Reno Police Department

PTO SCHOOL HANDOUTS

January 2015

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A Training Synopsis for the Reno Police Training Officer Program

INTRODUCTION

The following training synopsis outlines five instructional domains for the Police Training Officer (PTO) program. The following factors will ensure success of the program:

- **Adult learning is not like the traditional method(s) of instruction**. Adult learning focuses on self-directed learning and transferring what is learned to the world we live in. Adult learning engages participants in a wide range of learning activities that stimulate critical thinking and problem solving. It is important that facilitators be fully trained in adult learning strategies and employ the strategies while facilitating a course of instruction.

- **Officers who take on the job of "training" officer should have adequate police experience**. The specific length of service will be determined by each agency. Agencies should consider a person's professional experience and teaching abilities when selecting police training officers.

- **Throughout the course students will work on a "course development problem".** The best way to help students discover the effectiveness of adult learning is to model adult learning during the course. To accomplish this facilitators present a "course development problem" for group study at the start of the course. Time must be provided throughout to work on resolving it. Where possible, facilitators must avoid lecturing to the material. They should make every effort to encourage self-discovery by helping students use the course development problem to focus on the material.

This training synopsis outlines a 40-hour course for Police Training Officers (PTOs) in the Reno Model. It teaches them how to assist their trainees apply policing and problem solving skills in a 15-week training program after they graduate from the academy.

The Reno Model is specifically designed for agencies using the community oriented policing and problem solving (COPPS) service delivery method. This model was designed with the COPPS model as an intrinsic part of the program. At each stage of the model the trainer and trainee apply problem solving to their job tasks.

The Reno Model

COURSE OUTLINE

Introduction to Course

- Participant introductions
- History of police training models
- Model comparisons
- Role comparisons
- Learning Style Inventory
- Journal
- Introduction of course problem

Domain 1

- Adult learning and theory
- Methods of instruction

Domain 2

- Reno Model orientation
- Introduction to Problem-Based Learning Exercises (PBLEs)
- Introduction to Emotional Intelligence
- Mentoring
- Introduction to Reno Model evaluation components

Domain 3

- Introduction to Learning Matrix
- Construction of Learning Matrix

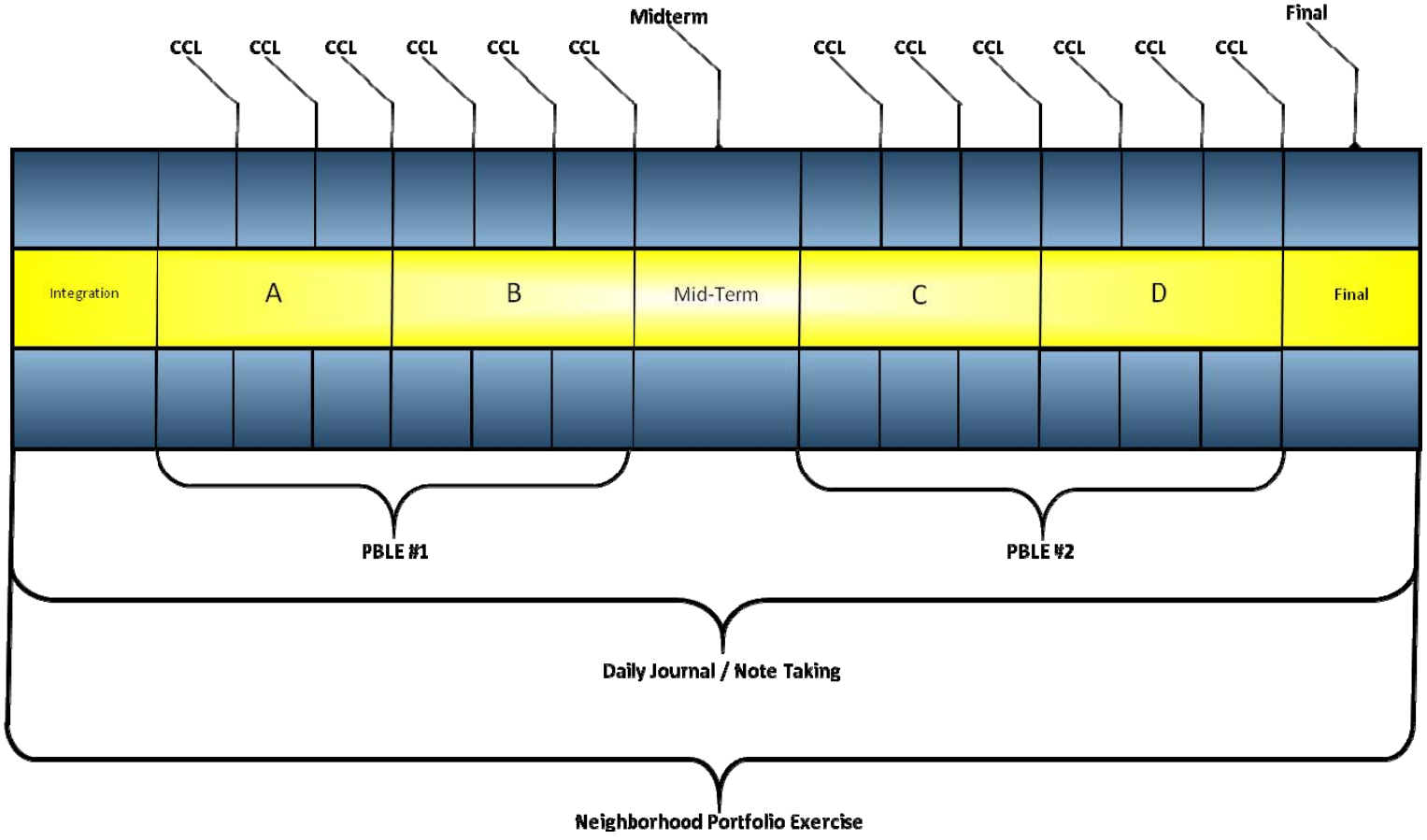
Domain 4

- Weekly coaching and training reports
- Prescriptive training
- Introduction to Neighborhood Portfolio Exercises
- Time management
- Organizational change

Domain 5

- Summative assessment exercise
- Development of facilitator's guide
- Course evaluation

Reno Model
PTO Timeline



LEARNING STYLE INVENTORY

This instrument is designed to assess an individual's learning style; it has nothing to do with learning ability. When giving instructions, emphasize this point and also mention that the instrument will not be collected, but is instead for the participant's personal use.

When taking this instrument, answer the questions about how you learned the job you are going to teach. If you are a police patrol officer, then think about how you reacted to learning that particular position. Do not apply this to your style of learning in an academic environment (such as college).

Concrete Experience:
All adults have an experiential basis for learning. Some simply use it more than others. In this style, when confronted by a particular skill, you will reach into your memory and select a like skill or similar situation in which you learned a skill, then apply the same experience or the same way of learning to this new situation. PTO's use this a great deal.

Abstract Conceptualization:
This is the analytical thinker who wants to think the whole thing through before he or she will try it. They are probably college educated, maybe even at the graduate level. They will mull this over and over, use visualization techniques, and will probably ask to see the skill performed on more than a few occasions before they will actually try it. This is many times the opposite style of concrete experience and may be shared with reflective observation.

Reflective Observation:
Reflective observation means that I want you to show me. I will watch you perform the entire task, more than once, before I try it. This is a tentative approach, common to trainees.

Active Experimentation:
Don't take too much time showing me anything, let me try it instead. Then tell me what I did wrong, and I will try it again, etc., etc. Very aggressive, but you have to hold the reigns on this type of trainee. Common to PTO's.

A person may use all, some, or just one of these styles. It is common to use mostly two with a smattering of the other two. What the PTO needs to know is that if he or she has one style, and the trainee has another, they may conflict in that the PTO has unrealistic expectations of the trainee. Typically, PTO's are active experimenters and concrete experience. Trainees are reflective observers and abstract conceptualizers.

LEARNING STYLE INVENTORY

This inventory is designed to assess your method of learning. As you take the inventory, give a high rank to those words which best characterize the way you learn and a low rank to the words which are least characteristic of your learning style.

You may find it hard to choose the words that best describe your learning style because there are no right or wrong answers. Different characteristics described in the inventory are equally good. The aim of the inventory is to describe how you learn, not to evaluate your learning ability.

INSTRUCTIONS

There are nine sets of four words listed below. Rank order each set of four words assigning a 4 to the word which best characterizes your learning style, a 3 to the word which next best characterizes your learning style, a 2 to the next most characteristic word, and a 1 to the word which is least characteristic of you as a learner. BE SURE TO ASSIGN A DIFFERENT RANK NUMBER TO EACH OF THE FOUR WORDS IN EACH SET. Do not make ties.

1.____discriminating	____tentative	____involved	____practical
2.____receptive	____relevant	____analytical	____impartial
3.____feeling	____watching	____thinking	____doing
4.____accepting	____risk-taker	____evaluative	____aware
5.____intuitive	____productive	____logical	____questioning
6.____abstract	____observing	____concrete	____active
7.____present oriented	____reflecting	____future oriented	____pragmatic
8.____experience	____observation	____conceptuali-zation	____experimentation
9.____intense	____reserved	____rational	____responsible

FOR SCORING ONLY

CE_____	RO_____	AC_____	AE_____
234578	136789	234589	136789

LEARNING-STYLE INVENTORY

David A. Kolb's Learning Style Inventory describes the way you learn and how you deal with ideas and day-to-day situations in your life. As this instrument is copyrighted please contact Jinny Flynn at (617) 425-4577 for licensing information.

David Kolb's learning cycle model (*Experiential Learning*. 1984), the learning style inventory, and associated terminology are based on the work of John Dewey, Kurt Lewin, Jean Piaget, and J.P. Guilford. For more information see the following materials:

Kolb, David A. 1984. Experiential Learning: Experience as the Source of Learning and Development. Prentice-Hall, Inc., Englewood Cliffs, N.J.

Smith, Donna M., and David A. Kolb 1986. The User's Guide for the Learning-Style Inventory: A Manual for Teachers and Trainers. McBer & Company. Boston, MA.

LEARNING STYLES: A MULTIPLE INTELLIGENCES APPROACH

Multiple Intelligence (MI) theory states that there are at least seven different ways of learning anything, and therefore there are "seven intelligences": body/kinesthetic, interpersonal, intra-personal, logical/mathematical, musical/rhythmic, verbal/linguistic and visual/spatial. In addition most all people have the ability to develop skills in each of the intelligences, and to learn through them. However, in education we have tended to emphasize two of "the ways of learning": logical/mathematical and verbal/linguistic.

Attached here are several sheets that describe the "seven intelligences". At the end is an inventory that can help you to see where you apply each of the intelligences, and to what extent. In addition to filling out this inventory, on a separate piece of paper, please describe the forms of learning/intelligence that you tend to utilize and/or enjoy most, as well as the forms which you feel you rarely utilize or have not spent much time developing. Please also comment specifically on your strengths and weaknesses relating to "interpersonal learning".

Much of this material is from: *Seven Ways of Knowing: Teaching for Multiple Intelligences* by David Lazear. 1991. IRI/Skylight Publishing, Inc. Palatine, IL.

Body/Kinesthetic Intelligence
This intelligence is related to physical movement and the knowing/wisdom of the body, including the brain's motor cortex, which controls bodily motion.

Body/kinesthetic intelligence is awakened through physical movement such as in various sports, dance, and physical exercises as well as by the expression of oneself through the body, such as inventing, drama, body language, and creative/interpretive dance.

Capacities involved:
--control of "voluntary" movements
--control of "preprogrammed" movements
--expanding awareness through the body
--the mind and body connection
--mimetic abilities
--improved body functioning

Interpersonal Intelligence
This intelligence operates primarily through person-to-person relationships and communication. Interpersonal intelligence is activated by person-to-person encounters in which such things as effective communication, working together with others for a common goal, and noticing distinctions among persons are necessary and important.

Capacities involved:
-- effective verbal/non-verbal communication
-- sensitivity to other's moods, temperaments, motivations and feelings
-- working cooperatively in a group
-- ability to discern other's underlying intentions and behavior
-- "passing over" into the perspective of another
-- creating and maintaining synergy

Intra-personal Intelligence
This intelligence relates to inner states of being, self-reflection, metacognition (i.e. thinking about thinking), and awareness of spiritual realities. Intra-personal intelligence is awakened when we are in situations that cause introspection and require knowledge of the internal aspects of the self, such as awareness of our feelings, thinking processes, self-reflection, and spirituality.

Capacities involved:
-- concentration of the mind
-- mindfulness
-- metacognition
-- awareness and expression of different feelings
-- transpersonal sense of the self
-- higher-order thinking and reasoning

Logical/Mathematical Intelligence
Often called "scientific thinking," this intelligence deals with inductive and deductive thinking/reasoning, numbers, and the recognition of abstract patterns. Logical mathematical intelligence is activated in situations requiring problem

solving or meeting a new challenge as well as situations requiring pattern discernment and recognition.

Capacities involved:
-- abstract pattern recognition
-- inductive reasoning
-- deductive reasoning
-- discerning relationships & connections
-- performing complex calculations
-- scientific reasoning

Musical/Rhythmic Intelligence
This intelligence is based on the recognition of tonal patterns, including various environmental sounds, and on sensitivity to rhythm and beats. Musical/rhythmic intelligence is turned on by the resonance or vibrational effect of music and rhythm on the brain, including such things as the human voice, sounds from nature, musical instruments, percussion instruments, and other humanly produced sounds.

Capacities involved:
-- appreciation for the structure of music
-- schemes or frames in the mind for hearing music
-- sensitivity to sounds
-- recognition, creation, and reproduction of melody/rhythm
-- sensing characteristic qualities of tone

Verbal/Linguistic Intelligence
This intelligence, which is related to words and language both written and spoken, dominates most Western educational systems. Verbal linguistic intelligence is awakened by the spoken word, by reading someone's ideas thoughts, or poetry, or by writing one's own ideas, thoughts, or poetry, as well as by various kinds of humor such as "plays on words," jokes, and "twists" of the language.

Capacities involved:
-- understanding order & meaning of words
-- convincing someone of a course of action
-- explaining, teaching, and learning
-- humor
-- memory & recall
-- "meta-linguistic" analysis

Visual/Spatial Intelligence
This intelligence, which relies on the sense of sight and being able to visualize an object, includes the ability to create internal mental images/pictures. Visual/spatial intelligence is triggered by presenting the mind with and/or creating unusual, delightful, and colorful designs, patterns, shapes, and pictures, and

engaging in active imagination through such things as visualization guided imagery, and pretending exercises.

Capacities involved:
-- active imagination
-- forming mental images
-- finding your way in space
-- image manipulations
-- graphic representation
-- recognizing relationships of objects in space
-- accurate perception from different angles

An MI Inventory for Adults

Check those statements that apply in each intelligence category. Use these intelligence categories to help you understand the types of intelligence you possess and your strengths and weaknesses. Space at the end of each intelligence allows you to write additional information not specifically referred to in the inventory.

Body/Kinesthetic Intelligence
__ I engage in a least one sport or physical activity on a regular basis.
__ I find it difficult to sit still for long periods of time.
__ I like working with my hands at concrete activities such as sewing, weaving, carving, carpentry, or model building.
__ My best ideas often come to me when I'm out for a long walk or a jog, or when I'm engaged in some other kind of physical activity
__ I often like to spend my free time outdoors
__ I frequently use hand gestures or other forms of body language when conversing with someone.
__ I need to touch things in order to learn more about them.
__ I enjoy daredevil amusement rides or similar thrilling physical experiences.
__ I would describe myself as well coordinated.
__ I need to practice a new skill rather than simply reading about it or seeing a video that describes it.

Other Body/Kinesthetic Strengths:

Interpersonal Intelligence
__ I'm the sort of person that people come to for advice and counsel at work or in my neighborhood.
__ I prefer group sports like badminton, volleyball, or softball to solo sports such as swimming and jogging.

__ When I have a problem, I'm more likely to seek out another person for help than attempt to work it out on my own.
__ I have at least three close friends.
__ I favor social pastimes such as Monopoly or bridge over individual recreations such as video games and solitaire.
__ I enjoy the challenge of teaching another person, or groups of people, what I know how to do.
__ I consider myself a leader (or others have called me that).
__ I feel comfortable in the midst of a crowd.
__ I like to get involved in social activities connected with my work, church, or community.
__ I would rather spend my evenings at a lively party than stay at home alone.

Other Interpersonal Strengths:

Intra-personal Intelligence
__ I regularly spend time alone meditating, reflecting, or thinking about important life questions.
__ I have attended counseling sessions or personal growth seminars to learn more about myself.
__ I am able to respond to setbacks with resilience.
__ I have a special hobby or interest that I keep pretty much to myself.
__ I have some important goals for my life that I think about on a regular basis.
__ I have a realistic view of my strengths and weaknesses (borne out by feedback from other sources).
__ I would prefer to spend a weekend alone in a cabin in the woods rather than at a fancy resort with lots of people around.
__ I consider myself to be strong willed or independent minded.
__ I keep a personal diary or journal to record the events of my inner life.
__ I am self-employed or have at least thought seriously about starting my own business.

Other Intra-personal Strengths:

Logical/Mathematical Intelligence
__ I can easily compute numbers in my head.
__ Math and/or science were among my favorite subjects in school.
__ I enjoy playing games or solving brainteasers that require logical thinking.
__ I like to set up little "what if" experiments (i.e. "What if I double the amount of water I give my rosebush each week?")

__ My mind searches for patterns, regularities, or logical sequences in things.
__ I'm interested in new developments in science.
__ I believe that almost everything has a rational explanation.
__ I sometimes think in clear abstract, wordless, imageless concepts.
__ I like finding logical flaws in things that people say and do at home and work.
__ I feel more comfortable when something has been measured, categorized, analyzed, or quantified in some way.

Other Logical/Mathematical Strengths:

Musical/Rhythmic Intelligence
__ I have a pleasant singing voice.
__ I can tell when a musical note is off-key.
__ I frequently listen to music on the radio, cassette tapes or compact discs.
__ I play a musical instrument.
__ My life would be poorer if there were no music in it.
__ I sometimes catch myself walking around with a jingle or other tune running through my mind.
__ I can easily keep time to a piece of music with a simple percussion instrument.
__ I know the tunes to many different songs or music pieces.
__ If I hear a musical selection once or twice, I am usually able to sing it back fairly accurately.
__ I often make tapping sounds or sing little melodies while working, studying or learning something new.

Other Musical/Rhythmic Strengths:

Verbal/Linguistic Intelligence
__ Books are very important to me.
__ I can hear words in my head before I read, speak, or write them down.
__ I get more out of listening to the radio or a spoken-word cassette than I do from television or films.
__ I enjoy word games like Scrabble, Boggle, Anagrams, or Password.
__ I enjoy entertaining myself or others with tongue twisters, nonsense rhymes, or puns.
__ Other people sometimes have to stop and ask me to explain the meaning of the words I use in my writing and speaking.
__ English, social studies, and history were easier for me in school than math and science.

__ When I drive down a freeway, I pay more attention to the words written on signs than to the scenery.
__ My conversation includes frequent references to things that I've read or heard.
__ I've written something recently that I was particularly proud of or that earned me recognition from others.

Other Verbal/Linguistic Strengths:

Visual/Spatial Intelligence
__ I often see clear visual images when I close my eyes.
__ I'm sensitive to color.
__ I frequently use a camera or camcorder to record what I see around me.
__ I enjoy doing jigsaw puzzles, mazes, and other visual puzzles.
__ I have vivid dreams at night.
__ I can generally find my way around unfamiliar territory.
__ I like to draw or doodle.
__ Geometry was easier for me than algebra in school.
__ I can comfortably imagine how something might appear if it were looked down upon from directly above in a bird's-eye view.
__ I prefer looking at reading material that is heavily illustrated.

Other Visual/Spatial Strengths:

What Style of Learner Are You?*

Indicate the degree to which you agree or disagree with the statements.
1 = disagree 5 = strongly agree

<u>Verbal Linguistic Styles</u>	
I'm expressive both verbally and in my writing	1 2 3 4 5
I'm very careful with my choice of words and expressions	1 2 3 4 5
I enjoy speaking in front of groups of people	1 2 3 4 5
I enjoy word games, puns and linguistic nuance	1 2 3 4 5
I look forward to reading and writing activities	1 2 3 4 5
<u>Logical – Mathematical Styles</u>	
I enjoy doing math puzzles	1 2 3 4 5
I'm a logical problem solver	1 2 3 4 5
I often complete crosswords and word-finding exercises in newspapers	1 2 3 4 5
I enjoy looking for patterns in events or problems	1 2 3 4 5
I find it easy to remember chemistry or math formulae	1 2 3 4 5
<u>Body – Kinesthetic Styles</u>	
I have a difficult time sitting still during meetings	1 2 3 4 5
I am expressive with my hands and face during discussions	1 2 3 4 5
I am athletic and enjoy physical exercise	1 2 3 4 5
I take a "hands-on" approach to learning new things	1 2 3 4 5
I teach others by showing them rather than telling them	1 2 3 4 5
<u>Visual – Spatial Styles</u>	
I learn best when presented with graphs, charts or drawn material	1 2 3 4 5
I will draw as I listen or doodle during presentations or meetings	1 2 3 4 5
I enjoy painting and other artistic exercises	1 2 3 4 5
I find it easy to picture something in my head when asked to do so	1 2 3 4 5
I always know where to find WALDO	1 2 3 4 5
<u>Musical Style</u>	
I know when someone is singing off key	1 2 3 4 5
I remember song lyrics and tunes	1 2 3 4 5
I enjoy listening to music while I work	1 2 3 4 5
I sing in the shower and I frequently sing along with the radio	1 2 3 4 5
I remember commercials because of the music, not the product	1 2 3 4 5
<u>Interpersonal Style</u>	
I am an excellent communicator of my feelings	1 2 3 4 5
I recognize moods in other people very quickly	1 2 3 4 5
I work well on teams	1 2 3 4 5
I am often referred to as "street smart"	1 2 3 4 5
I am told that I am a good listener	1 2 3 4 5
<u>Intrapersonal Style</u>	
I am told that I am very independent	1 2 3 4 5
I work well on my own	1 2 3 4 5

I often find myself on the fringes of the group	1 2 3 4 5
I can express my inner feelings in a variety of ways	1 2 3 4 5
I am keenly aware of my own strengths and weaknesses	1 2 3 4 5

LEARNING ACTIVITY
Kolb's Experiential Learning Self-Inventory

ACTIVITY DESCRIPTION

The student will take a learning style self-assessment to determine their own learning style from Kolb's Experiential Learning Model.

