonable choices concerning lifestyle changes.

Session III

- A. Make short-term and long-term stress management plans.
- B. Set personal goals and objectives.

BENEFITS OF STRESS MANAGEMENT

- ▶ Personal Improvement
- ▶ Decrease Stress - produced Symptoms and Illnesses
- ▶ Increase in Positive Mental Health
- ▶ Improvement in Job Performance
- ▶ Goal Setting both Personal and Workplace
- ▶ Team Problem Solving skills
- ▶ Application to Workplace and Home

WORKSHOP SYLLABUS

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WORKSHOP PLAN

- A. Workshop Title: STRESS MANAGEMENT B. Session 1
- C. Topic: What is Stress?
- D. Prerequisite: None
- E. Performance Objective: Student will be able to identify stress and it's effects.
- Activity: Self test for stress. Stress Profile
- F. Resources Required: Handouts

LECTURE OUTLINE

A. Course Title: Stress Management Lecture Number 1

- I. Introduction to Stress
 - A. What is Stress
 - 1. Mental
 - 2. Physical
 - B. Cost of Stress
 - 1. For the Individual
 - 2. For Corporations
- II. Symptoms of Stress
 - A. Physical Symptoms
 - B. Mental Symptoms
- III. Causes of Stress
 - A. Internal
 - 1. Emotions
 - 2. Perception of Situation
 - B. External
 - C. Control Over Situations
 - 1. Peer Pressure
 - 2. Job Pressure
- IV. Identifying Stress in Your Life
 - A. Handouts
 - B. Stress - Self Test for Stress

WORKSHOP PLAN

- A. Workshop Title STRESS MANAGEMENT B. Lesson 2
- C. Topic: Stress Reducer
- D. Prerequisite: None
- E. Performance Objective: Student will learn techniques to reduce stress in
workplace and home.
- Activity: Relaxation Exercises
- F. Resources Required: Handouts

LECTURE OUTLINE

A. Course Title: Stress Management

Lecture Number 2

- I. Types of Stress
 - A. Negative
 - B. Positive
- II. Reducing Negative Stress
 - A. Physical Activities
 - 1. Exercise
 - 2. Deep breathing
 - 3. Proper Diet
 - 4. Get Enough Sleep
 - B. Mental/Intellectual Activities
 - 1. Reading
 - 2. Listen to music
 - 3. Stimulate mind with intellectual games
 - C. Emotional Activities
 - 1. Laughter is good medicine
 - 2. Define own values
 - D. Spiritual Activities
 - 1. Meditation
 - 2. Prayers
- III. Be Good to the Caretaker
 - A. Mental Hugs
 - B. Know When to Say "No"

LESSON PLAN

- A. Workshop Title: STRESS MANAGEMENT B. Session 3
- C. Topic: Know Yourself
- D. Prerequisite: None
- E. Performance Objectives: Student will identify opportunities, evaluate goals, strengths and determine action steps.
- Activity: Complete Handout
- F. Resources Required: Handouts

LECTURE OUTLINE

A. Course Title: Stress Management Lecture Number 3

- I. Advantages of Reducing Negative Stress
 - A. Improved Mental Health
 - B. Improved Physical Health
 - C. Increased Energy Motivation Performance and Potential
 - D. Greater Feeling of Self Worth
 - E. Improved Appearance
 - F. Improved Relationships
 - G. Longer Life Expectancy
 - H. Challenges Become Opportunities
- II. Stress Management Plan
 - A. Values
 - B. Vision
 - C. Family
 - D. Workplace/Career goals
 - E. Personal Goals
 - F. Problems/Resolutions
 - G. Changes

STRESS MANAGEMENT

CONCLUSIONS

- ▶ Instructors need to be interactive and directly involved with the students.
- ▶ Instructors need to promote active participation in class discussion by all students.
- ▶ Instructors need to use a variety of student - involved activities to stimulate interest.
- ▶ The classroom should have minimal distractions or intrusions.

Bibliography

Hanson, Peter C. M.D. Stress for Success. New York: Bantam Doubleday Dell Publishing Group, Inc. 1989.

Lloyd, Sam R. Developing Positive Assertiveness. Los Altos, California: Crisp Publications, Inc. 1988.

McCarthy, Laura Flynn. "Stress Busters That Work." Woman's Day, April, 1992.

Sandroff, Ronni. "Stress Signals." Ladies Home Journal, April, 1992.

Scott, Cynthia D., and Jaffe, Dennis T. Managing Personal Change. Los Altos, California Crisp Publication, Inc. 1989.

Poppino and Shaw, Stress Management, Syllabus, 1992/

HANDOUTS

16

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SESSION I

17

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Stress signals

"We all think we're invincible and can handle it all—but eventually anxiety will affect the body," he says.

Scientists are uncovering new links every day, but many people in pain still don't make the connection. The first clue often comes at the doctor's office. "Many people have a habitual reaction, a target organ," says Oestreicher. These stress signals, such as aching muscles, stomach cramps, cold sores and headaches, are a warning that it's time to take extra care of yourself.

Is your body trying to tell you to take a break? Check out our head-to-toe guide—then read our tips for easing up.

Hair

Symptom: Generalized thinning
Cause: Emotional overload can cause alterations in hormone function and in the sebaceous glands, which secrete the oils that keep hair follicles healthy.
Remedy: Stress management and relaxation may slow hair loss.

Symptom: Loss of clumps of hair
Cause: "Some people unconsciously pull or twist their hair when they're under stress, and this can cause hair loss," says Paul J. Rosch, M.D., of the American Institute of Stress, in Yonkers, New York.

psychiatry at Columbia Presbyterian Medical Center.

In biofeedback, sensors are attached to the skin, and a tone or light gives the individual data about muscle tension and skin temperature. The person then learns to bring these automatic responses under conscious control. For example, migraine patients, who often have cold hands, can actually fend off attacks by learning to increase their skin temperature.

Jaw

Symptom: Difficulty opening the mouth, or pain in the temporomandibular joint, which operates the lower jaw.
Cause: Some people express tension by grinding their teeth or clenching their jaw muscles. The results can range from minor pain to muscle spasms, difficulty in opening the mouth, and damage to teeth and gums and the joint itself.
Remedy: For some people, just pointing out the cause of the problem is enough, says Charles Schoenfeld, D.D.S., Ph.D., of the American Dental Association. Others need to wear a plastic shield to prevent tooth damage and alleviate joint pain.

Ear, nose and throat

Symptom: Colds
Cause: Stress may hinder the immune system. In a recent study done at Carnegie-Mellon University, in Pittsburgh,

Remedy: Discharging nervous energy through deep relaxation techniques

Scalp and skin

Symptoms: Severe dandruff flaking on scalp and face; psoriasis—red, scaly plaques on elbows, knees and scalp

Cause: Chemical changes in skin, possibly the result of hormonal or immunological changes.

Remedy: Topical steroids, tar ointments, ultraviolet light

Symptoms: Eczema—itchy red rash that may ooze or blister; hives

Cause: Stress can cause cells to produce histamine—a substance often released in allergic reactions.

Remedy: Topical steroids, tar preparations and ultraviolet light for eczema; antihistamines for hives

Symptom: Acne

Cause: The release of the hormone adrenaline affects other hormones that are typically active in acne.

Remedy: Topical or oral antibiotics, benzoyl peroxide or Retin-A

Symptom: Neurodermatitis—an itchy area that just won't go away

Cause: "Some people take nervousness out on their skin," says Hillary Baldwin, M.D., associate professor of dermatology

at the State University of New York at Brooklyn Medical Center. They unconsciously rub and scratch at certain areas. Nerves under the skin get irritated, and an itch-scratch cycle can result.

Remedy: Keep hands busy with a needlework project or even worry beads. Topical steroids can relieve itching to help break the cycle.

Symptom: Cold sores (herpes simplex)
Cause: Stress starts replication of herpes viruses already in the body.

Remedy: Will go away in a week; ointments can help relieve discomfort but won't speed healing. Acyclovir, a prescription antiviral drug, can help sores heal faster.

Head

Symptoms: Migraine or tension headaches

Cause: Scientists now think that both migraine and tension headaches are caused by complex changes in brain chemistry, all of which can be set off by stress. Ironically, pain sometimes strikes just after a period of anxiety has passed.

Remedy: Traditional over-the-counter products— aspirin, acetaminophen and ibuprofen—relieve most tension headaches, and many new medications are now available for severe migraines. But biofeedback and deep relaxation techniques are being used more often, says Kenneth Greenspan, M.D., an assistant professor of

BEST COPY AVAILABLE

scientists surveyed subjects about the strife in their life and then exposed them to the germs that cause colds. Those who were overtaxed were most likely to be laid low by cold viruses.

Remedy: If you're under pressure, avoid contact with people who have colds.

Hands

Symptom: Eczema—red, scaly rash or small bumps that feel like blisters

Cause: See scalp and skin
Remedy: Topical steroids

Symptoms: Sweaty palms

Cause: Release of adrenaline and other hormones

Remedy: Tannic acid, an ingredient in tea, is helpful. Soak a teabag in one cup warm water for five minutes. Dilute with three cups cold water. Soak hands fifteen minutes. For severe cases, prescription antiperspirants are available.

Heart and lungs

Symptoms: Fast heartbeat, labored breathing

Cause: "When I get upset at work, my whole body feels like it's overheating," says Joan Baltarshanski, forty-one, who co-owns an audio-video equipment company with her husband. "My heart pounds, and I start breathing very fast and hard." It's a hormonal reaction of the

fight-or-flight syndrome.

Remedy: Muscle-relaxation and deep-breathing techniques can help turn off these reflexes. In severe cases, a doctor may prescribe tranquilizers and medications that slow heart rate and lower blood pressure.

Stomach and intestines

Symptoms: A knot or butterflies in the stomach; excess gas, stomach cramps, diarrhea, nausea.

Cause: Nervous-system action causes excess secretion of acid and speeds up movement through the digestive tract.

Remedy: Antacids, antispasmodics, laxatives or diarrhea medications.

Neck

Symptom: A dull, aching pain between the shoulders that may travel down the arm or up toward the jaw and ear

Cause: Involuntary tensing of neck and shoulder muscles is a common reaction to stress. This is hard work for the muscles, which release chemicals that produce muscle fatigue and pain, just as if you'd done heavy lifting or other strenuous exercise. Muscles may go into spasms, producing a painful throbbing or a general achiness.

Remedy: Ice packs are often used for acute initial phases, followed by moist heat, muscle relaxants, mild pain relievers/anti-inflammatory medications, such as ibuprofen, and gentle stretching exercises. (continued)

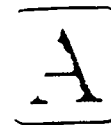
THE LIFE CHANGE STRESS SCALE



• 1992 Poppino & Shaw

Score yourself on the Life-Change Stress Scale. What events have happened to you in the past 12 months?

Event Rank	Event Value	Happened	Your Score	Life Event
1	100			Death of spouse
2	73			Divorce
3	65			Marital separation
4	63			Jail term
5	63			Death of close family member
6	53			Personal injury or illness
7	50			Marriage
8	47			Fired from job
9	45			Marital reconciliation
10	45			Retirement
11	44			Change in health of family member
12	40			Pregnancy
13	39			Sex difficulties
14	39			Gain of new family member
15	39			Business readjustment
16	38			Change in financial state
17	37			Death of a close friend
18	36			Change to different line of work
19	35			Change in number of arguments
20	31			Mortgage or loan for major purchase
21	30			Foreclosure of mortgage or loan
22	29			Change in responsibilities at work
23	29			Son or daughter leaving home
24	29			Trouble with in-laws
25	28			Outstanding personal achievement
26	26			Spouse begin or stop work
27	26			Begin or end school
28	25			Change in living conditions
29	24			Revision of personal habits
30	23			Trouble with boss
31	20			Change in work hours or conditions
32	20			Change in residence
33	20			Change in school
34	19			Change in recreation
35	19			Change in church activities
36	19			Change in social activities
37	17			Mortgage or loan for lesser purchase
38	16			Change in sleeping habits
39	15			Change in number of family gatherings
40	15			Change in eating habits
41	13			Vacation
42	12			Christmas
43	11			Minor violations of the law



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My Own Stress Profile

External Sources of Stress:

Events at Work

Away from Work

Conditions at Work

Away from Work

Internal Sources of Stress

In what ways do I expect too much of myself?

What do I value or believe that is different from others?

What am I really afraid of?



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My Own Stress Profile

My Most Stressful Situation

Look again at the list of stressful situations you identified in the last segment. Of the situations you have listed, choose up to five which are currently a major problem for you. Now list them in order of importance to you, most stressful to least stressful.

1.

2.

3.

4.

5.

My Own Stress Profile

Management Plan

By breaking the problem down into small components, we can often make it manageable and thereby eliminate the "panic" factor. Answer the questions below about the stressor you ranked "most stressful" in the previous segment.

1. What is the real problem?
2. What do I need to happen to remove the stress?
3. Who are the contributing parties?
4. Have I told them of the problem?
5. If not, why not?
6. What have/can they do?
7. What have/can I do?
8. Who else can help? Boss? Family? Colleagues? Staff?
9. Am I being realistic in my expectations of others? Myself?
10. What is the first action I need to take to solve the problem?

SESSION II

18

55

Stress Reducers

Get Up 15 Min. Earlier

Prepare for Tomorrow, Tonight

Make Duplicates of All Keys

Get Rid of "STUFF", Especially Old Appliances That Don't Work

Analyze Your Expectations. Get Real.

Get Feedback. Forget Old Failures.

Seek a Smooth-Running Work Situation

Relax. Meditate Pray.

Reward Yourself For Achievement.

Only Do Physical Exercise You ENJOY



Stress Reducers

Talk Less, Listen More

Prioritize "Things to Do"

Relax Without Guilt

Slow Down, "Smell the Roses"

Avoid Competitive Activities

Learn to Say "NO" Without Guilt

Exercise & Eat Right

Assert Yourself

Take Time For YOU

"Be Your Own Best Friend"



STRESS *Busters That Work*

BY LAURA FLYNN MCCARTHY

The word alone is enough to make your shoulders hunch and your brow furrow.

What your body knows instinctively is that stress—a physical response to a psychological overload—hurts. This mind/body relationship has kept researchers busy for decades.

Their findings? It's not only the big-time angst of divorce, unemployment and job change that takes a toll. It's the everyday stress of babies crying and appliances breaking down, of traffic tie-ups and late dinners that lead to stress-related health problems ranging from acne to increased risk of heart disease.

For tips on beating stress, we went to the real experts: women just like you who have learned to relax despite it all.

Beating the Morning Panic

● **Plan ahead.** Start the night before by setting the table for breakfast and fixing lunches. Make sure you (and the kids) know what you're going to wear the next day, and check everything for missing buttons, rips and spots.

● **Get up early.** "I get up one hour before my husband and kids do," says Connie West, a mother of four in Jasonville, Indiana. "That's my time to be by myself, to pray and to get mentally prepared for the rest of the day."

● **Share the load.** "I help my two kids get dressed, then my husband gives them breakfast while I get dressed," says Jane Davidson, a Spanish teacher from East Northport, New York. "Those few minutes of uninterrupted time in the morning are a must."

● **Set the clocks ahead 5 or 10 minutes—and don't tell anyone.** You'll worry less about getting everyone off on time.

● **Post reminders** on the door or the refrigerator so you don't forget anything—like lunches, library books, special appointments.

Getting Through the Day Easier

● **Take breaks.** "I make it a point to spend fifteen minutes in the morning and again in the evening doing yoga and meditation," says Nancy Ellner, a social worker and part-time radio announcer in Garden City,

New York. "It clears my mind of pressure and makes me more calm."

● **Walk more.** Like other aerobic exercise, it's a natural stress reliever. "I make regular walking dates with a friend," says Connie West. "By the time we've gone a mile and talked things out, I feel great."

● **Don't try to do too much at once.** "When I'm feeling overwhelmed by the number of tasks that face me," says stylist Danielle DiGiacomo, "I tell myself I only have to do one—but I must do it right away. That gets me started—and before I know it, the work no longer seems overwhelming."

● **Try to shop and bank at off hours when lines are short.** One early riser goes to the supermarket before breakfast and finishes in record time.

● **Keep a spare umbrella** in your car, office and tote so you'll never be caught in the rain without one.

● **Make sure you have duplicates** of any items you'd be lost without—such as your reading glasses, bank card or list of important numbers.

● **Go to the bathroom** before leaving your home or office and make sure your children do the same. That will be one less thing to worry about if you experience a delay.

● **Get a cordless phone** and take it with you when working in the yard or the garage—or simply relaxing. Then you won't have to dash to answer a ring.

● **Give yourself permission to be imperfect.** Let the dust pile up, use convenience foods, give a gift certificate instead of searching for the perfect blouse for Mom.

● **Take a personal tape player**—and your favorite tapes—along when you expect a long wait or a stressful encounter (a dentist appointment, a rush-hour shopping trip, even a line at a popular movie).

● **Make sure there is a phone at any meeting place.** If you're going shopping or to a movie with a friend, meet in a coffee shop instead of at the theater or the mall where you won't be able to make contact if there's an unavoidable delay.

● **Devise ways to deal with stressful people.** If you can't avoid them, try to maintain control of all encounters. MaryBeth Farrell, a San Francisco accountant, says: "I never ask time-wasters to sit down in my office; they may never get up. I also try to keep them from going off on tangents."

PLEASE TURN TO PAGE 42

1992-1993 ^{ERIC} ~~ERIC~~ ^{ERIC} Shaw Exercise Plan

One of the most easily-implemented methods of managing stress is an exercise plan. No special tools or equipment are needed and results are immediate and tangible. Walk when you could ride the elevator; walk to work; jog in your lunch hour; do whatever you enjoy. Don't regard it as a chore; if you like gardening, garden. If you like to bike, then ride.

1. List the forms of exercise you like and use already.
2. Using your own list and suggestions from the group, prioritize the options and choose the activities you would enjoy.
3. Are there any you could do every day?
4. Which could you do twice a week?
5. Which would you enjoy occasionally?

Establish a schedule. What day, time and place will you choose for each activity?

Monday: _____

Tuesday: _____

Wednesday: _____

Thursday: _____

Friday: _____

Saturday: _____

Sunday: _____

SESSION III

Creating Your Own Time and Space

For stress reduction, you need to give yourself a gift: time alone to put your world in perspective, and space to achieve this in. This usually needs to be made clear to others and you usually need to give yourself permission consciously to do it. Make the decision to set aside one hour per day, for relaxation, exercise or some activity that is for yourself and you alone.

Do this:

1. Determine what will be the 1-hour period which will suit you best (NOT the hour which is most convenient and fits in with your other obligations).
2. Determine what preparation you need to do to ensure that this time and space is your own (i.e. rescheduling, consulting with spouse, apprising family or companions, reserving room).
3. In addition, can you create 10-20 minutes alone, quiet time at work? How and when can you do this? Whom do you need to advise?
4. Make a personal commitment, then set it in motion immediately. Think of yourself as your own best friend. You would not think of letting your best friend down; don't do it to yourself.
5. There's no time like the present.

LIFTING MY SELF ESTEEM

15

Church respect
I don't
miss

Mental health

Good healed

Self-care is an attitude toward ourselves and our lives that says, I am responsible for myself. I am responsible for leading or not living my life. I am responsible for tending to my spiritual, emotional, physical, and financial well-being. I am responsible for identifying and meeting my needs. I am responsible for solving my problems or learning to live with those I cannot solve. I am responsible for my choices. I am responsible for what I give and receive. I am also

responsible for setting and achieving my goals. I am responsible for how much I enjoy life, for how much pleasure I find in daily activities. I am responsible for whom I love and how I choose to express this love. I am responsible for what I do to others and for what I allow others to do to me. I am responsible for my wants and desires. All of me, every aspect of my being, is important. I count for something. I matter. My feelings can be trusted. My thinking is appropriate. I value my wants and needs. I do not deserve and will not tolerate abuse or constant mistreatment. I have rights, and it is my responsibility to assert these rights. The decisions I make and the way I conduct myself will reflect my high self-esteem. My decisions will take into account my responsibilities to myself.

My decisions will also take into account my responsibilities to other people — my spouse, my children, my relatives, my friends. I will examine and decide exactly what these responsibilities are as I make my decisions. I will also consider the rights of those around me — the right to live their lives as they see fit. I do not have the right to impose on others' rights to take care of themselves, and they have no right to impose on my rights.

Self-care is an attitude of mutual respect. It means learning to live our lives responsibly. It means allowing others to live their lives as they choose, as long as they don't interfere with our decisions or live as we choose. Taking care of ourselves is not as selfish as some people assume it is, but neither is it as selfless as many codependents believe.

None comparisons
for me!

Relax!

I have a
right to
be
happy!

Learn to respect!
I'm not a
second class
citizen!

Nurture myself!
Value myself!

Trust myself!

Love myself!
Be gentle to
myself!

Accept myself!
I am
not
a
second
class
citizen!

6

CARE FOR THE CARETAKER

1. BE GENTLE WITH YOURSELF!
2. WE CANNOT CHANGE ANYONE ELSE - WE CAN ONLY CHANGE HOW WE RELATE TO THEM.
3. FIND A HERMIT SPOT. USE IT DAILY.
4. GIVE SUPPORT, ENCOURAGEMENT AND PRAISE TO PEERS AND TO MANAGEMENT. LEARN TO ACCEPT IT IN RETURN.
5. REMEMBER THAT IN THE LIGHT OF ALL THE PAIN WE SEE, WE ARE BOUND TO FEEL HELPLESS AT TIMES. ADMIT IT WITHOUT SHAME. CARING AND BEING THERE ARE SOMETIMES MORE IMPORTANT THAN DOING.
6. CHANGE YOUR ROUTINE OFTEN AND YOUR TASKS WHEN YOU CAN.
7. LEARN TO RECOGNIZE THE DIFFERENCE BETWEEN COMPLAINING THAT RELIEVES AND COMPLAINING THAT REINFORCES NEGATIVE STRESS.
8. ON THE WAY HOME, FOCUS ON A GOOD THING THAT OCCURRED DURING THE DAY.
9. BE A RESOURCE TO YOURSELF! GET CREATIVE - TRY NEW APPROACHES. BE AN ARTIST AS WELL AS A TECHNICIAN.
10. USE SUPERVISION OR THE BUDDY SYSTEM REGULARLY AS A SOURCE OF SUPPORT, ASSURANCE, AND RE-DIRECTION.
11. AVOID "SKOP TALK" DURING BREAKS AND WHEN SOCIALIZING WITH COLLEAGUES.
12. SCHEDULE "WITHDRAWAL" PERIODS DURING THE WEEK - LIMIT INTERRUPTIONS.
13. SAY "I CHOOSE" RATHER THAN "I SHOULD", "I OUGHT TO", OR "I HAVE TO". SAY "I WON'T" RATHER THAN "I CAN'T".
14. PRACTICE SAYING "NO". IF YOU NEVER SAY "NO", WHAT IS YOUR "YES" WORTH?
15. REMEMBER, ALOOFNESS AND INDIFFERENCE ARE FAR MORE HARMFUL THAN ADMITTING AN INABILITY TO DO MORE.
16. LAUGH AND PLAY!

CAMILLE WADE MAURICE

YOURSELF ...

STOP ALL CRITISM. Critism never changes a thing. Refuse to criticize yourself. Accept yourself EXACTLY as you are. Everybody changes. When you criticize yourself, your changes are negative. When you approve of yourself your changes are positive.

DON'T SCARE YOURSELF. Stop terrorizing yourself with your thoughts. Its a dreadful way to live. Find a mental image that gives you pleasure & immediately switch your scary thought to a pleasure thought.

BE GENTLE AND KIND AND PATIENT. Be gentle with yourself. Be kind to yourself. Be patient with yourself as you learn the new way of thinking. Treat yourself as you would someone you really loved.

BE KIND TO YOUR MIND. Self hatred is only hating your own thoughts. Don't hate yourself for having the thoughts. Gently change your thoughts.

PRAISE YOURSELF. Critism breaks down the inner spirit. Praise yourself as much as you can. Tell yourself how well you are doing with every thing.

SUPPORT YOURSELF. Find ways to support yourself. Reach out to friends and allow them to help you. It is being strong to ask for help when you need it.

BE LOVING TO YOUR NEGATIVES. Acknowledge that you created them to fulfill a need. Now you are finding new positive ways to fulfill those needs.

TAKE CARE OF YOUR BODY. Learn about nutrition. What kind of fuel does your body need to have optimum energy and vitality? Learn about exercise. What kind of exercise can you enjoy? Cherish and revere the temple you live in.

MIRROR WORK. Look into your eyes often. Express the growing sense of love you have for yourself. Forgive yourself looking into the mirror. Talk to your parents looking into the mirror. Forgive them too. At least once a day say "I LOVE YOU", "I REALLY LOVE YOU!"

DO IT NOW. Don't wait untill you get well,
or loose the weight,
or get the job,
or the new relationship.
Begin now---do the best you can.

**MODEL FOR THE DEVELOPMENT OF
RESPONSIVE, HIGH-PERFORMANCE
WORK TEAMS**

PIKES PEAK COMMUNITY COLLEGE

UNDERSTANDING THE DEVELOPMENT
OF
RESPONSIVE, HIGH PERFORMANCE TEAMS

PURPOSE: To provide a foundation for understanding what responsive, high performance work teams are and how they develop.

OBJECTIVES:

1. To illustrate the relevance of teams to business success.
2. To present and clarify the Best Practices Team Model and the process of team development.
3. To assist teams in assessing their current stage of team development, identifying strengths and opportunities, and realistic expectations.

LENGTH OF TIME: This course is scheduled to be delivered in two three hour sessions. While target times for each section have been included, the instructor should feel free to cover the materials at a rate that is comfortable for the group and will meet their needs. Breaks may be negotiated with the team, and may be taken at appropriate points along the way. The Best Practices Team Model should be gone over in the first session, so feedback regarding the results can be gone over in the second session. Active discussion is encouraged, but the instructor should watch the time carefully if time is a concern.

MATERIALS NEEDED:

- * Packets with handouts
- * Overhead Projector
- * Whiteboard
- * Flip Chart
- * VCR
- * Video - Everybody Leads Blue Sky Productions

COURSE OUTLINE:

Session 1	1.	60 min.	Understanding the Critical Need for Teams
	2.	5 min.	Break
	3.	20 min.	Continuum of Team Involvement (from Conformance to Ownership)
	4.	30 min.	Key Factors to Consider in Team Development
	5.	5 min.	Break
	6.	60 min.	Presentation of the Best Practices Team Model - team fills out evaluation as they complete model

Session 2

1. 15 min. Feedback of the Best Practices Team Assessment
- Completion of the Team Strengths exercise - teams asked to acknowledge their strengths and opportunities.
2. 60 min. Stages of Team Development
3. 5 min.. Break
4. 15 min. High Performance Management Behaviors
5. 10 min. Opportunities for Self-Direction
6. 10 min. Why Teams Fail (Barriers to High Performance)
7. 10 min. Managing the Transition
8. 5 min. Break
9. 40 min. Presentation and discussion of video, Everybody Leads
10. 15 min. Wrap up and evaluation

PURPOSE

TO PROVIDE A FOUNDATION FOR UNDERSTANDING WHAT RESPONSIVE, HIGH PERFORMANCE WORK TEAMS ARE AND HOW THEY DEVELOP.

OBJECTIVES

1. TO ILLUSTRATE THE RELEVANCE OF TEAMS TO BUSINESS SUCCESS.
2. TO PRESENT AND CLARIFY THE BEST PRACTICES TEAM MODEL AND THE PROCESS OF TEAM DEVELOPMENT.
3. TO ASSIST TEAMS IN ASSESSING THEIR CURRENT STAGE OF TEAM DEVELOPMENT, IDENTIFYING STRENGTHS AND OPPORTUNITIES, AND REALISTIC EXPECTATIONS.

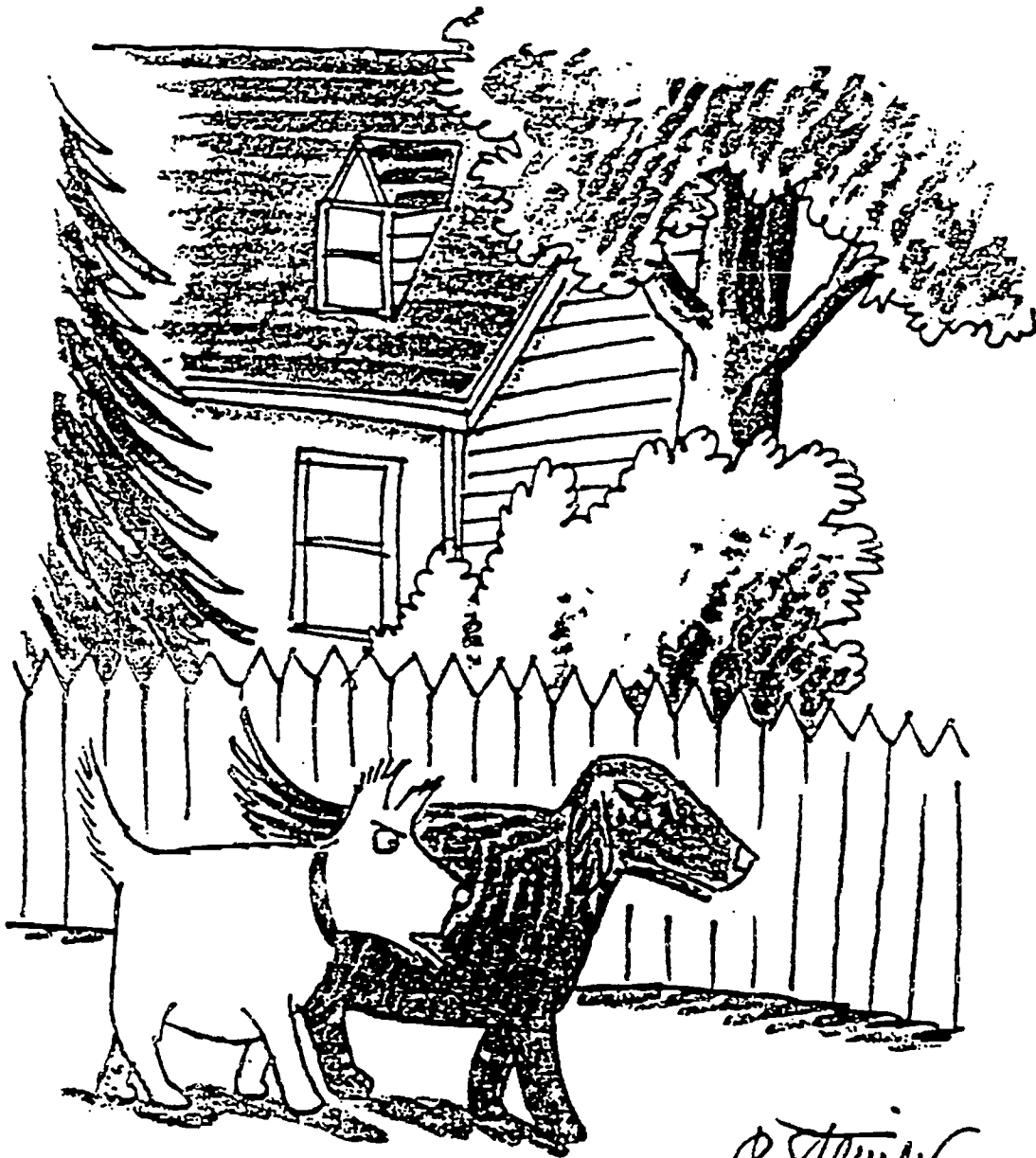
COURSE OUTLINE

SESSION 1

- * UNDERSTANDING THE CRITICAL NEED FOR TEAMS
- * BREAK
- * CONTINUUM OF TEAM INVOLVEMENT
- * KEY FACTORS TO CONSIDER IN TEAM DEVELOPMENT
- * BREAK
- * PRESENTATION OF BEST PRACTICES TEAM MODEL

SESSION 2

- * FEEDBACK OF BEST PRACTICES TEAM ASSESSMENT
- * STAGES OF TEAM DEVELOPMENT
- * BREAK
- * HIGH PERFORMANCE MANAGEMENT BEHAVIORS
- * OPPORTUNITIES FOR SELF-DIRECTION
- * WHY TEAMS FAIL
- * MANAGING THE TRANSITION
- * PRESENTATION AND DISCUSSION OF VIDEO
- * WRAP UP AND EVALUATION



P. Steiner

*"It's always 'Sit,' 'Stay,' 'Heel'—never
'Think,' 'Innovate,' 'Be yourself.'"*

Drawing by P. Steiner; © 1991 The New Yorker Magazine, Inc.