1. Pass out the 2-page Learning Style Inventory and instruct the participants to read the directions on the first page, complete the inventory, and tally their score on the bottom as per the instructions.
2. Explain that CE is Concrete Experience. RO is Reflective Observation, AC is Abstract Conceptualization and AE is Active Experimentation.
3. Have them chart their scores from the bottom of the first page onto the graph (circle) on the second page.
4. Using the handout Kolb's Experiential Learning Styles Inventory, go over traits of the four styles.
5. Lead a class discussion on what this might mean to them as teachers or trainers. How does it compare to other learning style inventories?

- Option: You can take this a step further on page five and six of the above handout.

KEY LEARNING POINTS

This serves as a lesson in the various learning styles and how, as an instructor or trainer, the importance to tap into various styles when you teach or train.

RESOURCES NEEDED

- Approximately 20 minutes
- Best suited for a group of 20-24 participants
- Kolb's Learning Style Inventory (a six page document)

SOURCE

- Cokie Lepinski, Marin County Sheriff's Office, POST Instructor, clepinski@co.marin.ca.us. Source of inventory can be found on-line at: http://www.nwlink.com/~donclark/hrd/learning/styles.html

Kolb's Experiential Learning Style Inventory

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1.		Discriminating		Tentative		Involved		Practical
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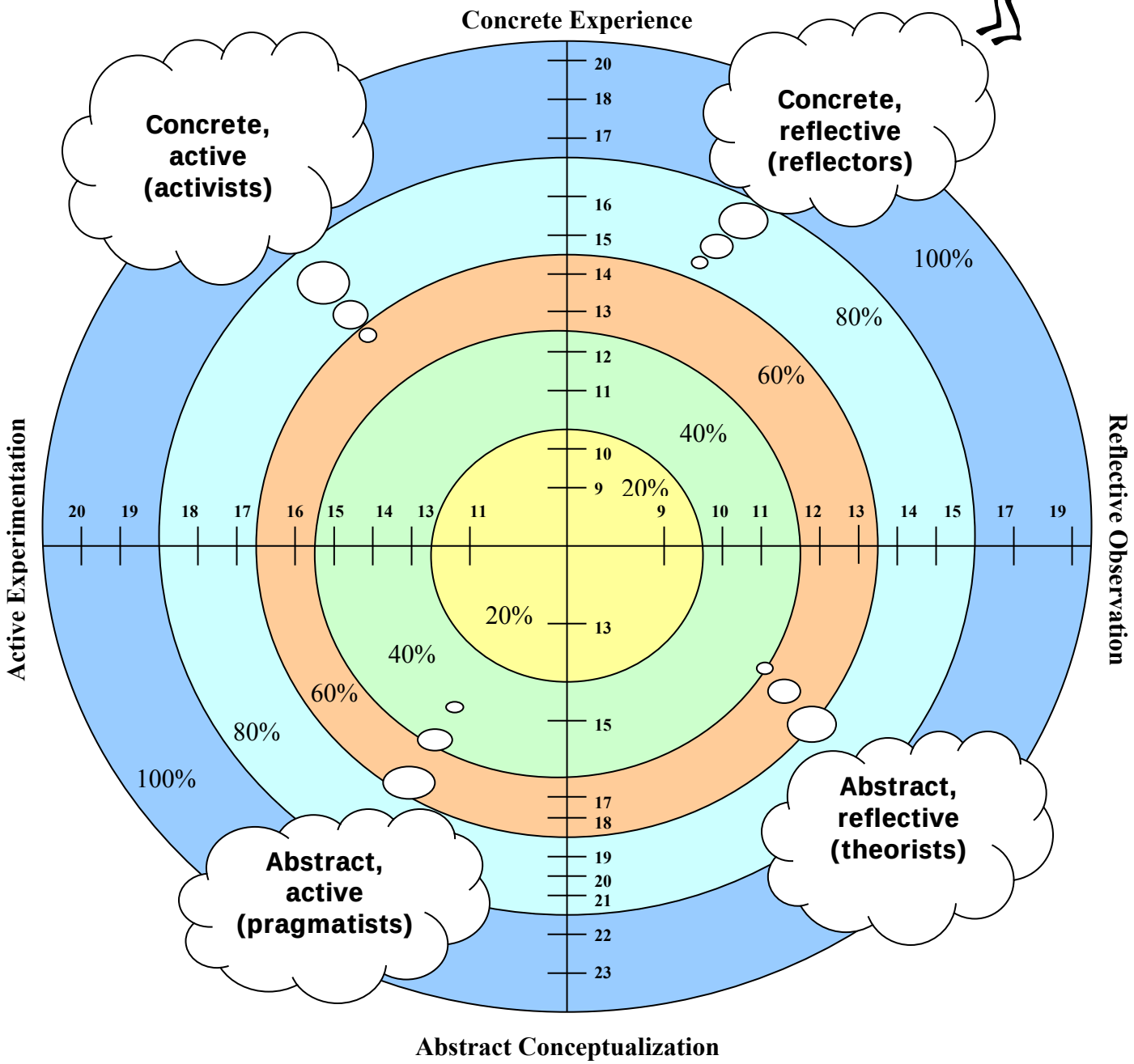
4.		Accepting		Risk-taker		Evaluative		Aware
5.		Intuitive		Productive		Logical		Questioning
6.		Abstract		Observing		Concrete		Active
7.		Present oriented		Reflecting		Future oriented		Pragmatic
8.		Experience		Observation		Conceptualization		Experimentation
9.		Intense		Reserved		Rational		Responsible
	CE	Add scores of numbers: 2 3 4 5 7 8	RO	Add scores of numbers: 1 3 6 7 8 9	AC	Add scores of numbers: 2 3 4 5 8 9	AE	Add scores of numbers: 1 3 6 7 8 9

Learning Style Inventory



The concentric circles represent percentile scores based on the combined responses of 127 practicing managers and 512 Harvard and M.I.T. graduate students in management. (For example, a raw score of 21 on Abstract Conceptualization means you scored higher on this dimension than 80 percent of the managers and students tested, while a score of 24 would indicate you scored higher than anyone in the population on which these norms are based.)

Key Points of the Different Styles

Concrete Experience *(feeling or sensing)*

Perceive information
Feeling based judgments
Learn best by being involved
Don't do well with theoretical approaches
Like group work and peer feedback

Reflective Observation (watching)

Reflect on how it will impact their life
Rely heavily on careful observation
Prefer to be impartial objective observers
Tend to be introverts
Likes lectures, they are visual and auditory
Learner wants instructor to provide expert interpretation
Wants performance measured by external criteria

Abstract Conceptualization (thinking)

Compare how it fits into their own experiences
Tend to be oriented to things and symbols
Not as oriented to people
Learn best in authority-directed, impersonal learning situations that emphasize theory and systematic analysis
Frustrated by unstructured "discovery learning" approaches such as exercises and simulations
Likes case studies, theoretical readings and reflective thinking exercises.

Active Experimentation (doing)

Think about how this info offers new ways to act
Learn best engaged in projects, homework, or group discussions
Dislike passive learning situations like lectures
Tend to be extroverts
Tend to be kinesthetic or tactile
Likes to see all materials to determine relevance
Problem solving, small group work or games, peer feedback, and self-directed work are best for this style

These two lines intersect each other and form four quadrants (represented by the gray circles in the above diagram). These quadrants form the four personal learning styles (These four quadrants represent a more complex model of learning styles as they are based upon two dimensions):

Theorists (or Assimilator) like to learn using abstract conceptualization and reflective observation (lecture, papers, analogies) and like to ask such questions as "How does this relate to that?" Training approach - case studies, theory readings, and thinking alone. Their strengths lie in their ability to create theoretical models. They tend to be less interested in people and less concerned with practical applications of knowledge. They are often more concerned with abstract concepts. Theorists are often found in research and planning departments. This learning style is more characteristic of basic science and mathematics than applied sciences.

Pragmatists (or Converger) like to learn using abstract conceptualization and active experimentation (laboratories, field work, observations). They ask "How can I apply this in practice?" Training approach - peer feedback; activities that apply skills; trainer is coach/helper for a self-directed autonomous learner. The pragmatist's greatest strength is in the practical application of idea. They tend to be relatively unemotional. They prefer to deal with things rather than people. They tend to have narrow technical interests and quite often choose to specialize in the physical sciences.

Activists (or Accommodator) like to learn using concrete experience and active experimentation (simulations, case study, homework). They tell themselves "I'm game for anything." Training approach - practicing the skill, problem solving, small group discussions, peer feedback; trainer should be a model of a professional, leaving the learner to determine her own criteria for relevance of materials. Their strengths lie in doing things and involving themselves in new experiences.

They are called accommodators because they excel in adapting to specific immediate circumstances. They tend to solve problems intuitively, relying on others for information. Accommodators are often found working in marketing and sales. The accommodator is at ease with people but is sometimes seen as impatient and pushy. This learner's educational background is often in technical or practical fields such as business.

Reflectors (or Diverger) like to learn using reflective observation and concrete experience (logs, journals, brainstorming). They like time to think about the subject. Training approach - lectures with plenty of reflection time; trainer should provide expert interpretation - taskmaster/guide; judge performance by external criteria. Their strengths lie in an imaginative ability. They tend to be interested in people and emotional elements. People with this learning style tend to become counselors, organizational development specialists and personnel managers. They have broad cultural interests and tend to specialize in the arts. This style is characterizes individuals from humanities and liberal arts backgrounds.

A reminder that we learn from all four experiences (quadrants), but one of the four is our favorite. The ideal training environment would include each of the four processes. For

example, the cycle might begin with the learner's personal involvement through concrete experiences; next, the learner reflects on this experience, looking for meaning; then the learner applies this meaning to form a logical conclusion; and finally, the learner experiments with similar problems, which result in new concrete experiences. The learning cycle might begin anew due to new and different experiences.

The training activities should be flexible so that each learner could spend additional time on his or her preferred learning style. Also, you can enter the learning cycle at any one of the four processes.

Examples
Learning to ride a bicycle:
Reflectors - Thinking about riding and watching another person ride a bike.
Theorists - Understanding the theory and having a clear grasp of the biking concept.
Pragmatists - Receiving practical tips and techniques from a biking expert.
Activists - Leaping on the bike and have a go at it.
Learning a software program:
Activists - Jumping in and doing it.
Reflectors - Thinking about what you just performed.
Theorists - Reading the manual to get a clearer grasp on what was performed.
Pragmatists - Using the help feature to get some expert tips.
Learning to coach:
Pragmatists - Having a coach guide you in coaching someone else.
Activists - Using your people skills with what you have learned to achieve your own coaching style.
Reflectors - Observing how other people coach.
Theorists - Reading articles to find out the pros and cons of different methods.
Learning algebra:
Theorists - Listening to explanations on what it is.
Pragmatists - Going step-by-step through an equation.
Activists - Practicing.
Reflectors - Recording your thoughts about algebraic equations in a learning log.

John Dewey (1859-1952)

Life and Works

John Dewey was born on October 20, 1859, the third of four sons born to Archibald Sprague Dewey and Lucina Artemesia Rich of Burlington, Vermont. The eldest sibling died in infancy, but the three surviving brothers attended the public school and the University of Vermont in Burlington with John. While at the University of Vermont, Dewey was exposed to evolutionary theory through the teaching of G.H. Perkins and *Lessons in Elementary Physiology*, a text by T.H. Huxley, the famous English evolutionist. The theory of natural selection continued to have a life-long impact upon Dewey's thought, suggesting the barrenness of static models of nature, and the importance of focusing on the interaction between the human organism and its environment when considering questions of psychology and the theory of knowledge. The formal teaching in philosophy at the University of Vermont was confined for the most part to the school of Scottish realism, a school of thought that Dewey soon rejected, but his close contact both before and after graduation with his teacher of philosophy, H.A.P. Torrey, a learned scholar with broader philosophical interests and sympathies, was later accounted by Dewey himself as "decisive" to his philosophical development.

After graduation in 1879, Dewey taught high school for two years, during which the idea of pursuing a career in philosophy took hold. With this nascent ambition in mind, he sent a philosophical essay to W.T. Harris, then editor of the *Journal of Speculative Philosophy*, and the most prominent of the St. Louis Hegelians. Harris's acceptance of the essay gave Dewey the confirmation he needed of his promise as a philosopher. With this encouragement he traveled to Baltimore to enroll as a graduate student at Johns Hopkins University.

At Johns Hopkins Dewey came under the tutelage of two powerful and engaging intellects who were to have a lasting influence on him. George Sylvester Morris, a German-trained Hegelian philosopher, exposed Dewey to the organic model of nature characteristic of German idealism. G. Stanley Hall, one of the most prominent American experimental psychologists at the time, provided Dewey with an appreciation of the power of scientific methodology as applied to the human sciences. The confluence of these viewpoints propelled Dewey's early thought, and established the general tenor of his ideas throughout his philosophical career.

Upon obtaining his doctorate in 1884, Dewey accepted a teaching post at the University of Michigan, a post he was to hold for ten years, with the exception of a year at the University of Minnesota in 1888. While at Michigan Dewey wrote his first two books: *Psychology* (1887), and *Leibniz's New Essays Concerning the Human Understanding* (1888). Both works expressed Dewey's early commitment to Hegelian idealism, while the *Psychology* explored the syntheses

between this idealism and experimental science that Dewey was then attempting to effect. At Michigan Dewey also met one of his important philosophical collaborators, James Hayden Tufts, with whom he would later author *Ethics* (1908; revised ed. 1932).

In 1894, Dewey followed Tufts to the recently founded University of Chicago. It was during his years at Chicago that Dewey's early idealism gave way to an empirically based theory of knowledge that was in concert with the then developing American school of thought known as pragmatism. This change in view finally coalesced into a series of four essays entitled collectively "Thought and its Subject-Matter," which was published along with a number of other essays by Dewey's colleagues and students at Chicago under the title *Studies in Logical Theory* (1903). Dewey also founded and directed a laboratory school at Chicago, where he was afforded an opportunity to apply directly his developing ideas on pedagogical method. This experience provided the material for his first major work on education, *The School and Society* (1899).

Disagreements with the administration over the status of the Laboratory School led to Dewey's resignation from his post at Chicago in 1904. His philosophical reputation now secured, he was quickly invited to join the Department of Philosophy at Columbia University. Dewey spent the rest of his professional life at Columbia. Now in New York, located in the midst of the Northeastern universities that housed many of the brightest minds of American philosophy, Dewey developed close contacts with many philosophers working from divergent points of view, an intellectually stimulating atmosphere which served to nurture and enrich his thought.

During his first decade at Columbia Dewey wrote a great number of articles in the theory of knowledge and metaphysics, many of which were published in two important books: *The Influence of Darwin on Philosophy and Other Essays in Contemporary Thought* (1910) and *Essays in Experimental Logic* (1916). His interest in educational theory also continued during these years, fostered by his work at Teachers College at Columbia. This led to the publication of *How We Think* (1910; revised ed. 1933), an application of his theory of knowledge to education, and *Democracy and Education* (1916) perhaps his most important work in the field.

During his years at Columbia Dewey's reputation grew not only as a leading philosopher and educational theorist, but also in the public mind as an important commentator on contemporary issues, the latter due to his frequent contributions to popular magazines such as *The New Republic* and *Nation* as well as his ongoing political involvement in a variety of causes, such as women's suffrage and the unionization of teachers. One outcome of this fame was numerous invitations to lecture in both academic and popular venues. Many of his most significant writings during these years were the result of such lectures, including *Reconstruction in Philosophy* (1920), *Human Nature and Conduct* (1922),

Experience and Nature (1925), *The Public and its Problems* (1927), and *The Quest for Certainty* (1929).

Dewey's retirement from active teaching in 1930 did not curtail his activity either as a public figure or productive philosopher. Of special note in his public life was his participation in the Commission of Inquiry into the Charges Against Leon Trotsky at the Moscow Trial, which exposed Stalin's political machinations behind the Moscow trials of the mid-1930s, and his defense of fellow philosopher Bertrand Russell against an attempt by conservatives to remove him from his chair at the College of the City of New York in 1940. A primary focus of Dewey's philosophical pursuits during the 1930s was the preparation of a final formulation of his logical theory, published as *Logic: The Theory of Inquiry* in 1938. Dewey's other significant works during his retirement years include *Art as Experience* (1934), *A Common Faith* (1934), *Freedom and Culture* (1939), *Theory of Valuation* (1939), and *Knowing and the Known* (1949), the last coauthored with Arthur F. Bentley. Dewey continued to work vigorously throughout his retirement until his death on June 2, 1952, at the age of ninety-two.

Theory of Knowledge

The central focus of Dewey's philosophical interests throughout his career was what has been traditionally called "epistemology," or the "theory of knowledge." It is indicative, however, of Dewey's critical stance toward past efforts in this area that he expressly rejected the term "epistemology," preferring the "theory of inquiry" or "experimental logic" as more representative of his own approach.

In Dewey's view, traditional epistemologies, whether rationalist or empiricist, had drawn too stark a distinction between thought, the domain of knowledge, and the world of fact to which thought purportedly referred: thought was believed to exist apart from the world, epistemically as the object of immediate awareness, ontologically as the unique aspect of the self. The commitment of modern rationalism, stemming from Descartes, to a doctrine of innate ideas, ideas constituted from birth in the very nature of the mind itself, had effected this dichotomy; but the modern empiricists, beginning with Locke, had done the same just as markedly by their commitment to an introspective methodology and a representational theory of ideas. The resulting view makes a mystery of the relevance of thought to the world: if thought constitutes a domain that stands apart from the world, how can its accuracy as an account of the world ever be established? For Dewey a new model, rejecting traditional presumptions, was wanting, a model that Dewey endeavored to develop and refine throughout his years of writing and reflection.

In his early writings on these issues, such as "Is Logic a Dualistic Science?" (1890) and "The Present Position of Logical Theory" (1891), Dewey offered a solution to epistemological issues mainly along the lines of his early acceptance

of Hegelian idealism: the world of fact does not stand apart from thought, but is itself defined within thought as its objective manifestation. But during the succeeding decade Dewey gradually came to reject this solution as confused and inadequate.

A number of influences have bearing on Dewey's change of view. For one, Hegelian idealism was not conducive to accommodating the methodologies and results of experimental science which he accepted and admired. Dewey himself had attempted to effect such an accommodation between experimental psychology and idealism in his early *Psychology* (1887), but the publication of William James' *Principles of Psychology* (1891), written from a more thoroughgoing naturalistic stance, suggested the superfluity of idealist principles in the treatment of the subject.

Second, Darwin's theory of natural selection suggested in a more particular way the form which a naturalistic approach to the theory of knowledge should take. Darwin's theory had renounced supernatural explanations of the origins of species by accounting for the morphology of living organisms as a product of a natural, temporal process of the adaptation of lineages of organisms to their environments, environments which, Darwin understood, were significantly determined by the organisms that occupied them. The key to the naturalistic account of species was a consideration of the complex interrelationships between organisms and environments. In a similar way, Dewey came to believe that a productive, naturalistic approach to the theory of knowledge must begin with a consideration of the development of knowledge as an adaptive human response to environing conditions aimed at an active restructuring of these conditions. Unlike traditional approaches in the theory of knowledge, which saw thought as a subjective primitive out of which knowledge was composed, Dewey's approach understood thought genetically, as the product of the interaction between organism and environment, and knowledge as having practical instrumentality in the guidance and control of that interaction. Thus Dewey adopted the term "instrumentalism" as a descriptive appellation for his new approach.

Dewey's first significant application of this new naturalistic understanding was offered in his seminal article "the Reflex Arc Concept in Psychology" (1896). In this article, Dewey argued that the dominant conception of the reflex arc in the psychology of his day, which was thought to begin with the passive stimulation of the organism, causing a conscious act of awareness eventuating in a response, was a carry-over of the old, and errant, mind-body dualism. Dewey argued for an alternative view: the organism interacts with the world through self-guided activity that coordinates and integrates sensory and motor responses. The implication for the theory of knowledge was clear: the world is not passively perceived and thereby known; active manipulation of the environment is involved integrally in the process of learning from the start.

Dewey first applied this interactive naturalism in an explicit manner to the theory of knowledge in his four introductory essays in *Studies in Logical Theory*. Dewey identified the view expressed in *Studies* with the school of pragmatism, crediting William James as its progenitor. James, for his part, in an article appearing in the *Psychological Bulletin*, proclaimed the work as the expression of a new school of thought, acknowledging its originality.

A detailed genetic analysis of the process of inquiry was Dewey's signal contribution to *Studies*. Dewey distinguished three phases of the process. It begins with the *problematic situation*, a situation where instinctive or habitual responses of the human organism to the environment are inadequate for the continuation of ongoing activity in pursuit of the fulfillment of needs and desires. Dewey stressed in *Studies* and subsequent writings that the uncertainty of the problematic situation is not inherently cognitive, but practical and existential. Cognitive elements enter into the process as a response to precognitive maladjustment.

The second phase of the process involves the isolation of the data or subject matter which defines the parameters within which the reconstruction of the initiating situation must be addressed. In the third, reflective phase of the process, the cognitive elements of inquiry (ideas, suppositions, theories, etc.) are entertained as hypothetical solutions to the originating impediment of the problematic situation, the implications of which are pursued in the abstract. The final test of the adequacy of these solutions comes with their employment in action. If a reconstruction of the antecedent situation conducive to fluid activity is achieved, then the solution no longer retains the character of the hypothetical that marks cognitive thought; rather, it becomes a part of the existential circumstances of human life.

The error of modern epistemologists, as Dewey saw it, was that they isolated the reflective stages of this process, and hypostatized the elements of those stages (sensations, ideas, etc.) into pre-existing constituents of a subjective mind in their search for an incorrigible foundation of knowledge. For Dewey, the hypostatization was as groundless as the search for incorrigibility was barren. Rejecting foundationalism, Dewey accepted the fallibilism that was characteristic of the school of pragmatism: the view that any proposition accepted as an item of knowledge has this status only provisionally, contingent upon its adequacy in providing a coherent understanding of the world as the basis for human action.

Dewey defended this general outline of the process of inquiry throughout his long career, insisting that it was the only proper way to understand the means by which we attain knowledge, whether it be the commonsense knowledge that guides the ordinary affairs of our lives, or the sophisticated knowledge arising from scientific inquiry. The latter is only distinguished from the former by the precision of its methods for controlling date, and the refinement of its hypotheses. In his writings in the theory of inquiry subsequent to *Studies*, Dewey endeavored

to develop and deepen instrumentalism by considering a number of central issues of traditional epistemology from its perspective, and responding to some of the more trenchant criticisms of the view.

One traditional question that Dewey addressed in a series of essays between 1906 and 1909 was that of the meaning of truth. Dewey at that time considered the pragmatic theory of truth as central to the pragmatic school of thought, and vigorously defended its viability. Both Dewey and William James, in his book *Pragmatism* (1907), argued that the traditional correspondence theory of truth, according to which the true idea is one that agrees or corresponds to reality, only begs the question of what the "agreement" or "correspondence" of idea with reality is. Dewey and James maintained that an idea agrees with reality, and is therefore true, if and only if it is successfully employed in human action in pursuit of human goals and interests, that is, if it leads to the resolution of a problematic situation in Dewey's terms. The pragmatic theory of truth met with strong opposition among its critics, perhaps most notably from the British logician and philosopher Bertrand Russell. Dewey later began to suspect that the issues surrounding the conditions of truth, as well as knowledge, were hopelessly obscured by the accretion of traditional, and in his view misguided, meanings to the terms, resulting in confusing ambiguity. He later abandoned these terms in favor of "warranted assertibility" to describe the distinctive property of ideas that results from successful inquiry.

One of the most important developments of his later writings in the theory of knowledge was the application of the principles of instrumentalism to the traditional conceptions and formal apparatus of logical theory. Dewey made significant headway in this endeavor in his lengthy introduction to *Essays in Experimental Logic*, but the project reached full fruition in *Logic: The Theory of Inquiry.*

The basis of Dewey's discussion in the *Logic* is the continuity of intelligent inquiry with the adaptive responses of prehuman organisms to their environments in circumstances that check efficient activity in the fulfillment of organic needs. What is distinctive about intelligent inquiry is that it is facilitated by the use of language, which allows, by its symbolic meanings and implicatory relationships, the hypothetical rehearsal of adaptive behaviors before their employment under actual, prevailing conditions for the purpose of resolving problematic situations. Logical form, the specialized subject matter of traditional logic, owes its genesis not to rational intuition, as had often been assumed by logicians, but due to its functional value in (1) managing factual evidence pertaining to the problematic situation that elicits inquiry, and (2) controlling the procedures involved in the conceptualized entertainment of hypothetical solutions. As Dewey puts it, "logical forms accrue to subject-matter when the latter is subjected to controlled inquiry."

From this new perspective, Dewey reconsiders many of the topics of traditional logic, such as the distinction between deductive and inductive inference, propositional form, and the nature of logical necessity. One important outcome of this work was a new theory of propositions. Traditional views in logic had held that the logical import of propositions is defined wholly by their syntactical form (e.g., "All As are Bs," "Some Bs are Cs"). In contrast, Dewey maintained that statements of identical propositional form can play significantly different functional roles in the process of inquiry. Thus in keeping with his distinction between the factual and conceptual elements of inquiry, he replaced the accepted distinctions between universal, particular, and singular propositions based on syntactical meaning with a distinction between existential and ideational propositions, a distinction that largely cuts across traditional classifications. The same general approach is taken throughout the work: the aim is to offer functional analyses of logical principles and techniques that exhibit their operative utility in the process of inquiry as Dewey understood it.

The breadth of topics treated and the depth and continuity of the discussion of these topics mark the *Logic* as Dewey's decisive statement in logical theory. The recognition of the work's importance within the philosophical community of the time can be gauged by the fact that the *Journal of Philosophy*, the most prominent American journal in the field, dedicated an entire issue to a discussion of the work, including contributions by such philosophical luminaries as C.I. Lewis of Harvard University, and Ernest Nagel, Dewey's colleague at Columbia University. Although many of his critics did question, and continue to question, the assumptions of his approach, one that is certainly unique in the development of twentieth century logical theory, there is no doubt that the work was and continues to be an important contribution to the field.

Learning Domains or Bloom's Taxonomy

The Three Types of Learning

There is more than one type of learning. A committee of colleges, led by Benjamin Bloom, identified three domains of educational activities. The three domains are cognitive, affective, and psychomotor. Since the work was produced by higher education, the words tend to be a little bigger than we are normally used to. Domains can be thought of as categories. Cognitive is for mental skills (Knowledge), affective is for growth in feelings or emotional areas (Attitude), while psychomotor is for manual or physical skills (Skills). Trainers often refer to these as KAS, SKA, or KSA (Knowledge, Attitude, and Skills). This taxonomy of learning behaviors can be thought of as "the goals of the training process." That is, after the training session, the learner should have acquired these new skills, knowledge, or attitudes.

The committee then produced an elaborate compilation for the cognitive and affective domains, but none for the psychomotor domain. Their explanation for this oversight was that they have little experience in teaching manual skills within the college level (possibly they never thought to check with their sports or drama departments).

This compilation divides the three domains into subdivisions, starting from the simplest behavior to the most complex. The divisions outlined are not absolutes and there are other systems or hierarchies that have been devised in the educational and training world. However, Bloom's taxonomy is easily understood and is probably the most widely applied one in use today.

Cognitive

The cognitive domain involves knowledge and the development of intellectual skills. This includes the recall or recognition of specific facts, procedural patterns, and concepts that serve in the development of intellectual abilities and skills. There are six major categories, which are listed in order below, starting from the simplest behavior to the most complex. The categories can be thought of as degrees of difficulties. That is, the first one must be mastered before the next one can take place.

Knowledge: Recall of data	Examples: Recite a policy. Quote prices from memory to a customer. Knows the safety rules. Keywords: defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states.

Comprehension: Understand the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words.	Examples: Rewrites the principles of test writing. Expresses in one's own words the steps for performing a complex procedure. Translates an equation into a computer spreadsheet. Keywords: comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives examples, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates.
Application: Use a concept in a new situation or unprompted use of an abstraction. Applies what was learned in the classroom into novel situations in the workplace.	Examples: Use a manual to calculate an employee's vacation time. Apply laws of statistics to evaluate the reliability of a written test. Keywords: applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves.
Analysis: Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences.	Examples: Troubleshoot a piece of equipment by using logical deduction. Recognize logical fallacies in reasoning. Gathers information from a department and selects the required tasks for training. Keywords: categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes.
Synthesis: Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure.	Examples: Write a company operations or process manual. Design a machine to perform a specific task. Integrates training from several sources to solve a problem. Revise and process to improve the outcome. Keywords: categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes.
Evaluation: Make judgments about the value of ideas or materials.	Examples: Select the most effective solution. Hire the most qualified candidate. Explain and justify a new budget. Keywords: appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports.

Affective

This domain includes the manner in which we deal with things emotionally, such as feelings, appreciation, enthusiasms, motivations, and attitudes. The five major cate-gories listed in order:

Receiving phenomena: Awareness, willingness to hear, selected attention.	Examples: Listen to others with respect. Listen for and remember the names of newly introduced people. Keywords: asks, chooses, describes, follows, gives, hears, identifies, locates, names, points to, selects, sits, erects, replies, uses.
Responding to phenomena: Active participation on the part of the learners. Attends and reacts to a particular phenomenon. Learning outcomes may emphasize compliance in responding, willingness to respond, or satisfaction in responding (motivation).	Examples: Participates in class discussions. Gives a presentation. Questions new ideas, concepts, models in order to full understand them. Knows the safety rules and practices them. Keywords: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes.
Valuing: The worth or value a person attaches to a particular object, phenomenon, or behavior. This ranges from simple acceptance to the more complex state of commitment. Valuing is based on the internalization of a set of specified values, while clues to these values are expressed in the learner's overt behavior and are often identifiable.	Examples: Demonstrates belief in the democratic process. Is sensitive towards individual and cultural differences (values diversity). Shows the ability to solve problems. Proposes a plan to social improvement and follows through with commitment. Informs management on matters that one feels strongly about. Keywords: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works.

Organization: Organizes values into priorities by contrasting different values, resolving conflicts between them, and creating a unique value system. The emphasis is on comparing, relating, and synthesizing values.	Examples: Recognizes the need for balance between freedom and responsible behavior. Accepts responsibility for one's behavior. Explains the role of systematic planning and solving problems. Accepts professional ethical standards. Creates a life plan in harmony with abilities, interests, and beliefs. Prioritizes time effectively to meet needs of the organization, family, and self. Keywords: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes.
Internalizing values (characterization): Has a value system that controls their behavior. The behavior is pervasive, consistent, predictable, and most importantly, characteristic of the learner. Instructional objectives are concerned with the student's general patterns of adjustment (personal, social, emotional).	Examples: Shows self-reliance when working independently. Cooperates in group activities (displays teamwork). Uses an objective approach in problem solving. Displays a professional commitment to ethical practice on a daily basis. Revises judgments and changes behavior in light of new evidence. Values people for what they are, not how they look. Keywords: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, quotes, revises, serves, solves, verifies.

Psychomotor

The psychomotor domain includes physical movement, coordination, and use of the motor-skill areas. Development of these skills requires practice and is measured in terms of speed, precision, distance, procedures, or techniques in execution. The seven major categories listed in order are:

Perception: The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation.	Examples: Detects non-verbal communication cues. Estimate where a ball will land after it is thrown and then moving to the correct location to catch the ball. Adjustment of stove to correct temperature by smell and taste of food. Adjusts the height of the forks on a forklift by comparison where the forks are in relation to the pallet. Keywords: chooses, describes, detects, differentiates, distinguishes, identifies, isolates, relates, selects.
Set: Readiness to act. It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person's response to different situations (sometimes called mindsets).	Examples: Knows and acts upon a sequence of steps in a manufacturing process. Recognize one's abilities and limitations. Shows desire to learn a new process (motivation). NOTE: This subdivision of Psychomotor is closely related to "Responding to phenomena" subdivision of the Affective domain. Keywords: begins, displays, explains, moves, proceeds, reacts, shows, states, volunteers.
Guided response: The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing.	Examples: Performs mathematical equation as demonstrated. Follows instructions to build a model. Responds to hand-signals of instructor while learning to operate a forklift. Keywords: copies, traces, follows, react, reproduce, responds.
Mechanism: This is the intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency.	Examples: Use a personal computer. Repair a leaking faucet. Drive a car. Keywords: assembles, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches.

Complex Overt Response: The skillful performance of motor acts that involve complex movement patterns. Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy. This category includes performing without hesitation, and automatic performance. For example, players often utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a football, because they can tell by the feel of the act what the result will produce.	Examples: Maneuvers a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano. Keywords: assembles, builds, calibrates, constructs, dismantles, displays, fastens, fixes, grinds, heats, manipulates, measures, mends, mixes, organizes, sketches. NOTE: The key words are the same as Mechanism, but will have adverbs or adjectives that indicate that the performance is quicker, better, more accurate, etc.
Adaptation: Skills are well developed and the individual can modify movement patterns to fit special requirements.	Examples: Responds effectively to unexpected experiences. Modifies instruction to meet the needs of learners. Perform a task with a machine that it was not originally intended to do (machine is not damaged and there is no danger in performing the new task). Keywords: adapts, alters, changes, rearranges, reorganizes, revises, varies.
Origination: Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills.	Examples: Constructs a new theory. Develops a new comprehensive training programming. Creates a new gymnastic routine. Keywords: arranges, builds, combines, composes, constructs, creates, designs, initiate, makes, originates.

As mentioned earlier, the committee did not produce a compilation for the psychomotor domain model, but others have. The one discussed above is by Simpson (1972). There are two other popular versions:

R.H. Dave's (1970)

- Imitation: Observing and patterning behavior after someone else. Performance may be of low quality. Example: copying a work of art.
- Manipulation: Being able to perform certain actions by following instructions and practicing. Example: Creating work on one's own, after taking lessons, or reading about it.
- Precision: Refining, becoming more exact. Few errors are apparent. Example: Working and reworking something, so it will be "just right."
- Articulation: Coordinating a series of actions, achieving harmony and internal consistency. Example: Producing a video that involves music, drama, color, sound, etc.

- Naturalization: Having high level performance become natural without needing to think much about it. Examples: Michael Jordan playing basketball, Nancy Lopez hitting a golf ball, etc.

Harrow's

- Involuntary movement – reaction
- Fundamental movements – basic movements
- Perception – response to stimuli
- Physical abilities – stamina that must be developed for further development
- Skilled movements – advanced learned movements
- No discursive communication – effective body language

Knowing the three types of learning and what they represent will aid you when selecting learning strategies.

Reference

Benjamin S. Bloom, Bertram B. Mesia, and David R. Krathwohl (1964). Taxonomy of Educational Objectives (two vols: The affective Domain & The Cognitive Domain). New York. David McKay.

Created June 5, 1999. Updated May 21, 2000.

Learning Outcomes Structured Activities

Instructors should adhere to these general guidelines when creating a lesson:

1. Design your course or class using outcomes or behavioral objectives. Outcomes state what the learner will do to demonstrate the acquisition of knowledge or skills taught in the class. These behavioral statements tend to drive the types of activities used in class as well as how they are tested. An outcome has three parts: Who will do the demonstration, how the learning will be done (the action verb), and the context or content (conditions) used to demonstrate the learning. The chart below shows examples of outcomes, and verbs for outcome writing are on following pages.

Writing Outcomes

The Learner	Action Verb	Content/Context
The recruit will	Analyze	Six 911 calls for problems at 6th and Doren Avenue to ascertain any common causes.
The trainee will	Demonstrate	Three effective evasive maneuvers to use in a vehicle pursuit.
The learner will	Describe	The necessary conditions under which a search warrant can be obtained.
The cadet will	Evaluate	The alibis of three suspects for consistency and accuracy.

2. Use the beginning of class time wisely. It is the best time to set a positive learning environment and is one of the two times that the highest level of learning takes place. Establish confidence and trust between participants and instructors. A first step is structuring ways for them to get to know you as well as each other. Begin with suitable introduction which is as experiential, lively, and as low-risk as possible.

3. Identify participant expectations and be prepared to act on any serious discrepancies between yours and theirs. Know what is negotiable with you. Be available to change what is negotiable and stick to what is not.

4. Achieve a balance between experiential, “hands-on”/practical and discussion/lecture activities and balance among independent, paired, group, and class activities.

5. Use groups wisely. When using groups and group projects, attend to the process of making those groups successful; teach people how to operate in groups and monitor/support their progress.

6. When using direct/lecture instruction, keep it short (7-20 minutes), make sure it is well organized and supported by audio/visual aids.

7. Involve participants in active discussion sessions among themselves with you as a participant. Discussion is more than instructor questions and participant answers. Begin each session with a problem to solve or a challenge to face. Always be aware of opportunities (and plan many) to relate experiences to participants' lives and work.

8. Check for the understanding of participants. Plan regular feedback points and be aware of other times when feedback is in order. Work to make feedback timely. Be available and approachable to your participants.

9. Increase the level of learning by asking higher-order, critical thinking questions when you have established the participants' understanding and ability to apply their comprehension of knowledge and skills. Use Bloom's Taxonomy as a tool to guide your activity selection and questioning style.

Bloom's Taxonomy
Levels of Thinking, Questioning, and Learning
(highest to lowest)

Evaluation	Judge the merit of an idea, solution, or work.
Synthesis	Combine ideas or related information; produce original communications, make predictions based on several bits of information, solve a problem using several sources.
Analysis	Identify reasons, causes, and motives; consider available evidence to reach a conclusion, inference, or generalization; analyze a conclusion, inference or generalization to find supporting evidence.
Application	Use previously learned material to solve a problem.
Comprehension	Organize learned material, describe it in his/her own words.
Knowledge	Recall or recognize information.

Verbs for Writing Behavioral Learning Outcomes

1. **Knowledge**

Arrange	Order
Define	Recognize
Duplicate	Relate
Label	Recall
List	Repeat
Memorize	Reproduce
Name	

2. **Comprehension**

Classify	Locate
Describe	Recognize
Discuss	Report
Explain	Restate
Express	Review
Identify	Select
Indicate	Tell
Translate	

3. **Application**

Apply	Operate
Choose	Practice
Demonstrate	Schedule
Dramatize	Sketch
Employ	Solve
Illustrate	Use
Interpret	

4. **Analysis**

Analyze	Differentiate
Praise	Discriminate
Assemble	Manage
Collect	Organize
Compose	Prepare
Construct	Propose
Design	Set up
Write	

5. **Synthesis**

Arrange	Formulate
Argue	Predict
Assess	Rate
Choose	Select
Compare	Support
Defend	Value
Estimate	Evaluate

6. **Evaluation**

Appraise	Judge
Calculate	Distinguish
Categorize	Examine
Compare	Experiment
Contrast	Inventory
Criticize	Question
Diagram	Test

Acquisition of Knowledge	Enhancement of Thinking Skills	Development of Psychomotor Skills	Changes in Attitudes, Values, and/or Feelings
Identify	Reflect	Demonstrate	Challenge
List	Compare	Produce	Defend
Define	Contrast	Assemble	Judge
Describe	Catalogue	Adjust	Question
State	Classify	Install	Accept
Prepare	Evaluate	Operate	Adopt
Recall	Forecast	Detect	Advocate
Express	Formulate	Locate	Bargain
Categorize	Investigate	Isolate	Cooperate
Chart	Modify	Arrange	Endorse
Rank	Organize	Build	Justify
Distinguish	Plan	Conduct	Persuade
Explain	Research	Check	Resolve
Outline	Study	Manipulate	Select
Inform	Translate	Fix	Dispute
Label	Differentiate	Lay out	Approve
Specify	Analyze	Perform	Choose
Tell	Compute	Sort	Feel
	Devise	Construct	Care
	Review	Draw	Express
			Reflect

Bloom's Taxonomy*

Benjamin Bloom created this taxonomy for categorizing level of abstraction of questions that commonly occur in educational settings. The taxonomy provides a useful structure in which to categorize test questions, since professors will characteristically ask questions within particular levels, and if you can determine the levels of questions that will appear on your exams, you will be able to study using appropriate strategies.

COMPETENCE	SKILLS DEMONSTRATED
Knowledge	▪ Observation and recall of information ▪ Knowledge of dates, events, places ▪ Mastery of subject matter ▪ ***Question Cues***: list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.
Comprehension	▪ Understanding information ▪ Grasp meaning ▪ Translate knowledge into new context ▪ Interpret facts, compare, contrast ▪ Order, group, infer causes ▪ Predict consequences ▪ ***Question Cues****:* summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend
Application	▪ Use information ▪ Use methods, concepts, theories in new situations ▪ Solve problems using required skills or knowledge ▪ ***Question Cues***: apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Analysis	▪ Seeing patterns ▪ Organization of parts ▪ Recognition of hidden meanings ▪ Identification of components ▪ ***Question Cues***: analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer
Synthesis	▪ Use old ideas to create new ones ▪ Generalize from given facts ▪ Relate knowledge from several areas ▪ Predict, draw conclusions ▪ ***Question Cues***: combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare, generalize, rewrite
Evaluation	▪ Compare and discriminate between ideas ▪ Assess value of theories, presentations ▪ Make choices based on reasoned argument ▪ Verify value of evidence ▪ Recognize subjectivity ▪ ***Question Cues***: assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, summarize, compare

* Adapted from: Bloom, B.S. (Ed.) (1956) Taxonomy of educational objectives: The classification of educational goals: Handbook I, cognitive domain.

What Is Problem-Based Learning?

To organize education so that natural active tendencies shall be fully enlisted in doing something, while seeing to it that the doing requires observation, the acquisition of information, and the use of a constructive imagination, is what needs to be done to improve social conditions.

-- Dewey 1916, 1944, p. 137

All education involves either problem solving or preparation for problem solving. From mathematical calculations ("What does this equal?") to literary analysis ("What does this mean?") to scientific experiments ("Why and how does this happen?") to historical investigation ("What took place, and why did it occur that way?"), teachers show students how to answer questions and solve problems. When teachers and schools skip the problem-formulating stage – handing facts and procedures to students without giving them a chance to develop their own questions and investigate by themselves – students may memorize material but will not full understand or be able to use it. Problem-based learning (PBL) provides a structure for discovery that helps students internalize learning and leads to greater comprehension.

Origin of Problem-Based Learning

The roots of problem-based learning can be traced to the progressive movement, especially to John Dewey's belief that teachers should teach by appealing to students' natural instincts to investigate and create. Dewey wrote that "the first approach to any subject in school, if thought is to be aroused and not words acquired, should be as unscholastic as possible" (Dewey 1916, 1944, p. 154). For Dewey, students' experiences outside of school provide us with clues for how to adapt lessons based on what interests and engages them:

> Methods which are permanently successful in formal education … go back to the type of situation which causes reflection out of school in ordinary life. They give pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking, or the intentional noting of connections; learning naturally results (Dewey 1916, 1944, p. 154).

More than 80 years after that was written, students still learn best by doing and by thinking through problems. Educators who use problem-based learning recognize that in the world outside of school, adults build their knowledge and skills as they solve a real problem or answer an important question – not through

abstract exercises. In fact, PBL originally was developed for adults, to train doctors in how to approach and solve medical problems.

Traditionally, medical schools taught doctors by requiring them to memorize a great deal of information and then to apply the information in clinical situations. This straightforward approach did not full prepare doctors for the real world where some patients might not be able to identify their symptoms or others might show multiple symptoms. Though students memorized basic medical information for tests in their courses, they did not know how to apply the information to real-life situations and so quickly forgot it.

Recognizing that Dewey's maxim held true for medical education, Howard Barrows, a physician and medical educator at McMaster University in Hamilton, Ontario, Canada, wanted to develop methods of instructing physicians that fostered their own capabilities for reflection outside of school in ordinary life. For Barrows, the ultimate objective of medical education was:

> To produce doctors capable of managing health problems of those who seek their services, in a competent and humane way. To do this, the doctors … must have both knowledge and the ability to use it (Barrows 1985, p. 3).