**UNDERSTANDING THE DEVELOPMENT
OF RESPONSIVE,
HIGH-PERFORMANCE WORK TEAMS**

WHY TEAMS?

"The most serious failure of American business in world-class competition has been the chronic underutilization of the creative talents of the vast majority of its workers. The sad truth is that the majority of American firms are operating at a fraction of their potential ...

In a world in which information, raw materials, and technology move freely across corporate and national borders, the bulk of an organization's assets are interchangeable with those of any other organization. The same basic tools are available to the firm, whether it is in Toledo or in Taiwan. Only one asset holds the power to differentiate a company in this environment: a dedicated, productive, innovative workforce ...

Today the success of businesses is directly linked to the development, commitment, and full participation of all employees. Competing in an era that demands continuous innovation requires the cooperation and brain power of every individual in the organization. At the heart of the new story of business are organizations and employees thriving together as fully participating partners."

- Charles Garfield
Second to None: How Our Smartest
Companies Put People First

"In the new global economy, nearly everyone has access to Big Ideas and the machines and money to turn them into standardized products, at about the same time, and on roughly the same terms. To remain competitive, American industries have two options: (1) They can try to match the wages for which workers elsewhere are willing to work; or, (2) They can compete on the basis of how quickly and well they can transform ideas into incrementally better products and services ...

Both paths can boost profits and improve competitiveness in the short run. But only the second can maintain and improve America's standard of living over time ...

On this second path, all those associated with the firm become partners in its future. Each member of the enterprise participates in its evolution. All have a commitment to the firm's continued success."

- Robert Reich, Harvard
Tales of a New America

"Evidence from the toughest industries shows that we can compete on quality and cost, despite high wages, only if we take advantage of the work force's full potential ...

There is ample evidence that American economic performance will increasingly depend on quality, service, constant innovation/improvement, and enhanced flexibility/responsiveness. Committed, flexible, multi-skilled, constantly retrained people, joined together in (high performance) teams, are the only possible implementers of this strategy."

- Tom Peters
Thriving on Chaos

"All major studies of employee involvement indicate that meaningful participation has a positive effect on productivity. It's almost never negative or neutral."

- Laura Tyson, U of California
1989 Brookings Institute Report

CHARACTERISTICS OF THE NEW ORGANIZATION

- * Clear vision of future end goals
- * Value-oriented mission and philosophy
- * Shared core values that guide actions
- * Progress measured in terms of sustainable growth, continuous learning, health, and quality
- * Flexible structures that facilitate rapid change and continuous innovation
- * Synergistic balance of human, technical, task and organizational subsystems
- * No "One Right Way" of approaching things
- * Fully participating partnerships

INDIVIDUAL BENEFITS

- ▲ **Enhanced job security**
- ▲ **Continuous growth and development/future marketability**
- ▲ **Latitude in making job-related decisions**
- ▲ **Ownership in solutions and strategies they must implement**
- ▲ **Meaningful, challenging, interesting work**
- ▲ **Improved personal effectiveness/information and feedback**
- ▲ **Supportive and cooperative relationships**
- ▲ **Effective and responsible leadership**
- ▲ **Recognition for accomplishments and contributions**
- ▲ **Participation in gains from increased productivity**

PAYOFFS FROM TEAMWORK

- ▲ **Highest levels of participation and involvement**
- ▲ **Increased commitment, ownership, motivation, satisfaction**
- ▲ **Better problem-solving and decision quality**
- ▲ **Enhanced skill/resource development and integration**
- ▲ **Increased flexibility and responsiveness**
- ▲ **Faster innovations**
- ▲ **Improved product and service quality**
- ▲ **More effective use of staff support**
- ▲ **Improved work methods**
- ▲ **Increased levels of productivity**
- ▲ **Reduced product costs**
- ▲ **Fewer layers of organizational structure**
- ▲ **Improved strategic planning and implementation**

PAYOFFS FROM TEAM DEVELOPMENT

Sherwin-Williams:

Product costs down 45%
Absenteeism 2.5% (63% below company's plant average)
Highest quality in the corporation (94% of product rated "excellent")
Productivity up 30%

Corning:

Defect rates reduced from 1800 ppm to 9.
Leadtime reduced from 5 weeks to 2 days.
Process losses reduced 50%.
On-time deliveries at 98.5%.

Honeywell:

Product costs down 50%
Productivity up 330%

Dana Corporation:

Cycle time reduced 92%.
Leadtime reduced from 6 months to 6 weeks.
On-time deliveries at 95%.
Quality costs down 47%.
Productivity up 32%
ROI up 470%; ROS up 320%.

Toledo Scale:

Cycle time reduced from 2 weeks to 3 days (area 1).
Cycle time reduced from 2 days to 30 minutes (area 2).
Defect rates down 85%.
On-time deliveries at 99%.
Productivity up 24%.

NUMMI:

Absenteeism dropped from 20% to 2.5%.
Labor costs 50% below typical GM plant
Productivity 50% higher than typical GM plant

Johnsonville Foods:

Production teams make strategic decision to expand plant capacity.
Production up 50%.

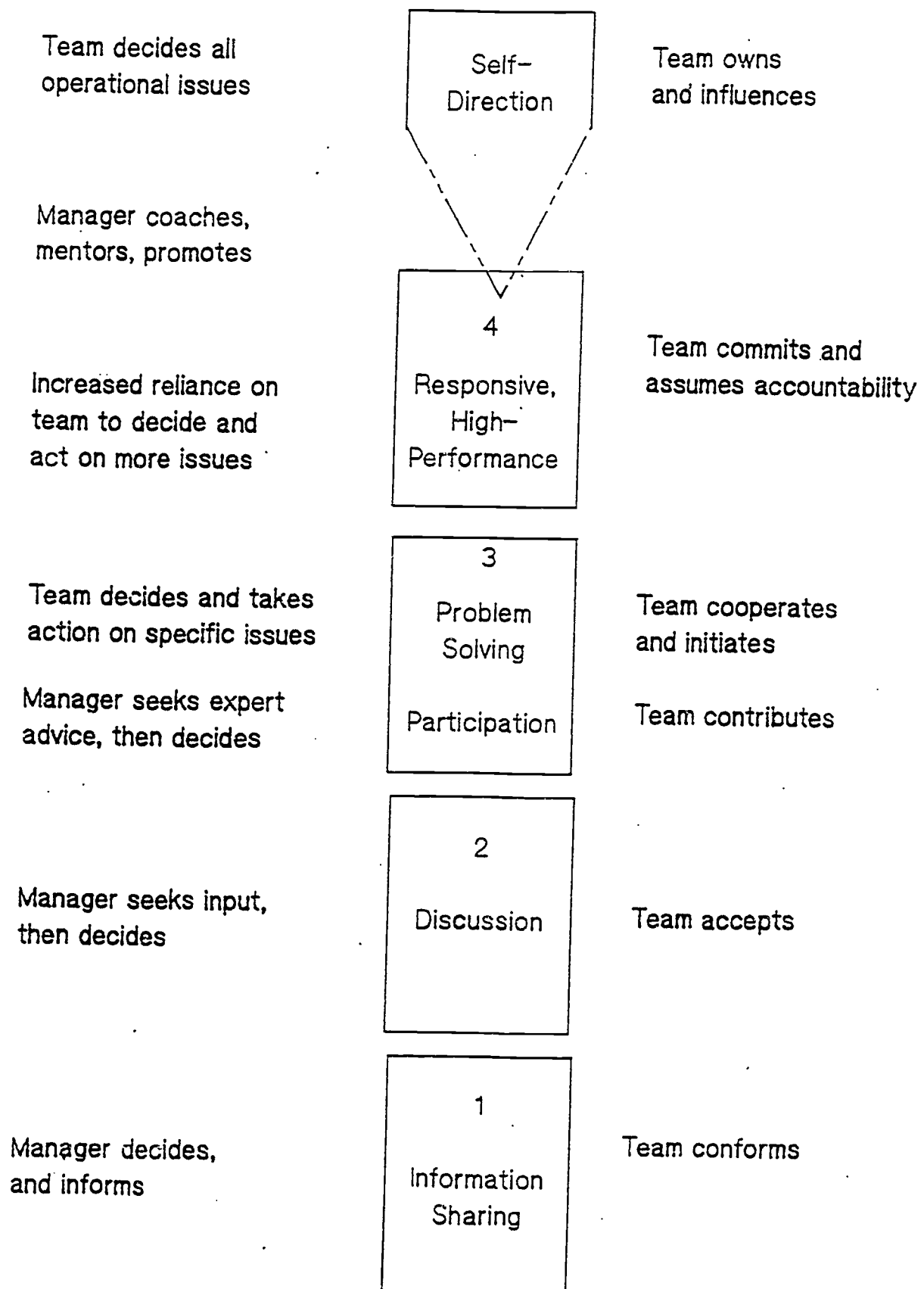
Chaparral Steel:

Team of millworkers select and supervise installation of mill stands.
Equipment on line within 1 year instead of the usual 3 - 4 years.

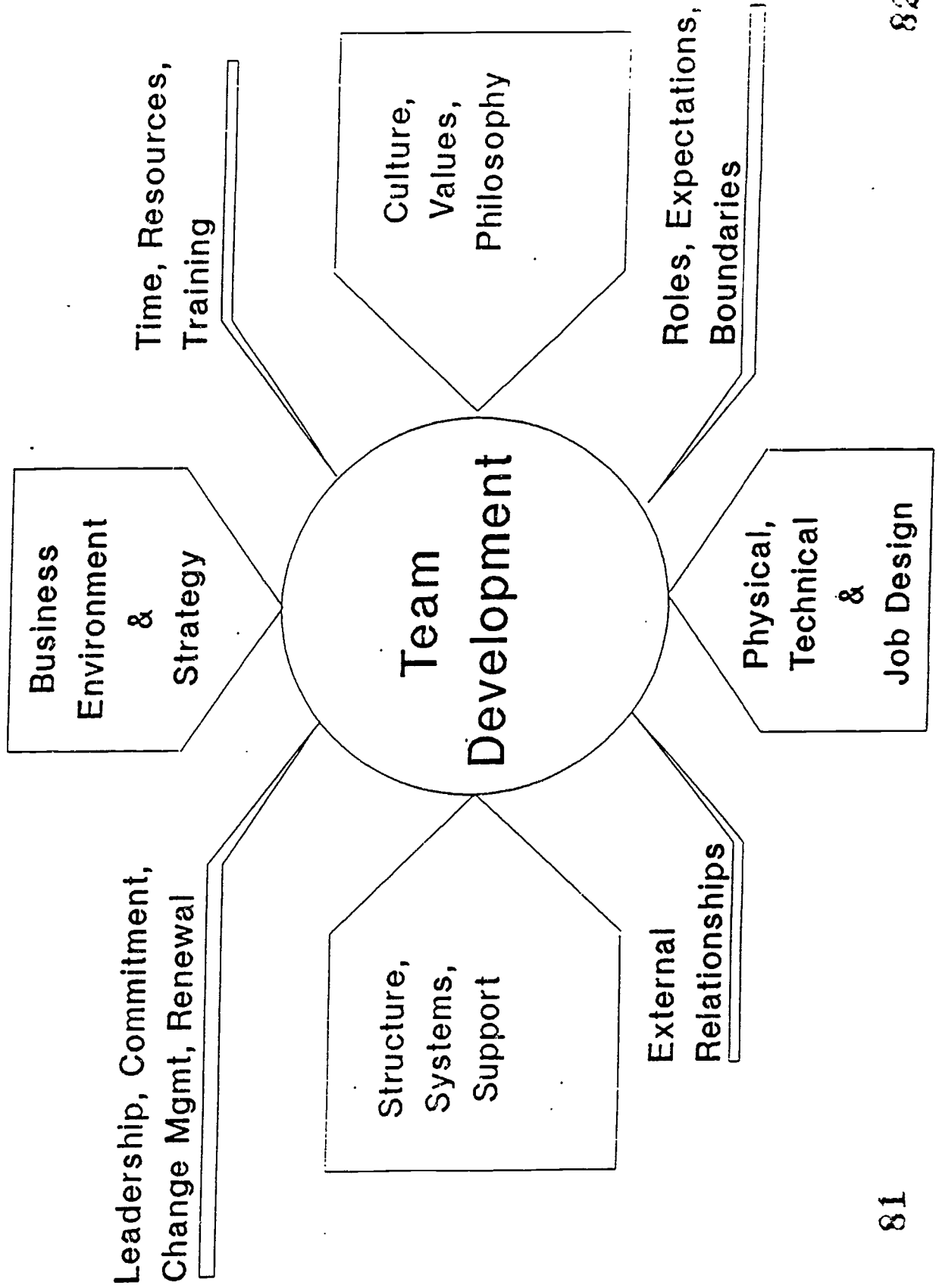
POTENTIAL HAZARDS

- ▲ Increased compensation costs
- ▲ Increased training costs
- ▲ Lost production time
- ▲ Unmet expectations for positive organizational change
- ▲ High risks to the organization, managers and workers
- ▲ Power and control issues
- ▲ Resistance
- ▲ Conflict
- ▲ Temporary set-backs
- ▲ Initial turnover

CONTINUUM OF TEAM INVOLVEMENT



KEY FACTORS IMPACTING TEAM DEVELOPMENT



I/N Tek Mission

The I/N Tek mission is to produce the most marketable cold-reduced products sold in the United States, maintaining the highest standards in quality, cost, and consumer satisfaction through the integration of human resources, equipment, technology, and business systems while providing secure and satisfying employment and an attractive return to investors.

I/N Tek Values

Quality Focus

We will commit our individual abilities and team efforts to achieve the highest-quality results in all aspects of personal performance, the productive process, and all functions of the organization.

Customer Orientation

We will seek out and satisfy our customers' needs and constantly strive to exceed their expectations. We recognize that the quality of our products has a powerful impact on our customers' manufacturing process and the quality of their products.

Constant Improvement (*Kaizen*)

We will continually strive to find better ways to do our work and to grow as individuals.

Participation and Involvement

We will seek input to find the best solutions to problems and methods of making improvements in the workplace. We will share information, resources, and ideas, and we will develop the skills necessary to maintain an exciting work environment where decisions are made at the lowest appropriate level.

People Focus

We will ensure a cooperative partnership among all members of I/N Tek in a framework built on mutual trust, respect, and a sense of dignity. We will provide opportunities for all employees to reach their maximum potential and to experience more secure and satisfying employment in a safe and healthy environment.

Cost Consciousness

We will continually improve operating efficiency and reduce costs based on the recognition that every action we take can influence external as well as internal costs.

STAGE 1

Time Frame:

First 6 - 9 months

Theme:

Adjusting / Uncertainty

Critical Outcomes:

Commitment

Acceptance

Common Characteristics:

Uncertainty

Lack of connection

Low commitment

Lack of clarity

Limited participation

Guarded communication

Avoidance of issues

Excitement

Eagerness

Reliance on manager

Major Opportunities:

Generating sense of teamness

Alleviating uncertainty

Tips for Advancing Through:

Develop and commit to mission/values/norms/objectives/measures

Get to know one another

Create a safe environment

Develop team training plans

Define roles, responsibilities, performance standards, boundaries

Understand team transition plan

Identify support systems and resources

Clarify expectations

Emphasize training (technical, interpersonal, general business knowledge)

Learn what other teams are doing

Focus on doable projects

Introduce peer training for managers and supervisors

STAGE 2

Time Frame:

Second 6 - 9 months

Theme:

Confusion / Conflict / Frustration

Critical Outcomes:

Clarification
Team identity
Valuing differences

Common Characteristics:

Frustration and dissatisfaction
Waivering commitment
Confusion
Conflicts, resistance, power struggles
Tension and stress
Poor attendance
Unproductive meetings
Frequent violations of standards
Ineffective team processes
Criticism
Poor performance
Reliance on manager

Major Opportunities:

Using and resolving conflict and stress effectively
Maintaining alignment with the team development transition

Tips for Advancing Through:

Clarify and enforce team values and norms
Clarify roles, responsibilities, expectations
Encourage and value diverse points of view
Emphasize training in team processes
Learn to lead and to participate effectively
Support other team members in doing their jobs

Cross-train within the team
Seek outside support and facilitation
Emphasize skills training for managers and supervisors
Remember that this stage is normal and temporary
Talk to mature teams
Stay focused on the task
Celebrate achievements
Be patient
Trust the process

STAGE 3

Time Frame:

Second year

Theme:

Cooperation / Teamwork

Critical Outcomes:

Involvement
Collaboration and cohesiveness

Common Characteristics:

Strong internal focus
Unified commitment and effort
Mutual trust and reliance
Adherence to norms and values
Skilled and open communications
Attention to quality
Informal team leaders and experts
Shared skills and job responsibilities
Participation and cooperation
Involvement with customers and suppliers
Creativity, experimentation, risk-taking
Increased responsibilities
Planning, monitoring, producing
Participation with manager
Reliance on team
Possibly insulated or protective

Major Opportunities:

Enhancing team effectiveness and independence
Broadening the team's focus

Tips for Advancing Through:

Increase team process skills
Learn to negotiate
Network
Expand team technical skills and job depth
Emphasize training in intergroup effectiveness, creativity, continuous improvement
Continue training and development for managers and supervisors
Incorporate team-based incentives

Increase multi-team contact with customers and suppliers
Resolve problems from broader business perspective
Train in overall business goals

STAGE 4

Time Frame:

Third year

Theme:

High Performance / Renewal

Critical Outcomes:

Results, Renewal, Responsiveness, Resilience
Pride in accomplishments
Organizational partnerships

Common Characteristics:

Cohesive team and business unit
Excellent communication and team processes
Effective relationships outside the team
High commitment to the team and to the organization
Personal development and satisfaction
Recognition
Flexibility, versatility, resilience, humor
Product and process innovations
Outstanding performance results
Continuous renewal and redesign
Proactive responsiveness
Involvement in strategic planning
Increasing team autonomy
Support from manager

Major Opportunities:

Sustaining momentum and productivity
Enhancing involvement in organizational issues

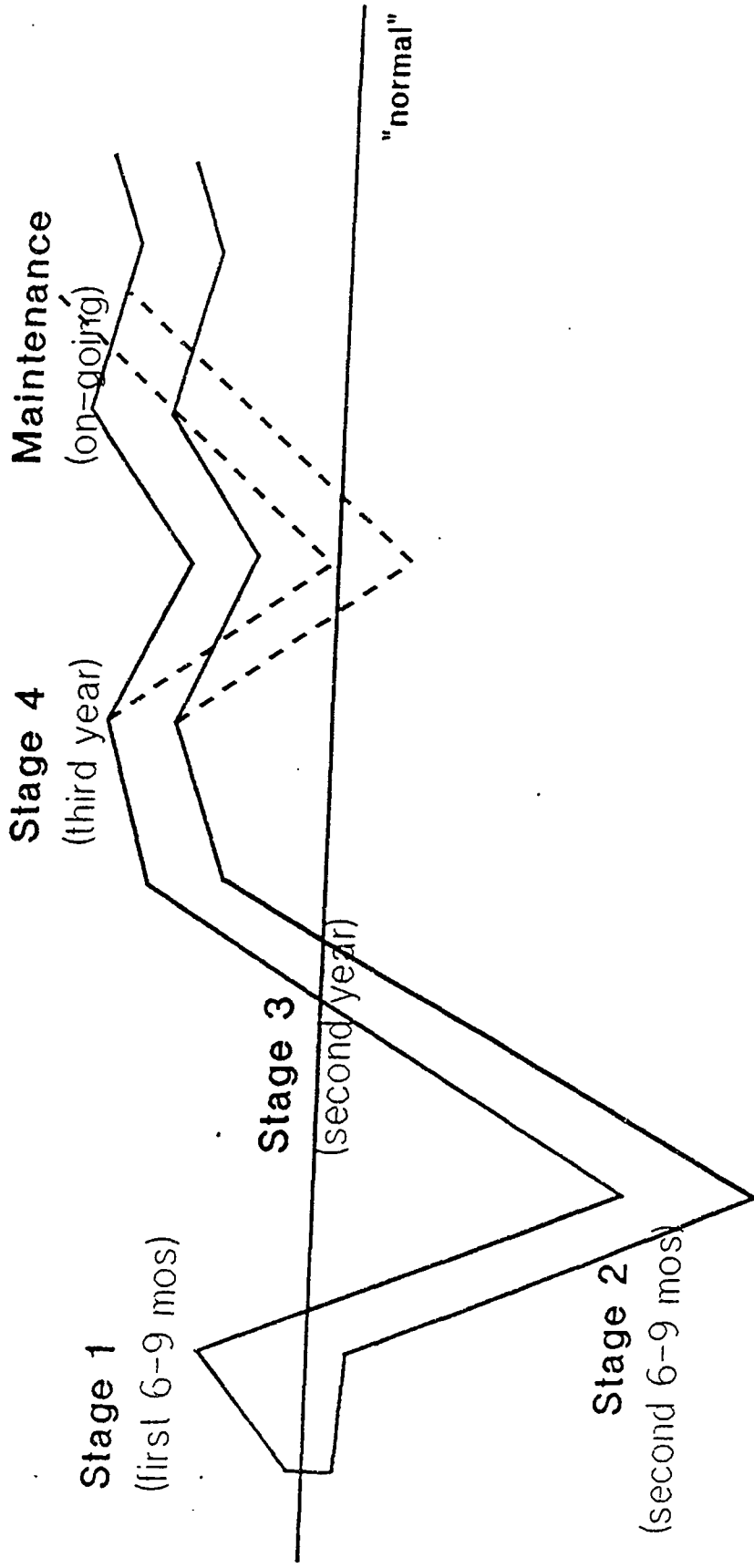
Tips for Advancing Through:

Emphasize training in renewal and responsiveness
Improve interteam process and development skills
Mentor less advanced teams
Prepare for temporary set-backs

Learn more about the business

Train in strategic planning, influencing, business skills, market dynamics
Initiate and support divisional improvement plans and business strategies

STAGES OF TEAM DEVELOPMENT



- Stage 1: Adjusting / Uncertainty
- Stage 2: Confusion / Conflict / Frustration
- Stage 3: Cooperation / Teamwork
- Stage 4: High Performance / Renewal

HIGH PERFORMANCE MANAGERS

- Team-Centered Behaviors -

- 1. Inspire and focus direction through vision and commitment (leading)**
 - Communicate clear vision and values to motivate and guide
 - Model behaviors expected of others
 - Take responsibility for results, not people
 - Commit to continuous improvement
 - Believe that most people will do what is right
 - Understand that business direction is influenced by those who implement it

- 2. Create ownership (facilitating)**
 - Actively solicit and channel the participation of others
 - Control the environment, not people
 - Manage by principle vs. policy/rules
 - Encourage and reward open and honest communication/feedback
 - Include all the right people in solving problems
 - Give decision-making responsibility to the people most directly impacted by the consequences
 - Empower others to do the right thing

- 3. Create winning teams (coaching)**
 - Understand the enlarged role everyone plays in the business
 - Develop individual players who work together effectively
 - Transfer authority/autonomy as team skills are developed

- 4. Act as a resource (enabling)**
 - Provide support/training/information/opportunity proactively
 - Trust people
 - Insist that people solve their own problems
 - Focus on results vs. activities
 - Set high standards
 - Deal firmly and fairly with unconstructive behavior
 - Give lots of performance feedback

- 5. Manage the external boundaries (networking)**
 - Think and work cross-functionally
 - Collaborate with and contribute to other parts of the organization
 - Develop cooperative relationships and strategic alliances among all the people, groups, and organizations that contribute to the business

SELF-DIRECTED WORK TEAMS

ARE:

- Experienced, responsive, high-performance teams
- Appropriately trained and developed
- Functioning as effective business units
- Without direct supervision
- Toward the accomplishment of unified goals

CONTRACT FOR:

- Accountability for a complete product, process or service
- Decision-making authority over how the work is to be done

RESPONSIBLE FOR:

Operations related to their overall task Supervisory and administrative roles within the team, such as:

- | | | |
|------------------------|-------------------------|--------------------------|
| . planning | . staffing | . scheduling |
| . setting goals | . controlling | . leading |
| . reporting | . documenting | . maintenance |
| . business diagnostics | . budgeting/forecasting | . project management |
| . quality assurance | . customer service | . continuous improvement |
| . renewal activities | | |

PAYBACKS:

- Increased flexibility
- Improved utilization of people/equipment/materials
- Improved problem solving and decision making
- Faster responsibility and innovation
- Development of people
- Improved quality (product and processes)
- Increased productivity
- More effective customer service

WHY TEAMS FAIL

- ▲ Losing sight of the goal**
- ▲ Control issues/politics/personal agendas**
- ▲ Deviation from values and standards of excellence**
- ▲ Breakdown of trust**
- ▲ Breakdown of communication and collaborative processes**
- ▲ Insufficient or intermittent training**
- ▲ Incompatible organizational structure and systems**
- ▲ Incompatible physical, technical and work designs**
- ▲ Lack of unity and full participation**
- ▲ Ineffective relationships outside the team**
- ▲ Lack of management commitment and development**
- ▲ Failure to manage the transition effectively**
- ▲ Failure to involve teams in strategic planning**

MANAGING THE TRANSITION

- The Role of Management -

- **Clarify the challenges and opportunities**
- **Communicate and build commitment to the overall vision, mission, values**
- **Set the stage for success**
- **Inform and solicit feedback frequently**
- **Reinforce values consistently**
- **Provide resources and support to promote creativity and risk-taking**
- **Provide necessary training**
- **Address issues and concerns openly and honestly**
- **Confront resistance constructively**
- **Model the desired changes**
- **Set short-range goals and checkpoints**
- **Honor the process of change and be patient**

MANAGING THE TRANSITION
- What Individuals and Teams Can Do -

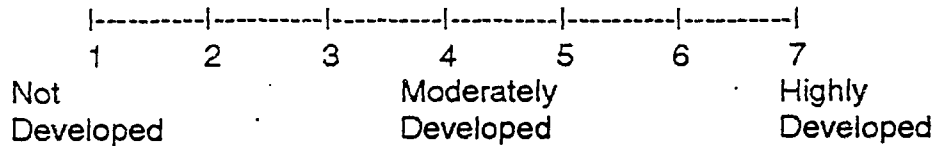
- Give it your best shot
- Be willing to follow sound advice
- Treat everyone and all contributions with respect
- Maintain a problem-solving approach to the issues
- Identify opportunities to improve and to experiment
- Focus on learning new things
- Ask questions and get the information you need
- Address issues and concerns openly
- Recognize and confront resistance constructively
- Clarify mission, values and norms
- Evaluate priorities/abilities/resources/temperament
- Set short-range goals and check points
- Unpack old baggage
- Honor the process of change and be patient

TEAM TIPS

- ▲ **Consider the whole system**
- ▲ **Don't expect a linear process**
- ▲ **Accommodate different rates of progress**
- ▲ **Measure individual and team progress**
- ▲ **Continually redesign**
- ▲ **Never stop learning**
- ▲ **Make the most of opportunities to change**
- ▲ **Celebrate successes**
- ▲ **Educate others**

TEAM DEVELOPMENT ASSESSMENT

(Please use this scale to assess your team's development in the areas listed below.)



1. **MISSION AND DIRECTION, WITH OBJECTIVES, MEASURES, AND VALUES**
 - a) a clear and compelling mission and direction: _____
 - b) motivating, customer-focused objectives and measures: _____
 - c) shared values that guide behaviors: _____

2. **RESULTS-DRIVEN STRUCTURE**
 - a) standards of excellence: _____
 - b) clear roles and accountabilities: _____
 - c) necessary resources and support: _____
 - d) procedures for planning, monitoring, and improving: _____
 - e) effective work design: _____

3. **UNIFIED COMMITMENT TO TEAM'S SUCCESS**
 - a) dedication to the team and its objectives: _____
 - b) valuing individual differences: _____

4. **EFFECTIVE AND OPEN COMMUNICATION**
 - a) building trust: _____
 - b) promoting teamwork: _____
 - c) providing essential information: _____
 - d) improving effectiveness between teams: _____

5. **BALANCED AND COMPREHENSIVE TEAM COMPETENCIES**
 - a) technical and administrative competencies: _____
 - b) personal competencies: _____
 - c) team process competencies: _____
 - d) knowledge of the business: _____

6. **OUTSTANDING TEAM EFFECTIVENESS**
 - a) high productivity: _____
 - b) quick responsiveness: _____
 - c) continuous renewal: _____
 - d) effective team processes: _____
 - e) enhancement of human resources: _____

*Best Practices Model for the Development of Responsive,
High-Performance Work Teams*

- Overview-

I. Definition of Responsive, High-Performance Work Teams

"Exceptionally competent, effectively structured, and unified work teams that excel in all dimensions of team process and productivity. They demonstrate a high degree of flexibility, involvement, and initiative; adapt quickly to new and changing business conditions; and develop and utilize the full potential of the team and its members.

II. Introduction to the Model

This model defines nine primary characteristics of responsive, high-performance work teams. Each of these characteristics is defined and described in terms of its components. A measurement tool is presented to generate team interaction, to assist teams in directing and assessing their development over time, and to help them to identify training and/or support needs. A glossary of terms is included in the back.

The model was developed by HP's Design Team, based on our research, experience, and insights. We recognize that the descriptions and wording may not fit exactly with every team and every situation, and so we invite all teams to study the concepts and to discover how they may apply them in further developing their responsiveness and high-performance.

III. Presentation of the Model

The Team Development Model is being presented to individual teams as part of their Team Development Training module. The model will be explained in depth and any questions concerning the concepts, terms, and definitions answered immediately. Presenting the material in this way should promote clarity about the model and provide the opportunity for teams to begin to explore how to apply the model to their own unique situations.

Page - 1

Description of Responsive, High-Performance Work Teams

Responsive, high-performance work teams are characterized by several distinctive features. They have a clear and engaging mission and direction, with customer-focused objectives, measures, and guiding values; a framework for structuring their activities that is designed to facilitate significant results; and team skills that are developed, utilized, and coordinated to maximize the productivity and effectiveness of the team effort. Team members communicate openly and honestly, share information freely, and focus on solutions; and they are united in the common purpose of achieving the team's objectives.

These teams are exceptionally effective. They consistently meet or exceed performance expectations; act on opportunities; continuously monitor and improve their activities, and conduct highly effective problem-solving, decision-making, and conflict resolution processes. They move toward autonomy within clearly determined boundaries. Managerial and leadership roles and responsibilities are defined and negotiated by the teams and their managers, and managers work with and on behalf of the teams to provide guidance and support and to facilitate team performance.

There is a high degree of support throughout the organization for the development and success of team performance. Management is visibly committed to creating an environment that fosters the development of responsive, high-performance teams; groups and individuals outside the teams are encouraging and cooperative; and teams receive broad recognition for their achievements.