While most medical schools focused on providing knowledge, Barrows thought this was just the first of three interdependent elements:

> (1) an essential body of knowledge, (2) the ability to use … knowledge effectively in the evaluation and care of … patients' health problems, and (3) the ability to extend or improve that knowledge and to provide appropriate care for future problems which they must face (Barrows 1985, p. 3).

Medical schools generally agreed on the content that should be taught; how this material should be learned remained an issue. Barrows developed problem-based learning to:

> Allow [medical] students to integrate, use, and reuse newly learned information in the context of patients' problems; the symptoms, signs, laboratory data, course of illness, etc., provide cues for retrieval in the clinical context (Barrows 1985, p. 5).

This led to his first educational objective for PBL:

> The medical students we educate must acquire basic science knowledge that is better retained, retrieved, and later used in the clinical context (Barrows 1985, p. 5).

Barrows designed a series of problems that went beyond conventional case studies. He didn't give students all the information but required them to research a situation, develop appropriate questions, and produce their own plan to solve the problem. This cultivated students' "clinical reasoning process" as well as their understanding of the tools at their disposal. He found that PBL also developed students' abilities to extend and improve their knowledge to keep up in the ever-expanding field of medicine and to learn how to provide care for new illnesses they encountered. Students who were taught through PBL became "self-directed learners" with the desire to know and learn, the ability to formulate their needs as learners, and the ability to select and use the best available resources to satisfy these needs. Barrows and Tamblyn defined this new method, problem-based learning, as "the learning that results from the process of working toward the understanding or resolution of a problem" (Barrows and Tamblyn 1980, p. 18). They summarized the process as follows:

1. The problem is encountered first in the learning sequence, before any preparation or study has occurred.

2. The problem situation is presented to the student in the same way it would present in reality.

3. The student works with the problem in a manner that permits his ability to reason and apply knowledge to be challenged and evaluated, appropriate to his level of learning.

4. Needed areas of learning are identified in the process of work with the problem and used as a guide to individualized study.

5. The skills and knowledge acquired by this study are applied back to the problem, to evaluate the effectiveness of learning and to reinforce learning.

6. The learning that has occurred in work with the problem and in individualized study is summarized and integrated into the student's existing knowledge and skills (Barrows and Tamblyn 1980, pp. 191-192).

Problem-Based Learning and the School Improvement Movement

Although the PBL method outlined in the preceding section originally was designed for medical schools, it has been adopted by a growing number of K-12 schools working to raise student achievement. Students educated for the world of the 21st century must develop habits of thinking, researching, and problem solving to succeed in a rapidly changing world. Yet, too many children in traditional education are not developing these increasingly vital abilities.

Thinking and problem-solving skills are not explicitly measured on a national basis. But studies show that while students are making progress in learning

basic skills, only a small percentage perform at desired grade levels and master higher-order thinking.

For example, on the National Assessment of Educational Progress (NAEP) reading test, 57 percent of 17-year-olds scored below the level necessary to "find, understand, summarize, and explain relatively complicated literary and informational material" (National Center for Education Statistics 1996, p. 114). Only 10 percent of students scored in the top two levels (proficient and advanced) on the NAEP history test. And while more than half of 17-year-olds (59 percent) could answer "moderately complex procedures and reasoning," only 7 in 100 showed a mastery of "multi-step problem solving and algebra" (National Center for Education Statistics 1996, p. 122). In science, less than half (47 percent) could "analyze scientific procedures and data," with only 10 percent able to "integrate specialized scientific information" (National Center for Education Statistics 1996, p. 126). Clearly, while students are taught the basics, they are unable to proceed to understanding and using advanced knowledge.

Problem-based learning fits right into the movement for higher standards and greater achievement. PBL asks students to demonstrate an understanding of the material, not just to parrot back information with a few word changes. Research and teachers' experience have demonstrated that active instructional techniques like PBL can motivate bored students and raise their understanding and achievement. These student-centered strategies build critical thinking and reasoning skills, further students' creativity and independence, and help students earn a sense of ownership over their own work.

In classrooms where educators employ active learning strategies, students talk to each other, not through the teacher, and they initiate and manage many of their own activities. In these classes, the teacher serves as a guide to learning, providing room for students to increase their independence and build their own creativity. The teachers rely less on textbooks, using them as only one of a number of valid information sources that include everything from the Internet to community members. Similarly, schools using active learning become more flexible, allowing teachers greater freedom to direct their students and structure their own courses. They recognize that helping students master information needed to solve a problem and building their analytical reasoning skills are at least as important as memorizing a predetermined answer.

Present State of Problem-Based Learning

Since Barrows first used PBL at McMaster University in the mid-1960's, PBL "has caused a small revolution in the medical community" (Albanese and Mitchell 1993), and it was cited by a *U.S. News and World Report* issue reviewing medical schools:

> Since the late 1970's, New Mexico has been a pioneer in reforming medical education and training … It was the first U.S. medical school to embrace a curriculum built around a case study method – the problem-based approach adopted six years later by Harvard (Sarnoff 1996, pp. 92-94).

PBL is presently used in more than 60 medical schools worldwide and also in schools of dentistry, pharmacy, optometry, and nursing. It is also used in high schools, middle schools, and elementary schools in cities, suburban counties, and rural communities. Teachers have been trained at the Problem-Based Learning Institute in Springfield, Illinois; the Center for Problem-Based Learning at the Illinois Mathematics and Science Academy in Chicago; and the Center for the Study of Problem-Based Learning at Ventures In Education in New York City.

PBL offers K-12 teachers a structured method to help their students build thinking and problem-solving skills while students master important subject knowledge. It empowers students with greater freedom while providing a process that teachers can use to guide and lead students. Most of all, PBL transfers the active role in the classroom to students through problems that connect to their lives and procedures that require them to find needed information, think through a situation, solve the problem, and develop a final presentation.

Andragogy (M. Knowles)

Overview:

Knowles' theory of andragogy is an attempt to develop a theory specifically for adult learning. Knowles emphasizes that adults are self-directed and expect to take responsibility for decisions. Adult learning programs must accommodate this fundamental aspect.

Andragogy makes the following assumptions about the design of learning: (1) Adults need to know why they need to learn something (2) Adults need to learn experientially, (3) Adults approach learning as problem-solving, and (4) Adults learn best when the topic is of immediate value.

In practical terms, andragogy means that instruction for adults needs to focus more on the process and less on the content being taught. Strategies such as case studies, role playing, simulations, and self-evaluation are most useful. Instructors adopt a role of facilitator or resource rather than lecturer or grader.

Scope/Application:

Andragogy applies to any form of adult learning and has been used extensively in the design of organizational training programs (especially for "soft skill" domains such as management development).

Example:

Knowles (1984, Appendix D) provides an example of applying andragogy principles to the design of personal computer training:

1. There is a need to explain why specific things are being taught (e.g., certain commands, functions, operations, etc.)

2. Instruction should be task-oriented instead of memorization – learning activities should be in the context of common tasks to be performed.

3. Instruction should take into account the wide range of different backgrounds of learners; learning materials and activities should allow for different levels/types of previous experience with computers.

4. Since adults are self-directed, instruction should allow learners to discover things for themselves, providing guidance and help when mistakes are made.

Principles:

1. Adults need to be involved in the planning and evaluation of their instruction.

2. Experience (including mistakes) provides the basis for learning activities.

3. Adults are most interested in learning subjects that have immediate relevance to their job or personal life.

4. Adult learning is problem-centered rather than content-oriented.

References:

Knowles, M. (1975). Self-Directed Learning. Chicago: Follet

Knowles, M. (1984). The Adult Learner: A Neglected Species (3rd Ed.). Houston, TX: Gulf Publishing.

Knowles, M. (1984) Andragogy in Action. San Francisco: Jossey-Bass

Experiential Learning (C. Rogers)

Overview:

Rogers distinguished two types of learning: cognitive (meaningless) and experiential (significant). The former corresponds to academic knowledge such as learning vocabulary or multiplication tables and the latter refers to applied knowledge such as learning about engines in order to repair a car. The key to the distinction is that experiential learning addresses the needs and wants of the learner. Rogers lists these qualities of experiential learning: personal involvement, self-initiated, evaluated by learner, and pervasive effects on learner.

To Rogers, experiential learning is equivalent to personal change and growth. Rogers feels that all human beings have a natural propensity to learn; the role of the teacher is to facilitate such learning. This includes: (1) setting a positive climate for learning, (2) clarifying the purposes of the learner(s), (3) organizing and making available learning resources, (4) balancing intellectual and emotional components of learning, and (5) sharing feelings and thoughts with learners but not dominating.

According to Rogers, learning is facilitated when: (1) the student participates completely in the learning process and has control over its nature and direction, (2) it is primarily based upon direct confrontation with practical, social, personal or research problems, and (3) self-evaluation is the principal method of assessing progress or success. Rogers also emphasizes the importance of learning to learn and an openness to change.

Roger's theory of learning evolved as part of the humanistic education movement (e.g., Patterson, 1973; Valett, 1977).

Scope/Application:

Roger's theory of learning originates from his views about psychotherapy and humanistic approach to psychology. It applies primarily to adult learners and has influenced other theories of adult learning such as Knowles and Cross. Combs (1982) examines the significance of Roger's work to education. Rogers & Frieberg (1994) discuss applications of the experiential learning framework to the classroom.

Example:

A person interested in becoming rich might seek out books or classes on economics, investment, great financiers, banking, etc. Such an individual would perceive (and learn) any information provided on this subject in a much different fashion than a person who is assigned a reading or class.

Principles:

1. Significant learning takes place when the subject matter is relevant to the personal interests of the student.

2. Learning which is threatening to the self (e.g., new attitudes or perspectives) is more easily assimilated when external threats are at a minimum.

3. Learning proceeds faster when the threat to the self is low.

4. Self-initiated learning is the most lasting and pervasive.

References:

Combs, A.W. (1982). Affective education or none at all. Educational Leadership, 39(7), 494-497.

Patterson, C.H. (1973). Humanistic Education. Engelwood Cliffs, NJ: Prentice-Hall.

Rogers, C.R. (1969). Freedom to Learn. Columbus, OH: Merrill.

Rogers, C.R. & Freiberg, H.J. (1994). Freedom to Learn (3rd Ed). Columbus, OH: Merrill/MacMillan

Valett, R.E. (1977). Humanistic Education. St. Louis, MO: Mosby.

Relevant Web Sites:

For more about Rogers and his work, see:

http://oprf.com/Rogers
http://www.infed.org/thinkers/et-rogers.htm
http://www.ship.edu/~cgboeree/rogers.html

Multiple Intelligences (H. Gardner)

Overview:

The theory of multiple intelligences suggests that there are a number of distinct forms of intelligence that each individual possesses in varying degrees. Gardner proposes seven primary forms: linguistic, musical, logical-mathematical, spatial, body-kinesthetic, intrapersonal (e.g., insight, metacognition) and interpersonal (e.g., social skills).

According to Gardner, the implication of the theory is that learning/teaching should focus on the particular intelligences of each person. For example, if an individual has strong spatial or musical intelligences, they should be encouraged to develop these abilities. Gardner points out that the different intelligences represent not only different content domains but also learning modalities. A further implication of the theory is that assessment of abilities should measure all forms of intelligence, not just linguistic and logical-mathematical.

Gardner also emphasizes the cultural context of multiple intelligences. Each culture tends to emphasize particular intelligences. For example, Gardner (1983) discusses the high spatial abilities of the Puluwat people of the Caroline Islands, who use these skills to navigate their canoes in the ocean. Gardner also discusses the balance of personal intelligences required in Japanese society.

The theory of multiple intelligences shares some common ideas with other theories of individual differences such as Cronbach & Snow, Guilford, and Sternberg.

Scope/Application:

The theory of multiple intelligences has been focused mostly on child development although it applies to all ages. While there is no direct empirical support for the theory, Gardner (1983) presents evidence from many domains including biology, anthropology, and the creative arts and Gardner (1993a) discusses application of the theory to school programs. Gardner (1982, 1993b) explores the implications of the framework for creativity (see also Marks-Tarlow, 1995).

Example:

Gardner (1983, p 390) describes how learning to program a computer might involve multiple intelligences:

“Logical-mathematical intelligence seems central, because programming depends upon the deployment of strict procedures to solve a problem or attain a

goal in a finite number of steps. Linguistic intelligence is also relevant, at least as long as manual and computer languages make use of ordinary language…an individual with a strong musical bent might best be introduced to programming by attempting to program a simple musical piece (or to master a program that composes). An individual with strong spatial abilities might be initiated through some form of computer graphics – and might be aided in the task of programming through the use of a flowchart or some other spatial diagram. Personal intelligences can play important roles. The extensive planning of steps and goals carried out by the individual engaged in programming relies on intrapersonal forms of thinking, even as the cooperation needed for carrying a complex task for learning new computational skills may rely on an individual's ability to work with a team. Kinesthetic intelligence may play a role in working with the computer itself, by facilitating skill at the terminal…"

Principles:

1. Individuals should be encouraged to use their preferred intelligences in learning.

2. Instructional activities should appeal to different forms of intelligence.

3. Assessment of learning should measure multiple forms of intelligence.

References:

Gardner, H. (1982). Art, Mind and Brain. New York: Basic Books

Gardner, H. (1983). Frames of Mind. New York: Basic Books

Gardner, H. (1993a). Multiple Intelligences: The Theory in Practice. NY: Basic Books

Gardner, H. (1993b). Creating Minds. NY: Basic Books

Marks-Tarlow, T. (1995). Creativity inside out: Learning through multiple intelligences. Reading, MA: Addison-Wesley.

Multiple Intelligence Learning Styles

From Multiple Intelligences in the Classroom by Thomas Armstrong. Association for Supervision and Curriculum Development, 1994, page 27.

Learners who are strongly:	Think…	Love…	Need…
Linguistic	In words	Reading, writing, telling stories, playing word games, etc.	Books, tapes, writing tools, paper, diaries, dialogue, discussion, debate, stories, etc.
Logical-Mathematical	By reasoning	Experimenting, questioning, figuring out logical puzzles, calculating, etc.	Things to explore and think about, science materials manipulatives, trips to the planetarium and science museum, etc.
Spatial	Images and pictures	Designing, drawing, visualizing, doodling, etc.	Art, LEGOs, video, movies, slides, imagination games, mazes, puzzles, illustrated books, trips to art museums, etc.
Bodily Kinesthetic	Through somatic sensations	Dancing, running, jumping, building, touching, gesturing, etc.	Role play drama, movement, things to build, sports and physical games, tactile experiences, hands-on learning, etc.
Musical	Via rhythms and melodies	Singing, whistling, humming, tapping feet and hands, listening, etc.	Sing-alongs, trips to concerts, music playing, musical instruments
Interpersonal	By bouncing ideas off other people	Leading, organizing, relating, manipulating, mediating, partying, etc.	Friends, group games, social gatherings, community events, clubs, mentor/apprenticeships
Intrapersonal	Deeply inside themselves	Setting goals, meditating, dreaming, being quiet, planning	Secret places, time alone, self-paced projects, choices, etc.

LEADERSHIP
Theory, and Practice

LEADERSHIP DEFINED

There are a multitude of ways to finish the sentence "Leadership is…" In fact, as Stogdill (1974) points out in a review of leadership research, there are almost as many different definitions of *leadership* as there are people who have tried to define it (p.7). It is much like the words *democracy, love*, and *peace.* Although each of us intuitively knows what he or she means by such words, the words can have different meanings for different people. As soon as we try to define "leadership," we immediately discover that leadership has many different meanings.

In the past 50 years, there have been as many as 65 different classification systems developed to define the dimensions of leadership (Fleishman et al., 1991). One such classification system, directly related to our discussion, is the scheme proposed by Bass (1990, pp. 11-20). He suggested that some definitions view leadership as the *focus of group processes.* From this perspective, the leader is at the center of group change and activity and embodies the will of the group. Another group of definitions conceptualizes leadership from a *personality perspective*, which suggest that leadership is a combination of special traits or characteristics that individuals possess and that enable them to induce other to accomplish tasks. Other approaches to leadership have defined it as an *act* or *behavior* – the things leaders do to bring about change in a group.

In addition, leadership has been defined in terms of the *power relationship* that exists between leaders and followers. Still others view leadership as an *instrument of goal achievement* in helping group members achieve their goals and meet their needs. This view includes leadership that transforms followers through vision setting, role modeling, and individualized attention.

Leadership is a process whereby an individual influences a group of individuals to achieve a common goal.

Despite the multitude of ways that leadership has been conceptualized, several components can be identified as central to the phenomenon of leadership. They are (a) leadership is a process, (b) leadership involves influence, (c) leadership occurs within a group context, and (d) leadership involves goal attainment. Based on these components, the following definition of leadership will be used in this text. *Leadership is a process whereby an individual influences a group of individuals to achieve a common goal.*

Defining leadership as a process means that it is not a trait or characteristic that resides in the leader, but is a transactional event that occurs between the leader and his or her followers. *Process* implies that a leader affects and is affected by followers. It emphasizes that leadership is not a linear, one-way event but rather an interactive event.

When leadership is defined in this manner, it becomes available to everyone. It is not restricted to only the formally designated leader in a group.

Leadership involves influence; it is concerned with how the leader affects followers. Influence is the sine qua non of leadership. Without influence, leadership does not exist.

Leadership occurs in *groups*. Groups are the context in which leadership takes place. Leadership involves influencing a group of individuals who have a common purpose. This can be a small task group, a community group, or a large group encompassing an entire organization. Leadership training programs that teach people to lead themselves are not considered a part of leadership within the definition that is set forth in this discussion.

Leadership includes attention to *goals*. This means that leadership has to do with directing a group of individuals toward accomplishing some task or end. Leaders direct their energies toward individuals who are trying to achieve something together. Therefore, leadership occurs and has its effects in contexts where individuals are moving toward a goal.

Throughout this text, the people who engage in leadership will be referred to as leaders and those individuals toward who leadership is directed will be referred to as *followers*. Both leaders and followers are involved together in the leadership process. Leaders need followers and followers need leaders (Burns, 1978; Heller & Van Til, 1983; Hollander, 1992; Jago, 1982). Although leaders and followers are closely linked, it is the leader who often initiates the relationship, creates the communication linkages, and carries the burden for maintaining the relationship.

In our discussion of leaders and followers, attention will be directed toward follower issues as well as leader issues. As Burns (1978) has pointed out, discussions of leadership are sometimes viewed as elitist because of the implied power and importance frequently ascribed to leaders in the leader-follower relationship. Leaders are not above followers or better than followers. Leaders and followers need to be understood in relation to each other (Hollander, 1992) and collectively (Burns, 1978). They are in the leadership relationship together – two sides of the same coin (Rost, 1991).

LEADERSHIP DESCRIBED

In addition to definitional issues, it is also important to discuss several other questions pertaining to the nature of leadership. In the following section, we will address questions such as how leadership as a trait differs from leadership as a process; how appointed leadership differs from emergent leadership; and how the concepts of power, coercion, and management differ from leadership.

TRAIT APPROACH

Of interest to scholars throughout the 20th century, the trait approach was one of the first systematic attempts to study leadership. In the early 1900s, leadership traits were studied to determine what made certain people great leaders. The theories that were developed were called "great man" theories because they focused on identifying the innate qualities and characteristics possessed by great social, political, and military leaders (e.g., Thomas Jefferson, Abraham Lincoln, and Mohandas Gandhi). It was believed that people were born with these traits and only the "great" people possessed them. During this time, research concentrated on determining the specific traits that clearly differentiated leaders from followers (Bass, 1990; Jago, 1982).

In the mid-1900s, the trait approach was challenged by research that questioned the universality of leadership traits. In a major review in 1948, Stogdill suggested that no consistent set of traits differentiated leaders from nonleaders across a variety of situations. An individual with leadership traits who was a leader in one situation might not be a leader in another situation. Rather than being a quantity that individuals possessed, leadership was reconceptualized as a relationship between people in a social situation (Stogdill, 1948). Personal factors related to leadership continued to be important, but researchers contended that these factors were to be considered as relative to the requirements of the situation.

In recent years, there has been resurgence in interest in the trait approach – in explaining how traits influence leadership (Bryman, 1992). For example, based on a new analysis of much of the previous trait research, Lord, DeVader, and Alliger (1986) found that personality traits were strongly associated with individuals' perceptions of leadership. Similarly, Kirkpatrick and Locke (1991) have gone so far as to claim that effective leaders are actually distinct types of people in several key respects. Further evidence of renewed interest in the trait approach can be seen in the current emphasis given by many researchers to visionary and charismatic leadership (see Bass, 1990; Bennis & Nanus, 1985; Nadler & Tushman, 1989; Zaleznik, 1977).

In short, the trait approach is alive and well. It began with an emphasis on identifying the qualities of great persons; next, it shifted to include the impact of situations on leadership; and most currently, it has shifted back to reemphasize the critical role of traits in effective leadership.

Although the research on traits spanned the entire 20th century, a good overview of this approach is found in two surveys completed by Stogdill (1948, 1974). In his first survey, Stogdill analyzed and synthesized more than 124 trait studies that were conducted between 1904 and 1947. In his second study, he analyzed another 163 studies that were completed between 1948 and 1970. By taking a closer look at each of these review, a clearer picture can be obtained of how individuals' traits contribute to the leadership process.

Stogdill's first survey identified a group of important leadership traits that were related to how individuals in various groups became leaders. His results showed that the average individual in the leadership role is different from an average group member in the following ways: (a) intelligence, (b) alertness, (c) insight, (d) responsibility, (e) initiative, (f) persistence, (g) self-confidence, and (h) sociability.

The traits that leaders possess must be relevant to situations in which the leader is functioning.

The findings of Stogdill's first survey also indicated that an individual does not become a leader solely because he or she possesses certain traits. Rather, the traits that leaders possess must be relevant to situations in which the leader is functioning. As stated earlier, leaders in one situation may not necessarily be leaders in another situation. Findings showed that leadership was not a passive state but resulted from a working relationship between the leader and other group members. This research marked the beginning of a new approach to leadership research that focused on leadership behaviors and leadership situations.

Stodgill's second survey, published in 1974, analyzed 163 new studies and compared the findings of these studies to the findings he had reported in his first survey. The second survey was more balanced in its description of the role of traits and leadership. While the first survey implied that leadership is determined principally by situational factors and not personality factors, the second survey argued more moderately that both personality and situational factors were determinants of leadership. In essence, the second survey validated the original trait idea that the leader's characteristics are indeed a part of leadership.

Similar to the first survey, Stogdill's second survey also identified traits that were positively associated with leadership. The list included the following 10 characteristics: (a) drive for responsibility and task completion, (b) vigor and persistence in pursuit of goals, (c) venturesomeness and originality in problem solving, (d) drive to exercise initiative in social situations, (e) self-confidence and sense of personal identity, (f) willingness to accept consequences of decision and action, (g) readiness to absorb interpersonal stress, (h) willingness to tolerate frustration and delay, (i) ability to influence other persons' behavior, and (j) capacity to structure social interaction systems to the purpose at hand.

Mann (1959) conducted a similar study that examined more than 1,400 findings regarding personality and leadership in small groups, but he placed less emphasis on how situational factors influenced leadership. Although tentative in his conclusions, Mann suggested that personality traits could be used to discriminate leaders from nonleaders. His results identified leaders as strong in the following traits: intelligence, masculinity, adjustment, dominance, extroversion, and conservatism.

Lord et al. (1986) reassessed the findings put forward my Mann (1959), using a more sophisticated procedure called meta-analysis. Lord and coworkers found that intelligence, masculinity, and dominance were significantly related to how individuals perceived leaders. From their findings, the authors argued strongly that personality traits

could be used to make discriminations consistently across situations between leaders and nonleaders.

Yet another review argues for the importance of leadership traits: Kirkpatrick and Locke (1991) contended that "it is unequivocally clear that leaders are not like other people" (p. 59). From a qualitative synthesis of earlier research, Kirkpatrick and Locke postulated that leaders differ from nonleaders on six traits: drive, the desire to lead, honesty and integrity, self-confidence, cognitive ability, and knowledge of the business. According to these writers, individuals can be born with these traits, they can learn them, or both. It is these six traits that make up the "right stuff" for leaders. Kirkpatrick and Locke contend that leadership traits make some people different from others, and this difference needs to be recognized as an important part of the leadership process.

Studies of Leadership Traits and Characteristics				
Stogdill (1948)	Mann (1959)	Stogdill (1974)	Lord, DeVader, and Alliger (1986)	Kirkpatrick and Locke (1991)
Intelligence	**Intelligence**	**Achievement**	**Intelligence**	**Drive**
Alertness Insight Responsibility Initiative Persistence Self-confidence Sociability	Masculinity Adjustment Dominance Extroversion Conservatism	Persistence Insight Initiative Self-confidence Responsibility Cooperativeness Tolerance Influence Sociability	Masculinity Dominance	Motivation Integrity Confidence Cognitive ability Task knowledge

Table 2.1 Studies of Leadership Traits and Characteristics

Table 2.1 provides a summary of the traits and characteristics that were identified by researchers from the trait approach. It illustrates clearly the breadth of traits related to leadership. Table 2.1 also shows how difficult it is to select certain traits as definitive leadership traits; some of the traits appear in several of the survey studies, whereas others appear in only one or two studies. Regardless of the lack of precision in Table 2.1, however, it represents a general convergence of research regarding which traits are leadership traits.

What, then, can be said about trait research? What has a century of research on the trait approach given us that is useful? The answer is an extended list of traits that "would-be" leaders might hope to possess or wish to cultivate if they want to be perceived by others as leaders. Some of the traits that are central to this list include the following: intelligence, self-confidence, determination, integrity, and sociability.

SITUATIONAL APPROACH

One of the more widely recognized approaches to leadership is the situational approach, which was developed by Hersey and Blanchard (1969a) based on Reddin's (1967) 3-D management style theory. The situational approach has been refined and revised several times since its inception (see Blanchard, Zigarmi, & Nelson, 1993; Blanchard, Zigarmi, & Zigarmi, 1985; Hersey & Blanchard, 1977, 1988), and it has been used extensively in training and development for leadership in organizations throughout the country.

As the name of the approach implies, situational leadership focuses on leadership *in situations.* The basic premise of the theory is that different situations demand different kinds of leadership. From this perspective, to be an effective leader requires that an individual adapt his or her style to the demands of different situations.

Situational leadership stresses that leadership is composed of both a directive and a supportive dimension, and each has to be applied appropriately in a given situation. To determine what is needed in a particular situation, a leader must evaluate her or his employees and assess how competent and committed they are to perform a given task. Based on the assumption that employees' skills and motivation vary over time, situational leadership suggests that leaders should change the degree to which they are directive or supportive to meet the changing needs of subordinates.

In brief, the essence of situational leadership demands that a leader matches his or her style to the competence and commitment of the subordinates. Effective leaders are those who can recognize what employees need and then adapt their own style to meet those needs.

The situational approach demands that leaders demonstrate a strong degree of flexibility.

How does the Situational Approach work?

The situational approach is constructed around the idea that employees move forward and backward along the developmental continuum – a continuum that represents the relative competence and commitment of subordinates. For leaders to be effective, it is essential that they *diagnose* where subordinates are on the developmental continuum and adapt their leadership styles so they directly match their style to the development level of subordinates.

In a given situation, the first task for a leader is to diagnose the nature of the situation. Questions such as the following need to be addressed: What is the task that subordinates are being asked to perform? How complicated is the task? Are the subordinates sufficiently skilled to accomplish the task? Do they have the desire to complete the job once they start it? Answers to these questions will help leaders to identify correctly the specific developmental level at which their subordinates are functioning. For example, new employees who are very excited but lack understanding of job requirements would be identified as D1-level employees. Conversely, seasoned workers with proven abilities and great devotion to a company would be identified as functioning at the D4 level.

Having identified the correct development level, the second task for the leader is to adapt his or her style to the prescribed leadership style. There is a one-to-one relationship between the development level of subordinates (D1, D2, etc.) and the leader's style (S1, S2, etc.). For example, if subordinates are at the first level of development, D1, the leader needs to adopt a high directive and low supportive leadership style (S1). If subordinates are more advanced and at the second development level, D2, the leader needs to adopt a coaching style (S2). For each level of development there is a specific style of leadership that the leader should adopt.

Because subordinates move back and forth along the development continuum, it is imperative for leaders to be flexible in their leadership behavior. Subordinates may move from one development level to another rather quickly over a short period (e.g., a day or a week), as well as more slowly on tasks that may proceed over much longer periods of time (e.g., a month). Leaders cannot use the same style in all contexts; rather, they need to adapt their style to subordinates and their unique situations. Unlike the trait or contingency approaches, which argue a fixed style for leaders, the situational approach demands that leaders demonstrate a strong degree of flexibility.

TRANSFORMATIONAL LEADERSHIP

One of the current approaches to leadership that has been the focus of much research since the early 1980s is the transformational approach. In fact, it has grown in popularity since the first edition of this book was published. Transformational leadership is part of the "New Leadership" paradigm (Bryman, 1992). As its name implies, transformational leadership is a process that changes and transforms individuals. It is concerned with values, ethics, standards, and long-term goals. Transformational leadership involves assessing followers' motives, satisfying their needs, and treating them as full human beings. It is a process that subsumes charismatic and visionary leadership.

Transformational leadership is an encompassing approach that can be used to describe a wide range of leadership, from very specific attempts to influence followers on a one-to-one level to very broad attempts to influence whole organizations and even entire cultures. Although the transformational leader plays a pivotal role in precipitating change, followers and leaders are inextricably bound together in the transformation process.

TRANSFORMATIONAL LEADERSHIP DEFINED

The term *transformation leadership* was first coined by Downton (1973); however, its emergence as an important approach to leadership began with a classic work by the political sociologist James MacGregor Burns titled *Leadership* (1978). In his work, Burns attempts to link the roles of leadership and followership. He writes of leaders as those individuals who tap the motives of followers in order to better reach the goals of leaders and followers (p. 18). For Burns, leadership is quite different from wielding power because it is inseparable from followers' needs.

Burns distinguishes between two types of leadership: transactional and transformational. *Transactional leadership* refers to the bulk of leadership models, which focus on the exchanges that occur between leaders and their followers. Politicians who win votes by promising no new taxes are demonstrating transactional leadership. Similarly, managers who offer promotions to employees who surpass their goals are exhibiting transactional leadership. In the classroom, teachers are being transactional when they give students a grade for work completed. The exchange dimension of transactional leadership is very common and can be observed at many levels throughout all types of organizations.

In contrast to transactional leadership, *transformational leadership* refers to the process whereby an individual engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower. This type of leader is attentive to the needs and motives of followers and tries to help followers reach their fullest potential. Burns point to Mohandas Gandhi as a classic example of transformational leadership. Gandhi raised the hopes and demands of millions of his people and in the process was changed himself. A more recent example of transformational leadership can be observed in the life of Ryan White. Than White raised the American people's awareness about AIDS and in the process became a spokesperson for increasing government support of AIDS research. In the organizational world, an example of transformational leadership would be a manager who attempts to change his or her company's corporate values to reflect a more human standard of fairness and justice. In the process, both the manager and followers may emerge with a stronger and higher set of moral values.

How Does The Transformational Approach Work?

The transformational approach to leadership is a broad-based perspective that encompasses many facets and dimensions of the leadership process. In general, it describes how leaders can initiate, develop, and carry out significant changes in organizations. Although not definitive, the steps followed by transformational leaders usually take the following form.

Transformational leaders set out to empower followers and nurture them in change. They attempt to raise the consciousness in individuals and to get them to transcend their own self-interests for the sake of others.

To create change, transformational leaders become strong role models for their followers. They have a highly developed set of moral values and a self-determined sense of identity (Avolio & Gibbons, 1988). They are confident, competent, and articulate, and they express strong ideals. They listen to followers and are not intolerant of opposing viewpoints. A spirit of cooperation often develops between these leaders and their followers. Followers want to emulate transformational leaders because they learn to trust them and believe in the ideas for which they stand.

It is common for transformational leaders to create a vision. The vision emerges from the collective interests of various individuals and units within an organization. The vision is

a focal point for transformational leadership. It gives the leader and the organization a conceptual map for where the organization is headed; it gives meaning and clarifies the organization's identity. Furthermore, the vision gives followers a sense of identity within the organization and also a sense of self-efficacy (Shamir et al., 1993).

Transformational leaders also act as change agents who initiate and implement new directions within organizations. They listen to opposing viewpoints within the organization as well as threats to the organization that may arise from outside the organization. Sometimes leaders generate instability themselves through nurturing the expression of discordant viewpoints or issues. Out of the uncertainty, transformational leaders create change.

To create change, transformational leaders become strong role models for their followers.

The transformational approach also requires that leaders become social architects. This means they make clear the emerging values and norms of the organization. They involve themselves in the culture of the organization and help shape its meaning. People need to know their roles and understand how they are contributors to the greater purposes of the organization. Transformational leaders are out front in interpreting and shaping for organizations the shared meanings that exist within them.

LEADERSHIP ETHICS / ETHICS DEFINED

From the perspective of Western tradition, the development of ethical theory dates back to Plato (427-347 B.C.) and Aristotle (384-322 B.C). The word *ethics* has its roots in the Greek word *ethos*, which means customs, conduct, or character. Ethics is concerned with the kinds of values and morals an individual or society finds desirable or appropriate. Furthermore, ethics is concerned with the "virtuousness" of individuals and their motives. Ethical theory provides a system of rules or principles that guide us in making decisions about what is "right or wrong" and "good or bad" in a particular situation. It provides a basis for understanding what it means to be a morally decent human being.

In regard to leadership, ethics has to do with what leaders *do* and who leaders *are*. It is concerned with the nature of leaders' behavior and their virtuousness. In any decision-making situation, ethical issues are either implicitly or explicitly involved. The choices that leaders make and how they respond in a given circumstance are informed and directed by their ethics.

HEIFETZ'S PERSPECTIVE ON ETHICAL LEADERSHIP

Based on his work as a psychiatrist and his observations and analysis of many world leaders (e.g., President Lyndon Johnson, Mohandas Gandhi, and Margaret Sanger), Ronald Heifetz (1994) has formulated a unique approach to ethical leadership; it emphasizes how leaders help followers to confront conflict and to effect changes from conflict. Heifetz's perspective is related to ethical leadership because it deals with values – values of workers, and the values of the organizations and communities in which they

work. According to Heifetz, leadership involves the use of authority to help followers deal with the conflicting values that emerge in rapidly changing work environments and social cultures. It is an ethical perspective because it "speaks" directly to the values of workers.

For Heifetz (1994), leaders must use authority to mobilize people to face tough issues. The leader provides a "holding environment" in which there is trust, nurturance, and empathy. Within a supportive context, followers can feel safe to confront and deal with hard problems. Specifically, leaders use authority to get people to pay attention to the issues, to act as a reality test regarding information, to manage and frame issues, to orchestrate conflicting perspectives, and to facilitate the decision-making process (Heifetz, 1994, p. 113). The leader's duties are to assist the follower in struggling with change and personal growth.

BURNS'S PERSPECTIVE ON ETHICAL LEADERSHIP

As discussed in Chapter 8, Burns's theory of transformational leadership places a strong emphasis on followers' needs, values, and morals. Transformational leadership involves attempts by leaders to move followers to higher standards of moral responsibility. This emphasis sets transformational leadership apart from most other approaches to leadership because it clearly states that leadership has a moral dimension.

Similar to Heifetz, Burns's (1978) perspective argues that is is important for leaders to engage themselves with followers and help them in their personal struggles regarding conflicting values. In the process, the connection between the leader and follower raises the level of morality in both the leader and the follower.

The origins of Burns's position on leadership ethics are rooted in the works of such writers as Abraham Maslow, Milton Rokeach, and Lawrence Kohlberg (Ciulla, 1998). The influence of these writers can be seen in how Burns emphasizes the leader's role to attend to the personal motivations and moral development of the follower. For Burns, it is the responsibility of the leader to help followers assess their own values and needs in order to raise them to a higher level of functioning, to a level that will stress values such as liberty, justice, and equality (Ciulla, 1998).

Burns's position on leadership as a morally uplifting process has not been without its critics. It has raised many questions. How do you choose what is a better set of moral values? Who is to say that some decisions represent higher moral ground than others? If leadership, by definition, requires raising individual moral functioning, does this mean that the leadership of a leader such as Adolf Hitler is not actually leadership? Notwithstanding these very legitimate questions, Burns's perspective on leadership is unique in how it makes ethics the central characteristic of the process. His writing has placed ethics at the forefront of scholarly discussions of what leadership means and how leadership should be carried out.

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Sometimes an article comes along and turns the conventional thinking on a subject not upside down but inside out. So it is with this landmark piece by Ronald Heifetz and Donald Laurie, published in January 1997. Not only do the authors introduce the breakthrough concept of adaptive change – the sort of change that occurs when people and organizations are forced to adjust to a radically altered environment – they challenge the traditional understanding of the leader-follower relationship.

Leaders are shepherds, goes the conventional thinking, protecting their flock from harsh surroundings. Not so, say the authors. Leaders who truly care for their followers expose them to the painful reality of their condition and demand that they fashion a response. Instead of giving people false assurance that their best is good enough, leaders insist that people surpass themselves. And rather than smoothing over conflicts, leaders force disputes to the surface.

Modeling the candor they encourage leaders to display, the authors don't disguise adaptive change's emotional costs. Few people are likely to thank the leader for stirring anxiety and uncovering conflict. But leaders who cultivate emotional fortitude soon learn what they can achieve when they maximize their followers' well-being instead of their comfort.

The Work of Leadership

Followers want comfort, stability, and solutions from their leaders. But that's babysitting. Real leaders ask hard questions and knock people out of their comfort zones. Then they manage the resulting distress.

By Ronald A. Heifetz and Donald L. Laurie

To stay alive, Jack Pritchard had to change his life. Triple bypass surgery and medication could help, the heart surgeon told him, but no technical fix could release Pritchard from his own responsibility for changing the habits of a lifetime. He had to stop smoking, improve his diet, get some exercise, and take time to relax, remembering to breathe more deeply each day. Pritchard's doctor could provide sustaining technical expertise and take supportive action, but only Pritchard could adapt his ingrained habits to improve his long-term health. The doctor faced the leadership task of mobilizing the patient to make critical behavioral changes; Jack Pritchard faced the adaptive work of figuring out which specific changes to make and how to incorporate them into his daily life.

Companies today face challenges similar to the ones that confronted Pritchard and his doctor. They face adaptive challenges. Changes in societies, markets, customers, competition, and technology around the globe are forcing organizations to clarify their values, develop new strategies, and learn new ways of operating. Often the toughest task for leaders in effecting change is mobilizing people throughout the organization to do adaptive work.

Adaptive work is required when our deeply held beliefs are challenged, when the values that made us successful become less relevant, and when legitimate yet competing perspectives emerge. We see adaptive challenges every day at every level of the workplace – when companies restructure or reengineer, develop or implement strategy, or merge businesses. We see adaptive challenges when marketing has difficulty working with operations, when cross-functional teams don't work well, or when senior executives complain, "We don't seem to be able to execute effectively." Adaptive problems are often systemic problems with no ready answers.

Solutions to adaptive challenges reside not in the executive suite but in the collective intelligence of employees at all levels.

Mobilizing an organization to adapt its behaviors in order to thrive in new business environments is critical. Without such change, any company today would falter. Indeed, getting people to do adaptive work is the mark of leadership in a competitive world. Yet for most senior executives, providing leadership and not just authoritative expertise is extremely difficult. Why? We see two reasons. First, in order to make change happen, executives have to break a long-standing behavior pattern of their own: providing leadership in the form of solutions. This tendency is quite natural because many executives reach their positions of authority by virtue of their competence in taking responsibility and solving problems. But the locus of responsibility for problem solving when a company faces an adaptive challenge must shift to its people. Solutions to adaptive challenges reside not in the executive suite but in the collective intelligence of employees at all levels, who need to use one another as resources, often across boundaries, and learn their way to those solutions.

Second, adaptive change is distressing for the people going through it. They need to take on new roles, new relationships, new values, new behaviors and new approaches to work. Many employees are ambivalent about the efforts and sacrifices required of them. They often look to the senior executive to take problems off their shoulders. But those expectations have to be unlearned. Rather than fulfilling the expectation that they will provide answers, leaders have to ask tough questions. Rather than protecting people from outside threats, leaders should allow them to feel the pinch of reality in order to stimulate them to adapt. Instead of orienting people to their current roles, leaders must disorient them so that new relationships can develop. Instead of maintaining norms,

leaders have to challenge “the way we do business” and help others distinguish immutable values from historical practices that must go.

Drawing on our experience with managers from around the world, we offer six principles for leading adaptive work: “getting on the balcony,” identifying the adaptive challenge, regulating distress, maintaining disciplined attention, giving the work back to people, and protecting voices of leadership from below. We illustrate those principles with an example of adaptive change at KPMG Netherlands, a professional services firm.

Get on the Balcony

Earvin “Magic” Johnson’s greatness in leading his basketball team came in part from his ability to play hard while keeping the whole game situation in mind, as if he stood in a press box or on a balcony above the field of play. Bobby Orr played hockey in the same way. Other players might fail to recognize the larger patterns of play that performers like Johnson and Orr quickly understand, because they are so engaged in the game that they get carried away by it. Their attention is captured by the rapid motion, the physical contact, the roar of the crowd, and the pressure to execute. In sports, most players simply may not see who is open for a pass, who is missing a block, or how the offense and defense work together. Players like Johnson and Orr watch these things and allow their observations to guide their actions.

Business leaders have to be able to view patterns as if they were on a balcony. It does them no good to be swept up in the field of action. Leaders have to see a context for change or create one. They should give employees a strong sense of the history of the enterprise and what’s good about its past, as well as an idea of the market forces at work today and the responsibility people must take in shaping the future. Leaders must be able to identify struggles over values and power, recognize patterns of work avoidance, and watch for the many other functional and dysfunctional reactions to change.

Without the capacity to move back and forth between the field of action and the balcony, to reflect day to day, moment to moment, on the many ways in which an organization’s habits can sabotage adaptive work, a leader easily and unwittingly becomes a prisoner of the system. The dynamics of adaptive change are far too complex to keep track of, let alone influence, if leaders stay only on the field of play.

We have encountered several leaders, some of whom we discuss in this article, who manage to spend much of their precious time on the balcony as they guide their organizations through change. Without that perspective, they probably would have been unable to mobilize people to do adaptive work. Getting on the balcony is thus a prerequisite for following the next five principles.

Identify the Adaptive Challenge

When a leopard threatens a band of chimpanzees, the leopard rarely succeeds in picking off a stray. Chimps know how to respond to this kind of threat. But when a man with an automatic rifle comes near, the routine responses fail. Chimps risk extinction in a world of poachers unless they figure out how to disarm the new threat. Similarly, when businesses cannot learn quickly to adapt to new challenges, they are likely to face their own form of extinction.

Consider the well-known case of British Airways. Having observed the revolutionary changes in the airline industry during the 1980's, then chief executive Colin Marshall clearly recognized the need to transform an airline nicknamed Bloody Awful by its own passengers into an exemplar of customer service. He also understood that this ambition would require more than anything else changes in values, practices, and relationships throughout the company. An organization whose people clung to functional silos and valued pleasing their bosses more than pleasing customers could not become "the world's favorite airline." Marshall needed an organization dedicated to serving people, acting on trust, respecting the individual, and making teamwork happen across boundaries. Values had to change throughout British Airways. People had to learn to collaborate and to develop a collective sense of responsibility for the direction and performance of the airline. Marshall identified the essential adaptive challenge: creating trust throughout the organization. He is one of the first executives we have known to make "creating trust" a priority.

To lead British Airways, Marshall had to get his executive team to understand the nature of the threat created by dissatisfied customers: Did it represent a technical challenge or an adaptive challenge? Would expert advice and technical adjustments within basic routines suffice, or would people throughout the company have to learn different ways of doing business, develop new competencies, and begin to work collectively?

Marshall and his team set out to diagnose in more detail the organization's challenges. They looked in three places. First, they listened to the ideas and concerns of people inside and outside the organization – meeting with crews on flights, showing up in the 350-person reservations center in New York, wandering around the baggage-handling area in Tokyo, or visiting the passenger lounge in whatever airport they happened to be in. Their primary questions were, Whose values, beliefs, attitudes, or behaviors would have to change in order for progress to take place? What shifts in priorities, resources, and power were necessary? What sacrifices would have to be made and by whom?