These characteristics and dynamics result in exceptionally competent, effectively structured, and unified work teams that excel in all dimensions of team process and productivity. They demonstrate a high degree of flexibility, involvement, and initiative; adapt quickly to new and changing business conditions; and develop and utilize the full potential of the team and its members.

BEST PRACTICES MODEL

- Characteristics of Responsive, High-Performance Work Teams -

1. **CLEAR AND ENGAGING MISSION AND DIRECTION, WITH OBJECTIVES, MEASURES, AND VALUES**
 - * a clear and compelling mission and direction
 - * motivating, customer-focused objectives and measures
 - * shared values that guide behaviors
2. **RESULTS-DRIVEN STRUCTURE**
 - * standards of excellence
 - * clear roles and accountabilities
 - * necessary resources and support
 - * procedures for planning, monitoring, and improving
 - * effective work design
3. **UNIFIED COMMITMENT TO TEAM'S SUCCESS**
 - * dedication to the team and its objectives
 - * valuing individual differences
4. **EFFECTIVE AND OPEN COMMUNICATION**
 - * building trust
 - * promoting teamwork
 - * providing essential information
 - * improving effectiveness between teams
5. **BALANCED AND COMPREHENSIVE TEAM COMPETENCIES**
 - * technical and administrative competencies
 - * personal competencies
 - * team process competencies
 - * knowledge of the business
6. **OUTSTANDING TEAM EFFECTIVENESS**
 - * high productivity
 - * quick responsiveness
 - * continuous renewal and orientation to the future
 - * effective team processes
 - * enhancement of human resources

7. **INCREASING SPANS OF TEAM AUTONOMY**

- * determining the end goals
- * defining the boundaries
- * contracting for increased autonomy
- * establishing training plans

8. **TEAM-CENTERED LEADERSHIP**

- * provided by the manager
- * provided by team members

9. **ORGANIZATIONAL SUPPORT AND RECOGNITION**

- * management commitment
- * external support
- * recognition

1. **Clear and Engaging Mission and Direction, with Objectives, Measures, and Values**

Mission: a compelling and meaningful outcome that adds meaning and purpose to work, inspires action, encourages growth and optimism, and provides a framework for determining team activities, behaviors, processes, and strategies.

A. **Clear and Compelling Team Mission and Direction**

Team members clearly understand, align with, and are highly motivated by the team's mission and direction. They understand how their team's purpose fits with the broader divisional mission, direction, and goals; and with the goals, requirements, and constraints of their internal and external customers and suppliers.

B. **Motivating, Customer-focused Objectives and Measures**

Objectives and measures are defined, challenging, customer-focused, and tested against the overall values, goals, and strategies of the division and organization.

C. **Shared Values that Guide Behaviors**

Values are clearly articulated, practiced by all team members, and aligned with values. Team members rely upon their team values to guide their behaviors.

2. **Results-Driven Structure**

Results-Driven Structure: a framework for team functioning that is designed to promote effectiveness and satisfaction by fostering coordination of effort, competent performance, achievement of objectives, and a high degree of personal work motivation.

A. **Standards of Excellence**

The team has established specific performance and interpersonal norms (standards of behavior) which are observed and effectively enforced by the team.

B. **Clear Roles and Accountabilities**

Each team member's role and expected performance results are clearly identified, as are the interdependencies among these roles. Team members understand what each of them is held accountable for and measured against, and how their individual performance impacts the effectiveness of other team members as well as team results.

C. **Necessary Resources and Support**

The team negotiates for adequate resources such as funding, space, equipment, personnel, coaching, and technical, managerial, and administrative support to achieve its objectives; and it effectively manages and utilizes those resources.

D. **Effective Team Planning and Procedures for Monitoring and Improving Team Performance and Team Processes**

The team has regularly scheduled meetings in which team members systematically assess the team's progress, evaluate the ways they are working together, plan future strategies, and provide constructive feedback to one another concerning their individual contributions and performance results.

E. **Effective Work Design**

Jobs are designed and structured to maximize team coordination, effectiveness, and productivity. Team members perceive their work to be meaningful and challenging, and they are given sufficient autonomy over how they perform their feedback concerning work quality and output.

3. **Unified Commitment to the Team's Success**

Unified Commitment to the Team's Success: a strong personal commitment and genuine dedication on the part of all team members to the team and its objectives.

A. **Dedication to the Team and Its Objectives**

Team members recognize that the team's effectiveness depends on how well they work together. They are highly motivated to abide by team values and norms and committed to accomplishing the team's objectives. Team members contribute to the greatest extent to which each is capable, and have high expectations of themselves and one another. They focus on results and participate fully in setting goals and planning strategies for achieving them. There is a high degree of team awareness, with team members demonstrating personal responsibility for the team's performance outcomes. Team members readily assist one another in meeting their performance requirements, and individual achievements are reached as a result of working toward team goals.

B. **Valuing Individual Differences**

Individual diversity in terms of talent, skill, experience, and style is valued, developed, and utilized in ways that complement the skills and contributions of other team members and support the team effort.

4. **Effective and Open Communication**

Effective and Open Communication: team members interact with one another and with those outside the team in a way that values people and their contributions, builds trust, supports the free exchange of information, fosters collaboration, focuses on solutions, and facilitates successful team processes and performance results.

A. **Building Trust**

Communication within the team creates a relaxed and comfortable climate that encourages honesty, openness, involvement, consistency, and respect; and results in a high degree of interaction, integrity, and trust among team members.

B. **Promoting Teamwork**

Communication patterns that include effective dialogue, confrontation, conflict resolution, negotiation, listening, and feedback skills facilitate teamwork by generating effective collaboration, problem-solving, and decision-making.

C. **Providing Essential Information**

The team has access to accurate, complete, and timely information that is essential for understanding factors impacting its performance and for planning and executing its strategies -- such as task requirements, environmental constraints and opportunities, available resources, costs, customer standards, and feedback on individual and team performance. Information, knowledge, ideas, and suggestions flow freely from divisional management to the team, from the team to management, and within and between teams.

D. **Improving Effectiveness Between Teams, with Other Parts of the Division, and Outside the Division.**

By developing and using effective communication patterns to interact outside of its group, the team has established effective working relationships with other teams, individuals, and groups inside and outside of the organization. These relationships are characterized by trust, openness, and mutual support toward the achievement of each party's specific objectives as well as the larger organizational goals.

5. **Team Competencies**

Team Competencies: the talents, skills, qualities, knowledge, and experience necessary to achieve excellence in both team productivity (results) and team processes (methods).

A. **Technical and Administrative Competencies**

The team has identified and achieved the appropriate balance and versatility of core technical, administrative, creative, and conceptual skills that enable the team to successfully perform its work and achieve its performance objectives. Cross-training and skill sharing is conducted where appropriate.

B. **Personal Competencies**

Team members demonstrate the personal qualities and skills that enable them to join forces and to participate effectively in the team's efforts. These competencies include the ability to cooperate and collaborate, leadership and membership skills, loyalty, the willingness to set high personal standards, time management, a strong desire to contribute, a strong personal commitment to excellence and success, positive regard toward others, and a problem-solving orientation.

C. **Team Process (Interpersonal) Competencies**

Team members are adequately trained and skilled in group dynamics and in designing and conducting healthy and effective procedures for working together. The team therefore demonstrates high quality problem-solving and decision-making processes, negotiation and conflict resolution processes, and meeting management.

D. **Knowledge of the Business**

Team members are knowledgeable concerning fundamental business principles and strategies and how they apply to the ongoing success of their team and the organization as a whole. The team is informed and aware of external legal and market influences impacting team performance and is skilled at developing strategies to anticipate and meet these challenges.

6. **Outstanding Team Effectiveness**

Outstanding Team Effectiveness: the team's effort and resources are efficiently focused and result in high performance, flexibility, and initiative; adaptability to future trends and demands; excellent team processes; and the full development of individual and team potential.

A. **High Productivity**

Team members achieve an exceptional degree of synergy in their activities. Team performance is smooth, consistent, and effective. Output meets or exceeds team objectives and customer standards. Team potential is fully realized.

B. **Quick Responsiveness**

The team is effective at assessing the environment, evaluating its own capacities, and developing and implementing strategies that facilitate quick and appropriate responses to new and changing conditions. The team identifies and acts on opportunities, and contributes effectively to strategic business planning. Creativity, innovation, and educated risk-taking are supported and rewarded.

C. **Continuous Renewal**

The team focuses on future opportunities and the long-term impact of decisions, while considering short-term needs. Team members perceive change optimistically, viewing it as a pivot point from which to explore new ideas or strategies. Continuous self-assessment, improvement, and adaptation by the team ensures that all team activities add value to organizational and team effectiveness.

D. **Effective Team Processes**

Team processes are defined, effective, and healthy. They provide clear guidelines which the team observes in identifying, addressing, and resolving team issues. Problem-solving and decision-making processes are focused, highly participative, and efficient; they result in sound choices, effective actions, and high-quality team decisions which are supported by all team members. Conflicts are openly confronted and constructively resolved. Meetings are useful and organized. Team members listen well and provide helpful feedback. Working together enhances team competencies and generates enthusiasm for working as a team in the future.

E. **Enhancement of Human Resources**

Work experiences contribute to the growth, career development, and personal well-being of team members by providing opportunities for learning, achievement, and satisfaction. The potential of each team member is developed and utilized as fully as possible.

7. **Increasing Spans of Team Autonomy**

Increasing Spans of Team Autonomy: in a planned and agreed-upon way, the team accepts accountability for and is granted decision-making authority over a gradually widening range of specific strategic, performance, and/or team process issues and concerns. The manager facilitates, coaches, and provides advice to support the team in successfully executing these responsibilities.

A. **Determining the End Goals**

The team and its manager have defined the specific areas in which team autonomy is ultimately desired, and the appropriate degree of autonomy within each area.

B. **Defining the Boundaries**

The team and its manager are effective at defining the scope of and limits to team autonomy (boundaries) in each area by matching team readiness (skills, knowledge, experience, and motivation) to the types of issues delegated to the team given existing organizational guidelines, constraints, requirements, etc. As the team develops over time and is willing and able to assume more responsibilities, these boundaries are renegotiated and redefined.

C. **Contracting for Increased Autonomy**

Guidelines for negotiating and contracting for increased autonomy are established by the team and its manager. At each stage, there is a clear determination and documentation of both the team's and the manager's specific roles and responsibilities, definitions of the tasks involved, and established boundaries, so that both the team and its manager thoroughly understand what is expected of each of them and can evaluate their effectiveness.

D. **Establishing Training Plans**

Specific training and development required by the team to achieve successive degrees or spans of autonomy is identified, along with realistic plans and time tables for acquiring it.

8. **Team-Centered Leadership**

Team-Centered Leadership: the process of working with and on behalf of the team to inspire excellence in all aspects of team processes and performance; to generate enthusiasm, action, and commitment toward the achievement of the team's mission and objectives; to facilitate performance results; to reinforce team-centered values and norms; and to support team members in leading themselves and managing their team's affairs.

A. **Leadership Provided by the Manager**

The team's manager provides team-centered leadership by demonstrating effectiveness in areas such as the following:

- * fostering, openness, creativity, and the confidence to take risks
- * exerting influence outside the team to help create supportive conditions within the larger organization
- * assuring that essential information flows through the team
- * linking the team with outside groups and individuals
- * motivating team interaction and healthy team spirit
- * creating a climate that supports open communication and effective team processes such as problem-solving, decision-making, and meeting management
- * cutting through red tape and removing performance barriers
- * providing coaching, facilitation, and expert support
- * modeling the attitudes, values, and behaviors that support and inspire teamwork
- * developing team competencies and team-centered leadership within the team
- * recognizing the team and team members for their achievements
- * delegating appropriate levels of accountability and autonomy to the team

B. **Leadership Provided by Team Members**

According to guidelines established by the teams, team-centered leadership responsibilities (listed above) are shared by team members who are supported or selected by the team to act in that capacity.

9. **Organizational Support and Recognition**

Organizational Support and Recognition: environmental conditions that promote and sustain excellent team performance by generating a high degree of commitment to, support for, and cooperation with the team development process throughout the organization.

A. **Management Commitment to Team Structure and Team Development**

Management demonstrates an authentic and whole-hearted commitment to a team-centered organizational structure and the team development process through activities such as the following:

- * modeling team effectiveness
- * devoting significant amounts of time, energy, and resources to fostering team development and success
- * incorporating measures of team behavior and effectiveness into divisional goals and appraisal and reward systems
- * engaging in honest and open communication and transmission of information
- * providing necessary training and motivation to managers in developing coaching, support, and team-centered leadership skills
- * persevering in its determination to institutionalize the team approach even in the face of difficulties and set-backs that might threaten the integrity of the team structure or sensational successes that might obscure opportunities for its improvement

B. **Effective External Support**

Essential services from other functional areas are readily available and contribute to team performance and effectiveness. Other departments and key stakeholders (people outside of the team who relate to it in important ways) are aware of and value the team's development effort, communicate support, and demonstrate cooperation.

C. **Recognition**

Team successes and achievements are acknowledged and celebrated in meaningful ways within the division and brought to the attention of the full organization. Both monetary and intangible reward structures are utilized to recognize team performance.

DEFINITIONS OF TERMS

Autonomy:	accountability for and decision-making authority over specific work-related issues and concerns.
Collaboration:	working cooperatively with others to reach a solution, decision, or plan that builds upon everyone's input.
Competencies:	the abilities, skills, talents, qualities, knowledge, and/or experience required to perform effectively.
Complement:	to fit together well, to balance, or to complete something.
Design team:	the team of managers, supervisors, and employees from various manufacturing areas that plans the overall transition to teams. It is responsible for designing and implementing team development strategy, addressing training needs, monitoring progress, and championing the team process through all stages of its development.
Dialogue:	an open and uncritical exchange of information, knowledge, ideas, and opinions characterized by mutual support and active listening.
Empowerment:	shifting control and decision-making authority over specific issues or areas of responsibility to the people who execute that work.
Facilitate:	to ease the way; to act in the interests of the team; to provide assistance.
Institutionalize:	to make something an integral part of the internal structure of the organization; to reinforce something so often and so consistently that it becomes the "normal" way of doing things.
Interdependent:	influenced by and contingent upon one another.
Interpersonal:	between people.
Norms:	standards of appropriate and inappropriate behavior.
Renewal:	adapting and revitalizing in response to changing conditions through positive change, development, and continuous improvement.
Responsive:	the ability to assess the environment, to self-evaluate, and to develop and implement effective strategies when confronted with new and changing conditions; versatility; flexibility.
Results-Driven Structure:	a framework for team functioning that is designed to promote effectiveness and satisfaction by fostering effective coordination of effort, competent performance, achievement of objectives, and a high degree of personal work motivation.

- Steering Committee:** the initial planning team that explores the readiness of the organization for the transition to teams and serves as an umbrella for the entire team design and development process.
- Synergy:** a total effect that is greater than the sum of the individual contributions.
- Team Processes:** the ways in which team members relate to one another, structure their activities, and work together; guidelines for group communication and interaction; the systems or procedures used by the group to address team issues such as problem-solving, decision-making, conflict resolution, and meeting management.
- Team-Centered Leadership:** the process of working with and on the behalf of the team to inspire excellence in all aspects of team processes and performance; to generate enthusiasm, action, and commitment toward the achievement of the team's mission and objectives; to facilitate performance results; to reinforce team-centered values and norms; and to support team members in leading themselves and managing their team's affairs.

THE ROLE OF MANAGEMENT

If management is not yet wholly and authentically convinced that (teamwork) is the route to go, yet endeavors halfheartedly to take it anyway, the trap is certainly destined to be a rocky and short one..

Without having arrived at the conclusion at both the rational and emotional levels that a (team system) is required... any effort to initiate such involvement will ultimately be seen as unauthentic. It is impossible to ask middle managers, supervisors, and workers to Jump and remain on the bandwagon if management entertains doubts whether it is where it wants to be...

Without the emotional conviction to (teamwork), efforts are likely to be perceived as just so much lip service. Managers must be clear on their expectations and reinforce them with every communication and with every action.

--Gene F. Brady

Management By Involvement

MANAGING THE TRANSIT

Stage 1: Getting Started

Common characteristics:

- Champions introduce and promote team concept**
- Feasibility studies/planning/designing/preparation**
- Generation of organizational support**
- Development of vision/philosophy/values**
- Allocation of resources**
- Evaluation of structures and systems**

Major opportunities:

- Understanding new work system and its implications**
- Building trust/commitment/acceptance**

Management roles:

- Promote supportive organizational environment**
- Communicate vision/philosophy/values repeatedly**
- Tie team development to real business and human needs**
- Clarify and discuss the new system and its implications for individuals, managers and teams**
- Make team development issues important and conspicuous**
- Develop a common vocabulary**
- Evidence support for the new system**
- Model value-driven behaviors**
- Design appropriate training and development**
- Provide necessary information and resources**
- Get the right people involved in the process**

MANAGING THE TRANSITION

Stage 2: Implementation

Common characteristics:

- New structures/systems are introduced**
- Foundational training In progress**
- Turmoil: figuring out the new system and testing it**
- Temporary disruption of work flow**
- Confusion/sense of loss/resistance among managers**

Major opportunities:

- Holding to new practices and values**
- Developing new managerial roles**
- Confronting resistance constructively**

Management roles:

- Implement transition plan**
- Establish boundaries**
- Emphasize core values/philosophy/business focus/objectives**
- Champion team system and structural/operational changes**
- Define and clarify new roles and responsibilities**
- Model, reinforce and reward team-centered behaviors**
- Help teams manage internal conflict**
- Encourage new ways of thinking and doing things**
- Ensure team/managerial training and development**
- Set attainable short-range goals and checkpoints**
- Recognize contributions and successes**
- Be patient with the process**

MANAGING THE TRANSITION
Stage 3: Competency

Common characteristics:

Application of new technical and process skills
Delegation of more responsibility/authority to teams
Teams learning to make business decisions

Major opportunities:

Monitoring desire to step in and fix things
Accepting failures as learning experiences

Management roles:

Assess teams' skill development
Transfer authority/autonomy as skills expand
Encourage risk-taking
Help people learn from mistakes
Monitor behaviors in terms of core values
Assess and align information/communication systems
Act as trainer/coach
Begin shift from internal to external focus
Provide protection from outside forces/skeptics
Continue training and development
Enhance feedback

MANAGING THE TRANSITION

Stage 4: Renewal

Common characteristics:

- Team effectiveness and consistency**
- Fully operating team-based structures and systems**
- Work changes are institutionalized**
- Cross-functional approaches and endeavors**

Major opportunities:

- Providing continuous developmental/learning opportunities**
- Identifying new opportunities**
- Promoting responsiveness and renewal**

Management roles:

- Facilitate continuous improvement and renewal activities**
- Monitor behaviors in terms of core values**
- Deal with unconstructive behaviors**
- Act as a resource Develop teams' strategic influence and skills**
- Manage external boundaries (network)**
- Think and act cross-functionally**
- Assess external environment for business trends/opportunities**
- Lead organizational-wide changes**
- Push for new ventures**

**UNDERSTANDING YOUR TEAM
FEEDBACK SESSION ON THE
MYERS-BRIGGS TYPE INDICATOR**

PIKES PEAK COMMUNITY COLLEGE

**UNDERSTANDING YOUR TEAM
FEEDBACK SESSION ON THE MYERS-BRIGGS TYPE INDICATOR**

OBJECTIVES:

Participants will:

1. have a common language with which to communicate perceptions and ideas regarding personality types.
2. have a positive appreciation of the differences in personality types.
3. understand the benefits of having balance within a group, and they will have an appreciation for the different ways various types deal with issues in a group process.
4. understand their team's profile and its implications for their team's development process.

LENGTH OF TIME:

This team development module is scheduled for three hours. Breaks have been included; however the instructor may want to negotiate the length and number of breaks with the group. Suggested amounts of time have been included for each topic as well; again, the instructor should cover the topics in a timely manner that will meet the needs of the group and not feel bound to adhere to specific times.

MATERIALS NEEDED:

Materials needed for this feedback session are:

1. Myers Briggs Type Indicator Profile Reports
2. Team Profile Chart
3. Booklet - Introduction to Type, Isabel Briggs Myers, Consulting Psychologists Press, Palo Alto, CA, 1987.
4. Selected handouts from the Pikes Peak Community College Testing Center regarding MBTI personality types.
5. Flip Chart or Whiteboard
6. Overhead projector

WORKSHOP PLAN:

- | | | |
|---|---------|---|
| * | 10 min. | Introduction/goals and course overview |
| * | 10 min. | Brief History of the Myers-Briggs Type Indicator |
| * | 10 min. | Introduction to the concept of preference. Left Hand/Right Hand Experience - have participants write their names using their left hand and then using their right hand. Develop a list of adjectives to describe both experiences and tie that to the concept of preference for a particular way of doing things. |

- * 20 min. Explain the four scales: extraversion vs. introversion, sensing vs. intuition, thinking vs. feeling, and judgment vs. perception. Have the participants write down what they think they are for each of the four scales.
- * 5 min. Break
- * 30 min. Individual test results handed back.
 - Explain the meaning of the scores.
 - Explain the meaning of close scores.
 - Answer questions regarding the meaning of scores.
- * 20 min. Attitudes and functions in work situations
- * 10 min. Exercise 1 - Instructor preference
- * 5 min. Break
- * 5 min. Old Woman/Young Woman Picture - show picture of the old woman/young woman to see if the group can perceive the picture both ways.
- * 5 min. Organizational Type Table - Show the team how they break out on the organizational type table.
- * 15 min. Organizational factors - discuss the implications of MBTI results for the team.
- * 15 min. Exercise 2: The team selects one of the following exercises:
 - Using Type in Problem Solving - helps look at problem solving in different ways based on personality and group traits.
 - Using Type in Time Management - explores different approaches to "time"... deadlines and project completion.
 - Type in the Ideal Organization - addresses individual perceptions of organizational structure and the effects on productivity
 - Team Benefits of MBTI - emphasizes the relationships between type in team interactions.
- * 10 min. Action Planning Worksheet - Using a flip chart, have the team determine what they have learned and where they think they should go from here.
- * 5 min. Fill out evaluation form.

For further information regarding this module, please contact Betty Armstrong, Director - Pikes Peak Community College Testing Center, (719) 540-7115.

GOALS

PARTICIPANTS WILL:

1. **HAVE A COMMON LANGUAGE WITH WHICH TO COMMUNICATE PERCEPTIONS AND IDEAS REGARDING PERSONALITY TYPES.**
2. **HAVE A POSITIVE APPRECIATION OF THE DIFFERENCES IN PERSONALITY TYPES.**
3. **UNDERSTAND THE BENEFITS OF HAVING BALANCE WITHIN A GROUP, AND THEY WILL HAVE AN APPRECIATION FOR THE DIFFERENT WAYS VARIOUS TYPES DEAL WITH ISSUES IN A GROUP PROCESS.**
4. **UNDERSTAND THEIR TEAM'S PROFILE AND ITS IMPLICATIONS FOR THEIR TEAM'S DEVELOPMENT PROCESS.**

OH1

WORKSHOP OUTLINE

- * INTRODUCTION/OBJECTIVES/OVERVIEW**
- * BRIEF HISTORY OF THE MYERS-BRIGGS**
- * THE LEFT HAND - RIGHT HAND
EXPERIENCE**
- * THE FOUR SCALES - WHERE ARE YOU?**
- * INDIVIDUAL TEST RESULTS**
- * ATTITUDES AND FUNCTIONS IN WORK
SITUATIONS**
- * EXERCISE 1**
- * OLD WOMAN/YOUNG WOMAN**
- * ORGANIZATIONAL TYPE TABLE**
- * ORGANIZATIONAL FACTORS**
- * EXERCISE 2**
- * ACTION PLANNING WORKSHEET**
- * EVALUATION AND WRAP UP**

OH2

EVALUATION FORM

Your help in answering the following questions will be beneficial to future workshop participants.

1. What have you learned as a result of this workshop? What insights have you gained?

2. What actions will you put into place in your workplace as a result of this workshop?

3. What were the most helpful parts?

4. What were the least helpful parts?

5. Please make any suggestions or comments regarding the instructor's presentation style or the structure of the feedback session.

6. Please make any comments regarding the materials used in this presentation. Were they effective, etc.?

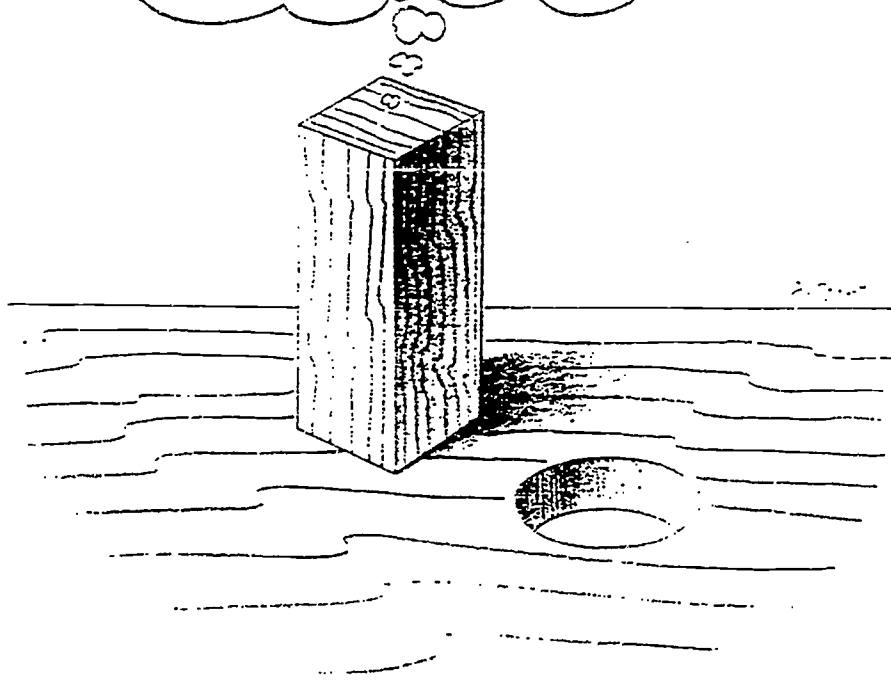
7. On a scale of 1 to 10 (1 is low; 10 is high), rate yourself to the extent that you will be a more effective (team player, etc.) as a result of this workshop.

OPTIONAL:

NAME _____ YOUR TYPE _____

THANK YOU!

WITH A PROPER DIET, MODERATE BUT CONSISTENT EXERCISE, AND THE DEVELOPMENT OF A HEALTHY MIND-SET, I SHOULD BE ABLE TO FIT IN FINE.



MYERS-BRIGGS FOUR SETS OF PREFERENCES AND % OF POPULATION

EXTRAVERSION 75%

active
outward
sociable
people
many
expressive
breadth

INTROVERSION 25%

reflective
inward
reserved
privacy
few
quiet
depth

SENSING 75%

details
present
practical
facts
sequential
directions
repetition
enjoyment
perspiration
conserve

INTUITION 25%

patterns
future
imaginative
innovations
random
hunches
variety
anticipation
inspiration
change

THINKING 50%

(only one with sex trend)

Cultural sanction for males
to feel more comfortable--6 out
of 10 males here.

head
objective
justice
cool
impersonal
criticize
analyze
precise
principles

FEELING 50%

Cultural sanction for females
to feel more comfortable--6 out
of 10 females here.

heart
subjective
harmony
caring
personal
appreciate
empathize
persuasive
values

JUDGEMENT 50%

organized
structure
control
decisive
deliberate
closure
plan
deadlines
productive

PERCEPTION 50%

flexible
flow
experience
curious
spontaneous
openness
wait
discoveries
receptive

CHARACTERISTICS FREQUENTLY

SENSING TYPES

WITH THINKING

WITH FEELING

INTROVERTS

JUDGING

PERCEPTIVE

PERCEPTIVE

EXTRAVERTS

JUDGING

<p>ISTJ</p> <p>Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter-of-fact, logical, realistic and dependable. See to it that everything is well organized. Take responsibility. Make up their own minds as to what should be accomplished and work toward it steadily, regardless of protests or distractions.</p> <p>Live their outer life more with thinking, inner more with sensing.</p>	<p>ISFJ</p> <p>Quiet, friendly, responsible and conscientious. Work devotedly to meet their obligations. Lend stability to any project or group. Thorough, painstaking, accurate. May need time to master technical subjects, as their interests are not often technical. Patient with detail and routine. Loyal, considerate, concerned with how other people feel.</p> <p>Live their outer life more with feeling, inner more with sensing.</p>
<p>ISTP</p> <p>Cool onlookers, quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. Usually interested in impersonal principles, cause and effect, or how and why mechanical things work. Exert themselves no more than they think necessary, because any waste of energy would be inefficient.</p> <p>Live their outer life more with sensing, inner more with thinking.</p>	<p>ISFP</p> <p>Retiring, quietly friendly, sensitive, modest about their abilities. Shun disagreements, do not force their opinions or values on others. Usually do not care to lead but are often loyal followers. May be rather relaxed about assignments or getting things done, because they enjoy the present moment and do not want to spoil it by undue haste or exertion.</p> <p>Live their outer life more with sensing, inner more with feeling.</p>
<p>ESTP</p> <p>Matter-of-fact, do not worry or hurry, enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. May be a bit blunt or insensitive. Adaptable, tolerant generally conservative in values. Dislike long explanations. Are best with real things that can be worked, handled, taken apart or put back together.</p> <p>Live their outer life more with sensing, inner more with thinking.</p>	<p>ESFP</p> <p>Outgoing, easygoing, accepting, friendly, fond of a good time. Like sports and making things. Know what's going on and join in eagerly. Find remembering facts easier than mastering theories. Are best in situations that need sound common sense and practical ability with people as well as with things.</p> <p>Live their outer life more with sensing, inner more with feeling.</p>
<p>ESTJ</p> <p>Practical realists, matter-of-fact, with a natural head for business or mechanics. Not interested in subjects they see no use for, but can apply themselves when necessary. Like to organize and run activities. Tend to run things well, especially if they remember to consider other people's feelings and points of view when making their decisions.</p> <p>Live their outer life more with thinking, inner more with sensing.</p>	<p>ESFJ</p> <p>Warm-hearted, talkative, popular, conscientious, born cooperators, active committee members. Always doing something nice for someone. Work best with plenty of encouragement and praise. Little interest in abstract thinking or technical subjects. Main interest is in things that directly and visibly affect people's lives.</p> <p>Live their outer life more with feeling, inner more with sensing.</p>

ASSOCIATED WITH EACH TYPE

INTUITIVES

WITH FEELING

WITH THINKING

<p style="text-align: center;">INFJ</p> <p>Succeed by perseverance, originality and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear convictions as to how best to serve the common good.</p> <p>Live their outer life more with feeling, inner more with intuition.</p>	<p style="text-align: center;">INTJ</p> <p>Have original minds and great drive which they use only for their own purposes. In fields that appeal to them they have a fine power to organize a job and carry it through with or without help. Skeptical, critical, independent, determined, often stubborn. Must learn to yield less important points in order to win the most important.</p> <p>Live their outer life more with thinking, inner more with intuition.</p>
<p style="text-align: center;">INFP</p> <p>Full of enthusiasms and loyalties, but seldom talk of these until they know you well. Care about learning, ideas, language, and independent projects of their own. Apt to be on yearbook staff, perhaps as editor. Tend to undertake too much, then somehow get it done. Friendly, but often too absorbed in what they are doing to be sociable or notice much.</p> <p>Live their outer life more with intuition, inner more with feeling.</p>	<p style="text-align: center;">INTP</p> <p>Quiet, reserved, impersonal. Especially enjoy theoretical or scientific subjects. Logical to the point of hair-splitting. Interested mainly in ideas, with little liking for parties or small talk. Tend to have very sharply defined interests. Need to choose careers where some strong interest of theirs can be used and useful.</p> <p>Live their outer life more with intuition, inner more with thinking.</p>
<p style="text-align: center;">ENFP</p> <p>Warmly enthusiastic, high-spirited, ingenious, imaginative. Able to do almost anything that interests them. Quick with a solution for any difficulty and ready to help anyone with a problem. Often rely on their ability to improvise instead of preparing in advance. Can always find compelling reasons for whatever they want.</p> <p>Live their outer life more with intuition, inner more with feeling.</p>	<p style="text-align: center;">ENTP</p> <p>Quick, ingenious, good at many things. Stimulating company; alert and outspoken, argue for fun on either side of a question. Resourceful in solving new and challenging problems, but may neglect routine assignments. Turn to one new interest after another. Can always find logical reasons for whatever they want.</p> <p>Live their outer life more with intuition, inner more with thinking.</p>
<p style="text-align: center;">ENFJ</p> <p>Responsive and responsible. Feel real concern for what others think and want, and try to handle things with due regard for other people's feelings. Can present a proposal or lead a group discussion with ease and tact. Sociable, popular, sympathetic. Responsive to praise and criticism.</p> <p>Live their outer life more with feeling, inner more with intuition.</p>	<p style="text-align: center;">ENTJ</p> <p>Hearty, frank, decisive, leaders in activities. Usually good in anything that requires reasoning and intelligent talk, such as public speaking. Are well-informed and keep adding to their fund of knowledge. May sometimes be more positive and confident than their experience in an area warrants.</p> <p>Live their outer life more with thinking, inner more with intuition.</p>

JUDGING
 INTROVERTS

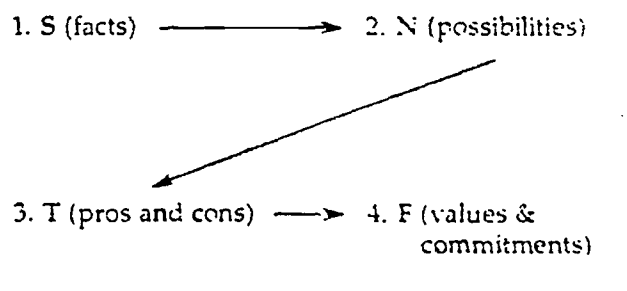
PERCEPTIVE

PERCEPTIVE

JUDGING
 EXTRAVERTS

In solving problems, the MBTI preferences can be used in a step-by-step process. The process can be used by an individual or a team. Although it seems straightforward, this process can actually be difficult to implement because people have a tendency to skip over those steps that require them to use their non-preferred functions. Decisions are usually made by emphasizing the step that employs the individual's dominant function and by ignoring the step related to the person's inferior function. A better decision is likely to result if all of the preferences are used, particularly the attending (SN) and the deciding (TF) ones. Until individuals master this process, it might be wise to consult others of opposite preferences when making important decisions. Likewise, if a team is overbalanced with certain types, consultation with others of opposite types may prove beneficial.

The problem-solving model looks like this:



Here are some questions to ask during each step:

1. **Sensing (S)**
 - What are the facts?
 - What exactly is the situation?
 - What has been done?
 - What am I and others doing?
 - How would an outsider look at this situation?
2. **Intuition (N)**
 - What are the possibilities?
 - What other ways are there for solving this problem?
 - What do the data imply?
 - What are the implications beyond the facts?
 - What is this problem analogous to?
3. **Thinking (T)**
 - What are the pros and cons of each possibility?
 - What are the logical consequences of each possibility?
 - What is the cost of each?
 - What are the pleasant and unpleasant outcomes of each?
 - What is the consequence of not acting?
4. **Feeling (F)**
 - How much do I care about what I gain or lose in each alternative?
 - What are the values involved for each possibility?
 - How will the people concerned react to the outcome?
 - Who is committed to carry out the solution?
 - Will the outcome contribute to individual or group harmony?
5. Finally, it is important to use Perception (P) in each step to insure openness to all aspects of the problem; use Judgment (J) to set a timetable for moving on to the next step of the process; use Introversion (I) to reflect at each step along the way; and use Extraversion (E) to discuss each step and to implement the solution.

Type and Creative Problem Solving

Extravert

carries it out

acts

communicates

Sensing Type

practices

gets things into use

forms habits, creates order

applies experience to problems

Thinking Type

logical, organizes knowledge

reforms what needs reforming

is creative with impersonal data and things

Judging Type

is methodological

is a cautious planner

seeks closure

has few inputs

Introvert

dreams it up

reflects in advance

ideates

Intuitive Type

develops theory

gets things designed

uses hunches and intuitions

applies ingenuity to problems

Feeling Type

stresses values, supplies meaning to knowledge

arouses enthusiasm for reform

is creative with personal data and things

Perceptive Type

is procedural

is a fearless adventurer

seeks more data

has many inputs

Adapted from Isabel Briggs Myers, *Gifts Differing* (Palo Alto, CA: Consulting Psychologists Press, Inc., 1980), pp. 205-206.

Using the Myers-Briggs Type Indicator in Organizations: A Resource Book © 1985 by Consulting Psychologists Press, Inc. Permission is hereby granted to reproduce this worksheet for workshop use. Duplication for any other use, including resale, is a violation of the copyright law.

Communications

When presenting, influencing, explaining, or trying to understand

S's

be factual
 document successful applications
 reduce risk factors
 thoroughly work out details in advance
 show why it makes sense

N's

give global scheme
 don't let opportunity pass
 use confidence and enthusiasm
 indicate challenges
 point out the future benefits

T's

be logical
 state principles involved
 stress competent handling of issue
 be well organized, moving logically from point to point
 list the costs and benefits

F's

tell who else is for the idea
 be personable and friendly
 indicate how it's helpful
 say it's the "right" thing to do
 tell why it's valuable

EFFECTS OF EACH PREFERENCE IN WORK SITUATIONS

EXTRAVERTS

- Like variety and action.
- Tend to be faster, dislike complicated procedures.
- Are often good at greeting people.
- Are often impatient with long slow jobs.
- Are interested in the results of their job, in getting it done and in how other people do it.
- Often do not mind the interruption of answering the telephone.
- Often act quickly, sometimes without thinking.
- Like to have people around.
- Usually communicate freely.

INTROVERTS

- Like quiet for concentration.
- Tend to be careful with details, dislike sweeping statements.
- Have trouble remembering names and faces.
- Tend not to mind working on one project for a long time uninterruptedly.
- Are interested in the idea behind their job.
- Dislike telephone intrusions and interruptions.
- Like to think a lot before they act, sometimes without acting.
- Work contentedly alone.
- Have some problems communicating.

THINKING TYPES

- Do not show emotion readily and are often uncomfortable dealing with people's feelings.
- May hurt people's feelings without knowing it.
- Like analysis and putting things into logical order. Can get along without harmony.
- Tend to decide impersonally, sometimes paying insufficient attention to people's wishes.
- Need to be treated fairly.
- Are able to reprimand people or fire them when necessary.
- Are more analytically oriented—respond more easily to people's thoughts.
- Tend to be firm-minded.

FEELING TYPES

- Tend to be very aware of other people and their feelings.
- Enjoy pleasing people, even in unimportant things.
- Like harmony. Efficiency may be badly disturbed by office feuds.
- Often let decisions be influenced by their own or other people's personal likes and wishes.
- Need occasional praise.
- Dislike telling people unpleasant things.
- Are more people-oriented—respond more easily to people's values.
- Tend to be sympathetic.

EFFECTS OF EACH PREFERENCE IN WORK SITUATIONS

18

SENSING TYPES

- Dislike new problems unless there are standard ways to solve them.
- Like an established way of doing things.
- Enjoy using skills already learned more than learning new ones.
- Work more steadily, with realistic idea of how long it will take.
- Usually reach a conclusion step by step.
- Are patient with routine details.
- Are impatient when the details get complicated.
- Are not often inspired, and rarely trust the inspiration when they are.
- Seldom make errors of fact.
- Tend to be good at precise work.

INTUITIVE TYPES

- Like solving new problems.
- Dislike doing the same thing repeatedly.
- Enjoy learning a new skill more than using it.
- Work in bursts of energy powered by enthusiasm, with slack periods in between.
- Reach a conclusion quickly.
- Are impatient with routine details.
- Are patient with complicated situations.
- Follow their inspirations, good or bad.
- Frequently make errors of fact.
- Dislike taking time for precision.

JUDGING TYPES

- Work best when they can plan their work and follow the plan.
- Like to get things settled and finished.
- May decide things too quickly.
- May dislike to interrupt the project they are on for a more urgent one.
- May not notice new things that need to be done.
- Want only the essentials needed to begin their work.
- Tend to be satisfied once they reach a judgment on a thing, situation, or person.

PERCEPTIVE TYPES

- Adapt well to changing situations.
- Do not mind leaving things open for alterations.
- May have trouble making decisions.
- May start too many projects and have difficulty in finishing them.
- May postpone unpleasant jobs.
- Want to know all about a new job.
- Tend to be curious and welcome new light on a thing, situation, or person.

MBTI ATLAS OF TYPE TABLES

You are now the proud owner of the MBTI Atlas of Type Tables! To preserve the condition of your Atlas, we have not assembled it prior to shipping.

ASSEMBLY INSTRUCTIONS

Sensing Directions:

- 1) Lay out the entire Atlas contents: 2 notebooks, 1 plastic wrapped package, 2 plastic protectors, and 11 chapter dividers.
- 2) Open the 2 notebooks using the thumb levers at the top and bottom of the notebook. Insert a plastic protector on the cover side (left) of each notebook. With a 3" knife or a pair of 5" scissors cut open the plastic wrapped package.
- 3) The chapters are separated by a sheet of colored paper. Take the first chapter and place it on the cover side of the notebook, face down. Put the first divider face down behind the first chapter. Place the next chapter on the cover side face down followed by the next chapter divider. Continue this process until you have inserted the first 7 chapters. Close the notebook and continue the process in the second notebook.
- 4) You have now completed assembly and are ready to take in the vast knowledge held within the Atlas of Type Tables.

Intuitive Directions:

With a little ingenuity you can assemble the Atlas however you see fit. The dividers go between the chapters, now separated by a sheet of colored paper.

You can easily assemble the Atlas while watching TV, listening to the radio, or even while reading the Atlas.

Thinking Directions:

- 1) Analyze the contents of the Atlas. Reorganize them based on your analysis.
- 2) Logically, the Atlas will not fit into one notebook. We have enclosed two notebooks to accommodate all the pages.
- 3) Proceed with assembly by placing the pages into the notebook separated by the chapter dividers.

Feeling Directions:

Here are the general guidelines for assembly of your Atlas. Depending on your preference, you can divide the Atlas into two equal sections, or you can fill the first notebook and add to the second notebook as additions are made available.

You may wish to display your new Atlas on your desk or on your bookshelf. On the other hand, you may not want to display it at all, but instead keep it to yourself.

Enjoy your Atlas and remember to smile while you savor every last tidbit of information.

MYERS-BRIGGS TYPE INDICATOR

Concepts for Understanding Type

ORGANIZATIONAL TENDENCIES

"LET'S KEEP IT..."

- + ENJOYING + CELEBRATING
- + PROTECTING + CONTINUITY
- + RECALLING + RESISTING
- MAY DRY UP THE ORGANIZATION,
NARROWING LEADERSHIP AND
PRODUCTIVITY.

"LET'S LOOK AT IT ANOTHER WAY..."

- + IMAGINING + QUESTIONING
- + LOOKING AHEAD + PERSPECTIVE
- + ANALYZING + DREAMING
- MAY WEAKEN ORGANIZATIONAL
EFFECTIVENESS BY IRRELEVANT
IDEAS AND ALTERNATIVES.

"LET'S GET IT DONE..."

- + ACCEPTING + DEVELOPING
- + MAKING + DOING
- + COMPUTING + GETTING RESULTS
- MAY GO AROUND IN CIRCLES, OR
STAY IN RUTS WITHOUT CLEAR GOALS

"LET'S CHANGE IT..."

- + PRODDING + STIMULATING
- + CONFRONTING + CONSULTING
- + VITALIZING + RISKING
- MAY LOSE TOUCH WITH PRACTICAL
LIMITS AND EXHAUST RESOURCES

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Organizational Preferences

ST Organizations

emphasize

specific factual details

micro issues

physical features of the work environment

control and certainty

job specificity

work roles rather than the worker

organizational goals and hierarchy

value

tough-minded people who can get others to do the job

set goals that are

realistic

down-to-earth

economical

SF Organizations

emphasize

specific, factual details

interpersonal features of the work environment

familiarity

workers first, then work and work roles

value

special people who create a highly personal, warm, human climate where people want to come to work

set goals that are

realistic

down-to-earth

people oriented

Organizational Preferences

ST Organizations

emphasize

specific factual details

micro issues

physical features of the work environment

control and certainty

job specificity

work roles rather than the worker

organizational goals and hierarchy

value

tough-minded people who can get others to do the job

set goals that are

realistic

down-to-earth

economical

SF Organizations

emphasize

specific, factual details

interpersonal features of the work environment

familiarity

workers first, then work and work roles

value

special people who create a highly personal, warm, human climate where people want to come to work

set goals that are

realistic

down-to-earth

people oriented

NF Organizations

emphasize

growth

macro issues

personal and human goals of the organization

personal and social needs of people in the organization

flexibility

wheel-like organizational structure

value

special people who work together for the good of all

set goals that provide

new lines of direction in goods and services for human or personal needs

NT Organizations

emphasize

broad, global concepts

macro issues

efficiency

impersonal atmosphere

value

people who are problem formulators

set goals that are

innovative and create new products, horizons, and businesses

Adapted from I. I. Mitroff and R. H. Kilmann, "Qualitative and Quantitative Analysis for Management Science: Different Forms for Different Psychological Types," *Interfaces*, vol. 6, no. 2, February 1976.

Using the Myers-Briggs Type Indicator in Organizations: A Resource Book. © 1985 by Consulting Psychologists Press, Inc. Permission is hereby granted to reproduce this worksheet for workshop use. Duplication for any other use, including resale, is a violation of the copyright law.

TYPE TABLE FOR ORGANIZATIONS

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

CREATIVE PROBLEM SOLVING

PIKES PEAK COMMUNITY COLLEGE

COURSE INTRODUCTION

This course is designed to approach problem solving by first focusing upon the individual. By directing the focus on how the individual processes information (learns), he will gain insight to his potential for working in a productive problem solving situation. Within the first module is imbedded the introduction to working with a model, in this case reasoning patterns. The selection of sample IQ questions for presenting reasoning patterns was made to accustom the student to working in a problem solving situation and to break the preconceived ideas that students have about their own abilities.

The second module, turns the focus to the students' problem solving skills. This module is designed to introduce the students to a simple model of problem solving (Polya's 4 step model), and to learn to adapt it to the team situations they will be facing on the job. Basic concepts of personal interactions within the team framework, team building skills and team problem solving skills will be introduced.

The third module deals with creativity. What it is? What is isn't? Can you learn creativity? Are there creative styles, individual and team? Can you kill creativity? Can you use a problem solving model and still be creative?

Goals For The Course

1. Establish that problem solving is an acquired skill that anyone can acquire.
2. Provide a model for problem solving that is flexible enough to be applicable to all problems faced by the participants.
3. Provide problem solving practice that each participant will feel comfortable applying this model to various problems.
4. Identify for each participant his personal learning style, an his personal problem solving style. Integrate these two personal styles into the problem solving model.
5. Introduce the elements of teamwork.
6. Identify each individuals role in the team concept.
7. Provide opportunity for each participant to practice team role playing in problem solving situations.
8. Introduce the elements of creativity.
9. Identify the styles of creativity of each participant.
10. Integrate creativity into the problem solving situations.

CREATIVE PROBLEM SOLVING - Thinking Better

OBJECTIVES:

By the end of this module you will be able to:

1. Identify your personal style of registering information.
2. Identify your personal style of filing information.
3. Apply models of reasoning to a series of problems.
4. Recognize instances when you rely upon false notions of abilities.

TIMING:

There are 4 sessions in this module. Each one is timed for 1 hour and 50 minutes.

MATERIALS:

Room
Tables for participants
OHP and screen
Dry Eraser Board and markers
Flip Chart and markers
Group discussion areas
Lecture notes: "Thinking Better" session 1 - 4
OH's 1.1 - 4.3
Worksheets 1-6 (copies for each participant)
Handouts 1-3 (copies for each participant)
Watch

Schedule - Thinking Better

Session 1	1. 10 min	
	Introduce class goals	OH 1.1
	Identify basic assumptions upon which the class is based	OH 1.2
	Identify approach to be used in class: The three modules and what they will cover.	OH 1.3
	Introduce goals for module "Thinking Better.	OH 1.4
	2. 10 min	
	Describe IQ Exercise. Predict scores	Handout 1
	3. 45 min	
	Distribute IQ Test. Explain that answers are to be recorded on test. Students will score their own and keep the score in their notebooks.	Handout 2
	4. 10 min	
	Break	
	5. 15 min	
	Look over test and determine which areas were the most difficult for each student	OH 1.5
	6. 10 min	
	Introduce Order of Preference Warm Up exercise Sample problem 1. Introduce Steps to solve this type of problem.	Flipchart 1 Handout 3 OH 1.6
	7. 15 min	
	Present new Problem Review Steps	OH 1.7
	8. 5 min	
	Review of warm up exercises	

Thinking Better

Up until now, we have all had the idea that intelligence is something that we are born with and carry around with us. This has been the theory behind intelligence tests. Once you were branded with this number, it was yours for life. Researchers Richard Rosenthal and Leonid Jacobson have proven this to be incorrect. Students can improve their scores on intelligence tests by being given the opportunity to change their personal perceptions of themselves and by changing the way in which teachers view those youngsters abilities.

Students were given an IQ test and then identified to themselves and to teachers as "sputters" who could be expected to do well over the coming months. These students were in fact randomly chosen. When they were retested several months later, the "sputters" did indeed increase their scores over the other students tested. The increase in scores can be attributed to the enhanced self image of the students themselves and the increase in expectations of improved performance by the teachers.

This idea of self image plays an important role in our lives. Yet, we often fail to acknowledge that it even exists and seldom see the role it plays in our personal relations with others. Our brain is such a good learning device that any negative perception it acquires is quickly assimilated and thus, influences the way it functions. If you limit your intellectual growth by developing a damaging self-image where mental activities are concerned, the brain can never perform at peak efficiency.

We are using the IQ exam here to prove to you that all too often what we think of ourselves and our abilities is based upon false assumptions. Things like IQ test scores can be changed with just a little work on your part. Like anything else training can help you to achieve at a higher level. Some students have discovered a big change in their ideas about their abilities. Throughout this course we will be trying to change how you think about yourself in the areas of your creativity, your ability to work effectively in groups and your abilities in problem solving.

David Lewis and James Green advance the theory that we as learners are quick to accept any excuse for not using our intellect at its peak performance levels. They state that the following myths are advanced to shift responsibility for failure away from the individual and onto some outside force over which we have no control. The most often used excuses are:

Session 1 cont

"I just wasn't born smart"

"I have a terrible memory"

"You can't teach an old dog new tricks"

Research has proven each of these statements to be false. Instead of falling back on these excuses for our past performances, learners at all levels should recognize that our failures lie in our lack of effective training in the skills necessary to solve the problems presented to us.

Problems of Order Preference

Problems which require the selection of an order of preference among a group of objects, give us an opportunity to illustrate this fact. Once a pattern for devising a solution to a problem can be established, our brains can then move on to other similar problems and apply these same patterns to their solutions.

Example: A customer wants to buy a new car in his favorite color. The salesman explains that availability may not exist for that particular model with that color within the time frame indicated by the customer. If the customer would like to select the colors that would be acceptable the salesman can begin the search. The customer then replies:

I dislike red less than white.
I don't dislike blue as much as green.
I like blue less than white.

What color car does the customer most want and which would he be least likely to accept.

As you walk through the problem be aware of the thought processes you are using. Do you mentally imagine the cars in each color and arrange them according to information provided in the problem (a visual approach). Do you instead work on the words to try and clarify the problem a little more (an auditory approach). Most of us use a little of both methods to reason through the problem. Any of these approaches might produce an answer if the problem isn't too complicated. Lewis and Green, in their discussion of this problem, advance the theory that these types of problems can be worked most efficiently with an "if... then" process. In this process you would:

Session 1 cont

1. Read each line independently.
2. Select an answer from information provided in the 1st set of information. This is the "if". (If no further information rises to contradict this answer "then" the solution will be this answer (red)).
3. Read next statement. If the tentative answer is not contained in the statement, ignore the whole statement.
4. Continue through statements until your tentative answer is mentioned again. If it is never mentioned again, it becomes the final answer.
5. If tentative answer is mentioned, ask yourself, Does the new information cause you to change your answer? (Black) If so, run a check on the other statements against your new answer.

What color car would the customer least wish to buy? (green)

What will George do tonight?

George has some spare time this evening. There is a pro football game on TV, friends are having a party, he has free tickets for the ballet tonight, the cinema near his house is showing a movie he has wanted to see and he has reached the point in a book he is reading where the murderer is about to be revealed. What will George do given that:

1. He likes parties less than movies.
2. He dislikes reading less than sports.
3. He doesn't like the ballet as much as parties.
4. He dislikes reading more than the ballet.

(answer: George will go to the Movies. He is least likely to watch TV.)




HANDOUT I

SELF EXPLORATION EXERCISE

If you were to predict your IQ score what would it be
....._____

What do you believe can influence your score




Heredity.....yes___ no___
Environment.....yes___ no___
Grades in School.....yes___ no___
Training.....yes___ no___

1.  is to  as  is to: _____



2. BUY is to SELL as GIVE is to: _____
a. employ b. save c. receive d. slow e. purchase

3. 5, 9, 13, _____, 21

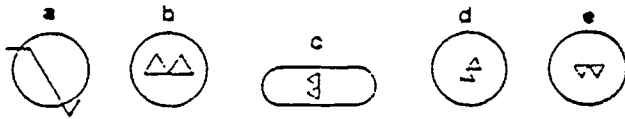
4.  is to  as  is to: _____



5. PREFER is to LIKE as SAFE is to: _____
a. valuables b. secure c. keep d. spend e. want


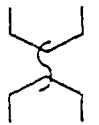
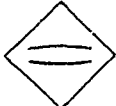
6. 33, 26, 19, 12, _____

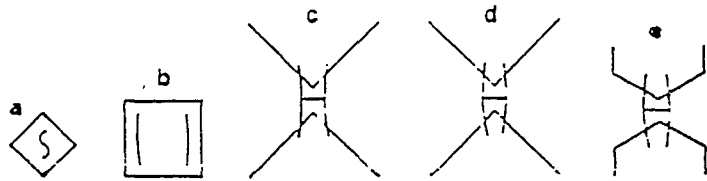
7.  is to  as  is to: _____



8. HOUR is to TIME as INCH is to: _____
a. foot b. minute c. hurry d. carry e. length


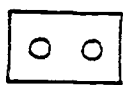

9. 4, 8, _____, 32, 64

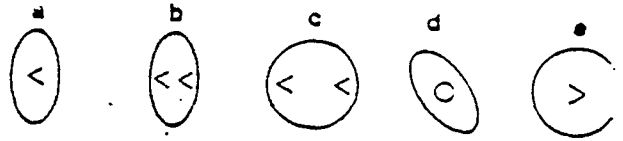
10.  is to  as  is to: _____



11. SEED is to PLANT as CHILD is to: _____
a. boy b. play c. human d. adult e. toy

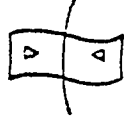

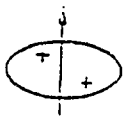
12. 1, _____, 9, 27, 81

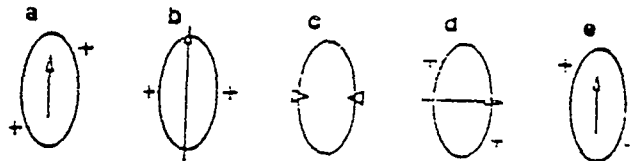
13.  is to  as  is to: _____



14. OCEAN is to POND as MANSION is to: _____
a. home b. cottage c. puddle d. bricks e. dwell




15. 2, 4, 7, 11, _____, 22

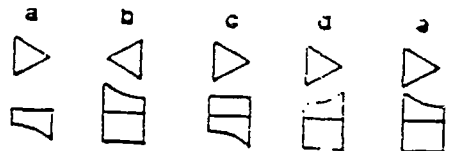
16.  is to  as  is to: _____



17. EWE is to SEED as ONE is to: _____
a. number b. sell c. grow d. does e. get




18. 3, 5, 9, 15, _____, 33

19.  is to  as  is to: _____



20. RED is to GREEN as LIME is to: _____
a. apple b. tree c. stem d. eat e. fruit

21. 0, 3, 9, _____, 30, 45

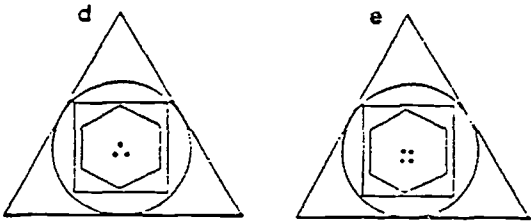
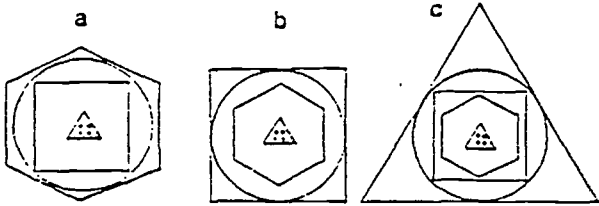
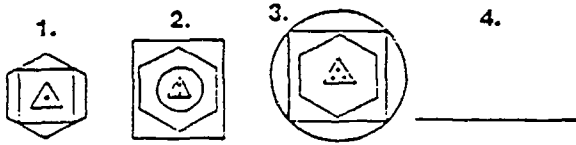
22.  is to  as  is to: _____



23. RUNNY NOSE is to HANDKERCHIEF as SHIVER is to: _____
a. cold b. shake c. sniff d. heater e. omit

24. 4, 7, 11, 17, _____, 39

25. Complete the series by filling in the blank.

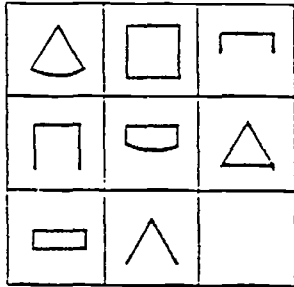


26. SLIGHT is to EXCESSIVE as LENIENT is to: —

- a. easy b. futile c. surrender d. find e. severe

27. 58, 35, —, 11, 6, 3

28. Find the figure that belongs in the empty box.



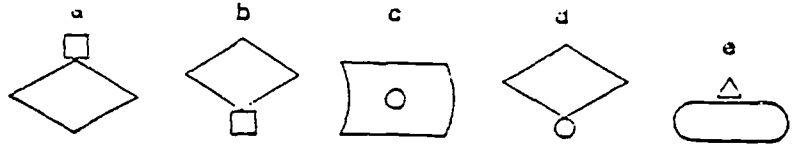
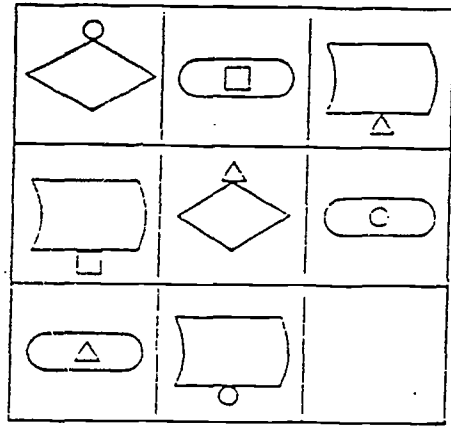
29. Find the word below which belongs with the others.

SKILL, KNOWHOW, ABILITY, —

- a. capacity b. implementation c. success d. product
e. desire

30. 4, 7, 12, 21 —, 71

31.

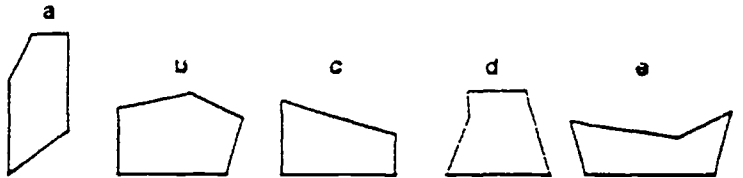


32. Find the word which does not belong with the others.

- a. frequently b. probably c. rarely d. sometimes e. often

33. 2, 4, 6, 10, 16, —

34. Find the *one* figure which does not belong with the others.



35. Which word does not belong with the others?

- a. once more b. duplicate c. renewal d. numerous
e. replica

36. 7, 8, 15, 23, —, 61

Answers to the IQ Test

(1)	d	(10)	d	(19)	e	(28)	b
(2)	c	(11)	d	(20)	a	(29)	a
(3)	17	(12)	3	(21)	18	(30)	38
(4)	c	(13)	c	(22)	b	(31)	a
(5)	b	(14)	b	(23)	d	(32)	b
(6)	5	(15)	16	(24)	26	(33)	26
(7)	e	(16)	e	(26)	a	(34)	e or c
(8)	e	(17)	d	(26)	e	(35)	d
(9)	16	(18)	23	(27)	20	(36)	38

Total your score and refer to the chart below to find the IQ equivalent. The items in this test are arranged in the same Sequence, Spatial Problems, Word Problems, Number Problems. You might like to note whether any specific type of question proved especially different.

Your Score	Equivalent	Your Score	Equivalent
12	88	23	130
13	93	24	133
14	96	25	137
15	98	26	140
16	100	27	144
17	105	28	147
18	109	29	151
19	114	30	155
20	118	31	159
21	122	32	163
22	126		

Problems in Order Preference

A customer wants to buy a new car in his favorite color. The salesman explains that availability may not exist for that particular model with that color within the time frame indicated by the customer. If the customer would like to select the colors that would be acceptable the salesman can begin the search. The customer then replies:

I dislike red less than white.

I don't dislike blue as much as green.

I like blue less than white.

OH

Problems in Order Preference

A customer wants to buy a new car in his favorite color. The salesman explains that availability may not exist for that particular model with that color within the time frame indicated by the customer. If the customer would like to select the colors that would be acceptable the salesman can begin the search. The customer then replies:

I dislike red less than white.

I don't dislike blue as much as green.

I like blue less than white.

What color car does the customer most want and which would he be least likely to accept.

P-13a

Steps for Problem of Order of Preference

1. Read each line independently.
2. Select an answer from information provided in the 1st set of information. This is the "if". (If no further information rises to contradict this answer "then" the solution will be this answer (red)).
3. Read next statement. If the tentative answer is not contained in the statement, ignore the whole statement.
4. Continue through statements until your tentative answer is mentioned again. If it is never mentioned again, it becomes the final answer.
5. If tentative answer is mentioned, ask yourself, Does the new information cause you to change your answer? (Black) If so, run a check on the other statements against your new answer.

OH

PROBLEMS IN ORDER PREFERENCE

What will George do tonight?

George has some spare time this evening. There is a pro football game on TV, friends are having a party, he has free tickets for the ballet tonight, the cinema near his house is showing a movie he has wanted to see and he has reached the point in a book he is reading where the murderer is about to be revealed. What will George do given that:

He likes parties less than movies

He dislikes reading less than sports.

He doesn't like the ballet as much as parties.

He dislikes reading more than the ballet.