Second, Marshall and his team saw conflicts as clues – symptoms of adaptive challenges. The way conflicts across functions were being expressed were mere surface phenomena; the underlying conflicts had to be diagnosed. Disputes over seemingly technical issues such as procedures, schedules, and lines of authority were in fact proxies for underlying conflicts about values and norms.

Third, Marshall and his team held a mirror up to themselves, recognizing that they embodied the adaptive challenges facing the organization. Early in the transformation of British Airways, competing values and norms were played out on the executive team in dysfunctional ways that impaired the capacity of the rest of the company to collaborate across functions and units and make the necessary trade-offs. No executive can hide from the fact that his or her team reflects the best and the worst of the company's values and norms, and therefore provides a case in point for insight into the nature of the adaptive work ahead.

Thus, identifying its adaptive challenge was crucial in British Airways' bid to become the world's favorite airline. For the strategy to succeed, the company's leaders needed to understand themselves, their people, and the potential sources of conflict. Marshall recognized that strategy development itself requires adaptive work.

Regulate Distress

Adaptive work generates distress. Before putting people to work on challenges for which there are no ready solutions, a leader must realize that people can learn only so much so fast. At the same time, they must feel the need to change as reality brings new challenges. They cannot learn new ways when they are overwhelmed, but eliminating stress altogether removes the impetus for doing adaptive work. Because a leader must strike a delicate balance between having people feel the need to change and having them feel overwhelmed by change, leadership is a razor's edge.

A leader must attend to three fundamental tasks in order to help maintain a productive level of tension. Adhering to these tasks will allow him or her to motivate people without disabling them. First, a leader must create what can be called a *holding environment*. To use the analogy of a pressure cooker, a leader needs to regulate the pressure by turning up the heat while also allowing some steam to escape. If the pressure exceeds the cooker's capacity, the cooker can blow up. However, nothing cooks without some heat.

A leader must sequence and pace the work. Too often, senior managers convey that everything is important. They overwhelm and disorient the very people who need to take responsibility for the work.

In the early stages of a corporate change, the holding environment can be a temporary "place" in which a leader creates the conditions for diverse groups to talk to one another about the challenges facing them, to frame and debate issues, and to clarify the assumptions behind competing perspectives and values. Over time, more issues can be phased in as they become ripe. At British Airways, for example, the shift from an internal focus to a customer focus took place over four or five years and dealt with important issues in succession: building a credible executive team, communicating with a highly fragmented organization, defining new measures of performance and compensation, and

developing sophisticated information system. During that time, employees at all levels learned to identify what and how they needed to change.

Thus, a leader must sequence and pace the work. Too often, senior managers convey that everything is important. They start new initiatives without stopping other activities, or they start too many initiatives at the same time. They overwhelm and disorient the very people who need to take responsibility for the work.

Second, a leader is responsible for direction, protection, orientation, managing conflict, and shaping norms. (See the exhibit "Adaptive Work Calls for Leadership.") Fulfilling these responsibilities is also important for a manager in technical or routine situations. But a leader engaged in adaptive work uses his authority to fulfill them differently. A leader provides direction by identifying the organization's adaptive challenge and framing the key questions and issues. A leader protects people by managing the rate of change. A leader orients people to new roles and responsibilities by clarifying business realities and key values. A leader helps expose conflict, viewing it as the engine creativity and learning. Finally, a leader helps the organization maintain those norms that must endure and challenge those that need to change.

Third, a leader must have presence and poise; regulating distress is perhaps a leader's most difficult job. The pressures to restore equilibrium are enormous. Just as molecules bang hard against the walls of a pressure cooker, people bang up against leaders who are trying to sustain the pressures of tough, conflict-filled work. Although leadership demands a deep understanding of the pain of change – the fears and sacrifices associated with major readjustment – it also requires the ability to hold steady and maintain the tension. Otherwise, the pressure escapes and the stimulus for learning and change is lost.

Adaptive Work Calls for Leadership

Leader's Responsibilities	**Type of Situation**	
	Technical or Routine	*Adaptive*
Direction	Define problems and Provide solutions	Identify the adaptive challenge and frame key questions and issues
Protection	Shield the organization from external threats	Let the organization feel external pressures within a range it can stand

Orientation	Clarify roles and responsibilities	Challenge current roles and resist pressure to define new roles quickly
Managing Conflict	Restore order	Expose conflict or let it emerge
Shaping Norms	Maintain norms	Challenge unproductive norms

In the course of regulating people's distress, a leader faces several key responsibilities and may have to use his or her authority differently depending on the type of work situation.

A leader has to have the emotional capacity to tolerate uncertainty, frustration, and pain. He has to be able to raise tough questions without getting too anxious himself. Employees as well as colleagues and customers will carefully observe verbal and nonverbal cues to a leader's ability to hold steady. He needs to communicate confidence that he and they can tackle the tasks ahead.

Maintain Disciplined Attention

Different people within the same organization bring different experiences, assumptions, values, beliefs, and habits to their work. This diversity is valuable because innovation and learning are the products of differences. No one learns anything without being open to contrasting points of view. Yet managers at all levels are often unwilling – or unable – to address their competing perspectives collectively. They frequently avoid paying attention to issues that disturb them. They restore equilibrium quickly, often with work avoidance maneuvers. A leader must get employees to confront tough trade-offs in values, procedures, operating styles, and power.

That is as true at the top of the organization as it is in the middle or on the front line. Indeed, if the executive team cannot model adaptive work, the organization will languish. If senior managers can't draw out and deal with divisive issues, how will people elsewhere in the organization change their behaviors and rework their relationships? As Jan Carlzon, the legendary CEO of Scandinavian Airlines System (SAS), told us, "One of the most interesting missions of leadership is getting people on the executive team to listen to and learn from one another. Held in debate, people can learn their way to collective solutions when they understand one another's assumptions. The work of the leader is to get conflict out into the open and use it as a source of creativity."

Because work avoidance is rampant in organizations, a leader has to counteract distractions that prevent people from dealing with adaptive issues. Scapegoating, denial, focusing only on today's technical issues, or attacking individuals rather than the perspectives they represent – all forms of work avoidance – are to be expected when an organization undertakes adaptive work. Distractions have to be identified when they occur so that people will regain focus.

When sterile conflict takes the place of dialogue, a leader has to step in and put the team to work on reframing the issues. She has to deepen the debate with questions, unbundling the issues into their parts rather than letting conflict remain polarized and superficial. When people preoccupy themselves with blaming external forces, higher management, or a heavy workload, a leader has to sharpen the team's sense of responsibility for carving out the time to press forward. When the team fragments and individuals resort to protecting their own turf, leaders have to demonstrate the need for collaboration. People have to discover the value of consulting with one another and using one another as resources in the problem-solving process. For example, one CEO we know uses executive meetings, even those that focus on operational and technical issues, as opportunities to teach the team how to work collectively on adaptive problems.

Of course, only the rare manager intends to avoid adaptive work. In general, people feel ambivalent about it. Although they want to make progress on hard problems or live up to their renewed and clarified values, people also want to avoid the associated distress. Just as millions of U.S. citizens want to reduce the federal budget deficit, but not by giving up their tax dollars or benefits or jobs, so, too, managers may consider adaptive work a priority but have difficulty sacrificing their familiar ways of doing business. People need leadership to help them maintain their focus on the tough questions. Disciplined attention is the currency of leadership.

Give the Work Back to People

Everyone in the organization has special access to information that comes from his or her particular vantage point. Everyone may see different needs and opportunities. People who sense early changes in the marketplace are often at the periphery, but the organization will thrive if it can bring that information to bear on tactical and strategic decisions. When people do not act on their special knowledge, businesses fail to adapt.

All too often, people look up the chain of command, expecting senior management to meet market challenges for which they themselves are responsible. Indeed, the greater and more persistent distresses that accompany adaptive work make such dependence worse. People tend to become passive, and senior managers who pride themselves on being problem solvers take decisive action. That behavior restores equilibrium in the short term but

ultimately leads to complacency and habits of work avoidance that shield people from responsibility, pain, and the need to change.

Getting people to assume greater responsibility is not easy. Not only are many lower-level employees comfortable being told what to do, but many managers are accustomed to treating subordinates like machinery that requires control. Letting people take the initiative in defining and solving problems means that management needs to learn to support rather than control. Workers, for their part, need to learn to take responsibility.

Jan Carlzon encouraged responsibility taking at SAS by trusting others and decentralizing authority. A leader has to let people bear the weight of responsibility. "The key is to let them discover the problem," he said. "You won't be successful if people aren't carrying the recognition of the problem and the solution within themselves." To that end, Carlzon sought widespread engagement.

For example, in his first two years at SAS, Carlzon spent up to 50% of his time communicating directly in large meetings and indirectly in a host of innovative ways; through workshops, brainstorming sessions, learning exercises, newsletters, brochures, and exposure in the public media. He demonstrated through a variety of symbolic acts – for example, by eliminating the pretentious executive dining room and burning thousands of pages of manuals and handbooks – the extent to which rules had come to dominate the company. He made himself a pervasive presence, meeting with and listening to people both inside and outside the organization. He even wrote a book, *Moments of Truth* (HarperCollins, 1989), to explain his values, philosophy, and strategy. As Carlzon noted, "If no one else read it, at least my people would."

A leader also must develop collective self-confidence. Again, Carlzon said it well: "People aren't born with self-confidence. Even the most self-confident people can be broken. Self-confidence comes from success, experience, and the organization's environment. The leader's most important role is to instill confidence in people. They must dare to take risks and responsibility. You must back them up if they make mistakes."

Protect Voices of Leadership from Below

Giving a voice to all people is the foundation of an organization that is willing to experiment and learn. But, in fact, whistle-blowers, creative deviants, and other such original voices routinely get smashed and silenced in organizational life. They generate disequilibrium, and the easiest way for an organization to restore equilibrium is to neutralize those voices, sometimes in the name of teamwork and "alignment."

The voices from below are usually not as articulate as one would wish. People speaking beyond their

Management needs to learn to support rather than control. Workers, for their part, need to learn to take responsibility.

authority usually feel self-conscious and sometimes have to generate “too much” passion to get themselves geared up for speaking out. Of course, that often makes it harder for them to communicate effectively. They pick the wrong time and place, and often bypass proper channels of communication and lines of authority. But buried inside a poorly packaged interjection may lie an important intuition that needs to be teased out and considered. To toss it out for its bad timing, lack of clarity, or seeming unreasonableness is to lose potentially valuable information and discourage a potential leader in the organization.

That is what happened to David, a manager in a large manufacturing company. He had listened when his superiors encouraged people to look for problems, speak openly, and take responsibility. So he raised an issue about one of the CEO’s pet projects – an issue that was deemed “too hot to handle” and had been swept under the carpet for years. Everyone understood that it was not open to discussion, but David knew that proceeding with the project could damage or derail key elements of the company’s overall strategy. He raised the issue directly in a meeting with his boss and the CEO. He provided a clear description of the problem, a rundown of competing perspectives, and a summary of the consequences of continuing to pursue the project.

The CEO angrily squelched the discussion and reinforced the positive aspects of his pet project. When David and his boss left the room, his boss exploded: “Who do you think you are, with your holier-than-thou attitude?” He insinuated that David had never liked the CEO’s pet project because David hadn’t come up with the idea himself. The subject was closed.

David had greater expertise in the area of the project than either his boss or the CEO. But his two superiors demonstrated no curiosity, no effort to investigate David’s reasoning, no awareness that he was behaving responsibly with the interests of the company at heart. It rapidly became clear to David that it was more important to understand what mattered to the boss than to focus on real issues. The CEO and David’s boss together squashed the viewpoint of a leader from below and thereby killed his potential for leadership in the organization. He would either leave the company or never go against the grain again.

Leaders must rely on others within the business to raise questions that may indicate an impending adaptive challenge. They have to provide cover to people who point to the internal contradictions of the enterprise. Those individuals often have the perspective to provoke rethinking that people in authority do not. Thus, as a rule of thumb, when authority figures feel the reflexive urge to glare at or otherwise silence someone, they should resist. The urge to restore social equilibrium is quite powerful, and it comes on fast. One has to bet accustomed to getting on the balcony, delaying the impulse, and asking: What is this guy really talking about? Is there something we’re missing?

Doing Adaptive Work at KPMG Netherlands

The highly successful KPMG Netherlands provides a good example of how a company can engage in adaptive work. In 1994, Ruud Koedijk, the firm's chairman, recognized a strategic challenge. Although the auditing, consulting, and tax-preparation partnership was the industry leader in the Netherlands and was highly profitable, growth opportunities in the segments it served were limited. Margins in the auditing business were being squeezed as the market became more saturated, and competition in the consulting business was increasing as well. Koedijk knew that the firm needed to move into more profitable growth areas, but he didn't know what they were or how KPMG might identify them.

Koedijk and his board were confident that they had the tools to do the analytical strategy work: analyze trends and discontinuities, understand core competencies, assess their competitive position, and map potential opportunities. They were considerably less certain that they could commit to implementing the strategy that would emerge from their work. Historically, the partnership had resisted attempts to change, basically because the partners were content with the way things were. They had been successful for a long time, so they saw no reason to learn new ways of doing business, either from their fellow partners or from anyone lower down in the organization. Overturning the partners' attitude and its deep impact on the organization's culture posed an enormous adaptive challenge for KPMG.

Koedijk could see from the balcony that the very structure of KPMG inhibited change. In truth, KPMG was less a partnership than a collection of small fiefdoms in which each partner was a lord. The firm's success was the cumulative accomplishment of each of the individual partners, not the unified

IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

NANCY FADHL Plaintiff, v. POLICE DEPARTMENT OF THE CITY AND COUNTY OF SAN FRANCISCO Defendant.	)	NO. C 79-2119 TEH

FINDINGS OF FACT AND CONCLUSIONS OF LAW

This case concerning sex discrimination was brought under Title VII of the Civil Rights Act of 1964, 42 U.S.C. 2000e et seq. Trial to the Court commenced on March 9 1982, and post trial briefs on issues related to statistical evidence were submitted on June 11 1982. Based on the evidence presented at trial the Court makes the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. This suit was commended on August 13, 1979 by Nancy Fadhl against the Police Department of the City and County of San Francisco (hereinafter "Police Department"), pursuant to Title VII of the Civil Rights Act of 1964, as amended. Plaintiff Fadhl is a woman who alleges that she was terminated from employment with the Police Department because of her sex.

2. The Police Department is an employer within the meaning contained in Title VII of the Civil Rights Act of 1964.

3. Ms. Fadhl was hired by the Police Department to be a Q-2 police officer in January 1978.

4. Prior to her employment, plaintiff received an Associate of Arts degree in Criminology in preparation for her anticipated employment.

b. Ms. Fadhl satisfactorily completed the police academy portion of her training in April 1978 as a member of the 130th recruit class of the Police Department.

c. Of the forty-nine (49) recruits in the 130th recruit class, two (2), including the plaintiff, were female.

5. Following completion of her police academy training, the plaintiff entered the Field Training Program (hereinafter "F.T.O. Program"), in May 1978.

a. In 1978, the F.T.O. Program was a fourteen (14) week training program which all recruits were required to pass in order to be retained by the Police Department as Q-2 officers.

b. During the course of the F.T.O. Program, the recruit is trained and evaluated by a series of training officers and sergeants. The recruit's skills are evaluated in thirty (30) performance categories, which are sub-divided under the headings of "Appearance", "Attitude", "Knowledge", "Performance", and "Relationships." In each of the thirty categories, the recruit is graded on a scale from one (1) to seven (7), with a grade of four (4) representing the minimum acceptable grade.

c. A Field Training Officer (hereinafter F.T.O.) responsible for the day-to-day training and evaluation of the recruit completes a Daily Observation Report (hereinafter "D.O.R."). For each of the performance categories in which the F.T.O. actually observes the recruit's conduct on a given day, a grade on the one-to-seven scale is recorded on the D.O.R. The F.T.O. also records, in narrative form, the recruit's most acceptable and least acceptable performance of the day, as well as any additional comments. Alternate Week Evaluation Session forms (hereinafter "A.W.E.S.") are also completed by the

assigned F.T.O., who records the significant strengths and weaknesses of the recruit, as well as optional comments.

d. Each F.T.O. is supervised by a Field Training Sergeant. The Field Training Sergeant, in addition to training and evaluating the recruit, completes a Supervisor's Weekly Training Report (hereinafter S.W.T.R.) on which the recruit's average grade for the week in each performance category is recorded.

6. During her participation in the F.T.O. Program, plaintiff Fadhl rotated among the following regularly assigned F.T.O.'s and Field Training Sergeants *(we choose to identify the F.T.O.'s by initial and their full names have been deleted)* from the eighth through the twenty-eighth of the Program: Officer H.W. and Sergeant P.D.; from the twenty-ninth through the fifty-sixth day of the Program, Officer M.M. and Sergeant R.B.; beginning on the fifty-seventh day of the Program, Officer J.H. and Sergeant D.D. None of the Police Department employees who trained recruits in the program during plaintiff's participation was female.

7. On the sixty-ninth day of the F.T.O. Program, Ms. Fadhl was relieved of field duty, placed on station duty, and recommended for termination on the basis of unsatisfactory field performance. Plaintiff's employment with the defendant terminated on October 20, 1978.

8. Though the numerical grades given to the plaintiff on her D.O.R.'s and S.W.T.R.'s were designed to convey an objective assessment of Ms. Fadhl's performance, it is clear from the evidence of their application that the grades given were subject to the judgment of the person conducting the evaluation. As a result, the numerical grades received by the plaintiff were often inconsistent with either the guidelines themselves or with the training officer's narrative description of Ms. Fadhl's performance. For example, Officer W.'s description of Ms. Fadhl's most acceptable performance of the day on D.O.R. 22 characterizes that performance *(a report that she had written)* as "flawless", yet the grades given in the applicable performance categories are all fours (4's), indicating minimally acceptable performance. The discrepancy between plaintiff's

performance and the scores for her performance bears out the testimony concerning the potential for subjective grading inherent in the evaluation system used in the Program.

9. The F.T.O.'s and Field Training Sergeants who trained and evaluated the plaintiff did not apply the evaluation guidelines to Ms. Fadhl's performance in the same manner as they applied the guidelines to the performance of male recruits. The guidelines were applied less favorably to Ms. Fadhl than to male recruits. Male recruits, unlike plaintiff, received scores higher than those called for by the evaluation guidelines, including acceptable scores where unacceptable scores were called for. *The court then continues by citing several examples.*

10. Defendant's stated reason for terminating the plaintiff was Ms. Fadhl's failure to perform at a consistently acceptable level in various categories to include driving skill under normal and stress conditions, field performance under stress conditions, officer safety, use of physical skill to control conflict and use of common sense and good judgment. Plaintiff has demonstrated that her inability to perform was not the true reason for her termination, and that she has been the victim of intentional discrimination because of her sex.

11. At trial, several of plaintiff's training officers testified to events or circumstances not reflected in the narrative portions of Ms. Fadhl's written evaluations in an effort to explain the scores given to Ms. Fadhl's performance. Such post-hoc explanations and rationalizations of Ms. Fadhl's treatment while a recruit are entitled to little or no weight in light of the defendant's policy, testified to by Sergeant B., among others, of thorough contemporaneous documentation of recruit performance.

12. Several of the officers involved in the training and evaluation of the plaintiff expressed a bias against female officers.

a. F.T.O. W. described the plaintiff, in A.W.E.S. as "too much like a woman," and his testimony at trial in no way refuted the obvious inference to be drawn from this statement that being a successful police officer requires, at some level, not being female.

b. Field Training Sergeant D., criticizing plaintiff's "police attitude" in S.W.T.R. 4, stated that "After work she can become feminine again."

c. F.T.O. M, in A.W.E.S. 6, described Ms. Fadhl as "very ladylike at all times, which in the future may cause problems," and told plaintiff at one point not to cross her legs because it made her look "too much like a lady." As Officer M.'s testimony at trial revealed, the concern underlying these statements was officer safety. By referring to the plaintiff as "ladylike," rather than unsafe, F.T.O. M. communicated to Ms. Fadhl, as to the court, his belief that women police officers are not safe police officers.

13. It was shown through testimony that no effective mechanism for screening out of participation as F.T.O.'s and Field Training Sergeants individuals biased against women was employed by the Department.

14. Plaintiff Fadhl, as well as other officers who testified in her behalf *(there weren't many and some should have been described as "ex-officers" as previously terminated personnel were members of the group)* frequently received conflicting instructions from their F.T.O.'s concerning the definition of acceptable performance in the areas deemed by the Police Department to be critical to plaintiff's termination. For example, Ms. Fadhl received a score of 2 in category 20, Officer Safety, for placing a non-violent misdemeanor suspect in a patrol car without handcuffing him, though plaintiff's undisputed testimony at trial was that she was taught at the Police Academy that she had discretion in deciding whether to place handcuffs on non-violent non-felons. "Mixed messages" like this one made it difficult if not impossible for the plaintiff to know what was expected of her and to perform accordingly.

15. As defense witnesses involved with the F.T.O. Program testified, positive feedback from training officers and sergeants is important to a recruit's successful completion of the Program. Though the evidence shows that plaintiff's F.T.O.'s gave positive reinforcement to other recruits, the evidence supports the conclusion that Ms. Fadhl did not receive the same consideration.

16. The plaintiff testified and the court finds, despite the contrary testimony of F.T.O. H., that Officer H. implied that Ms. Fadhl could receive a

good performance evaluation if she granted him sexual favors. Such conduct is entirely inconsistent with the support acknowledged by the defendant to be important to successful completion of the F.T.O. Program.

17. Testimony from female officers trained by Ms. Fadhl's F.T.O.'s and Field Training Sergeants that these training officers were not hostile to them as women but were in fact supportive of their efforts as trainee recruits is not persuasive that these officers were not hostile to the plaintiff because she is female. The female officers who testified for the defendant were indeed a very impressive group. However the fact that such outstanding women succeeded in the F.T.O. Program under the tutelage of plaintiff's training officers reinforces rather than undermines the inference that must be drawn from plaintiff's evidence, i.e. that the plaintiff, because she is a woman, was subjected to a higher standard of performance than were male recruits.

18. The plaintiff has met her ultimate burden of persuasion that she has been the victim of intentional discrimination in showing the defendant's proferred explanation for her termination was pretext. The preponderance of the evidence shows that Ms. Fadhl was held to a more stringent standard of performance because she is a woman and thus her sex was a significant factor in her termination.

19. Plaintiff is entitled to a final judgment against defendant in the amount of $57,880.00 reflecting pay she would have received but for her wrongful termination by defendant, less income actually earned since the termination. Plaintiff shall also receive interest on this back pay. Plaintiff is also entitled to a final judgment against defendant for the additional sum of $14,080.00 per year as front pay for a period of two years, to enable plaintiff to acquire an education equal to that which she acquired in preparation for her employment by defendant, for a total of $28,160.00. An award of front pay is appropriate in a case such as this one where reinstatement is an inappropriate remedy because the antagonism generated by the litigation prohibits the re-establishment of an effective employment relationship. Plaintiff is entitled to her costs of suit, including reasonable attorneys' fees for representation in this case.

Dated: September 2, 1982

T.E.H.
United States District Judge

The Emotional Competence Framework

SOURCES: This generic competence framework distills findings from: *MOSAIC competencies for professional and administrative occupations* (U.S. Office of Personnel Management); Spencer and Spencer, *Competence at Work*; and top performance and leadership competence studies published in Richard H. Rosier (ed.), *The Competency Model Handbook, Volumes One and Two* (Boston : Linkage, 1994 and 1995), especially those from Cigna, Sprint, American Express, Sandoz Pharmaceuticals; Wisconsin Power and Light; and Blue Cross and Blue Shield of Maryland. Much of the material that follows comes from *Working with Emotional Intelligence* by Daniel Goleman (Bantam, 1998).

Personal Competence

SELF-AWARENESS

Emotional awareness: Recognizing one's emotions and their effects. People with this competence:

- Know which emotions they are feeling and why
- Realize the links between their feelings and what they think, do, and say
- Recognize how their feelings affect their performance
- Have a guiding awareness of their values and goals

Accurate self-assessment: Knowing one's strengths and limits. People with this competence are:

- Aware of their strengths and weaknesses
- Reflective, learning from experience
- Open to candid feedback, new perspectives, continuous learning, and self-development
- Able to show a sense of humor and perspective about themselves

Self-confidence: Sureness about one's self-worth and capabilities. People with this competence:

- Present themselves with self-assurance; have "presence"
- Can voice views that are unpopular and go out on a limb for what is right
- Are decisive, able to make sound decisions despite uncertainties and pressures

SELF-REGULATION

Self-control: Managing disruptive emotions and impulses. People with this competence:

- Manage their impulsive feelings and distressing emotions well
- Stay composed, positive, and unflappable even in trying moments
- Think clearly and stay focused under pressure

Trustworthiness: Maintaining standards of honesty and integrity. People with this competence:

- Act ethically and are above reproach
- Build trust through their reliability and authenticity
- Admit their own mistakes and confront unethical actions in others
- Take tough, principled stands even if they are unpopular

Conscientiousness: Taking responsibility for personal performance. People with this competence:

- Meet commitments and keep promises
- Hold themselves accountable for meeting their objectives
- Are organized and careful in their work

Adaptability: Flexibility in handling change. People with this competence:

- Smoothly handle multiple demands, shifting priorities, and rapid change
- Adapt their responses and tactics to fit fluid circumstances
- Are flexible in how they see events

Innovativeness: Being comfortable with and open to novel ideas and new information. People with this competence:

- Seek out fresh ideas from a wide variety of sources
- Entertain original solutions to problems
- Generate new ideas
- Take fresh perspectives and risks in their thinking

SELF-MOTIVATION

Achievement drive: Striving to improve or meet a standard of excellence. People with this competence:

- Are results-oriented, with a high drive to meet their objectives and standards
- Set challenging goals and take calculated risks
- Pursue information to reduce uncertainty and find ways to do better
- Learn how to improve their performance

Commitment: aligning with the goals of the group or organization. People with this competence:

- Readily make personal or group sacrifices to meet a larger organizational goal
- Find a sense of purpose in the larger mission
- Use the group's core values in making decisions and clarifying choices
- Actively seek out opportunities to fulfill the group's mission

Initiative: Readiness to act on opportunities. People with this competence:

- Are ready to seize opportunities
- Pursue goals beyond what's required or expected of them
- Cut through red tape and bend the rules when necessary to get the job done
- Mobilize others through unusual, enterprising efforts

Optimism: Persistence in pursuing goals despite obstacles and setbacks. People with this competence:

- Persist in seeking goals despite obstacles and setbacks
- Operate from hope of success rather than fear of failure
- See setbacks as due to manageable circumstance rather than a personal flaw

Social Competence

SOCIAL AWARENESS

Empathy: Sensing others' feelings and perspective, and taking an active interest in their concerns. People with this competence:

- Are attentive to emotional cues and listen well
- Show sensitivity and understand others' perspectives
- Help out based on understanding other people's needs and feelings

Service orientation: Anticipating, recognizing, and meeting customers' needs. People with this competence:

- Understand customers' needs and match them to services or products
- Seek ways to increase customers' satisfaction and loyalty
- Gladly offer appropriate assistance
- Grasp a customer's perspective, acting as a trusted advisor

Developing others: Sensing what others need in order to develop, and bolstering their abilities. People with this competence:

- Acknowledge and reward people's strengths, accomplishments, and development
- Offer useful feedback and identify people's needs for development
- Mentor, give timely coaching, and offer assignments that challenge and grow a person's skills

Leveraging diversity: Cultivating opportunities through diverse people. People with this competence:

- Respect and relate well to people from varied backgrounds
- Understand diverse worldviews and are sensitive to group differences
- See diversity as opportunity, creating an environment where diverse people can thrive
- Challenge bias and intolerance

Political awareness: Reading a group's emotional currents and power relationships. People with this competence:

- Accurately read key power relationships
- Detect crucial social networks
- Understand the forces that shape views and actions of clients, customers, or competitors
- Accurately read situations and organizational and external realities

Social Skills

Influence: Wielding effective tactics for persuasion. People with this competence:

- Are skilled at persuasion
- Fine-tune presentations to appeal to the listener
- Use complex strategies like indirect influence to build consensus and support
- Orchestrate dramatic events to effectively make a point

Communication: Sending clear and convincing messages. People with this competence:

- Are effective in give-and-take, registering emotional cues in attuning their message
- Deal with difficult issues straightforwardly

- Listen well, seek mutual understanding, and welcome sharing of information fully
- Foster open communication and stay receptive to bad news as well as good

Leadership: Inspiring and guiding groups and people. People with this competence:

- Articulate and arouse enthusiasm for a shared vision and mission
- Step forward to lead as needed, regardless of position
- Guide the performance of others while holding them accountable
- Lead by example

Change catalyst: Initiating or managing change. People with this competence:

- Recognize the need for change and remove barriers
- Challenge the status quo to acknowledge the need for change
- Champion the change and enlist others in its pursuit
- Model the change expected of others

Conflict management: Negotiating and resolving disagreements. People with this competence:

- Handle difficult people and tense situations with diplomacy and tact
- Spot potential conflict, bring disagreements into the open, and help deescalate
- Encourage debate and open discussion
- Orchestrate win-win solutions

Building bonds: Nurturing instrumental relationships. People with this competence:

- Cultivate and maintain extensive informal networks
- Seek out relationships that are mutually beneficial
- Build rapport and keep others in the loop
- Make and maintain personal friendships among work associates

Collaboration and cooperation: Working with others toward shared goals. People with this competence:

- Balance a focus on task with attention to relationships
- Collaborate, sharing plans, information, and resources
- Promote a friendly, cooperative climate
- Spot and nurture opportunities for collaboration

Team capabilities: Creating group synergy in pursuing collective goals. People with this competence:

- Model team qualities like respect, helpfulness, and cooperation
- Draw all members into active and enthusiastic participation
- Build team identity, esprit de corps, and commitment
- Protect the group and its reputation; share credit

WHAT MAKES A LEADER?
By Daniel Goleman

The Idea in Brief

Asked to define the ideal leader, many would emphasize traits such as intelligence, toughness, determination, and vision. Often left off the list are softer, more personal qualities – but recent studies indicate that they are also essential. Although a certain degree of analytical and technical skill is a minimum requirement for success, what is called "emotional intelligence" may be the key attribute that distinguishes outstanding performers from those who are merely adequate. For example, in a 1996 study of a global food and beverage company, where senior managers had a certain critical mass of emotional intelligence, their divisions outperformed yearly earnings goals by 20%. Division leaders without that critical mass underperformed by almost the same amount.

The Idea at Work

There are five components to emotional intelligence: self-awareness, self-regulation, motivation, empathy, and social skill. All five traits sound desirable to just about everyone. But organizations too often implicitly discourage their people from developing them.

Self-Management Skills

1. *Self-awareness*. Emotional intelligence begins with this trait. People with a high degree of self-awareness know their weaknesses and aren't afraid to talk about them. Someone who understands that he works poorly under tight deadlines, for example, will work hard to plan his time carefully, and will let his colleagues know why. Many executives looking for potential leaders mistake such candor for "wimpiness."

2. *Self-regulation*. This attribute flows from self-awareness, but runs in a different direction. People with this trait are able to control their impulses or even channel them for good purposes.

3. *Motivation*. A passion for achievement for its own sake – not simply the ability to respond to whatever incentives a company offers – is the kind of motivation that is essential for leadership.

The Ability to Relate to Others

4. *Empathy*. In addition to self-management skills, emotional intelligence requires a facility for dealing with others. And that starts with empathy – taking into account the feelings of others when making decisions – as opposed to taking on everyone's troubles.

EXAMPLE:
Consider two division chiefs at a company forced to make layoffs. One manager gave a hard-hitting speech emphasizing the number of people who would be fired. The other manager, while not hiding the bad news, took into account his people's anxieties. He promised to keep them informed and to treat everyone fairly. Many executives would have refrained from such a show of consideration, lest they appear to lack toughness. But the tough manager demoralized his talented people – most of whom ended up leaving his division voluntarily.

5. *Social skill*. All the preceding traits culminate in this fifth one: the ability to build rapport with others, to get them to cooperate, to move them in a direction you desire. Managers who simply try to be sociable – while lacking the other components of emotional intelligence – are likely to fail. Social skill, by contrast, is friendliness with a purpose.

Can you boost your emotional intelligence? Absolutely – but not with traditional training programs that target the rational part of the brain. Extended practice, feedback from colleagues, and your own enthusiasm for making the change are essential to becoming an effective leader.

IQ and technical skills are important, but emotional intelligence is the sine qua non of leadership.

What Makes a Leader?

By Daniel Goleman

Every businessperson knows a story about a highly intelligent, highly skilled executive who was promoted into a leadership position only to fail at the job. And they also know a story about someone with solid – but not extraordinary – intellectual abilities and technical skills who was promoted into a similar position and then soared.

Such anecdotes support the widespread belief that identifying individuals with the "right stuff" to be leaders is more art than science. After all, the personal styles of superb leaders vary: some leaders are subdued and analytical; others shout their manifestos from the mountaintops. And just as important, different situations call for different types of leadership. Most mergers need a sensitive negotiator at the helm, whereas many turnarounds require a more forceful authority.

I have found, however, that the most effective leaders are alike in one crucial way: they all have a high degree of what has come to be known as emotional intelligence. It's not that IQ and technical skills are irrelevant. They do matter, but mainly as "threshold capabilities"; that is, they are the entry-level requirements for executive positions. But my research, along with other recent studies, clearly shows that emotional intelligence is the sine qua non of leadership. Without it, a person can have the best training in the world, an incisive, analytical mind, and an endless supply of smart ideas, but he still won't make a great leader.

Effective leaders are alike in one crucial way: they all have a high degree of emotional intelligence.

In the course of the past year, my colleagues and I have focused on how emotional intelligence operates at work. We have examined the relationship between emotional intelligence and effective performance, especially in leaders. And we have observed how emotional intelligence shows itself on the job. How can you tell if someone has high emotional intelligence, for example, and how can you recognize it in yourself? In the following pages, we'll explore these questions, taking each of the components of emotional intelligence – self-awareness, self-regulation, motivation, empathy, and social skill – in turn.

Evaluating Emotional Intelligence

Most large companies today have employed trained psychologists to develop what are known as "competency models" to aid them in identifying, training, and

promoting likely stars in the leadership firmament. The psychologists have also developed such models for lower-level positions. And in recent years, I have analyzed competency models from 188 companies, most of which were large and global and included the likes of Lucent Technologies, British Airways, and Credit Suisse.

In carrying out this work, my objective was to determine which personal capabilities drove outstanding performance within these organizations, and to what degree they did so. I grouped capabilities into three categories: purely technical skills like accounting and business planning; cognitive abilities like analytical reasoning; and competencies demonstrating emotional intelligence such as the ability to work with others and effectiveness in leading change.

To create some of the competency models, psychologists asked senior managers at the companies to identify the capabilities that typified the organization's most outstanding leaders. To create other models, the psychologists used objective criteria such as a division's profitability to differentiate the star performers at senior levels within their organizations from the average ones. Those individuals were then extensively interviewed and tested, and their capabilities were compared. This process resulted in the creation of lists of ingredients for highly effective leaders. The lists ranged in length from 7 to 15 items and included such ingredients as initiative and strategic vision.

When I analyzed all this date, I found dramatic results. To be sure, intellect was a driver of outstanding performance. Cognitive skills such as big-picture thinking and long-term vision were particularly important. But when I calculated the ratio of technical skills, IQ, and emotional intelligence as ingredients of excellent performance, emotional intelligence proved to be twice as important as the others for jobs at all levels.

Moreover, my analysis showed that emotional intelligence played an increasingly important role at the highest levels of the company, where differences in technical skills are of negligible importance. In other words, the higher the rank of a person considered to be a star performer, the more emotional intelligence capabilities showed up as the reason for his or her effectiveness. When I compared star performers with average ones in senior leadership positions, nearly 90% of the difference in their profiles was attributable to emotional intelligence factors rather than cognitive abilities.

Other researchers have confirmed that emotional intelligence not only distinguishes outstanding leaders but can also be linked to strong performance. The findings of the late David McClelland, the renowned researcher in human and organizational behavior, are a good example. In a 1996 study of a global food and beverage company, McClelland found that when senior managers had a critical mass of emotional intelligence capabilities, their divisions outperformed

yearly earnings goals by 20%. Meanwhile, division leaders without that critical mass underperformed by almost the same amount. McClelland's findings, interestingly, held as true in the company's U.S. divisions as in its divisions in Asia and Europe.

In short, the numbers are beginning to tell us a persuasive story about the link between a company's success and the emotional intelligence of its leaders. And just as important, research is also demonstrating that people can, if they take the right approach, develop their emotional intelligence.

The Five Components of Emotional Intelligence at Work

	Definition	Hallmarks
Self-Awareness	The ability to recognize and understand your moods, emotions, and drives, as well as their effect on others.	Self-confidence Realistic self-assessment Self-deprecating sense of humor
Self-Regulation	The ability to control or redirect disruptive impulses and moods. The propensity to suspend judgment; to think before acting.	Trustworthiness, integrity Comfort with ambiguity Openness to change
Motivation	A passion to work for reasons that go beyond money or status. A propensity to pursue goals with energy and persistence.	Strong drive to achieve Optimism, even in the face of failure Organizational commitment
Empathy	The ability to understand the emotional makeup of other people. Skill in treating people according to their emotional reactions.	Expertise in building and retaining talent Cross-cultural sensitivity Service to clients and customers
Social Skill	Proficient in managing relation-ships and building networks. An ability to find common ground and build rapport.	Effectiveness in leading change Persuasiveness Expertise in building and leading teams

Self-Awareness

Self-awareness is the first component of emotional intelligence – which makes sense when one considers that the Delphic oracle gave the advice to "know thyself" thousands of years ago. Self-awareness means having a deep

understanding of one's emotions, strengths, weaknesses, needs, and drives. People with strong self-awareness are neither overly critical nor unrealistically hopeful. Rather, they are honest – with themselves and with others.

People who have a high degree of self-awareness recognize how their feelings affect them, other people, and their job performance. Thus a self-aware person who knows that tight deadlines bring out the worst in him plans his time carefully and gets his work done well in advance. Another person with high self-awareness will be able to work with a demanding client. She will understand the client's impact on her moods and the deeper reasons for her frustration. "Their trivial demands take us away from the real work that needs to be done," she might explain. And she will go one step further and turn her anger into something constructive.

Self-awareness extends to a person's understanding of his or her values and goals. Someone who is highly self-aware knows where he is headed and why; so, for example, he will be able to be firm in turning down a job offer that is tempting financially but does not fit with his principles or long-term goals. A person who lacks self-awareness is apt to make decisions that bring on inner turmoil by treading on buried values. "The money looked good so I signed on," someone might say two years into a job, "but the work means so little to me that I'm constantly bored." The decisions of self-aware people mesh with their values; consequently, they often find work to be energizing.

How can one recognize self-awareness? First and foremost, it shows itself as candor and an ability to assess oneself realistically. People with high self-awareness are able to speak accurately and openly – although not necessarily effusively or confessionally – about their emotions and the impact they have on their work. For instance, one manager I know of was skeptical about a new personal-shopper service that her company, a major department-store chain, was about to introduce. Without prompting from her team or her boss, she offered them an explanation: "It's hard for me to get behind the rollout of this service," she admitted, "because I really wanted to run the project, but I wasn't selected. Bear with me while I deal with that." The manager did indeed examine her feelings; a week later, she was supporting the project fully.

Self-aware job candidates will be frank in admitting to failure – and will often tell their tales with a smile.

Such self-knowledge often shows itself in the hiring process. Ask a candidate to describe a time he got carried away by his feelings and did something he later regretted. Self-aware candidates will be frank in admitting to failure – and will often tell their tales with a smile. One of the hallmarks of self-awareness is a self-deprecating sense of humor.

Self-awareness can also be identified during performance reviews. Self-aware people know – and are comfortable talking about – their limitations and strengths, and they often demonstrate a thirst for constructive criticism. By contrast, people with low self-awareness interpret the message that they need to improve as a threat or a sign of failure.

Self-aware people can also be recognized by their self-confidence. They have a firm grasp of their capabilities and are less likely to set themselves up to fail by, for example, overstretching on assignments. They know, too, when to ask for help. And the risks they take on the job are calculated. They won't ask for a challenge that they know they can't handle alone. They'll play to their strengths.

Consider the actions of a mid-level employee who was invited to sit in on a strategy meeting with her company's top executives. Although she was the most junior person in the room, she did not sit there quietly, listening in awestruck or fearful silence. She knew she had a head for clear logic and the skill to present ideas persuasively, and she offered cogent suggestions about the company's strategy. At the same time, her self-awareness stopped her from wandering into territory where she knew she was weak.

Despite the value of having self-aware people in the workplace, my research indicates that senior executives don't often give self-awareness the credit it deserves when they look for potential leaders. Many executives mistake candor about feelings for "wimpiness" and fail to give due respect to employees who openly acknowledge their shortcomings. Such people are too readily dismissed as "not tough enough" to lead others.

In fact, the opposite is true. In the first place, people generally admire and respect candor. Further, leaders are constantly required to make judgment calls that require a candid assessment of capabilities – their own and those of others. Do we have the management expertise to acquire a competitor? Can we launch a new product within six months? People who assess themselves honestly – that is, self-aware people – are well suited to do the same for the organizations they run.

Self-Regulation

Biological impulses drive our emotions. We cannot do away with them – but we can do much to manage them. Self-regulation, which is like an ongoing inner conversation, is the component of emotional intelligence that frees us from being prisoners of our feelings. People engaged in such a conversation feel bad moods and emotional impulses just as everyone else does, but they find ways to control them and even to channel them in useful ways.

Imagine an executive who has just watched a team of his employees present a botched analysis to the company's board of directors. In the gloom that follows,

the executive might find himself tempted to pound on the table in anger or kick over a chair. He could leap up and scream at the group. Or he might maintain a grim silence, glaring at everyone before stalking off.

But if he had a gift for self-regulation, he would choose a different approach. He would pick his words carefully, acknowledging the team's poor performance without rushing to any hasty judgment. He would then step back to consider the reasons for the failure. Are they personal - a lack of effort? Are there any mitigating factors? What was his role in the debacle? After considering these questions, he would call the team together, lay out the incident's consequences, and offer his feelings about it. He would then present his analysis of the problem and a well-considered solution.

People who have mastered their emotions are able to roll with the changes. They don't panic.

Why does self-regulation matter so much for leaders? First of all, people who are in control of their feelings and impulses - that is, people who are reasonable - are able to create an environment of trust and fairness. In such an environment, politics and infighting are sharply reduced and productivity is high. Talented people flock to the organization and aren't tempted to leave. And self-regulation has a trickle-down effect. No one wants to be known as a hothead when the boss is known for her calm approach. Fewer bad moods at the top mean fewer throughout the organization.

Second, self-regulation is important for competitive reasons. Everyone knows that business today is rife with ambiguity and change. Companies merge and break apart regularly. Technology transforms work at a dizzying pace. People who have mastered their emotions are able to roll with the changes. When a new change program is announced, they don't panic; instead, they are able to suspend judgment, seek out information, and listen to executives explain the new program. As the initiative moves forward, they are able to move with it.

Sometimes they even lead the way. Consider the case of a manager at a large manufacturing company. Like her colleagues, she had used a certain software program for five years. The program drove how she collected and reported data and how she thought about the company's strategy. One day, senior executives announced that a new program was to be installed that would radically change how information was gathered and assessed within the organization. While many people in the company complained bitterly about how disruptive the change would be, the manager mulled over the reasons for the new program and was convinced of its potential to improve performance. She eagerly attended training sessions – some of her colleagues refused to do so – and was eventually promoted to run several divisions, in part because she used the new technology so effectively.

I want to push the importance of self-regulation to leadership even further and make the case that it enhances integrity, which is not only a personal virtue but also an organizational strength. Many of the bad things that happen in companies are a function of impulsive behavior. People rarely plan to exaggerate profits, pad expense accounts, dip into the till, or abuse power for selfish ends. Instead, an opportunity presents itself, and people with low impulse control just say yes.