P-15

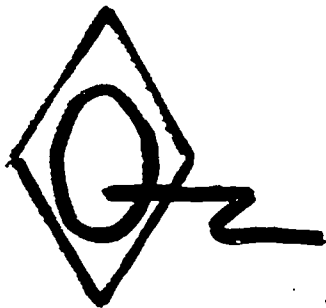
Manipulation of Space

Another set of reasoning skills which will help to provide the foundation for effective problem solving techniques involve the use and manipulation of space. These types of spatial problems are easily solved by people who utilize visualization as a personal learning style, but present great difficulty for those who lack this ability.

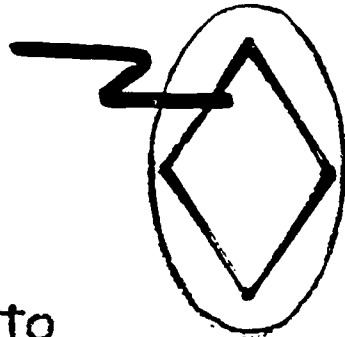
These types of problems require the participant to:

1. Identify the key parts of each of the figures
2. Identify the changes in each of the parts

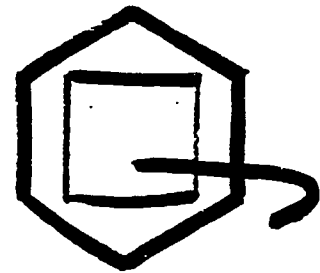
Manipulation of Space



is to

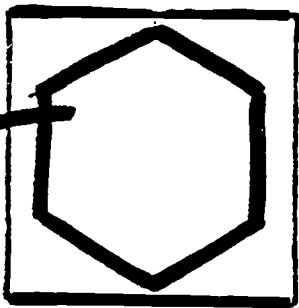


as

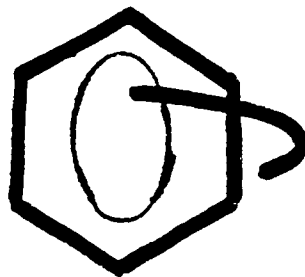


is to:

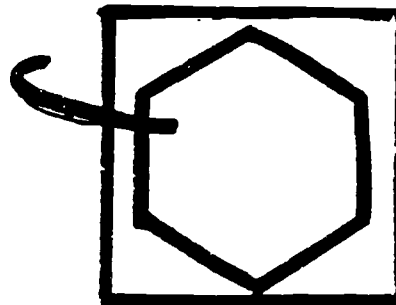
a



b



c



OH2.3

OH

Manipulation of Space

What changes take place between the first and the second drawings:

The Diamond changes _____

The Oval changes _____

The stylized z changes _____

Now make these same changes to the key elements in the comparison figure.

The hexagon changes _____

The square changes _____

The curved line changes _____

OH 2.4

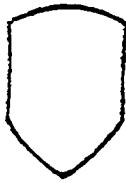
P-18

Manipulation of space

Select the figure which doesn't belong:



a



b



c



d

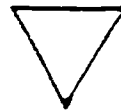
Select the figure which would complete the series:



a



b



c



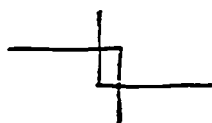
OH 2.5

Worksheet 1

In order to get used to working with these figures, try some practice examples of spotting the key parts of the following figures.



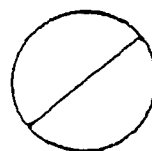
1



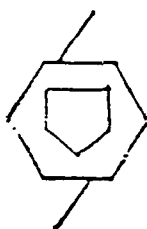
2



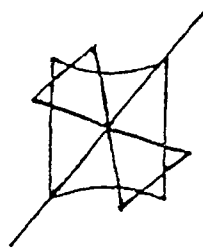
3



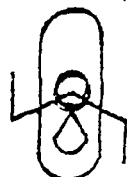
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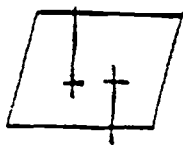
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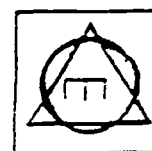
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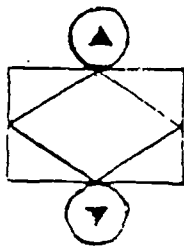
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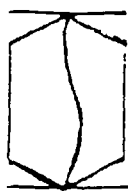
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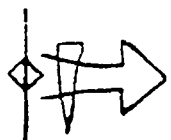
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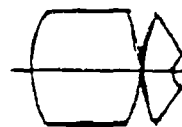
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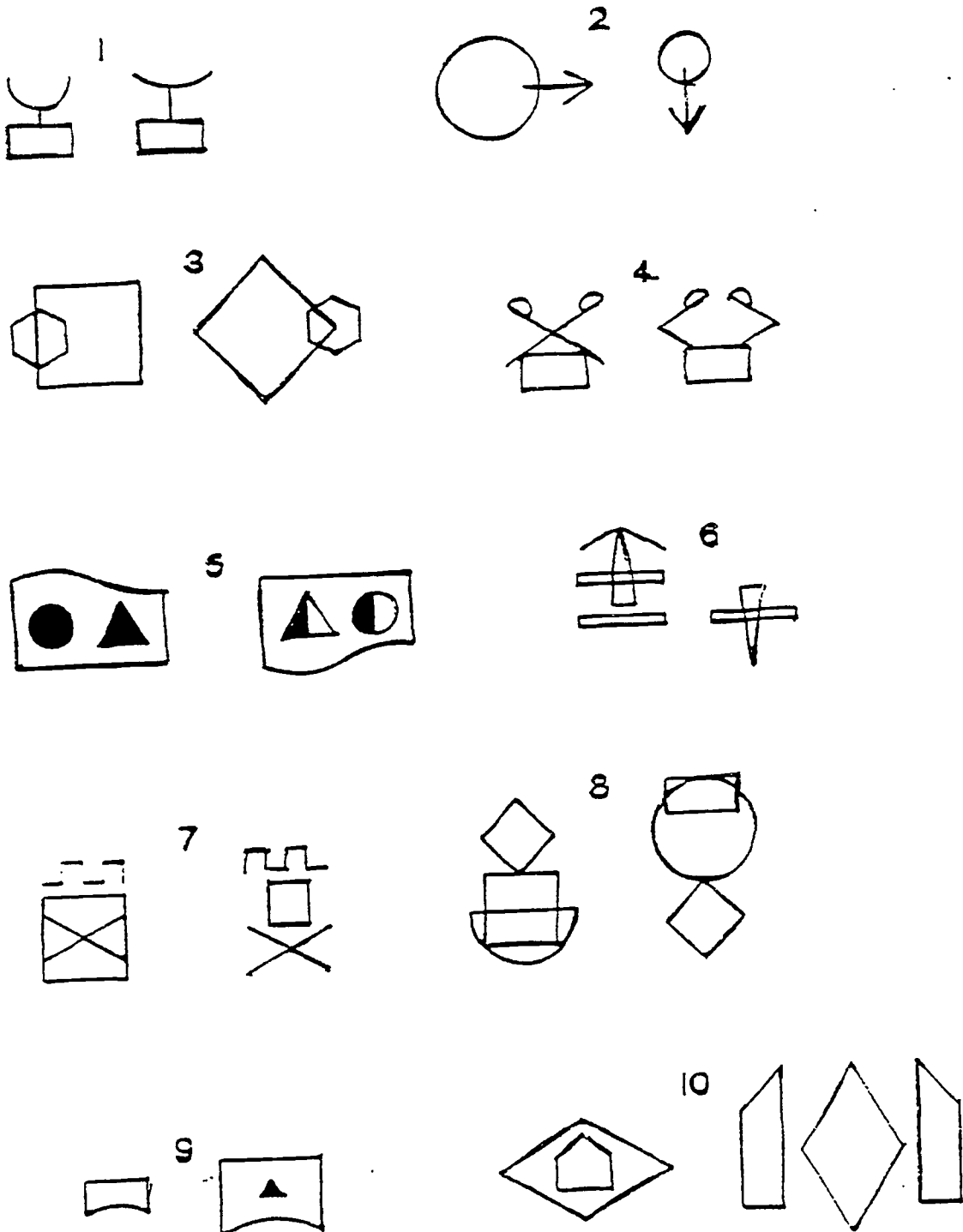
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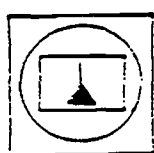
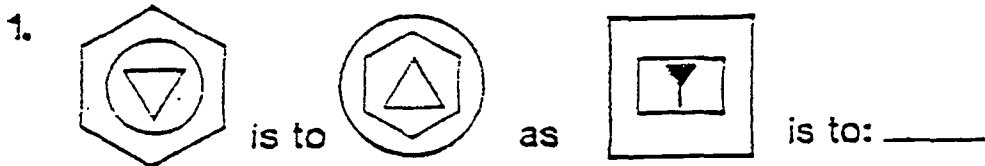
Worksheet 2 - Manipulation of Space

Select the ways in which each figure changes. Identify the key parts.

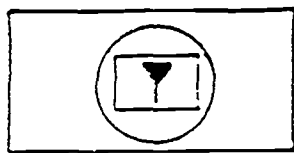


Worksheet 3 - Manipulation of Space

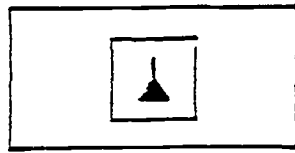
Now look at this series of figures. Note that even though the figures become more and more complicated, the steps of reasoning remain the same.



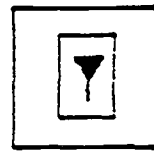
a



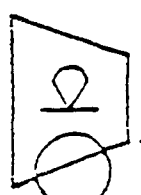
b



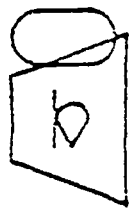
c



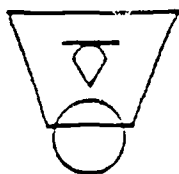
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a



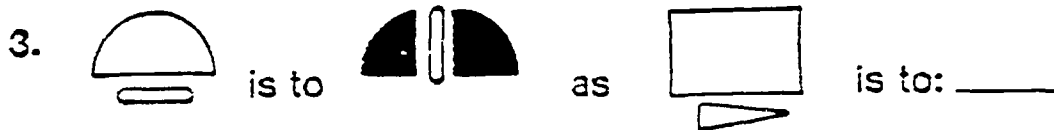
b



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d



a



b



P-22

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d

Schedule - Thinking Better

Session 2. 1. 10 min

Review Session I - exercises OH 1.6
Problem "Where will George Go" 1.7
Go over Why the system works -Lecture
and Terms

2. 10 min

Introduce concepts of Manipulation of OH 2.1
Space.

3. 15 min

As a group identify key parts of
figures in Worksheet 1

4. 15 min

Distribute worksheet 2 and have students
complete

5. 10 min

Break

6. 20 min

Distribute worksheet 3 and have students complete

7. 5 min

Show examples of some variations of these
problems.

8. 20 min

Introduce Number Problems OH 2.2
Steps of the Galloping V
Distribute Worksheet 4

9. 5 min

Review OH 2.1 & 2.2

P-23

Lecture Session 2

Manipulation of Space

Another set of reasoning skills which will help to provide the foundation for effective problem solving techniques involve the use and manipulation of space. These types of spatial problems are easily solved by people who utilize visualization as a personal learning style, but present great difficulty for those who lack this ability.

These types of problems require the participant to:

1. Identify the key parts of each of the figures
2. Identify the changes in each of the parts

Number Problems

Using the same idea of identifying a pattern of reasoning and then applying this pattern to a series of similar problems, let's look at some number problems from the IQ Test.

Identify the missing number:

5 9 13 ? 21

In each problem you will be asked to identify the missing number Using the Steps of the Galloping V reasoning system.

STEPS OF THE GALLOPING V.

1. Connect each number with the next number of the series by placing a "V" under them.

5 9 13 ? 21

2. Subtract, where possible, each number from the one in front of it (moving from right to left). Place the answer below the "V" connecting the numbers.

5 9 13 ? 21

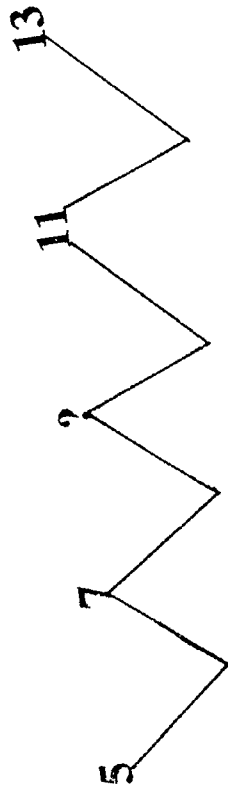
4 4 ? ?

3. Look for a pattern and substitute that "guess" into the unanswered spaces.
4. Now check the progression. In this case 4 added to 13 gives 17. Then 4 added to 17 gives 21.

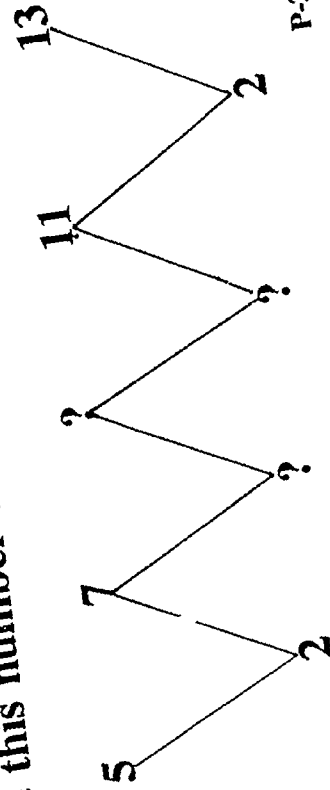
OH

Steps of the Galloping "V"

Draw a V connecting each number



Starting on the left side, subtract the 1st number from the second number and place this number at the bottom of the V.

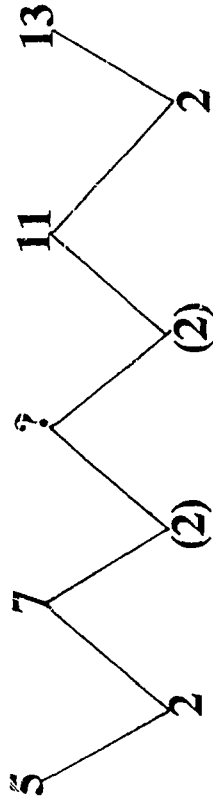


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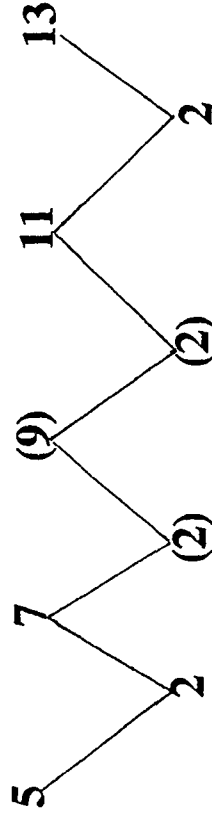
P-25

OH

Has a pattern been suggested? When it has make your best guess to fill in the last row.



Now work your way up the rows using your best guess.



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Hint: You know you have made enough levels of V's when the numbers in a row are all the same.



HO

Worksheet 4 - Number Problems

Practice on these problems:

A.	5	7	?	11	13
B.	4	?	12	16	20
C.	2	7	12	?	22
D.	0	?	12	18	24
E.	42	37	?	27	22
F.	3	?	19	27	35

Now try these:

A.	3	5	8	13	21	?
B.	2	5	9	15	24	?
C.	0	1	5	13	26	?
D.	2	4	7	12	?	32

P-27

HO

Worksheet 5 - Number Problems

Practice on these problems:

- A. 2 4 ? 16 32
B. 2 6 ? 54 162
C. 15 21 24 30 33 ?
D. 256 64 16 ?
E. 7 ? 63 189 567
F. 1 1 4 4 16 16 ?

Hint: Addition and multiplication series can be combined. In some instances the same operation can be done on a single tier.

Now try these:

- a. 3 4 7 16 ? 124
b. 3 6 10 16 ? 44
c. 0 2 10 16 ? 682

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OH

Solving Word Problems

Three Logical Stages

- One** Find the Relationship - using the categories
- Two** Search the options until you identify a word with the same relationship to the word in question.
- Three** Avoid Pitfalls

P - 29

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Solving Word Problems

Eight Categories of Word Problems

1. Are they Similar?

The answer is yes only when the words have and identical or near identical meaning. For example

Swim is to Float as Shout is to ?
(A) Whisper (B) Argue (C) Scream

2. Are they Opposites?

Does the relationship between the first two words stem from their being opposite in meaning?

These is to Those as Go is to ?
(A) Proceed (B) Run (C) Come

3. Do they share class membership?

Do the words belong to the same group of things or share some feature in common.

Horse is to Lion as Blue is to ?
(A) Bird (B) Pink (C) Mood

4. Is a class name involved?

Does one of the first two words mane the class or group to which the other belongs?

April is to Month as Bee is to ?
(A) Flower (B) Spring (C) Insect

5. Does one turn into the other?

Here some special process could be involved (milk into butter) or the transformation might occur with the passage of time?

Flower is to Bud as Butterfly is to ?
(A) Pollen (B) Wings (C) Caterpillar

6. Does one perform a function on or for the other?

The link here is that one of the words is associated with the other by means of some activity which is either carried out on its behalf or actually involves it.

Teacher is to Student as Driver is to ?

(A) Golf (B) Speed (C) Car

7. Is some concept of quantity involved?

The first two words differ from one another in size or amount.

Mountain is to Hill as Tiger is to ?

(A) Jungle (B) Housecat (C) Lion

8. Are letter patterns involved?

Good is to Harpoon as Illuminate is to ?

(A) Bellows (B) Light (C) Abolish

Sequence of the Letters.

Grilling is to Simpleness as Delayed is to ?

(A) Consist (B) Performance (C) Enshrine

Begins and ends in the same letter.

Idiosyncrasy is to Succedent as piping is to ?

(A) Insulated (B) Repent (C) Statement

Vowel/Consonant Patters "vcv"

Browbeat is to Maneater as Crankshaft is to ?

(A) Anger (B) Bookshelf (C) Lioness

Words constructed from two smaller words.

Worksheet 6 - Word Problems

Practice

Go is to Come as Above is to

- (A) Upside-down (B) Up (C) Travel (D) Below (E) Over

Find is to Locate as Hold is to

- (A) Discover (B) Release (C) Contain (D) Sample (E) Clear

Smile is to Chasm as Stilted is to

- (A) Discover (B) Gulf (C) Realist (D) Grin (E) Unsettled

Many is to Maximum as Softly is to

- (A) Move (B) Silence (C) Gently (D) Smoothly (E) Group

Cluster is to Pair as Crowd is to

- (A) People (B) Panic (C) Hurry (D) Walk (E) Group

Mouse is to Mammal as Ant is to

- (A) Fly (B) Insect (C) Lion (D) Crawl (E) Difference

See is to Hear as Sail is to

- (A) Travel (B) Swing (C) Drive (D) Receive (E) Wind

Think is to Ponder as Change is to

- (A) Transform (B) Remain (C) Store (D) Perform (E) Position

House is to Foundation as Automobile is to

- (A) Drive (B) Accident (C) Tire (D) Swim (E) Traffic

Crass is to Missing as Fill is to

- (A) Yellow (B) Empty (C) Instill (D) Sense (E) Glass

Stew is to Meat as Lumber is to

- (A) Branch (B) Forester (C) Model (D) Trees (E) Arrive

Flower is to Bee as Building is to

- (A) Office (B) Carpenter (C) Destroying (D) Ground (E) Result

Carelessness is to Accident as Gluttony is to

- (A) Overeating (B) Food (C) Improvement (D) Dinner (E) Heartburn

Accept is to Decline as Consent is to

- (A) Allow (B) Refuse (C) Reveal (D) Falter (E) Spend

Fire is to Heat as Flower is to

- (A) Grow (B) Leaf (C) Scent (D) Petal (E) Ground

Schedule - Thinking Better

Session 3

1. 5 min

Review Galloping V Technique

OH 2.2

2. 20 min

Introduce number problems using multiplication.

Worksheet 5

3. 10 min

Review - Galloping V
Manipulation of Space

4. 35 min

Distribute IQ Test 2

Handout 4

5. 5 min

Break

6. 15 min

Score IQ Test 2

In open discussion determine

How much did each student improve?

If not why not? Determine conclusion of about
reasoning ability.

7. 10 min

Introduce Learning Styles from notes

Registering items in Memory

Identifying Methods of Learning

OH 3.1

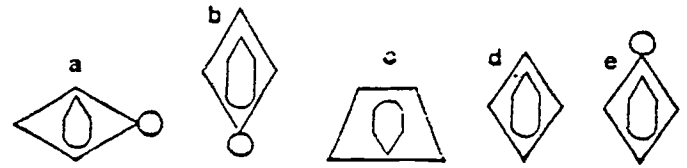
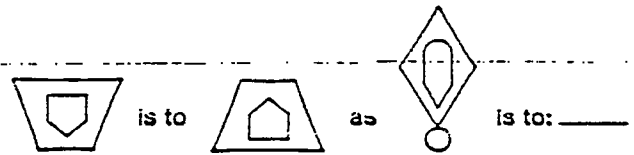
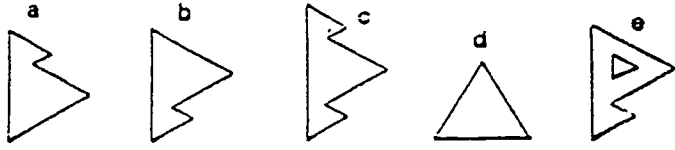
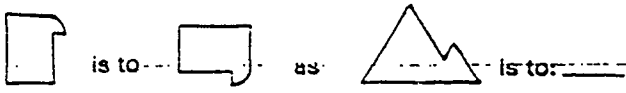
8. 15 min

Administer Edmonds School Inventory

Handouts 6, 7 & 8

THE SECOND IQ TEST—NOTE THE TIME NOW
AND STOP AFTER EXACTLY THIRTY MINUTES

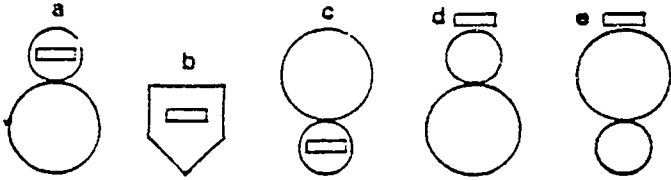
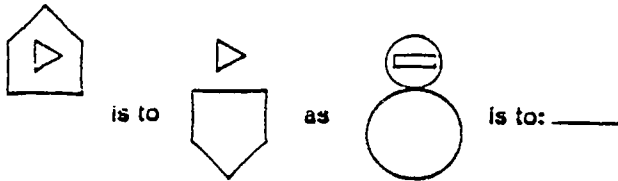
10.



2. TRUTH is to LIE as LARGE is to: _____
a. grow b. small c. falsehood d. see e. biggest

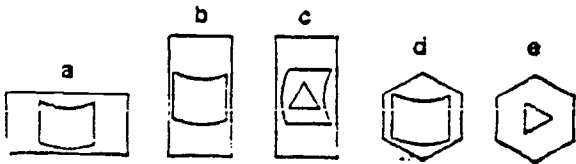
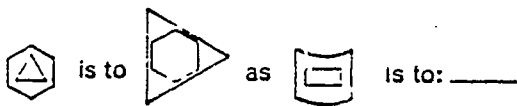
3. 6, 11, 16, _____, 26

4.



5. ALLOW is to PERMIT as CREATE is to: _____
a. invent b. destroy c. license d. undo e. relieve

6. 8, _____, 20, 26, 32

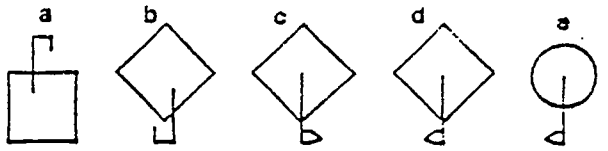
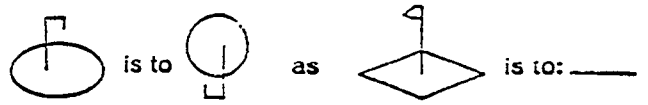


INK is to PRINTING as TELEPHONE is to: _____
a. wire b. communication c. receiver d. deliver e. black

11. PREPARATION is to GROUNDWORK as ESCAPE is to: _____
a. confinement b. deliverance c. intention d. rehearsal e. fugitive

12. _____, 6, 18, 54, 162

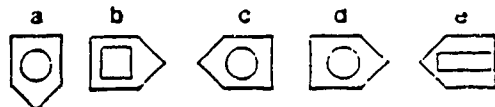
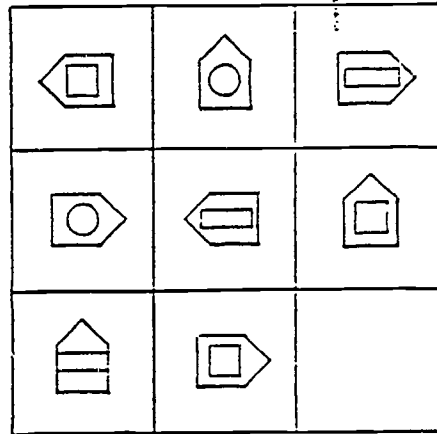
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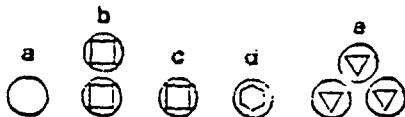
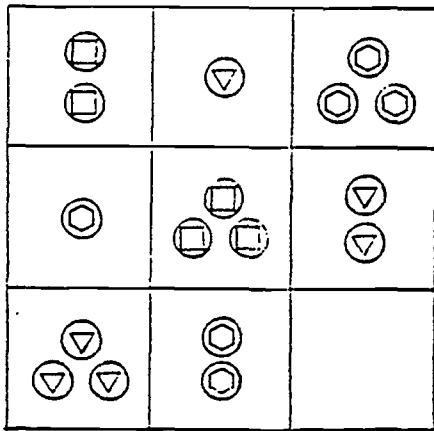
14. GIANT is to DWARF as LAKE is to: _____
a. boat b. puddle c. rain d. liquid e. grow

15. 5, 6, 8, 11, _____, 20

16.



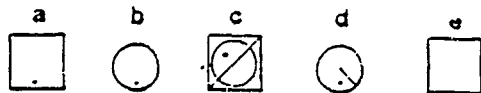
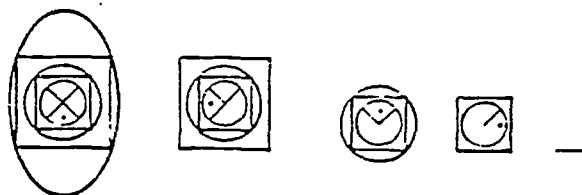
17. PAPER is to APPLAUSE as OBOE is to: —
 a. boor b. flute c. reed d. telescope e. clever
18. 1, 3, 7, 13, —, 31
- 19.



HARBOR is to OCEAN as GATE is to: —
 a. hinge b. field c. swing d. open e. ship

21. 2, 5, 11, —, 32, 47

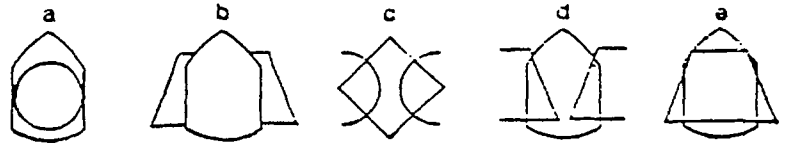
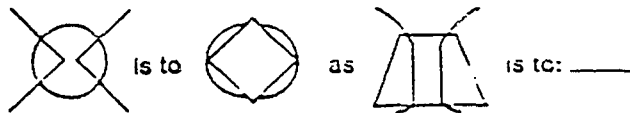
22. Complete the series.



23. COMPLETE is to UNFINISHED as CERTAIN is to: —
 a. sure b. incomplete c. true d. possible e. foreseen

- 5, 7, 10, 15, —, 35

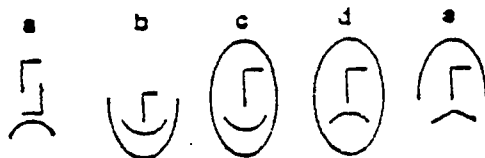
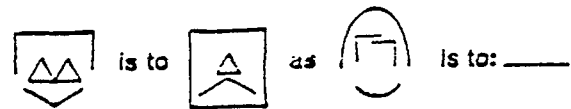
25.



26. STOCK is to INVESTMENT as ANGER is to: —
 a. emotion b. calm c. sincere d. pity e. continue

27. 0, 4, 10, 20, —, 60

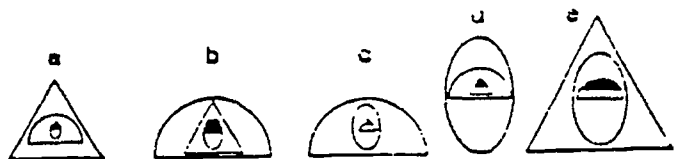
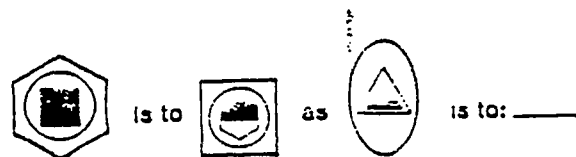
28.



29. Choose the word which does not belong with the others.
 a. matured b. digested c. ripened d. labored e. wrought

30. 0, 1, 4, 11, 26, —

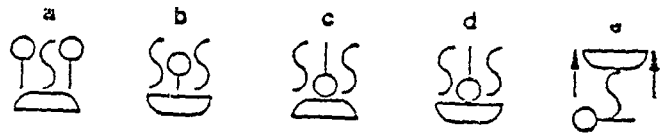
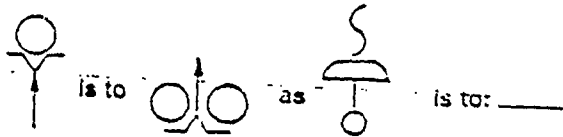
31.



32. Choose the word which does not belong with the others.
 a. tray b. envelope c. frame d. basket e. pad

33. 1, 4, 5, 9, 14, —

34.



35. SELDOM is to TINSEL as NOTARY is to: —
 a. ought b. imbibe c. lawyer d. scribe e. cannot

36. —, 7, 9, 16, 25, 41

Answers		Answers		Answers	
Problem Number	Answer	Problem Number	Answer	Problem Number	Answer
1	b	13	c	25	b
2	b	14	b	26	a
3	21	15	15	27	36
4	c	16	c	28	d
5	a	17	a	29	d
6	14	18	21	30	57
7	b	19	c	31	b
8	b	20	b	32	c
9	12	21	20	33	23
10	c	22	b	34	d
11	b	23	d	35	e
12	2	24	23	36	a

To determine your new IQ as measured by this test, check your total score against the IQ chart given earlier. Then subtract your score on the test in that chapter from the score on the test you have just taken. This will tell you exactly how much your IQ performance has improved.

Session 3 - Thinking Better- Lecture Notes

INDIVIDUAL LEARNING STYLES-

Registering Items in Memory

Now that we have established that we can, in fact, teach reasoning skills, let's look at each of us as individuals and develop how we personally process information. This greater ability to use information through our personal learning style, combined with the established methods of reasoning, provides a base for developing a personal problem solving style.

First we have to recognize that we all learn information on several different levels. For this discussion we will explore how individuals accept information in the most efficient manner, then we will look at how individuals organize that information for use in any problem solving situation.

In our earliest stages of development, we learn of our world through the use of the five senses. We taste, touch, smell, see, and hear our way to an understanding of the world in which we are expected to function. Our world seems to change when we enter school. Here we are expected to sit in a chair for long periods of time and to absorb information given us by a teacher. As we progress, we learn to read. Then information is presented to us in a book. For some this transition is smooth, but for others somewhere along the way they begin to lose the ability to increase their information banks. We stop paying attention. We are left out of the process either by our actions or those of others.

Identifying Methods of Learning

For purposes of this discussion we are going to identify the major learning areas as Auditory Learning, Visual learning, and Kinesthetic learning.

Auditory learners are those people who remember the words to a song they have heard only once or twice. They remember the conversation they had last week. They are the children who often say to their parents, "But, last week you said we would do this another way", or "That's not the way you told the story last week".

Session 3 -Lecture Notes cont

Visual learners are those who can tell you exactly where you parked the car at the Super Bowl. They often remember the exact place on a page where information is listed. They can picture events that happened to them years ago, and describe them down to the last detail. Sometimes they are excellent spellers because they have learned to see the words in their minds written correctly.

Kinesthetic learners are those of us who remember information because the learning involves one of the other three senses: taste, smell, or touch. Because this discussion is limited in scope this grouping becomes the most difficult for students to understand at first but as we move through the instrument they begin to develop a sense for those experiences in this category. Kinesthetic learners experience the learning. A pan is hot. What is hot? Hot is the experience we go through when our skin comes in contact with heat. This experience can be pleasant or unpleasant. Either way we learn from it. Another experience could be the introduction of ammonia to the nose. We learn from this experience. This is Kinesthetic learning.

The instrument we are going to use is the Edmonds School Learning Inventory. The actual test is a shortened version of the instrument which in its original form used over 500 responses from each test taker in order to determine a learning style.

Here we are going to use only 50. Each participant will first predict the outcome of the inventory by answering the following questions:

Insert test.

Present the graphs for the normative quantities.

One essential point to be made, is that this inventory is given only to point out to you the areas that you should explore most often when you are faced with the need to learn some specific information. Very few of us are pure learners in one category or the other. Most of us utilize a mixture of all the techniques of learning. This exercise should identify those areas that present information in such a way that you absorb that information in the most efficient mode. It will vary from person to person.

Session 3 - Lecture Notes cont

Exercise: The participants should be divided into three groups (groups should not have more than 6 participants). Each group is to brainstorm ways which reflect the presentation of material in either an auditory mode, a visual mode, or a kinesthetic mode.

Groups will be given 4 minutes to develop a list. Lists are then posted and discussed.

The object of this exercise is to have all the participants understand how they can transfer information that has been presented to them in one mode into another mode for easier assimilation.

The working mechanism of the human brain is a very complex topic and it is not our purpose to try and present all the information on how the brain works. We should know that the brain stores all the experiences of the senses from the time of birth up until the current second. We all know that we cannot remember all this information. So how do we retrieve the information we want from the brain in order to use it? The assumption is made that there is a small storage area of the brain called short-term memory. All information used by the human must be utilized from this memory area. It has only limited space. Our brains function by moving information stored elsewhere (long-term memory) into this area. Then selecting that information which is useful and returning the rest to long-term memory. Thus, learning can be summed up as having three stages:

1. Registering the item.
2. filing the item.
3. retrieving the item.

Our inability to learn information can be traced to a block at any one of these stages. Our experiences of identifying a preferred learning style can help us to register the items we deem to be desirable in the most efficient manner. Learning to file items is a process that can be easily learned.

Edmonds Learning Style Inventory

This exercise, is designed to identify how individuals learn most easily and most efficiently. This is not a test. There are no right or wrong answers.

In this exercise, you will hear a total of fifty single English words. Each word is a common word with which you are familiar. As you hear each word, observe your own immediate reaction -- notice what goes on inside your head. For each word, you probably will have one activity or you will picture the word spelled out in your mind, or you will hear the word and understand its meaning based on the sound, or you may have some physical or emotional feeling about the word, such as a tightening of a muscle or a feeling such as warmth, sorrow, etc. This is not a test of word association-- it is not important which other word or what picture you might think of. The nature of your own immediate and instantaneous reaction to the word itself is the important data.

On your answer sheet, circle the number in the appropriate column for your own response to each word. Each word will be read only one time.

Example:

You hear the word "hold". One person might visualize the hold of a ship or see one wrestler holding another. In this case, he would circle number one. Notice that it does not matter what the picture is only that the word immediately brings to mind some visual image. Another person might see the word H-o-l-d spelled out. He would circle the number two. A third person might have no visual image at all, but simply hears the word and understands its meaning from the sound alone. He would circle number three. Finally, still another person might just for an instant feel a tensing of his arm muscles as if he were holding an object, or he might feel as if someone were holding him. In either case, he would circle number four.

Practice Words

Sink Meat Home

Following the introduction and a short discussion, explain that you will read each of the fifty words one time at ten-second intervals:

- | | | | | |
|---------------|-------------|------------|-------------|------------|
| 1. pool | 11. grass | 21. enemy | 31. ocean | 41. law |
| 2. tall | 12. hope | 22. bag | 32. good | 42. angry |
| 3. summer | 13. yellow | 23. shame | 33. paint | 43. friend |
| 4. long | 14. fear | 24. street | 34. down | 44. paper |
| 5. house | 15. five | 25. truth | 35. freedom | 45. warm |
| 6. guilty | 16. God | 26. story | 36. letter | 46. above |
| 7. chicken | 17. read | 27. happy | 37. think | 47. kill |
| 8. strange | 18. foot | 28. ground | 38. love | 48. swim |
| 9. liar | 19. justice | 29. hate | 39. running | 49. hungry |
| 10. beautiful | 20. baby | 30. talk | 40. ugly | 50. bad |

EDMONDS SCHOOL DISTRICT NO. 15
Lynnwood, Washington

LEARNING STYLE IDENTIFICATION EXERCISE

Name _____ Date _____ Class _____

Instructions: As each word is read, circle the number indicating your response according to the following code:

1. Mental picture of some object or activity.
2. Mental picture of the word spelled out.
3. No mental picture; sound of word carries meaning.
4. Physical or emotional feeling about the word.

- | | | | |
|-------------|-------------|-------------|-------------|
| 1. 1 2 3 4 | 2. 1 2 3 4 | 3. 1 2 3 4 | 4. 1 2 3 4 |
| 5. 1 2 3 4 | 6. 1 2 3 4 | 7. 1 2 3 4 | 8. 1 2 3 4 |
| 9. 1 2 3 4 | 10. 1 2 3 4 | 11. 1 2 3 4 | 12. 1 2 3 4 |
| 13. 1 2 3 4 | 14. 1 2 3 4 | 15. 1 2 3 4 | 16. 1 2 3 4 |
| 17. 1 2 3 4 | 18. 1 2 3 4 | 19. 1 2 3 4 | 20. 1 2 3 4 |
| 21. 1 2 3 4 | 22. 1 2 3 4 | 23. 1 2 3 4 | 24. 1 2 3 4 |
| 25. 1 2 3 4 | 26. 1 2 3 4 | 27. 1 2 3 4 | 28. 1 2 3 4 |
| 29. 1 2 3 4 | 30. 1 2 3 4 | 31. 1 2 3 4 | 32. 1 2 3 4 |
| 33. 1 2 3 4 | 34. 1 2 3 4 | 35. 1 2 3 4 | 36. 1 2 3 4 |
| 37. 1 2 3 4 | 38. 1 2 3 4 | 39. 1 2 3 4 | 40. 1 2 3 4 |
| 41. 1 2 3 4 | 42. 1 2 3 4 | 43. 1 2 3 4 | 44. 1 2 3 4 |
| 45. 1 2 3 4 | 46. 1 2 3 4 | 47. 1 2 3 4 | 48. 1 2 3 4 |
| 49. 1 2 3 4 | 50. 1 2 3 4 | | |

Total Responses: 1 _____ 2 _____ 3 _____ 4 _____

Becoming a Master Student , by Dave Ellis

The basic assumption we make in interpreting these profiles is that the further the individual varies from the mean in any one of the four categories, the stronger or weaker will be that mode of learning for that individual. i.e., the more (or less) easily the individual is able to learn by using that approach. Scores at the extremes (either in the ± 3 or ± 4 band) may be considered indicative of a strongly dominant influence—positively or negatively—of that mode. A score falling in the ± 4 range, for example, tends to indicate that the person must in some way translate information received from other modes into that category before successful learning will occur. e.g. if a person has a ± 4 score in listening, he probably will sound words to himself as he reads (since this converts the words into a more readily "digestible" form), and when watching a film he will learn more from the dialogue than from the pictures themselves. Conversely, a ± 4 score in listening would indicate that when that individual attends a lecture, he would feel compelled to engage in some other activity in order to remember what was said. e.g., taking copious notes, converting the words of the speaker into visual images, etc.

A guide to interpreting the score follows:

1. Visualization. This category indicates the relative importance to the learner of actually seeing objects and activities in order for him to learn.
2. Written Word. This category is distinguished from the first by noting whether a person will get more details from a certain incident by seeing the event occur (visualization) or by reading a description of the event (written word). Persons scoring very high in this category have a great dependence on the written word. Persons scoring very low in this category may read quite well, but they tend to translate written words into another category (visual images or sounds) rather than being able to get meaning from the words immediately.
3. Sound-understanding (Listening). This category indicates the degree to which the person is able to learn from hearing the spoken language without recourse to some other mode. Persons scoring very high in this category will find audio tapes an invaluable aid in learning. Those scoring very low will probably need to work to increase comprehension of the spoken language.
4. Feeling (Activity). This category represents how important some manner of physical activity is to the learning process. A person scoring above the median band in this category will find it a definite advantage to become physically active in some way in order to facilitate learning. Such activities can be as simple as taking notes, writing out exercises, or pacing the floor while memorizing. Persons scoring fairly high in this category are usually compulsive note-takers in class or at lectures.

Becoming a Master Student, by Dave Ellis

LEARNING STYLE IDENTIFICATION EXERCISE (Profile Sheet)

BAND	VISUALIZATION 1	WRITTEN WORD 2	LISTENING 3	ACTIVITY 4
14	38	20	22	20
13	31	17	17	20
12	29	15	15	16
11	10	13	13	12
0	12	9	9	10
-1	7	7	7	9
-2	1	6	6	9
-3	3	3	3	1
-4				

Becoming a Master Student, By
Dave Ellis

Schedule - Thinking Better

Session 4

1. 5 min

Review - Learning Styles

2. 25 min

Divide participants into groups.
No group larger than 6 people in
each group. Answer question:
Name some activities in each area
of Learning - Visual, Auditory,
Kinesthetic- Answer on Flip Chart
Paper, Discuss each groups ans
with class

3. 10 min

Introduce learning as an experience of
Registering the item- Learning Style
Filing the item - Filing Style
Retrieving the item- Problem Solving

OH 4.1

4. 20 min

Lecture - Filing Items in Memory Worksheet 8

5. 10 min

Break

6. 30 min

Lecture and discussion on Groupers
and Stringers

OH 4.1

7. 10 min

Review of Thinking Better

Session 4 - Thinking Better Lecture Notes

FILING ITEMS IN MEMORY

This is the second level of learning styles to be addressed in this discussion. Here we are looking at how the mind likes to organize information. Included here is a questionnaire from the work of Gordon Pask. We are looking to suggest how you file information for the most efficient retrieval. This will also suggest a method of organization that is most efficient for you.

Distribute Exercise - Worksheet 8

GROUPERS

These learners take a broad view of any subject under study. They search out general principles rather than meticulous details and relate one topic to as many other areas of knowledge as possible. They are quick to find relationships and to draw parallels among different areas of study.

Groupers learn most easily and effectively in unstructured situations and do less well if everything is presented according to some rigid plan. Because they are able to bring together a wide range of information, they are likely to prove more successful than Stringers when an all around approach is required.

As Professor Pask points out, however, much current teaching- at all levels- is not presented in this way. Lesson plans, textbooks, and training schemes, whether in the factory, the university, or the classroom, are usually designed in a systematic, step-by-step manner that favors Stringers. This approach works to the disadvantage of Groupers, who prefer to come to grips with overall principles before getting down to the finer details of a topic.

Groupers Organizational Plan

Study topic one

Study topic two

Study topics one and two

Study topic three

Study topic four

Study topics three and four

Study topics one and two

Study topics three and four

Study topics one, two, three and four

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OH 5.1

Stringers Organizational Plan

Study topic one

Study topic two

Study topics one and two

Study topic three

Study topic one, two and three

Study topic four

Study topics one, two, three and four

OH 5.2

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Session 4 -lecture notes cont

STRINGERS

A systematic, methodical approach best suits the learning style of Stringers. The exact opposite of Groupers in many ways, they learn most successfully by mastering specific details before moving to more general concepts.

Their best approach is to establish a series of clearly defined goals that allow knowledge to be accumulated gradually. Only facts directly related to the topic under study should be considered. Less relevant information, no matter how interesting in itself, must temporarily be ignored. Stringers tend to achieve good grades in college because the highly structured nature of most academic work favors their particular style of learning.

Each of these groups of learners should recognize how they best organize information and then take full advantage of their personal style of forming mental connections among items of information. Groupers should study the following plan for the organization of information.

- Study topic one
- Study topic two
- Study topics one and two
- Study topic three
- Study topic four
- Study topics three and four
- Study topics one and two
- Study topics three and four
- Study topics one, two, three and four

Stringers on the other hand should follow the following example of information grouping.

- Study topic one
- Study topic two
- Study topics one and two
- Study topic three
- Study topics one, two and three
- Study topic four
- Study topics one, two, three and four

Session 4 - Lecture notes cont

RETRIEVING ITEMS FROM MEMORY

When we retrieve an item from memory our goal is to then put this item to use. This process is the process of problem solving we all employ. In the next module of this course we will examine problem solving as a function of the retrieval process. We will look at our own personal style and how we can use this style to complement the personal styles of others with whom we work. It is our firm belief that no matter what your style, you can learn to effectively combine it with others to increase productivity and profitability in the workplace. This combining of styles for problem solving will thus enhance the idea of individual thought and instead of diminishing the individual by utilizing groups we will enhance the role played by each member. The diversity of styles becomes a necessity for efficient and effective problem solving.

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Worksheet 6 - Identifying methods of filing information

Each participant will be given 10 minutes to answer the following questions. These questions are adapted from the research of Gordon Pask.

1. When studying an unfamiliar subject do you:
 - a. Prefer to gather information from many topic areas?
 - b. Prefer to stay fairly close to the central topic?
2. Would you sooner:
 - a. Know a little about a great many subjects?
 - b. Become an expert on just one subject?
3. When studying from a textbook do you:
 - a. Skip ahead and read chapters of special interest out of sequence?
 - b. Work systematically from one chapter to the next, not moving on until you have understood earlier material.
4. When asking other people for information about some subject of interest do you:
 - a. Tend to ask broad questions which call for rather general answers?
 - b. Tend to ask narrow questions which demand specific answers.
5. When browsing in a library or bookstore do you:
 - a. Roam around looking at books on many different subjects?
 - b. Stay more or less in one place, looking at books on just a couple of subjects.
6. Are you best at remembering:
 - a. General principles?
 - b. Specific facts?
7. When performing some task do you:
 - a. Like to have background information not strictly related to the work?
 - b. Prefer to concentrate only on strictly relevant information?
8. Do you think that educators should:
 - a. Give students exposure to a wide range of subjects in college?
 - b. Ensure that students mainly acquire extensive knowledge related to their specialties?
9. When on vacation would you sooner:
 - a. Spend a short amount of time in several different places?
 - b. Stay in just one place the whole time and really get to know it?
10. When learning something would you rather:
 - a. Follow general guidelines?
 - b. Work in a detailed plan of action?

11. Do you agree that, in addition to his/her specialized knowledge, an engineer should know something about some or all of the following: math, art, physics, literature, psychology, politics, languages, biology, history, medicine? If you agree and select four or more of the subjects, then score an "a" on this question.

Now total up all the a's and b's.

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CREATIVE PROBLEM SOLVING -- PROBLEM SOLVING

OBJECTIVES: By the end of this module you will be able to:

1. Identify at least two problem solving models.
2. Select an appropriate model and apply it to a sample problem.
3. Identify the necessary components of a successful team.
4. Recognize the necessary interactions which must occur to have a successful team outcome.
5. Identify your personal social style.
6. Recognize the steps to developing good working relationships with other social styles.
7. Identify types of problem solving teams.
8. Apply a problem solving model to a team situation.

TIMING: There are 7 sessions in this module. Each one is timed for 1 hour and 50 minutes.

MATERIALS: Room
Tables for participants
OHP and screen
Dry Eraser Board and markers
Flip chart and markers
Group discussion areas
Lecture notes: Problem Solving
OH's
Work sheets
Handouts

CREATIVE PROBLEM SOLVING - Problem Solving

- Session 5
1. 5 min
Introduction from lecture notes PS OH 1
 2. 40 min
Introduce Problem solving styles inventory -see Lecture notes-Distribute inventory to students. Allow 25 min. for them to complete. Allow 10 min. to score them and fill in score sheet. Handout 1
 3. 5 min
Discuss the attributes of a Realist PS OH 2
 4. 10 min
Break
 5. 20 min
Discuss the attributes of an Idealist Activist, and Pragmatist PS OH 3
These styles can reflect attitudes PS OH 4&5
toward the process of problem solving by discovering the parts of the process we find most comfortable, and those we find less comfortable.
 6. 30 min
Divide class unto groups of three. Have each group select two of the styles. Develop a scenario using these two styles. The topic is: "How to introduce a new phone system to a hospital with 465 people on staff, and 79 volunteers and doctors. Class will present scenarios at next meeting. Limit of 5 min for each presentation.

Problem Solving -

If we are to solve the problems we need to learn how to collaborate more effectively. We need to know how to set aside individual agendas so that a common understanding of a problem has an opportunity to develop. We need to understand how that common understanding gets translated into concrete performance objectives so that a realistic and attainable solution to a problem becomes identified. We need to know how the activities of people can be coordinated, and their efforts brought together within a structure that integrates and focuses, rather than diffuses. We need to know how to foster the trust and the sharing of information that will lead to the best decisions. Our goals are decisions that will have the maximum impact on the problem, and lead to the minimum disruption of individual lives.

This is problem solving at it's highest level. (OH PS.1)

Our goal is to peel away some of the confusion of what problem solving is, and who does it. Everyone is a problem solver. We do it every day as part of our lives. It's only when we are faced with the formal act that we begin to have doubts about our abilities. As has been shown in the first module, these doubts (thoughts) have great impact upon our success. In the first module, we explored your personal method of registering information and looked at methods of filing that information. Now we will look at the methods you have developed for retrieving and utilizing that information. This is called your personal style of problem solving.

Problem Solving

- **We need to learn how to collaborate more effectively.**
- **We need to set aside individual agendas**
- **We need to understand how to set common, specific goals.**
- **We need to learn how to coordinate individual activities.**
- **We need to learn to trust others.**

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Lecture Notes - PS Styles

The Problem-Solving Style Inventory is an attempt to provide some information about which aspects of problem solving you prefer. Porter identified four styles of problem solving, and a quiz to determine which style you prefer. Having a high score in one problem-solving style and an average to low score in the others, indicates a tendency to work most comfortably in the style represented by the high score. If two of the scores are fairly close and the third somewhat lower, the tendency is to move back and forth between the two higher styles. If all three of the scores are average, this would indicate a pragmatist's style.

Scores provide only a rough approximation of the way people go about solving problems. Keep in mind not only your scores, but also what you know to be true about yourself, when reading through the descriptions of the styles of problem solvers.

(Styles developed by Porter, 1973)

The Problem Solving Style Inventory

Take up to 25 minutes to complete the inventory, but be sure to respond honestly to the items. Do not respond as you think you should or would like to behave, but as you actually behave when solving problems. Feel free to change your responses after further reflection if you wish, but do not be concerned about consistency among responses or certainty. There are no "right" or "wrong" responses.

Each of the ten following items begins with an incomplete sentence, followed by three different sentence completions. Distribute 10 points -- no more and no less -- among the three endings to show the degree to which each ending describes the way you think or behave. You may use zeroes to indicate that a particular alternative is completely unlike you, but use whole numbers only.

Sample question:

When I find myself facing complex problems, I tend to:

- Seek help from my friends.
- Work out the problem for myself.
- Seek professional help.

1. I am impressed with other problem solvers who are able to :

- Clarify goals and objectives.
- Offer the best solution.
- Ask the right questions.

2. My definition of effective problem solving includes concern about:

- "Having a vision."
- Getting the job done.
- Being "down to earth."

3. I am most satisfied when I am determining:

- How things should be.
- How to make things better.
- How things are now.

4. When I am bothered by something, I tend to focus on:

- How I would like things to be different.
- What I should do to make things better.
- The cause of the problem.

5. When I am under pressure to solve a problem, I am likely to:

- Spend time thinking about what I want
- Push for a rapid solution to the problem.
- Step back and carefully examine the situation.

6. I am most interested in:

- The way things could be
- How to improve things
- The way things are now

7. When I am working with a group, I tend to help the group:

- Determine goals
- Take action
- Obtain the facts

8. When I find out that another person does not like me or is angry with me, I tend to:

- Try to understand what that person wants.
- Try to make things better between us
- Try to find out what is wrong.

9. When another person asks me for help with a problem, I tend to:

- Find out what that person wants to accomplish
- Suggest ways that a person could solve the problem.
- Ask for more information.

10. People in general are likely to get into trouble when they:

- Lack a vision of what things could be like.
- Are unwilling to take a few risks.
- Act without a clear understanding of consequences.

Problem-Solving Style Inventory Scoring Sheet

Add the numbers you have assigned to each response line. In question one add the number you assigned to the first response to the number you assigned to the to the first response in question two. Add the number you assigned to the first response in question three. And so on through all the questions. Now add the numbers you have assigned to the second responses of each question. All these scores added together should total 100.

Scores of response 1 lines _____ add 5 points _____
Scores of response 2 lines _____
Scores of response 3 lines _____ subtract 5 pt _____

Write your adjusted scores below.

_____ Response 1 (Idealist)

_____ Response 2 (Activist)

_____ Response 3 (Realist)

Now examine the following scale to obtain an estimate of the relative strength of each of your three final scores.

Scale

100 - 85	Very High
61 - 84	High
46 - 60	Above Average
20 - 45	Average
10 - 19	Low
0 - 9	Very Low

Finally, fill in the information requested below by listing each of your scores and whether it is high, above average, etc.

My Idealist score of _____ is _____.

My Activist score of _____ is _____.

My Realist score of _____ is _____.

Strategies for Problem Solving

UNDERSTANDING THE PROBLEM

- First. What is the unknown? What are the data? What are the conditions? Is it possible to satisfy the condition? Is the condition sufficient to determine the unknown? Or is it insufficient? Or redundant? Or contradictory? Draw a figure. Introduce suitable notation. Separate the various parts of the condition. Can you write them down?

DEVISING A PLAN

- Second. Have you seen it before? Or have you seen the same problem in a slightly different form? Do you know a related problem? Do you know a theorem that could be useful? Look at the unknown! And try to think of a familiar problem having the same or a similar unknown. Is the problem related to one you have solved before? Could you use it? Could you use its result? Could you use its method? Should you introduce some auxiliary element in order to make its use possible? Could you restate the problem? Could you restate it still differently? Go back to definitions. If you cannot solve the proposed problem try to solve first some related problem. Could you imagine a more accessible related problem? A more general problem? A more special problem? Keep only a part of the condition, drop the other part; how far is the unknown then determined, how can it vary? Could you derive something useful from the data? Could you think of other data appropriate to determine the unknown? Could you change the unknown or the data or both if necessary, so that the new unknown, and the new data are nearer to each other? Did you use all the data? Did you see the whole condition? Have you taken into account all essential notions involved in the problem?

CARRYING OUT THE PLAN

- Third. Carrying out your plan of the solution: check each step. Can you see clearly that the step is correct? Can you prove that it is correct?

LOOKING BACK

- Fourth. Can you check the result? Can you check the argument? Can you derive the result differently? Can you see it at a glance? Can you use the result or the method for some other problem?

Class Exercise

Have the students go back to the Number problems presented on the IQ exams.

How do the steps presented here relate to Polya's plan?

How about the Spatial Problems?

Are the four steps of Polya used here?

Can there be a deduction made about the usefulness of the model?

Realist

Careful, Cautious, Rational, Logical, Analytical.

Basic Belief: Problems can best be solved by a thorough analysis of the situation and a clear understanding of the cause of the problem.

Realist is reluctant to take any action until he or she clearly understands what actually is happening. The realist wants to avoid the wishful thinking of the idealist and the unanticipated consequences produced by the activist.

Strength is the ability to collect information and to ask hard questions.

Weakness, tendency toward "analysis paralysis" - Can never have enough information.

OH

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Idealist

Visionary, Hopeful, Trusting, Future Oriented

Basic Belief: Problem solving can be successful only if people have a clear sense of their values, of what they want and where they are going. Wants to avoid the mundane, pedestrian thinking of the realist and the hasty decision making of the activist.

Strength: Ability to challenge the sometimes limited thinking of the realist and to provide new perspectives on old problems for the activist.

Weakness: Frequent dissatisfaction. Can pick out a flaw in any situation, relationship.

Instead of accepting what must be accepted, he tries to create utopias. Too often he fails to act.

OH

P - 64

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Activist

Energetic, Confident and Enterprising

Basic Belief: Problems can be solved only by generating proposals and ideas, by making something happen. He wants to avoid what he sees as the realist's tendency to analyze and the hopelessly romantic thinking of the idealist.

Strength: Ability to move into action

Weakness: Risk Taking

The problem with both realists and idealists is their unwillingness to take risks. In an over eagerness to take action he may do anything and thus make the problem worse. The activist is the ultimate trial - and - error problem solver.

Pragmatist

Flexible, Adaptable, Responsive and Tolerant

Basic Belief: The appropriate response to a problem depends on a number of variables. When confronted with a new problem they become realists, when confronted with an old problem they become idealists. When pressed for time, they become activists. They wish to avoid excessive behavior in any form.

Strength: Flexibility

Weakness: May choose the wrong approach.
Sometimes is considered to be unpredictable.

OH

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Creative Problem Solving - Problem Solving

Session 6

1. 30 min

Review the Styles of Problem Solving
Call for presentations of Scenarios.
Discuss each. Have the students critique
each of the presentation of the styles.

PS OH 3-5

2. 30 min

Introduce the Problem Solving Model (Polya)
Distribute copies. Review Steps and
explanations of each step.

PS OH 6

Present Problem 1. Allow 10 min for
students to work on their own. Introduce
Solution via the four steps of the model.
See Lecture notes Using Polya's Plan.
Write process on the board.

PS OH 7

3. 10 min

Break

4. 25 min

Introduce Problem #2. Allow students
10 min to solve on their own using the
4 steps. Have them identify the steps
with their work. Lecture notes Ex. 2

PS OH 8

5. 15 min

Have the students look at the steps they
used to solve Number Problems and Spatial
Problems. Identify the four Steps (Polya)

6. 10 min

Review on the board.

Problem Solving Process

1. Understand the Problem - What is known? What is unknown? What are the data available? What are the conditions?
2. Devise a Plan - Have you seen the problem before? Different form? Do you know a related problem? Could you use its results?
3. Carry out the Plan - Check each step. Can you see clearly that the step is correct? Can you prove that it is correct?
4. Looking Back - Can you check the result? Can you check the argument? Can you derive the result differently? Can you see it at a glance? Can you use the result, or the method for some other problem?

OH

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Using Polya's Model Solve

Problem:

A man has a daughter and a son. The son is three years older than the daughter. In one year the man will be six times as old as the daughter is now, and in ten years he will be fourteen years older than the combined ages of his children.

What is the man's present age.

OH

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Using Polya's Plan Exercise #2

Understand the Problem: You might think that answer could be found by simply adding all the numbers together and subtracting from the given number. (470) This is not correct.

Let's look at a simpler problem and see if we can understand why?
Suppose 48 people bought Coca Cola and 71 people bought Pepsi for a total of 119. Now add the fact that 19 people bought both types of cola. Now the equation changes $48 + 71 - 19 = 100$.
Draw out the picture to help you see the logic.

Devise a Plan:

Now look at the original problem. Draw circles for each class, finite math, statistics, and computer programming. Now overlap the circles when appropriate according to the problem.

Carry out the plan:

Fill in the circles beginning with the students who are taking all 3 courses.(7) You are given that 17 students are taking statistics and computer programming. But, you have already accounted for 7 of these students in the 7 that are taking all three courses so you must only account for 10 of the 17. We do likewise for the other two spaces representing the students taking finite math and a combination of statistics or computer programming. Always remembering that we have already accounted for 7 students. Now we are ready to determine the numbers taking only finite math, computer programming and statistics. We can now add all the numbers in the chart and we find that we have accounted for 83 students. Since 470 students were surveyed, 387 are not taking any of the three mentioned courses.

Looking Back:

Find the sum of all the numbers in the graph.
 $19 + 8 + 16 + 11 + 7 + 10 + 12 + 387 = 470$

Notice the techniques we have used in solving the problems. We have relied upon charts (problem 1), looking at a simpler problem and using pictures in problem 2. All the while still following Polya's four step design for problem solving. We can draw upon all we know of our own personal learning styles to help us to understand the problems. If you need pictures use them. Maybe reading information out loud would help. You might have to physically walk through a problem to understand all the facts.
What ever your style, USE IT.

Problem Solving

Example #2

A survey of 470 student gives the following information:

- 45 students are taking finite math
- 41 students are taking statistics
- 40 students are taking computer programming
- 15 students are taking finite math and statistics
- 18 students are taking finite math and computer programming
- 17 students are taking statistics and computer programming
- 7 students are taking all three

How many students are not taking any of these courses?

OH

P - 71

220

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CREATIVE PROBLEM SOLVING - Problem Solving

Session 7

1. 10 min.

Review of the Problem Solving Model

PS OH 6

2. 20 min

Introduce P'DAGEDIE Model. See Lecture notes. Distribute copies of OH. Compare Steps of P'DAGEDIE Model with POLYA

PS OH 9

2. 20 min

Read Script- Select two students at break Using one of the models identify the problem Larry is having. What are the steps Larry has completed?

PS OH 8&9

Help students to identify the model they feel most comfortable working with. Can they see how they could use this model to help them do some problem solving on their own. Have they a problem they wish to pose to the class. Have them write it out and bring it to the next class.

3. 10 min

Break

4. 30 min

Divide class into groups not larger than 6 Have them record on Flip chart pages - "The things I dislike about working in Teams". Have students note the repetitiveness of lists. Explain that we all seem to experience the same feelings. Note on the lists the general category of each complaint.

5. 15 min

Introduce Problem Solving Teams
Discuss what is a team
Discuss team Goals - characteristics
Discuss Design features of Teams

PS OH 10
PS OH 11
PS OH 12
PS OH 13

6. 10 min

Review the items listed on the Flip
Charts. Note if the items listed relate
to the Four Necessary Features of Team
Structure

PS OH 14 & 15

P - 73

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Lecture Notes - Problem Solving

Polya originally proposed these steps in 1941. Since then all kinds of models have been proposed for problem solving. Each one is basically come form of these same four steps. Each discipline of study has gone through several popular models in the intervening years. One of the most popular models currently being used in the business world is the eight step P'DAGEDIE process.

1. Perceive
2. Define
3. Analyze
4. Generate alternate solutions
5. Evaluate the alternatives
6. Decide
7. Implement
8. Evaluate

Compare these two models and we see the similarities.

January 16, 1992

P'DAGEDIE Problem Solving Model

1. Perceive - Describe your situation objectively. What's happening? Who's involved? What are they saying? Also, determine who will be making the final decision.
2. Define - Determine a mutually agreed upon, neutral definition of the problem. (Getting agreement on the problem statement is 75 percent of finding the solution!) Make sure the problem statement is phrased in neutral terms that do not imply a specific solution. Determine the criteria for the optimum solution.
3. Analyze - Describe the worst, best, and current states of the situation. List the forces that are acting in the solution to make it better or worse.
4. Generate - Gather all ideas without any criticism, judgement or evaluation. alternate solutions "That's one idea what's another."
5. Evaluate - Discuss each alternative using the criteria from step 1. the alternatives Discuss combinations.
6. Decide - Choose your solutions using the authority of one person or of the whole group, as appropriate.
7. Implement - Create a plan designating who is responsible for what by when. Include check-up appointments and ensure that each person has authority commensurate with responsibility. Identify how you will recognize success of the plan when you see it.
8. Evaluate - Measure the success of your plan. It didn't achieve your expected results, was it because of faulty implementation, inaccurate definition of the problem, or what?

To implement P'DAGEDIE properly your group should agree up front to complete one stage of the discussion before going on to the next stage. That way, everyone is working together instead of some defining the problem, others generating solutions, others analyzing the data, and still others debating the merits of a suggested solution.

OH

P - 75

Lecture Notes Cont

All of us have encountered situations where our intentions were not clearly communicated by our behavior.

You may intend to break the ice with a new client in a non-threatening way (you decide to tell a joke) but that behavior preference of yours (for joking) may cause your client to give you a cold stare, making you realize that you have gotten off on the wrong foot.

You may intend to critique your subordinate's work fairly and honestly (by going over the facts step by step, point by point, with methodical completeness). But that behavioral preference of yours (for being thorough and logical) may result in your being called picky.

You may intend to faithfully incorporate all of your superior's suggestions into the XYZ report for the company vice-president but that behavioral preference of yours (for describing things with a dash of color, just to underline the point) may cause others to say stop trying to be clever. It distracts from our true purpose.

You may intend to have every one's best interests at heart at the office by running a tight ship: Keeping things moving on schedule and everyone, including yourself, fully informed (you send out memos to the whole staff twice a day). But that behavioral preference of yours (for informing you staff of what needs to be done in a series of rapid commands) may cause members to feel that their independence is being limited, which, in turn, makes them unresponsive to your demands. Then you fume, "My staff just isn't motivated."

It might be fair to say its what we say and do, and how we say and do it, that gets us into trouble with others, not our intentions.

One of the primary reasons why these experiences are so common to each of us is that many people do not have a clear understanding of how their behavior affects others, and what it does to an interpersonal relationship.

We all say and do things as a result of certain habit patterns, and people make predictions about us because they come to expect us to behave in a particular way. While we can easily ascribe patterns of behavior to theories, we often resist putting the same labels on ourselves. All of us have habits we have grown used to -- habits that have worked well for us, habits that make us comfortable, and these habits become our social style. In order to ease the task of becoming objective observers of social style, we will narrow our observations to interpersonal behaviors -- those behaviors that occur when we are involved with one or more persons.

Script Teams

Jim Berklund sat in his boss's office. Jim was recently hired as a management trainee at a large West Coast insurance firm and Bill Stanley was his boss. Jim is a bit nervous. The two men were meeting to discuss Jim's assignments and Jim didn't know what to expect from the day. He enjoyed spontaneity, had a personal preference for friendly, easy going relationships, and he was suspicious of anything highly organized --including large corporations.

Bill arrived and apologized for being late. He draped his coat over a vacant chair, dumped an assembly of files from his briefcase onto his desk, and gave Jim a friendly smile as he sorted papers.

Bill Well, Jim, how's your training going? As soon as we get a chance I'd like to spend some time with you, but right now we've got a meeting with Frank Johnson. He's senior vice-president for marketing. I know you came here to discuss your training but, this meeting was called late last night and I have had to spend my time preparing a report. But this will give you an opportunity to meet some of the other men on the team. I would like for you to help me out by sitting in on the meeting and taping the discussion and then write a summary for me.

On the way to the meeting Bill met several co-workers and stopped to introduce Jim. Upon entering the meeting Bill saw that Jim was introduced to everyone there and was included in the small talk. Bill passed around copies of his report. Frank Johnson was not yet present.

Frank Frank enters. So, Bill, what's on the agenda?

Bill We're here to go over my preliminary report on the possibility of beginning our own management-development school.

Frank Right, What have you got for me.

Bill Frank, let's go over the high points first and then get into details. I'm recommending that we develop a feasibility proposal. We've done some preliminary research and it looks like there's enough value in such a school to at least put some numbers together.

Frank All right, Bill. Tell me what you've dug up, but let's all understand that not all the facts are on the table. When they are, I'll see what's feasible.

Bill (Shifts in his chair) Well Frank, three conclusions from our research support the idea of a feasibility proposal.

Frank Yes, yes. Okay, what are they? (Frank stands up and starts to pace.)

Bill The first one is that most of our competitors are setting up these schools.

Frank What are the details on this?

Script cont 2

Bill Of the big five, four already have plans for a centralized management-development school. I've talked with most of our regional vice-presidents, and ...

Frank Did you get hold of Mac? What was his point of view?

Bill MacKenna wasn't available yesterday,

Frank Well Bill, I told you before that Mac's opinion was going to be important. It doesn't look to me as if you have done as much as you need to on this. (Frank reaches over and cuts off the recorder in front of Jim.) How's that for an introduction.

That night when Jim arrives home later than usual his dinner is over cooked. Liz his wife, was slightly annoyed. Liz is the head accountant at a locally owned construction company. She is ambitious and likes to move from one activity to another quickly with very little time to relax. Time to Liz is something to be organized. Basically she and Jim get along fine.

Liz Hi honey, how was your day?

Jim Just all right? I'll tell you about it when I get changed.

Jim Well, you know how it is. Lots to do.

Liz Come on, I know something is bothering you. What is it?

Jim Oh, nothing important. I had a meeting today with some of the big shots. This may be a tougher place to work than I thought.

Liz Why? What Happened?

Jim Here listen, (He plays the recording for her). Can you imagine anyone being as callous as Frank? And look at his pictures in these company newsletters. He's always pointing at someone or ordering them around.

Liz Well, it sounded to me like Frank is a real leader. He got right to the point and didn't waste any time. I'll bet you can depend on him to make decisions. And what's wrong with pointing? I think he looks like an intelligent, ambitious man. How could someone who has a love of music be callous? She glanced through an article on Frank and the local symphony.

Jim But, what about Bill's feelings? Frank never once even acknowledged all of Bill's work. He just found out that Bill hadn't talked to this Mac guy, and that was it. You should have seen Bill. He was humiliated. I think Frank is a pretty arrogant. He probably pushes people around because he's not as smart as he wants people to think he is. To tell you the truth, I think the man's a conceited jerk.

Liz Maybe he is demanding, but you have to be tough in his position. That's how my Dad would have handled it. Take charge. Get things done.

What kind of judgments are being made here? Both are basing their judgments on what is being said and on the interaction between the men. How would you identify Liz's social style? Why does she feel comfortable with Frank? What can you say about Jim? What types of words are they each using to describe Frank?

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TEAMS

- TWO OR MORE PEOPLE
- HAVE A SPECIFIC PERFORMANCE OBJECTIVE OR RECOGNIZABLE GOAL
- COOPERATIVE MEMBERS

OH

P - 80

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PROBLEM SOLVING AS TEAMS

- **GOAL MUST BE UNDERSTOOD AND ACCEPTED BY ALL MEMBERS**
- **MODEL FOR SOLVING MUST BE AGREED UPON BY ALL MEMBERS**
- **PROCEDURES AND RULES MUST BE AGREED UPON BY ALL MEMBERS**
- **CLEARLY DEFINED DEFINITION OF THE COMPLETION CRITERIA**

OH

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**Problem Solving
Teams**

Problem Resolution

**Centers for Disease control
Challenger investigation team
Presidential Cabinet
Executive Management Team**

Creative

**IBM PC Development Team
McDonald's Chicken McNugget
US Space command
Theatrical productions**

Tactical

**Cardiac surgery teams
Sports teams
Mountain-climbing teams**

OH

P - 82

Goals

High performance teams have both a clear understanding of the goal to be achieved and a belief that the goal embodies a worthwhile or important result.

Clarity--

Is the most important characteristic of a goal. Implies that there is a specific performance objective, phrased in such concrete language that it is possible to tell, unequivocally, whether or not that performance objective has been attained.

Elevating--

If a goal is clearly understood and viewed by team members as important or worthwhile.

- 1) Goals can be personally challenging -- to the individuals or to the collective effort.
- 2) Goals can be elevating in the sense that the performance objective itself makes differences -- creating a sense of urgency.

Structure is Results Driven--

Structure is established in such a way that individual and group efforts always lead toward the goal.

- 1) Problem-solving team structure promotes trust.
- 2) Creativity team structure allows for autonomy.
- 3) Tactical team the structure reinforces clarity.

OH

CREATIVE PROBLEM SOLVING - Problem Solving

Session 8

1. 10 min

Review Teams and Problem Solving

PS OH 8-16

2. 20 min

Divide class into groups not larger than 6 to a group. Have them determine the criteria necessary for being selected on a team. Who do You Want to Work with?(Qualifications?). What Qualifications would a boss want? Do the Qualifications compare? Record on Flip Chart. Compare to the necessary criteria

PS OH 16

3. 20 min

Lecture notes on Social Style

4. 10 min

Break

5. 50 min

Using the play Team Script, review the characters. Have the students take 3 minutes to describe in single words each of the characters. Discuss where they got their impressions Introduce OH 17 Common ways of describing people.

PS OH 87

6. 10 min

Have Students list three of their acquaintances and describe each one in terms of Interpersonal Situations. Try this with the people from the Play.

TEAM SELECTION CRITERIA

- Have the essential skills and abilities
- Have desire to contribute
- Have capability of collaborating effectively

OH

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Lecture notes - PS

One of the strongest factors that accounts for a successful team or group activity is the selection of the right people for the team. Look at the lists you generated about group activities. How many of them are based upon unsuccessful relationships within the group or team. It is unfortunately true that in many organizations the criteria for team selection is based solely on qualifications and no consideration is given to the social side of the individual.

Yet this social side can divide teams and produce work that is less than the talent of the individuals indicated. This social side can be counter productive to good problem solving in a team situation or it can elevate the team product beyond simple goal attainment.

In this section of the course we will determine the personal social style all of us present to our fellow workers.

Your social style, the "you" that is on display every day, can be quite independent of what we may believe about ourselves or wish we were. But because others react to and draw conclusions about us mainly from our behavior, whether they know why we act as we do or not, our actions have a significant effect on our success in dealing with others.

In this effort we are going to use the work of David W. Merrill, Ph.D. and Roger H Reid, M.A., to try and help us to identify our personal social style and then to apply this knowledge in working in a group setting. This should aid us in our quest to understanding how we as individuals have developed our own styles of coping within this situation. Armed with this information we can move into problem solving techniques. Where we can use our information of ourselves and of the group to develop viable solutions to group problems.

The key principle of this section is that the conclusions that people draw about a person are based on what they observe that person saying and doing. Other aspects of an individual's personality, including abilities, dreams, ambitions, beliefs, likes and dislikes, play no role whatsoever in discussing behavior. This is the public "you" we will talk about. Your intentions will be disregarded, because they belong to the private you.

It's difficult to stand outside ourselves as observers, and then to think about how our actions affect others. Others cannot feel what we are feeling or think what we are thinking. They can only observe what we say and do. We think this attempt is worth while because it will lead to improved relationships without requiring dramatic changes in our attitudes or values. As we study how others react to our behavior, these insights become useful immediately.

All of us have encountered situations where our intentions were not clearly communicated by our behavior.

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Lecture Notes cont

You may intend to faithfully incorporate all of your superior's suggestions into the XYZ report for the company vice-president (illustrating his ideas with some dramatic little narratives) but that behavioral preference of yours (for describing things with a dash of color, just to underline the point) may cause others to say Stop trying to be clever. It distracts from our true purpose.

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COMMON WAYS OF DESCRIBING PEOPLE

1. WORDS AND PHRASES THAT DESCRIBE THE INNER QUALITIES

**HONEST
INTELLIGENT
AMBITIOUS
MOTIVATED**

**INTERESTED
SINCERE
HYPOCRITICAL**

**2. WORDS AND PHRASES THAT DESCRIBE OUR OWN REACTIONS
FEELINGS AND JUDGEMENTS**

**LIKEABLE
CONFUSING**

**NICE
ODD**

OH

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Liz Maybe he is demanding, but you have to be tough in his position. That's how my Dad would have handled it. Take charge. Get things done.

What kind of judgments are being made here? Both are basing their judgments on what is being said and on the interaction between the men. How would you identify Liz's social style? Why does she feel comfortable with Frank? What can you say about Jim? What types of words are they each using to describe Frank?

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QUESTIONS FROM THE SCRIPT

- **WHAT IS THE REAL PROBLEM?**
- **WHAT PLAN WAS USED TO SOLVE THE PROBLEM?**
- **DID WE SEE THE PLAN IN ACTION? - (CARRY OUT PLAN)**
- **WAS THERE FEEDBACK?**

OH

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CREATIVE PROBLEM SOLVING - Problem Solving

Session 9

1. 10 min

Review Common ways of describing people

PS OH 17

2. 45 min

Compare Objective Descriptions to
Subjective Descriptions
Present research on Social Styles
Assertiveness and Responsiveness

PS OH 18
PS OH 19
PS OH 20&21

3. 10 min

Break

4. 40 min

Divide into groups to develop a definition
of an aggressive person. How did they
define him? How do they know? Did they
Use non verbal clues? Discuss.
Have students define a responsive
person. How did they make that
determination?
Identify some well known personalities
and determine where they belong on the
Scales.

PS OH 22
PS OH 23

5. 5 min.

Review next session - Add a new dimension
to the Social Styles.

Objective Description

Fast paced rather than Slow

Loud rather than Quiet

Aloof rather than Warm

Rigid rather than compromising

ONE Inner Qualities, Traits, or Characteristics	TWO Interpersonal Situations	THREE Reactions, Feelings, and Judgements
Honest	Loud • Quiet	I like him
Intelligent	Fast-paced • Slow-paced	She bugs me
Ambitious	Facially • Facially animated controlled	She interests me
Motivated	Inflected • Monotone speech speech	He seems nice
Interested	Rigid posture • Casual posture	He's strange
Sincere	Direct • Indirect eye contact eye contact	I hate him
Hypocritical	Dramatic speech • Factual speech	I trust her
<p>▲</p> <p>These descriptions identify (1) an interpersonal situation in which two or more people interact; and (2) observable behavior which can be described by an observer and verified by observations made by others.</p>		

Fig. 2-1. Common ways of describing people. Limit descriptions to type of words in column two to describe behavior objectively.

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FEELINGS AND JUDGEMENTS**

**LIKEABLE
CONFUSING**

**NICE
ODD**

OH

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Responsiveness cont

The Social Style Profile is a result of our measurement of how others describe a person. It is like a picture or map of what others can see you doing or saying, and shows where a person most frequently positions himself within the available actions on assertiveness and responsiveness.

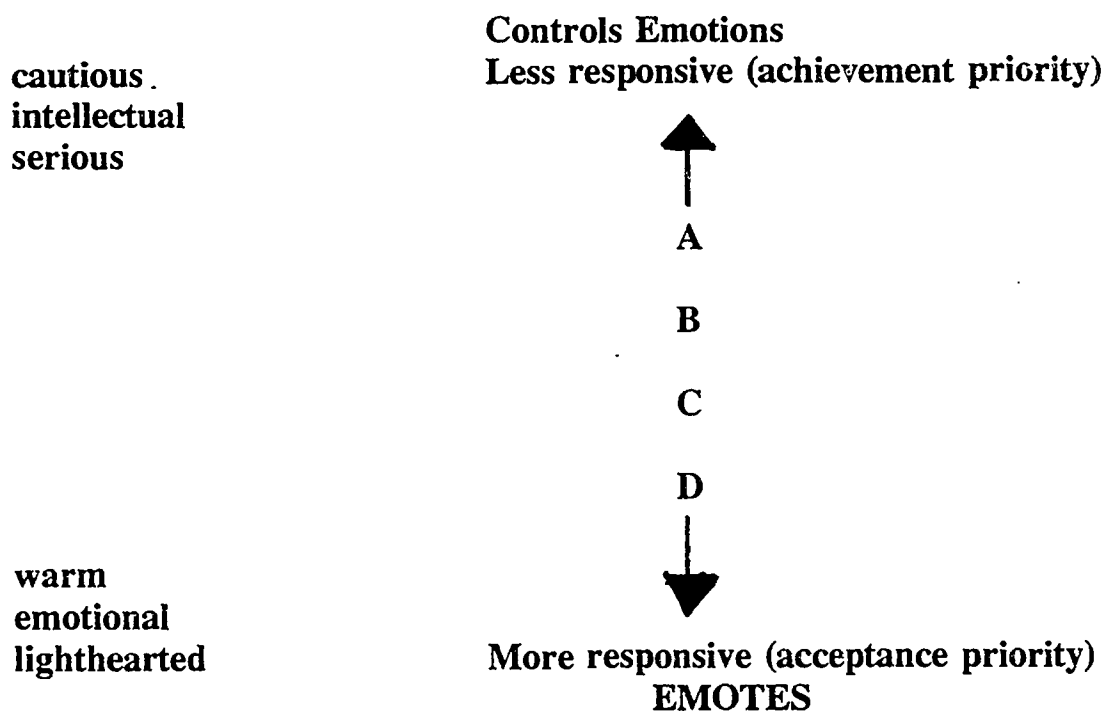
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Responsiveness

Who controls feelings?, Who shows feelings?

This is the second dimension of Social Style. It indicates how much feeling a person displays.



Each section represents 1/4 of the normal population

More responsive individuals tend to say and do things that show, rather than control, their feelings. These people will display responsiveness and work at maintaining relationships to earn social acceptance. Less responsive people tend to control emotions, and tend to focus on ideas: things, data, and tasks – rather than on people, to gain approval through achievement.

Verbal Behavioral Clues

	Less Responsive	More Responsive
Emotion in voice	Monotone	Inflections
Subjects of speech	Tasks	People
Descriptives	Facts/Data	Opinions/Stories

Nonverbal Behavioral Clues

	Less Responsive	More Responsive
Use of hands	Closed	Open palms
Body posture	Rigid	Casual
Facial expression	Controlled	Animated

Fig. 3-4. Behavioral clues to responsiveness.

Assertiveness; Who tells?, Who asks?

Some people are more likely to start an interaction quickly, to tell others what they think, and to make social moves which are definite. Others are less likely to do these things.

Descriptions.

Telling

demanding
aggressive
forceful

Asking

unassuming
contented
quiet

Asks ← D C B A → Tells

Remember not all of our judgments are based on verbal clues -- 70 to 80 percent of what people learn and believe about others is based on non verbal communication -- on what they see rather than what they hear.

When observing others: consider all the clues together -
Verbal and non verbal

Verbal Behavioral Clues

	Less Assertive	More Assertive
Pace of speech	Slower	Faster
Quantity of speech	Fewer statements	More statements
Volume of speech	Softer	Louder

Nonverbal Behavioral Clues

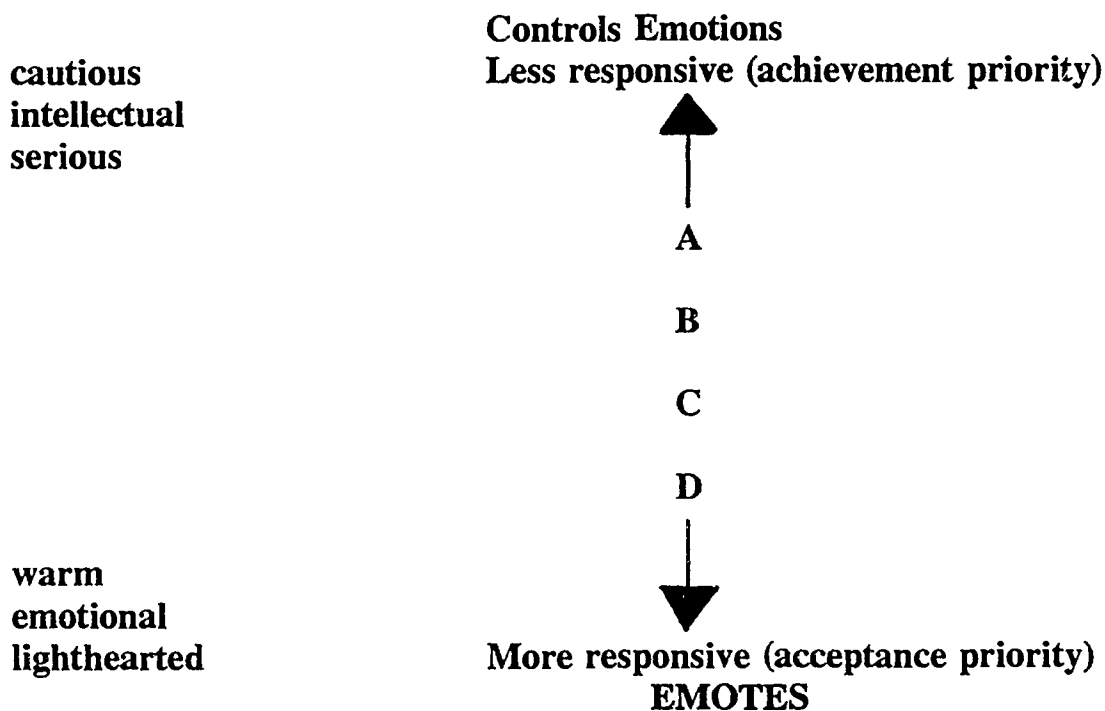
	Less Assertive	More Assertive
Use of hands	Relaxed or cupped	Pointing at others
Body posture	Leans back while talking	Leans forward to make a point
Eye contact	Indirect contact while speaking	Direct contact while speaking

Fig. 3-2. Behavioral clues to assertiveness.

Responsiveness

Who controls feelings?, Who shows feelings?

This is the second dimension of Social Style. It indicates how much feeling a person displays.



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More responsive individuals tend to say and do things that show, rather than control, their feelings. These people will display responsiveness and work at maintaining relationships to earn social acceptance. Less responsive people tend to control emotions, and tend to focus on ideas: things, data, and tasks – rather than on people, to gain approval through achievement.

CREATIVE PROBLEM SOLVING - Problem Solving

- Session 10
1. 10 min
Review Personal Social Styles PS OH 22&23
 2. 40 min
Introduce versatility as a component of Social Style. PS OH 24
Distribute Self-Scoring Questionnaire Handout
Allow 25 min to complete. Discuss PS OH 25
The four styles presented in Handout Analytical, Driving, Amiable, Expressive
Summarize using OH Behavior typical of the four Styles PS OH 26
 3. 10 min
Break
 4. 30 min
Hand out copy of Handout OH 25 have students Fill out again. Have their ideas or observations changed. Now add the dimension of flexibility on a scale of 1 to 10 with 10 being the most flexible rate each person. Have students identify the people they would feel comfortable working with. Handout
 5. 20 min
Examine handout "How others respond" Handout
Have each student read thoroughly their identified style. Do they agree? Divide the class into the 4 self identified groups. Do you agree with the assessment? Before next class do an assessment of people you know. Try to identify one person in each group. Answer the following: Do you get along with this person? Can you work with him? Do you like him? Why? What activity does this person do to make you classify him in this group? Be sure to caution students to write information down.

YOUR STYLE AND OTHER STYLES

ASSERTIVENESS

Asks

Tells

1. _____

1. _____

2. _____

2. _____

SELF _____

RESPONSIVENESS

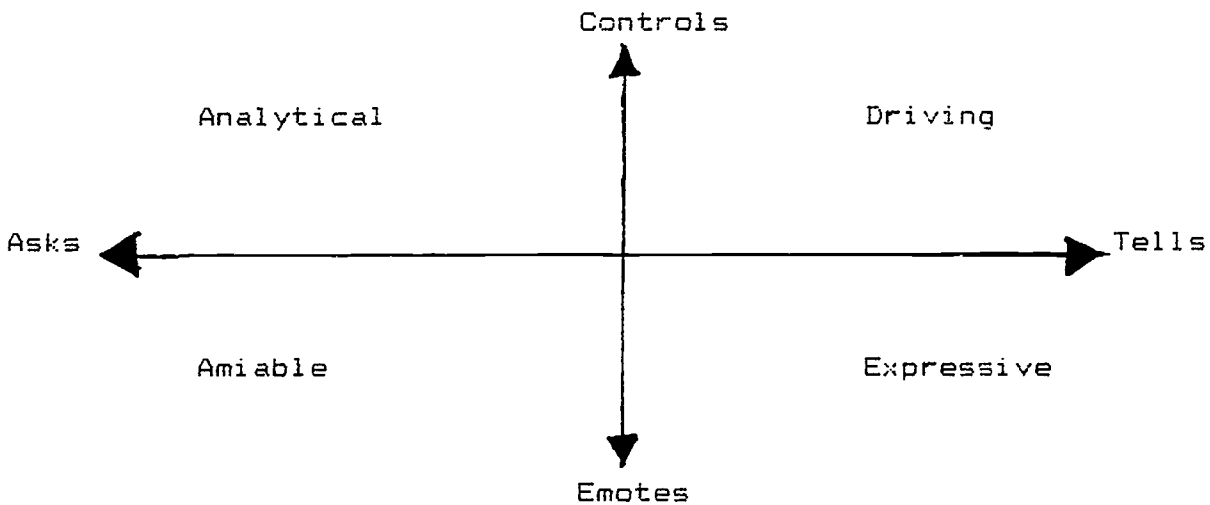
1. _____

1. _____

2. _____

2. _____

SELF _____



Social Style is not an absolute: it is a matter of degree. Even though we tend to repeat some behaviors more than others, we all display a wide range of behaviors at various times. But we all develop patterns. In order for this instrument to be accurate you should review your answers periodically.

VERSATILITY

1. Represents how others view a person's ability to adapt to others, and to deal with relationships effectively.
2. It reflects the effort that a person makes to have a relationship succeed, the skill shows in this effort.
3. The endorsement that he or she earns as a result of it.

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VERSATILITY SELF-SCORING QUESTIONNAIRE

Read each statement and place an X in the box that best describes your reaction to that statement. Mark either (1) "Very True," (2) "Somewhat True," (3) "Somewhat False," or (4) "Very False."

Before I dress for the day, I stop to consider those I might meet for the first time, and then dress in a way that will have an appropriate impact on them.

(1) _____ (2) _____ (3) _____ (4) _____

I recognize the importance of first impressions and, for this reason, give special effort and attention to my physical grooming and dress.

(1) _____ (2) _____ (3) _____ (4) _____

My manner of dress is one of my ways of expressing my individuality, and it's not my problem if someone is put off by the impression I create.

(1) _____ (2) _____ (3) _____ (4) _____

I am a skillful speaker and find it easy to communicate my ideas to people I meet, both in groups and in one-to-one situations.

(1) _____ (2) _____ (3) _____ (4) _____

I must admit that there are times I will say things just to impress people with my vocabulary and my knowledge of a subject.

(1) _____ (2) _____ (3) _____ (4) _____

I sometimes have difficulty expressing my ideas in a clear, concise, and organized manner.

(1) _____ (2) _____ (3) _____ (4) _____

Versatility cont

People ask my opinions on a variety of subjects, and appear to respect my judgment even if they disagree with me.

(1) _____ (2) _____ (3) _____ (4) _____

At a social gathering or party, I tend to seek out one or two people with interests similar to mine, and spend most of my time with these people.

(1) _____ (2) _____ (3) _____ (4) _____

I find I have some difficulty socializing with people who have educational backgrounds or experiences different from mine.

(1) _____ (2) _____ (3) _____ (4) _____

I am usually very frank and candid with others and can usually disagree with them without causing hurt feelings.

(1) _____ (2) _____ (3) _____ (4) _____

I seldom let it be known if my feelings are hurt by something someone says to me about the way I feel.

(1) _____ (2) _____ (3) _____ (4) _____

I am equally good at taking directions from others and giving directions to others when the situation calls for me to do so.

(1) _____ (2) _____ (3) _____ (4) _____

Versatility cont

Scoring instructions: Indicate your score for each statement using the following answer values. Add your scores for the twelve statements. Interpret your total score as follows:

- 0 - 24 Less versatility than most people
- 25 - 30 Mid-range versatility, typical
- 31 - 36 Most versatile

	Very True	Somewhat True	Somewhat False	Very False
1.	3	2	1	0
2.	3	2	1	0
3.	0	1	2	3
4.	3	2	1	0
5.	0	1	2	3
6.	0	1	2	3
7.	3	2	1	0
8.	0	1	2	3
9.	0	1	2	3
10.	3	2	1	0
11.	0	1	2	3
12.	3	2	1	0

Most people completing this questionnaire tend to underestimate their versatility since the statements are written to challenge the way you would normally think and how you handle your relationships.

YOUR STYLE AND OTHER STYLES

Generally, if someone relates well to us, we describe that person's style with the favorable adjectives, if not, we will tend to use the unfavorable terms. But all styles can be successful, and there are no good or bad styles.

Still, because of our own behavioral preferences, some social styles may cause us more discomfort than others. Let's take a closer look at the four styles and learn what types of habitual actions we can expect from each of them. The focus is on three types of actions: typical actions related to others; actions related to the use of time; and actions related to decision making. From these aspects of behavior, others get an impression of an individual's predominant social style.

As we are considering these aspects of behavior, try to decide which styles might cause you problems. Which styles do you think you could work with easily? For most of us styles that most closely resemble our own create the least discomfort, and we feel positive about individuals with that behavior. Styles that differ most from our own create the most discomfort for us, and we feel uncomfortable around individuals with that behavior. Styles that differ most from our own probably create tension-- violate our comfort zones--and we may tend to place a negative label on that behavior. Once again, we see how quickly we can let our objective observations of behavior become obscured by subjectively jumping to conclusions about people, especially when they make us uncomfortable by the things they say and do.

THE DRIVING STYLE: ACTION ORIENTED

Actions Used to Relate to Others: Individuals whose overall pattern of behavior gives the impression that they know what they want, where they are going and how to get there quickly, have a predominately Driving style. "Let's get it done now, and get it done my way" is an appropriate slogan for persons with Driving behavior. Because driving actions seem more oriented toward getting results than toward pleasing people, individuals with this style often appear uncommunicative, cool, independent, and competitive in relationships with others. They tend to initiate action, and their actions, and their actions are definite. However, their personal reasons for such action may not be clear to us, because they seldom see a need to share personal motives or feelings.

Because of this, many people feel that they really don't get to know the Driving person on a close, personal basis. In discussion about people, Driving individuals display an attitude that suggests that they have learned how to work with others only because they must, in order to achieve their objectives, not because they enjoy people. But they can also appear very pleasant, and even charming--on their terms.

Use of time: Individuals with a Driving style tend to focus on the present. Their responses appear swift, efficient, and to the point. They tend to deal with the immediate situation rapidly and appear to have little concern for the past or the future. They work most easily with others who are able to move quickly. The further someone's behavior appears to get from that objective, the more restless the person with a Driving style becomes about the other person's attempts to communicate. Because of this tendency to be impatient, individuals with Driving styles get things done in a hurry, but the job sometimes has to be redone.

Approach to decision Making: Persons with Driving behavior appear to want to make their own decisions; they seek power, and do not like being told what to do or what not to do. They are quick to express their conclusions about anything that concerns them and when they encounter an obstacle between themselves and their perceived objectives, they will often seek to control the situation and get past the obstacle through the use of force. They generally base their decisions on facts and data, will take risks, and prefer to be presented with options from which they can choose.

THE EXPRESSIVE STYLE: INTUITION ORIENTED

Actions Used to Relate to Others: People with an Expressive style usually appear communicative, warm, approachable, and competitive. They involve other people with their feelings and thoughts. Their actions suggest that they want others as friends—but in the roles of followers and personal supporters of their dreams, rather than as competitors. Expressive persons consider power and politics important, since they seek to gain personal recognition and to recruit supporters to their causes. While relationships and people count to the Expressive man or woman, to their associates these relationships may frequently seem shallow and short-lived.

Use of time: People with an Expressive style seem to spend much of their time and efforts moving toward some dream of the future. They generally act quickly, but are undisciplined in their use of time. Because of their focus on the future, they seem to have little concern for practical details in the present. They can easily change a course of action, and seem impatient to find the most exciting vision of the moment for themselves and others. As they move rapidly from subject to subject, they may forget to address specifics, such as who, why, what, and how. Changeableness is part of this style.

Approach to Decision Making: The Expressive individual will take risks in making decisions and will base the decision on personal opinion—his own or others. The opinions of people the expressive individual considers important, prominent, or successful will mean more to this person's decision-making process than all the facts and logic one might introduce. Expressive individuals appear to have more imaginative and creative ideas than do people with other styles; however, it is also easy for them to make mistakes, since they base their decisions on opinions, hunches, and intuitions, rather than on facts.

Expressive people like special, immediate, and extra incentives for their willingness to take risks and move rapidly. Personal social recognition or prestige often provides this incentive.

THE AMIABLE STYLE: RELATIONSHIP ORIENTED

Actions Used to Relate to Others: People who appear to place a high priority on friendships, close relationships, and cooperative behavior have an Amiable style. Because of this, Amiable individuals often lend joy, warmth, and freshness to social situations. Folklore, religious or family traditions, and even sentimentality can capture their attention. People seen as acting in an Amiable manner appear to interpret the world on a personal basis, and they get involved in feelings and relationships between people, frequently speculating on "who did what with whom, and why. They tend to look for personal motives in the actions of others.

As Amiable individuals attempt to achieve objectives with people, they use understanding and mutual respect, rather than force and authority. Paradoxically, though, people with an Amiable style appear to accept authority from another person, if the person is friendly and understanding. Power over others is not an important objective for them: however, being accepted by others does appear important to the Amiable man or woman.

Use of Time: Amiable people tend to move slowly and are undisciplined in their use of time, generally because they wish to take time to share personal objectives and feelings with other people. They focus on what is happening right now, and on how the actions of others may influence their lives. In some instances, talking and socializing can become so important that it is difficult for them to get back to the work at hand.

Approach to Decision Making: People with an Amiable social style appear slow or reluctant to change opinions that hold personal meaning for them. In fact, Amiable individuals frequently stick with the comfortable and known, and tend to avoid activities that involve risk with the unknown—especially risks that involve personal relationships. They tend to use personal opinions in arriving at decisions, and they want others to provide guarantees that any decision made will minimize risk and assure the benefits promised. This need to feel safe in the decision-making process has the highest priority for an Amiable person. Consequently, one of the surest ways to alienate such a person is to provide assurances and guarantees and then not fulfill the commitment.

THE ANALYTICAL STYLE: THINKING ORIENTED

Actions Used to Relate to Others: People who are described as living life according to facts, principles, logic and consistency have an Analytical style. Individuals with this general pattern of behavior are often viewed by others as lacking enthusiasm or as cold and detached. But although they are seen as cool and independent, they also appear cooperative in their actions, as long as they can have some freedom to organize their own efforts.

Individuals with Analytical behavior tend to be cautious about extending friendship or showing personal warmth, and initially will be more concerned with how things can get done without the need for personal involvement. People and friendships may be very important to this person; however, it might not seem so in initial contacts. Facts and logic will appear to have greater importance. People with an Analytical style have a "show me" attitude. They tend to be suspicious of power or leverage until they can see a predictable pattern in the way power is used. Once they determine how power is systematically used to achieve stated goals and objectives, they begin to identify with its use and may even incorporate such power into their own efforts.

Use of Time: Although persons with an Analytical style seem to move slowly, they use time in a deliberate, disciplined manner. These people are interested in facts, and they prefer to consider information in a calm, common-sense way, and avoid flashiness. Because they want to look at the facts in a systematic, accurate manner, they focus on the past to give them direction for the future, and they prefer to work on a predictable schedule.

Approach to Decision Making: Analytical individuals appear to make decisions on the basis of facts, and they tend to avoid risks. They look for evidence to support the validity of their decisions. The evidence should be solid, tangible, practical and realistic--not just someone's personal opinion. They also require assurance that any decision made today will remain reasonably valid in the future. Because of this desire to be "right," Analytical people move with caution and deliberation when making a decision. While they may appear to be overly concerned with details and organization, once made, the decision will be lasting.

Remember: These four styles can be used to characterize the observable behavior of most human beings. While at times people will combine the actions of several, or all, of the social styles, a person's basic social style represents his system for coping easily and comfortably with the varied relationships encountered in the course of a day.

We all have behavioral themes running through most of our actions, and others will recognize those themes (even if we don't) and deal with us in terms of our styles.

YOUR STYLE AND OTHER STYLES

Analytical	Driver
<p>Slow reaction</p> <p>Maximum effort to organize</p> <p>Minimum concern for relationships</p> <p>Historical time frame</p> <p>Cautious action</p> <p>Tends to reject involvement</p>	<p>Swift reaction</p> <p>Maximum effort to control</p> <p>Minimum concern for caution in relationships</p> <p>Present time frame</p> <p>Direct action</p> <p>Tends to reject inaction</p>
<p>Unhurried reaction</p> <p>Maximum effort to relate</p> <p>Minimum concern for effecting change</p> <p>Present time frame</p> <p>Supportive action</p> <p>Tends to reject conflict</p>	<p>Rapid reaction</p> <p>Maximum effort to involve</p> <p>Minimum concern for routine</p> <p>Future time frame</p> <p>Impulsive action</p> <p>Tends to reject isolation</p>
Amiable	Expressive

Fig. 3-12. Behavior typical of the four styles

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CREATIVE PROBLEM SOLVING - Problem Solving

Session 11 1. 20 min

Without disclosing names of subjects have the students report on the four different Styles. What did the people do to have you include them in each group? What were your answers to the questions posed last session?

2. 30 min

Introduction to the next trait of a productive problem solving team.
Trust - Lecture Notes
Present When Trust is Present

PS OH 1
PS OH 27
PS OH 28

3. 10 min

Break

4. 10 min

Review the Elements of Problem Solving as a Team Lecture Notes

PS OH 29

5. 40 min

Have each student put his/her name in a sack. Depending on the number of students groups will be selected. From the list have groups select a project. Groups can work the rest of the class and will have all of the 1st hour of the next class. Presentations of the groups solutions will be made the last 50 minutes of next class. Each group will be required to show their line of reasoning to reach the conclusion and to identify the model they selected to use.

Note: These Projects can also be presented during the last three sessions of Problem Solving and the major project can be "Junior Achievement" Premise to JA is that the group is being asked by the company board of Directors to evaluate the JA program. Should the Board continue to fund such a program at the current levels in light of the downsizing of the workforce? What benefits are there to this type funding? Presentation is on the last day of class.

Essentials for Teamwork

The essence of teams is teamwork. If a team is a group of people pursuing a specific performance objective, the achievement of which requires coordinated action, then teamwork must be a significant factor in determining a team's success. Teamwork is influenced most by the clarity and significance of the goal. Teamwork takes place within a structure that either facilitates or impedes effective coordination of effort. Teamwork is more likely to succeed if members are both competent in the technical knowledge and skills associated with the performance objective and able to collaborate effectively with one another. Teamwork succeeds most dramatically when team members are enthusiastically unified in pursuit of a common objective rather than individual agendas. Working well together is a fundamental ingredient in team success. This state requires "trust" on the parts of all members.

Trust is the bond that allows any kind of significant relationship to exist between people. Once broken, it is not easily -- if ever--repaired. The climate that fosters trust:

- (1) honesty - integrity, no lies, no exaggerations
- (2) Openness- willingness to share, and a receptivity to information, perceptions, ideas;
- (3) Consistency- predictable behavior and responses
- (4) Respect - treating people with dignity and fairness

WHEN TRUST IS PRESENT THE TEAM

- **HAS A COLLABORATIVE CLIMATE**
- **STAYS FOCUSED ON COMMON PROBLEM OR GOAL**
- **NO SUSPICION OR CONFLICT TO DIVERT ATTENTION**
- **PROMOTES EFFICIENT COMMUNICATION AND COORDINATION**
- **IMPROVES QUALITY OF COLLABORATIVE OUTCOMES**
- **LEADS TO COMPENSATING**

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THE CLIMATE THAT FOSTERS TRUST

1. **HONESTY** - integrity, no lies, no exaggerations
2. **OPENNESS** - willingness to share
receptivity to information, ideas
3. **CONSISTENCY** - predictable behavior and responses
4. **RESPECT** - treating people with dignity
fairness

OH

The climate that fosters trust fosters teamwork

Trust allows team members to stay problem-focused. When trust is present, a collaborative climate is more readily fostered -- allowing team members to stay focused on their common problem or goal. There is no suspicion or conflict to divert their attention. The clearer the goal, and the more team members are free to concentrate on it, the greater the likelihood they will succeed.

Trust promotes more efficient communication and coordination. Trust not only allows people to stay problem-focused, it promotes a more efficient use of the time and energy devoted to the problem. Trust improves the quality of collaborative outcomes. In this type team members must be willing to share information with each other especially when that information is negative. If a team member is having problems figuring something out or making a decision, this is the kind of information that must be shared. Hiding negative information and not being willing to listen to negative information are ruinous to team outcomes. Secondly, members must take risks and be permitted to fail. Without failures you are not getting innovation or change. This rethinking process brought about by failure is vital to success.

Trust leads to compensating. Compensating happens when one team member picks up the slack that occurs when another member falters. If a lot of compensating occurs, then a whole team is capable of pulling itself, collectively, to new levels of performance. Compensating builds confidence.

Four Necessary Features of Team Structure

Clear Roles and Accountabilities

Each member's relationship to the team must be defined in terms of the role to be assumed and the results the role is to produce. Each member of any successful team must understand at the outset what he or she will be held accountable for and measured against in terms of performance.

EVERYONE IS ACCOUNTABLE ALL THE TIME on successful teams.

Effective Communication System

Information must be accessible to all members. Information must come from credible sources. There must be opportunities for team members to raise issues not on the formal agenda. There must be methods for documenting issues raised and decisions made.

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Monitoring of Individual Performance and Providing Feedback

Without knowing an individual's performance, it becomes impossible to determine, with any sense of accuracy and equity, how the individual should be rewarded, what the individual's development needs are, and what increased or further responsibilities this individual might assume in the future

Fact-Based Judgments

There is a need for objective and factual data as a basis for sound decision-making

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Design features of Successful Teams

Four design features that characterize effectively functioning teams in general: (1) clear roles and accountabilities; 2) effective communication system; 3) methods for monitoring individual performance and providing feedback; 4) an emphasis on fact-based judgments. The degree of emphasis of these features varies with the team objective

Types	Dominant Feature	Process Emphasis	Characteristics of Team Members
Problem Resolution	Trust	Focus on issues	Intelligent "Street Smart" People sensitive High integrity
Creative	Autonomy	Explore possibilities and alternatives	Cerebral Independent thinkers Self-starters Tenacious
Tactical	Clarity	Directive Highly Focused tasks Role clarity Well-defined operational standards Accuracy	Loyal Committed Action-oriented Sense of urgency Responsive

OH

Problem Solving

Capture Dog Food

Capture Dog Food Company is a small company that manufactures a specially formulated frozen dog food to owners and breeders of show dogs. They have grown steadily for the last five years at a pace of 5% per year. Capture has 3 employees, all members of the same family: mother, father, and son. They are all breeders. The company is at a crossroad. The company makes an acceptable living for the three of them. They sell their products at the regional dog shows which are held each weekend. The son wishes to continue in the business. He also, wishes to be married. How can the company continue and now support two households? What steps will be necessary?

The Hot Tub

Sharon and John Mills have built a deck on their house at the rear door. The deck has a wonderful view of Pikes Peak. It is 12x12 and has a flight of steps to enter the back yard. The Mills have added to their deck to accommodate a Hot Tub. By wrapping the new addition to the deck around the corner of the house, they have increased the size of the deck. The addition consisted of 2 new sections one at the corner and one along the side of the house. The Mills now have a wonderful view from their hot tub. The Mills' neighbors also have a wonderful view of the Mills in their hot tub, as the Mills' yard drops away one story from the front of the house to the back yard. The six foot privacy fence around the back yard is below the level of the deck. The Mills find this unacceptable, but they have only \$150.00 left in their building fund to correct the situation. What can they do to gain some privacy in the hot tub and still maintain the view.

Sherlock Holmes

Sherlock Holmes and his faithful friend, Dr. Watson, have been invited to New York at the urgent request of the dirty tricks division of the espionage service of the United States, to advise them on a matter of grave national importance. When he was briefed by the head of the agency, the following facts emerged:

A key agent in the organization had defected and was currently under close security in the prison of a hostile power. In a few days he was expected to give evidence in a show trial which would not only do great harm to the security of the United States but would also cause considerable political embarrassment. They wanted to silence the traitor permanently but could think of no method for doing so. Prior to the hearing, which was to be in a closely guarded courtroom form which all members of the public would be excluded, the man was being held in an antechamber on the thirtieth floor of the courthouse building. The only entrance to this room was via a steel door which was watched night and day by armed soldiers. There was no way in by the ceiling or floor and the unglazed window was protected by steel bars.

It might be possible to plant a sniper in the building across the street, but if the man was shot, the hostile power would be able to make political capital out of the assassination. The only answer seemed to be to kill him in such a way that his death remained a profound mystery to his guardians. A rare poison had been suggested, but all his food and drink were prepared under guard and tasted by officials before he ate or drank. A nerve gas had also been proposed but there seemed no way of introducing it into the chamber, since the outside wall had no ledge along which an agent could crawl and was a hundred feet from the rooftop. Can you figure a way to solve the problem.

CREATIVE PROBLEM SOLVING - CREATING ANSWERS

OBJECTIVES: By the end of this module you will be able to:

1. Recognize the creative elements of problem solving.
2. Develop processes that will increase personal creativity.
3. Understand that the creative process is necessary to effective problem solving in team situations.
4. Identify Killer Phrases and be able to diffuse them.

TIMING: There are 4 sessions in this module. Each session is timed for 1 hour and 50 minutes.

MATERIALS: Room
Tables for participants
OHP and screen
Dry Eraser Board and markers
Flip chart and markers
Group discussion areas
Lecture notes "Creating Answers"
OH's
Work sheets
Handouts
Watch

CREATIVE PROBLEM SOLVING - Creating Answers

Session 12 1. 10 min

Introduce Creating Answers-

CA OH 1
CA OH 2

2. 20 min

How We Inform Ourselves - Exercise:

Have the students write out the most interesting new thing they have learned today. Answer questions on Work sheet 1. Divide the class into groups and brainstorm places to find new information. 5 min. Put answers on Flip Chart Paper and Put on walls. Discuss ways. Encourage students to discover one new thing a day. Have them keep a record of their new things for one week.

3. 30 min

In group discussion: Define What a creative person is. Name some creative people! What is it that makes them creative. Work sheet 2 Creative Thinking is defined as: a attitude that allows you to search for ideas and manipulate your knowledge and experience. Does this define it sufficiently if not develop a class definition. Develop a list of characteristics for a creative person.

4. 10 min

Break

5. 50 min

Introduce two kinds of killer phrases.

Phrases that keep us from being creative.

PS OH 3

1. Phrases that we use on ourselves.

2. Phrases that other people use.

Have students write out the killer phrase they use on themselves most often. 5 min

Use OH 4 to question yourself about that phrase. Discuss with students the answers

PS OH 4

Emphasize the need to be your own best Friend. On the flip chart develop a progressive line. Example 1. Place your

Killer Phrases on this line. Where does reality belong. Use OH to identify ways to diffuse Killer Phrases

PS OH 5

Carl Ally defined the creative person:

"The creative person wants to be a know-it-all. He wants to know about all kinds of things: Ancient history, nineteenth century mathematics, current manufacturing techniques, flower arranging, and hog futures. Because he never knows when these ideas might come together to form a new idea. It may happen six minutes later or six years down the road. But he has faith that it will happen."

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INFORM
EXPLORE
JUDGE
BUILD

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CREATIVE PROBLEM SOLVING - Creating Answers

Work sheet 1

After you have written out the most interesting new thing you have learned today, answer the questions:

Most interesting new thing I have learned today

Where did you learn this information?

CREATIVE PROBLEM SOLVING - Creating Answers

Worksheet 2

Name 10 creative people (They may be personal friends, personalities from TV, News, Politics, Publishing, etc.)

Names

What Makes ~~them~~ Creative

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

What stops us from being creative?

Killer Phrases

One's we use on ourselves.

One's others use on us.

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Common Killer Phrases

Write out your most common killer phrase.

Is it really true?

What makes it so?

Who told you so?

Why do you believe this?

Is this a way to place the blame somewhere else?

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Example Progressive Chart

Truth
Always true
Usually true
Occasionally true
Almost true
Almost false
Occasionally false
somewhat false
Usually false
Always false
False

Diffuse Killer Phrases We Use On Ourselves

Identify the typical phrase.

What is your motive in believing this phrase.

Are you really asking yourself a question?

Decide how much you really believe this.

Substitute an opposite phrase. What would have to happen to make this new phrase true?

What do you want to believe?

What do you have to do now?

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CREATIVE PROBLEM SOLVING - Creating Answers

Session 2

1. 10 min

Review Killer Phrases we use on ourselves

PS OH 3

2. 40 min

Introduce Killer Phrases others use on us.
Discuss what, when and where we most often
hear these phrases. Have students write
some of the phrases they hear most often.

PS OH 6

Put some on the flip-chart. Discuss the
Top 40 by Charles Thompson, in terms of
When and where we hear them.

PS OH 7

3. 10 min

Best Ways to Diffuse Killer Phrases

PS OH 8

4. 10 min

Break

5. 10 min

Remind students of the four terms we are
using to study creativity,
Introduce the Explore - the most fun

PS OH 1

PS OH 9

6. 15 min

Lecture Notes - Explore - Put on
Allow students to look at it and read
silently each sentence. Remove 30 sec.
Replace and again have them read silently.
Remove from screen. Ask them what does it
say. Replace and read carefully the over
head.

OH 10 PS OH 10

7. 20 min

Place these letters on the board in this
order: BASINXLEATNTEARS The directions
are to cross out six letters to form a
common word. Give students 15 min to
create an answer. IS there only one right
answer?

8. 5 min

Place IX on the board. Before the next class have them add one line to make this a six.

Place the following sequence on the board

1 5 4 3 7 4 2 1 ?

What is the next number in the sequence?

Killer Phrases: The Top 40

- 1. "YES, But..."**
- 2. "We tried that before."**
- 3. "That's irrelevant."**
- 4. "We haven't got the manpower."**
- 5. "Obviously, you misread my request."**
- 6. "Don't rock the boat!"**
- 7. "The boss (or competition) will eat you alive."**
- 8. "Don't waste time thinking."**
- 9. "Great idea, but not for us."**
- 10. "It'll never fly."**
- 11. "Don't be ridiculous."**
- 12. "People don't want change."**
- 13. "It's not in the budget."**

14. "Put it in writing."
15. "It will be more trouble than it's worth."
16. "It isn't your responsibility."
17. "That's not in your job description."
18. "You can't teach an old dog new tricks."
19. "Let's stick with what works."
20. "We've done all right so far."
21. "The boss will never go for it."
22. "It's too far ahead of the times."
23. ...laughter...
24. ...suppressed laughter...
25. ...condescending grin...
26. ...dirty looks...
27. "Don't fight city hall."
28. "I'm the one who gets paid to think."

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29. "What will people say?"
30. "Get a committee to look into that."
31. "If it ain't broke, don't fix it."
32. "You have got to be kidding."
33. "NO!"
34. "We've always done it this way."
35. "It's all right in theory...but..."
36. "Be practical!"
37. "Do you realize the paperwork it will create?"
38. "Because I said so..."
39. "I'll get back to you."
40. ...silence...

OH

Best Ways to Diffuse Killer Phrases

- * Identify and write down the Killer Phrase.**
- * Anticipate who will say them.**
- * Could this really be a question?**
- * Write out answers to anticipated questions.**
- * Anticipate who will say the Killer Phrase.**
- * Plan a comeback.**

OH

"There is no use trying" said Alice, One can't believe impossible things."

"I dare say you haven't much practice." said the Queen

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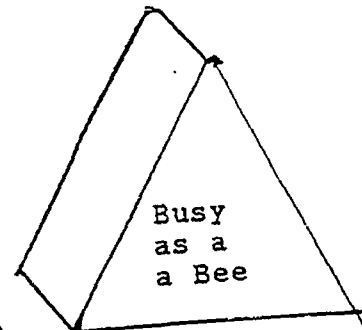
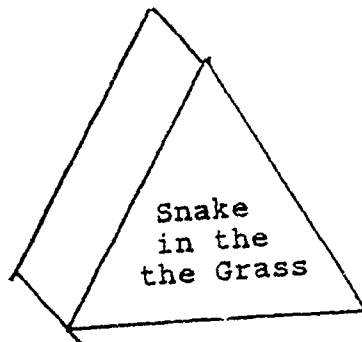
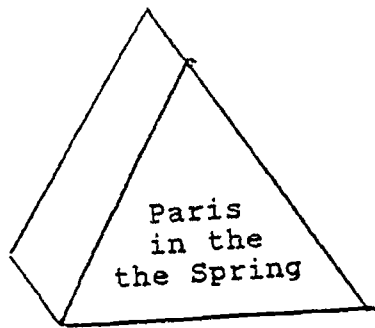
Lecture notes - Creating Answers

Explore

As we grow older we lose the ability to flex our brain. We get in a rut. In actuality as we begin to mellow the chemistry in our brain changes. As we experience the same routine again and again we lose the desire to think in different patterns. We begin to overlook things.

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OH 10 Ca

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CREATIVE PROBLEM SOLVING - Creating Answers

Session 14 1. 10 min

Review the questions from last meeting.
More than one way; IX could place a
s in front. could put a 6 at the end.
for one times 6 which is 6.

2. 40 min.

Discussion on Making the Mind Flexible.
Divide class. Brainstorm on Things you
can do with an idea. 10 min
Discuss with whole class. Present Roger
Van Oech List.

CA OH 11

3. 10 min

Break

4. 35 min

Divide the class into teams. Prize to
the team that can come up with the most
uses for BAKING SODA. Use all the tech-
niques we have discussed. 30 min.

5. 15 min

Put lists on the board and discuss methods
used. Award Prizes.

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Where do ideas come from?

Brainstorming? a three step process.

1. Define your problem (Ready)
2. Come up with as many ideas as you can as fast as you can without criticizing them (Fire)
3. Sift, synthesize and choose (Aim.)

Occurs on three levels

Sharing of facts and experiences.

Comming up with something new and different

Flashes of brilliance

"Nothing is more dangerous than an idea when it's the only one you have" Emile Chartier
Philosopher

Ways to Make an Idea Better

Roger von Oech

1. Think in opposites

Stretch it

Make it romantic

Combine it

Appeal to kids

Winterize it

Illuminate it

Speed it up

Go Clockwise

Sharpen it

Freeze it

Sweeten it

Balance it

Tighten it

Force it

Build it up

Tie it

Jump over it

Raise the price

Shrink it

Make it terrifying

Separate it

Appeal to seniors

Summarize it

Darken it

Slow it down

Go Counterclockwise

Dull it

Melt it

Sour it

unbalance it

Loosen it

Relax it

Tear it down

Untie it

Go under it

Give it away

OH

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Ways to make an idea better cont.

2. **Envision the future - what will the future be like with the idea?**
3. **Change the direction or location of the idea?**
4. **Snatch victory from Defeat- declare yourself the winner**
5. **What is everyone doing? Do the opposite.**
6. **Make it negative?**
7. **Change your perspective.**
8. **Develop metaphors**
9. **Learn to Visualize- Creative Daydreaming**
 - The future**
 - The past**
 - Recreate the Past**
 - The present**
10. **Make persistence count. Don't give up too soon.**
11. **Learn to put several ideas together.**
12. **Things to try when you can't think of something.**

As Questions - Not just any old question.
The Six Universal questions.
What, Where, When, How, Who, and Why?
Then ask why, 4 more times.

OH

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CREATIVE PROBLEM SOLVING - Creating Answers

Session 15	1. 10 min	
	Review Ways to make an idea Better	CA OH 11
	2. 20 min	
	Introduce Being a JUDGE. How to live in the real world. Use OH and have class discuss. Record points on the flip chart.	CA OH 12
	3. 30 min	
	Using lecture notes discuss Accepting Change. Review A Good Judge	CA OH 13 CA OH 14
	4. 10 min	
	Break	
	5. 30 min	
	Discuss the attributes of a Builder Review the four Steps to Creativity	CA OH 15 CA OH 1
	6. 30 min	
	Class evaluation Handout	

Ways to Make an Idea Better

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OH

Becoming a Judge

In the real world we must learn

- Not to jump to conclusions on too little evidence
- Not to accept second - hand evidence without proof.
- Not accept judgements by Peers. Think for yourself.
- Keep emotions out of decision making
- Be aware of other people's motives.

OH

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Mastering Change

- Denial - When confronted with change we ignore it.
- Resistance - Recognize that change is inevitable.
- Exploration - Letting go of the past.
- Commitment - Complete acceptance of the new way.

OH

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Change in the Workplace

Two of the Basic rules of life are:

Change is inevitable.

Everybody resists change.

Change requires us to reconsider our relationship to the world; it disorients us, and forces us to reorganize thoughts, practices and habits. The more extreme the change, the more determined our resistance.

But life is change. And change can lead to growth. So while we can't stop change, we can learn from it. We can transform our reaction to change and make it work for us.

Our reaction to change typically follows four stages: denial, resistance, exploration, and commitment as we grasp new concepts and learn new ways of thinking about ourselves and our world.

Denial -- When confronted with change, the shock can be so great that we ignore it altogether. It's easier and more comfortable for us to continue doing things the way we're used to. We may not understand all the implications of the change. We may not understand why the change was made. We may see where things are headed, and we may not like the direction.

When we are denying change, we may appear nonchalant and unconcerned. We continue to work as usual, but only go through the motions: as if we realize we won't be making these motions much longer. Our performance is lackluster and mediocre.

We may say nothing; we may decline to talk about the situation. Or we may say everything's OK or that we fail to see what all the commotion is about.

Denial is like a cocoon. It insulates us from change and reassures us that our world is in order and under control.

Resistance -- The first step in waking up from the dream of denial. In resistance we know that change is inevitable, but knowing it makes us even more determined to prevent it. Resistance is an exercise of personal power.

People resisting change often get sick or hurt; we retire on the job. We work carelessly and make mistakes we would never make ordinarily. We are angry and may be bored or defeatist in our attitudes.

When griping and complaining are the conversational mainstays, when we say, "This is stupid...will never work...is unfair...should never have happened," we're resisting. And as paradoxical as it may sound, resistance is the first sign of accepting change.

Exploration -- the breakthrough that signals letting go of the past. People who are exploring change are energetic and enthusiastic. We are daring and open to trying out new ideas. People, things and situations are freed from their usual contexts and relationships, so we can put them together in new ways.

Chaos appears to reign as we try and then discard new ways of dealing with the change, but the seeds of a new order are present. We may not always spend our time wisely. This is real learning. It is active, noisy, and sometimes unfocused but the payoff comes in mastering the change and adapting to the new order.

People in exploration are excited and happy about their work. We feel up to the challenge, are eager to test new ideas. After all, anything can happen. And now we see we can make change happen ourselves.

Commitment -- is the complete acceptance of the new way. The change, once threatening and unfamiliar, has become the way things are done. Teamwork is high and cooperation strong. Sure of ourselves and of the skills we have learned in exploration, we work confidently and independently.

We don't have control over many aspects of our lives and our work, but we do have complete control over how we react to change. We can see it as an opportunity to learn new skills and to stretch our imaginations. We can become stagnant or we can become lifelong learners. We can remain powerless in the face of change or we can empower ourselves to face any change with confidence and equanimity.

Judges Accept Change

Recognize and use Patterns which make our lives easier because we don't have to recreate them. The problem is we learn to depend upon them.

Transferring what you learn in one problem to another.

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Transferring what you learn in one problem to another.

Example: What is the next number in the sequence?

1,5,4,3,7,6,4,2,1,?

Ans: Any number that has curved lines in it.

In which group of letters does the Q belong.

A	EF	HI	KLMN	TVWXY
<hr/>				
BCD	G	J	OP	RS U

A GOOD JUDGE

- * Does not make snap decisions
- * Guards against emotional decisions
- * Listens well
- * Keeps an open mind, more than one solution
- * Can tolerate suspense
- * Looks for patterns in thinking, behavior, facts
- * Can see alternatives
- * Can project and predict outcomes
- * Is aware of society and family conditioning
- * Can Find the Real Problem
- * Guards against self-deception

OH

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BE A BUILDER

Be Dissatisfied

Map Out Your Plans

Give it a Try

Get Support

Have Something at Stake

Get Rid of Excuses

Be Courageous

Set Deadlines

Fight for IT

Be Persistent

HAVE FUN

OH

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CRITICAL THINKING

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OVERVIEW

Every situation we face involves four sides or aspects. But each of us is inclined to pay attention to one aspect initially or more so than the others. When critical thinking standards are applied to problem solving, we're encouraged to overlook our natural biases and to consider all aspects of the problem in order to reach a better solution. Through a group problem-solving exercise, you'll learn in this workshop how to become a critical thinker and a better problem solver.

OBJECTIVES

By the end of this workshop, you will be able to:

- * Identify your problem-solving style
- * Use a four-stage problem-solving model that requires you to practice those styles for which you don't have a natural preference
- * Understand ways to improve group problem solving by taking advantage of the group's problem-solving differences

TIMING

This workshop will be conducted as a four-hour session.

MATERIALS

You will need:

- * A room large enough for at least eight participants
- * Flipchart or whiteboard
- * Copies of the Learning Style Exercise for all participants

WORKSHOP NOTES

Today you'll be involved in a group problem-solving process. One of the reasons why "The Stuck Truck" is so challenging is that it really involves several problems. Most likely, however, not all will be equally important to all members of your group. Everyone may have different opinions as to what to do.

Everyday problems are like this as well, and in the workplace people often have to solve them together. Following a four-stage process increases problem-solving effectiveness. You'll find that some members of your group may excel at a particular step of the process and be less effective at others. Hopefully, you'll all bring needed strengths to this activity.

The first step relies on **concrete experience** as a means of handling human problems in a personal way. The emphasis is on feeling as opposed to thinking and dealing with present reality.

Secondly, **reflective observation** focuses on the meaning of the problem through impartial observation. Truth is emphasized, and relevant information must be sorted from irrelevant before seeking further information.

Using **abstract conceptualization** is the third step in the process. It involves ideas, concepts, and logic--taking into account and evaluating alternative solutions.

The final step, **active experimentation**, requires influencing people and changing situations. Ideas are tested for their usefulness and examined for cause-and-effect relationships.

Each step also coincides to a different aspect of the problem--urgent, human, important, and technical. Therefore, some in the group will be better at dealing with one side than the others.

At the end you'll discover the advantages and disadvantages of having a problem-solving group made up of people with different styles, your goal being to make full use of the group's differences.

OUTLINE

- I. Thinking critically: an introduction
- II. The problem-solving process
 - A. Concrete experience
 - B. Reflective observation
 - C. Abstract conceptualization
 - D. Active experimentation
- III. Aspects of problems
 - A. Urgent side
 - B. Human side
 - C. Important side
 - D. Technical side
- IV. Summing up the problem-solving exercise