By contrast, consider the behavior of the senior executive at a large food company. The executive was scrupulously honest in his negotiations with local distributors. He would routinely lay out his cost structure in detail, thereby giving the distributors a realistic understanding of the company's pricing. This approach meant the executive couldn't always drive a hard bargain. Now, on occasion, he felt the urge to increase profits by withholding information about the company's costs. But he challenged that impulse – he saw that it made more sense in the long run to counteract it. His emotional self-regulation paid off in strong, lasting relationships with distributors that benefited the company more than any short-term financial gains would have.

The signs of emotional self-regulation, therefore, are not hard to miss: a propensity for reflection and thoughtfulness; comfort with ambiguity and change; and integrity – an ability to say no to impulsive urges.

Like self-awareness, self-regulation often does not get its due. People who can master their emotions are sometimes seen as cold fish – their considered responses are taken as a lack of passion. People with fiery temperaments are frequently thought of as "classic" leaders – their outbursts are considered hallmarks of charisma and power. But when such people make it to the top, their impulsiveness often works against them. In my research, extreme displays of negative emotion have never emerged as a driver of good leadership.

Motivation

If there is one trait that virtually all effective leaders have, it is motivation. They are driven to achieve beyond expectations – their own and everyone else's. The key word here is achieve. Plenty of people are motivated by external factors such as a big salary or the status that comes from having an impressive title or being part of a prestigious company. By contrast, those with leadership potential are motivated by a deeply embedded desire to achieve for the sake of achievement.

If you are looking for leaders, how can you identify people who are motivated by the drive to achieve rather than by external rewards? The first sign is a passion for the work itself – such people seek out creative challenges, love to learn, and take great pride in a job well done. They also display an unflagging energy to do things better. People with such energy often seem restless with the status quo.

They are persistent with their questions about why things are done one way rather than another; they are eager to explore new approaches to their work.

A cosmetics company manager, for example, was frustrated that he had to wait two weeks to get sales results from people in the field. He finally tracked down an automated phone system that would beep each of his salespeople at 5 p.m. every day. An automated message then prompted them to punch in their numbers – how many calls and sales they had made that day. The system shortened the feedback time on sales results from weeks to hours.

That story illustrates two other common traits of people who are driven to achieve. They are forever raising the performance bar, and they like to keep score. Take the performance bar first. During performance reviews, people with high levels of motivation might ask to be "stretched" by their superiors. Of course, an employee who combines self-awareness with internal motivation will recognize her limits – but she won't settle for objectives that seem too easy to fulfill.

And it follows naturally that people who are driven to do better also want a way of tracking progress – their own, their team's, and their company's. Whereas people with low achievement motivation are often fuzzy about results, those with high achievement motivation often keep score by tracking such hard measures as profitability or market share. I know of a money manager who starts and ends his day on the Internet, gauging the performance of his stock fund against four industry-set benchmarks.

Interestingly, people with high motivation remain optimistic even when the score is against them. In such cases, self-regulation combines with achievement motivation to overcome the frustration and depression that come after a setback or failure. Take the case of another portfolio manager at a large investment company. After several successful years, her fund tumbled for three consecutive quarters, leading three large institutional clients to shift their business elsewhere.

Some executives would have blamed the nosedive on circumstances outside their control; others might have seen the setback as evidence of personal failure. This portfolio manager, however, saw an opportunity to prove she could lead a turnaround. Two years later, when she was promoted to a very senior level in the company, she described the experience as "the best thing that ever happened to me; I learned so much from it."

Executives trying to recognize high levels of achievement motivation in their people can look for one last piece of evidence: commitment to the organization. When people love their job for the work itself, they often feel committed to the organizations that make that work possible. Committed employees are likely to stay with an organization even when they are pursued by headhunters waving money.

It's not difficult to understand how and why a motivation to achieve translates into strong leadership. If you set the performance bar high for yourself, you will do the same for the organization when you are in a position to do so. Likewise, a drive to surpass goals and an interest in keeping score can be contagious. Leaders with these traits can often build a team of managers around them with the same traits. And of course, optimism and organizational commitment are fundamental to leadership – just try to imagine running a company without them.

Empathy

Of all the dimensions of emotional intelligence, empathy is the most easily recognized. We have all felt the empathy of a sensitive teacher or friend; we have all been struck by its absence in an unfeeling coach or boss. But when it comes to business, we rarely hear people praised, let alone rewarded, for their empathy. The very word seems unbusinesslike, out of place amid the tough realities of the marketplace.

But empathy doesn't mean a kind of "I'm okay, you're okay" mushiness. For a leader, that is, it doesn't mean adopting other people's emotions as one's own and trying to please everybody. That would be a nightmare – it would make action impossible. Rather, empathy means thoughtfully considering employees' feelings – along with other factors – in the process of making intelligent decisions.

For an example of empathy in action, consider what happened when two giant brokerage companies merged, creating redundant jobs in all their divisions. One division manager called his people together and gave a gloomy speech that emphasized the number of people who would soon be fired. The manager of another division gave his people a different kind of speech. He was upfront about his own worry and confusion, and he promised to keep people informed and to treat everyone fairly.

The very word empathy seems unbusinesslike, out of place amid the tough realities of the marketplace.

The difference between these two managers was empathy. The first manager was too worried about his own fate to consider the feelings of his anxiety-stricken colleagues. The second knew intuitively what his people were feeling, and he acknowledged their fears with his words. Is it any surprise that the first manager saw his division sink as many demoralized people, especially the most talented, departed? By contrast, the second manager continued to be a strong leader, his best people stayed, and his division remained as productive as ever.

Empathy is particularly important today as a component of leadership for at least three reasons: the increasing use of teams; the rapid pace of globalization; and the growing need to retain talent.

Consider the challenge of leading a team. As anyone who has ever been a part of one can attest, teams are cauldrons of bubbling emotions. They are often charged with reaching a consensus – hard enough with two people and much more difficult as the numbers increase. Even in groups with as few as four or five members, alliances form and clashing agendas get set. A team's leader must be able to sense and understand the viewpoints of everyone around the table.

That's exactly what a marketing manager at a large information technology company was able to do when she was appointed to lead a troubled team. The group was in turmoil, overloaded by work and missing deadlines. Tensions were high among the members. Tinkering with procedures was not enough to bring the group together and make it an effective part of the company.

So the manager took several steps. In a series of one-on-one sessions, she took the time to listen to everyone in the group – what was frustrating them, how they rated their colleagues, whether they felt they had been ignored. And then she directed the team in a way that brought it together: she encouraged people to speak more openly about their frustrations, and she helped people raise constructive complaints during meetings. In short, her empathy allowed her to understand her team's emotional makeup. The result was not just heightened collaboration among members but also added business, as the team was called on for help by a wider range of internal clients.

Globalization is another reason for the rising importance of empathy for business leaders. Cross-cultural dialogue can easily lead to miscues and misunderstandings. Empathy is an antidote. People who have it are attuned to subtleties in body language; they can hear the message beneath the words being spoken. Beyond that, they have a deep understanding of the existence and importance of cultural and ethnic differences.

Consider the case of an American consultant whose team had just pitched a project to a potential Japanese client. In its dealings with Americans, the team was accustomed to being bombarded with questions after such a proposal, but this time it was greeted with a long silence. Other members of the team, taking the silence as disapproval, were ready to pack and leave. The lead consultant gestured them to stop. Although he was not particularly familiar with Japanese culture, he read the client's face and posture and sensed not rejection but interest – even deep consideration. He was right: when the client finally spoke, it was to give the consulting firm the job.

Finally, empathy plays a key role in the retention of talent, particularly in today's information economy. Leaders have always needed empathy to develop and

keep good people, but today the stakes are higher. When good people leave, they take the company's knowledge with them.

That's where coaching and mentoring come in. It has repeatedly been shown that coaching and mentoring pay off not just in better performance but also in increased job satisfaction and decreased turnover. But what makes coaching and mentoring work best is the nature of the relationship. Outstanding coaches and mentors get inside the heads of the people they are helping. They sense how to give effective feedback. They know when to push for better performance and when to hold back. In the way they motivate their protégés, they demonstrate empathy in action.

In what is probably sounding like a refrain, let me repeat that empathy doesn't get much respect in business. People wonder how leaders can make hard decisions if they are "feeling" for all the people who will be affected. But leaders with empathy do more than sympathize with people around them: they use their knowledge to improve their companies in subtle but important ways.

Social Skill

The first three components of emotional intelligence are all self-management skills. The last two, empathy and social skill, concern a person's ability to manage relationships with others. As a component of emotional intelligence, social skill is not as simple as it sounds. It's not just a matter of friendliness, although people with high levels of social skill are rarely mean-spirited. Social skill, rather, is friendliness with a purpose: moving people in the direction you desire, whether that's agreement on a new marketing strategy or enthusiasm about a new product.

Socially skilled people tend to have a wide circle of acquaintances, and they have a knack for finding common ground with people of all kinds – a knack for building rapport. That doesn't mean they socialize continually; it means they work according to the assumption that nothing important gets done alone. Such people have a network in place when the time for action comes.

Social skill is friendliness with a purpose: moving people in the direction you desire.

Social skill is the culmination of the other dimensions of emotional intelligence. People tend to be very effective at managing relationships when they can understand and control their own emotions and can empathize with the feelings of others. Even motivation contributes to social skill. Remember that people who are driven to achieve tend to be optimistic, even in the face of setbacks or failure. When people are upbeat, their "glow" is cast upon conversations and other social encounters. They are popular, and for good reason.

Because it is the outcome of the other dimensions of emotional intelligence, social skill is recognizable on the job in many ways that will by now sound familiar. Socially skilled people, for instance, are adept at managing teams – that's their empathy at work. Likewise, they are expert persuaders – a manifestation of self-awareness, self-regulation, and empathy combined. Given those skills, good persuaders know when to make an emotional plea, for instance, and when an appeal to reason will work better. And motivation, when publicly visible, makes such people excellent collaborators; their passion for the work spreads to others, and they are driven to find solutions.

But sometimes social skill shows itself in ways the other emotional intelligence components do not. For instance, socially skilled people may at times appear not to be working while at work. They seem to be idly schmoozing – chatting in the hallways with colleagues or joking around with people who are not even connected to their "real" jobs. Socially skilled people, however, don't think it makes sense to arbitrarily limit the scope of their relationships. They build bonds widely because they know that in these fluid times, they may need help someday from people they are just getting to know today.

For example, consider the case of an executive in the strategy department of a global computer manufacturer. By 1993, he was convinced that the company's future lay with the Internet. Over the course of the next year, he found kindred spirits and used his social skill to stitch together a virtual community that cut across levels, divisions, and nations. He then used this de facto team to put up a corporate Web site, among the first by a major company. And, on his own initiative, with no budget or formal status, he signed up the company to participate in an annual Internet industry convention. Calling on his allies and persuading more than 50 people from a dozen different units to represent the company at the convention.

Management took notice: within a year of the conference, the executive's team formed the basis for the company's first Internet division, and he was formally put in charge of it. To get there, the executive had ignored conventional boundaries, forging and maintaining connections with people in every corner of the organization.

Is social skill considered a key leadership capability in most companies? The answer is yes, especially when compared with the other components of emotional intelligence. People seem to know intuitively that leaders need to manage relationships effectively; no leader is an island. After all, the leader's task is to get work done through other people, and social skill makes that possible. A leader who cannot express her empathy may as well not have it at all. And a leader's motivation will be useless if he cannot communicate his

passion to the organization. Social skill allows leaders to put their emotional intelligence to work.

It would be foolish to assert that good-old-fashioned IQ and technical ability are not important ingredients in strong leadership. But the recipe would not be complete without emotional intelligence. It was once thought that the components of emotional intelligence were “nice to have” in business leaders. But now we know that, for the sake of performance, these are ingredients that leaders “need to have.”

It is fortunate, then, that emotional intelligence can be learned. The process is not easy. It takes time and, most of all, commitment. But the benefits that come from having a well-developed emotional intelligence, both for the individual and for the organization, make it worth the effort.

Can Emotional Intelligence Be Learned?

For ages, people have debated if leaders are born or made. So too goes the debate about emotional intelligence. Are people born with certain levels of empathy, for example, or do they acquire empathy as a result of life's experiences? The answer is both. Scientific inquiry strongly suggests that there is a genetic component to emotional intelligence. Psychological and developmental research indicates that nurture plays a role as well. How much of each perhaps will never be known, but research and practice clearly demonstrate that emotional intelligence can be learned.

One thing is certain: emotional intelligence increases with age. There is an old-fashioned word for the phenomenon: maturity. Yet even with maturity, some people still need training to enhance their emotional intelligence. Unfortunately, far too many training programs that intend to build leadership skills – including emotional intelligence – are a waste of time and money. The problem is simple: they focus on the wrong part of the brain.

Emotional intelligence can be learned. The process is not easy. It takes time and commitment.

Emotional intelligence is born largely in the neuro-transmitters of the brain's limbic system, which governs feelings, impulses, and drives. Research indicates that the limbic system learns best through motivation, extended practice, and feedback. Compare this with the kind of learning that goes on in the neocortex, which governs analytical and technical ability. The neocortex grasps concepts and logic. It is the part of the brain that figures out how to use a computer or make a sales call by reading a book. Not surprisingly – but mistakenly – it is also the part of the brain targeted by most training programs aimed at enhancing emotional intelligence. When such programs take, in effect, a neocortical approach, my research with the Consortium for Research on Emotional Intelligence in Organizations has shown they can even have a *negative* impact on people's job performance.

To enhance emotional intelligence, organizations must refocus their training to include the limbic system. They must help people break old behavioral habits and establish new ones. That not only takes much more time than conventional training programs, it also requires an individualized approach.

Imagine an executive who is thought to be low on empathy by her colleagues. Part of that deficit shows itself as an inability to listen; she interrupts people and doesn't pay close attention to what they're saying. To fix the problem, the executive needs to be motivated to change, and then she needs practice and feedback from others in the company. A colleague or coach could be tapped to let the executive know when she has been observed failing to listen. She would then have to replay the incident and give a better response; that is demonstrate

her ability to absorb what others are saying. And the executive could be directed to observe certain executives who listen well and to mimic their behavior.

With persistence and practice, such a process can lead to lasting results. I know one Wall Street executive who sought to improve his empathy – specifically his ability to read people's reactions and see their perspectives. Before beginning his quest, the executive's subordinates were terrified of working with him. People even went so far as to hide bad news from him. Naturally, he was shocked when finally confronted with these facts. He went home and told his family – but they only confirmed what he had heard at work. When their opinions on any given subject did not mesh with his, they, too, were frightened of him.

Enlisting the help of a coach, the executive went to work to heighten his empathy through practice and feedback. His first step was to take a vacation to a foreign country where he did not speak the language. While there, he monitored his reactions to the unfamiliar and his openness to people who were different from him. When he returned home, humbled by his week abroad, the executive asked his coach to shadow him for parts of the day, several times a week, in order to critique how he treated people with new or different perspectives. At the same time, he consciously used on-the-job interactions as opportunities to practice "hearing" ideas that differed from his. Finally, the executive had himself videotaped in meetings and asked those who worked for and with him to critique his ability to acknowledge and understand the feelings of others. It took several months, but the executive's emotional intelligence did ultimately rise, and the improvement was reflected in his overall performance on the job.

It's important to emphasize that building one's emotional intelligence cannot – will not – happen without sincere desire and concerted effort. A brief seminar won't help; nor can one buy a how-to-manual. It is much harder to learn to emphasize – to internalize empathy as a natural response to people – than it is to become adept at regression analysis. But it can be done. "Nothing great was every achieved without enthusiasm," wrote Ralph Waldo Emerson. If your goal is to become a real leader, these words can serve as a guidepost in your efforts to develop high emotional intelligence.

EXPLORING FURTHER . . .

Articles:

"The Manager's Job: Folklore and Fact" by Henry Mintzberg (Harvard Business Review, March – April 1990, Product no. 90210

"The Work of Leadership" by Ronald A. Heifetz and Donald L. Laurie (Harvard Business Review, January – February 1997, Product no. 4150)

"The Ways Chief Executive Officers Lead" by Charles M. Farkas and Suzy Wetlaufer (Harvard Business Review, May – June 1996, Product no. 96303)

Books:

John P. Kotter on What Leaders Really Do by John P. Kotter (1999, Harvard Business School Press, Product no. 8974)

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UNIVERSAL MATRIX

Police Vehicle Operations

1. The trainee, within the context of the focus activities, will define department policies and state laws regarding vehicle responses. The trainee will describe how to safely operate a police vehicle. The trainee will recognize the geographical makeup of the jurisdiction.
2. The trainee demonstrates the skills necessary to safely operate a patrol vehicle and all associated equipment to include:
    a. Geographical knowledge
    b. Most efficient routes
    c. Vehicle position at the scene
    d. Situational response
3. The trainee assesses the needs of a given incident and decides what level of response is appropriate.

Conflict Resolution

1. The trainee recognizes the level of conflict and identifies available options to resolve the conflict.
2. The trainee demonstrates appropriate communication and problem solving skills to resolve conflict in a field situation.
3. The trainee assesses their response to a conflict for effective and efficient resolution.

Use of Force

1. The trainee defines and describes the use of force alternatives and reporting requirements.
2. The trainee applies and demonstrates the reasonable amount of force necessary to resolve a situation safely.
3. The trainee assesses the level of force used against Department guidelines and community expectations.

Local procedures, policies, laws and philosophies

1. The trainee identifies commonly used state, local, federal laws, policies, procedures and resources as they relate to the focus activities.
2. The trainee applies commonly used state, local, federal laws, policies, procedures and resources as they relate to the focus activities.
3. The trainee differentiates between state, local, federal laws, policies, procedures and resources as they relate to the focus activities.

Report writing

1. The trainee describes what types of policing activities require documentation and identifies any and all pertinent information to complete the report writing process.
2. The trainee constructs an appropriate report, including proper forms, in an objective, concise, timely and accurate manner.
3. The trainee assesses the reporting requirements for any given situation.

Leadership

1. The trainee identifies leadership skills as they apply to police situations, i.e. situational leadership, assisting citizens to solve problems and explain leadership roles throughout the community and peer groups.
2. The trainee displays leadership capabilities while engaged in patrol and field activities.
3. The trainee assesses their leadership skills within a policing situation to develop more effective responses to the situation.

Problem solving

1. The trainee identifies problems encountered, and defines problem solving methods.
2. The trainee demonstrates problem solving skills using appropriate methods.
3. The trainee explains and supports the problem solving process; and, is able to adapt the process based upon achieved results.

Community specific problems

1. The trainee identifies and describes specific community problems in an assigned area.
2. The trainee demonstrates proficiency in creating partnerships and solving problems specific to the community or geographic assignment.
3. The trainee recommends and supports a course of action, and judges its effectiveness in alleviating the specific problem.

Cultural diversity

1. The trainee identifies different needs of various cultural and special needs groups.
2. The trainee employs appropriate actions and demonstrates empathy to cultural and special needs groups.
3. The trainee assesses the different needs applicable to different cultural and special needs groups.

Legal authority

1. The trainee identifies legal authority in patrol and field activities.
2. The trainee exercises legal authority with regard to policies, procedures and statutes.
3. The trainee assesses the situation and operates within the limits of legal authority.

Individual rights

1. The trainee identifies individual rights in the performance of duties.
2. In the performance of duties, the trainee upholds and respects the rights of an individual.
3. The trainee justifies their choices based on reasonable argument, established court cases, laws and policies.

Officer safety

1. The trainee describes concepts of appropriate officer safety techniques and tactics.
2. The trainee consistently demonstrates officer safety techniques and tactics to include, but not limited to:
    a. Awareness of environment
    b. Equipment use
    c. Defensive tactics
    d. Arrest control
    e. Command presence
3. The trainee assesses, improves the effectiveness of, and supports decisions regarding officer safety techniques and tactics.

Communication skills

1. The trainee defines effective communication skills as they relate to patrol and field activities.
2. The trainee applies effective communication skills while engaged in patrol and field activities.
3. The trainee measures the effectiveness of communication skills and adapts an appropriate style.

Ethics

1. The trainee identifies ethical practices as they pertain to the performance of duties.
2. The trainee demonstrates ethical conduct at all times.
3. The trainee assesses situations and responds in a professional and ethical manner to maintain public trust.

Lifestyle stressors, self awareness and self regulation

1. The trainee identifies stressors that affect performance and defines methods to appropriately engage in self awareness and self regulation.
2. The trainee applies self awareness and self regulation to maintain a healthy balance between work and personal life.
3. The trainee consistently assesses self awareness and self regulation to improve effectiveness as a police officer.

NON-EMERGENCY INCIDENT RESPONSE

A-PHASE

EXAMPLES OF TRAINING PHASE FOCUS ACTIVITIES

- NON-VIOLENT IN-CUSTODY ARRESTS
- NON-CUSTODIAL INCIDENTS
- ALARM RESPONSE CALLS
- TRAFFIC ACCIDENT RESPONSE
- TRAFFIC HAZARDS
- PRISONER TRANSPORTS
- CIVIL DISPUTES
- MENTAL SUBJECTS
- COVER OFFICER RESPONSE
- PROPERTY AND EVIDENCE PROCESSING
- ANIMAL CALLS
- LOW RISK CRIMES IN PROGRESS
- OUTSIDE AGENCY REQUESTS
- PRESERVE THE PEACE
- CIVIL PROTECTIVE CUSTODY
- LOW RISK JUVENILE CRIMES

EMERGENCY INCIDENT RESPONSE
B-PHASE
EXAMPLES OF TRAINING PHASE
FOCUS ACTIVITIES

- OFFICERS IN NEED OF EMERGENCY ASSISTANCE
- FELONY CRIMES IN PROGRESS
- IN CUSTODY CALLS WITH A PHYSICAL DISTURBANCE
- WEAPONS CALLS / SHOTS FIRED CALLS
- BANK ALARMS
- INJURY ACCIDENTS
- MEDICAL CALLS WHEN AMBULANCE IS STANDING BY
- SUICIDAL SUBJECTS
- DOMESTIC DISPUTES WITH A PHYSICAL DISTURBANCE
- FIGHTS IN PROGRESS
- CHILD INVOLVED CALLS (ABDUCTIONS, MISSING, ENDANGERED-NOT RUNAWAYS)
- BARRICADED SUBJECTS OR HOSTAGE SITUATIONS
- DOMESTIC / FOREIGN TERRORIST INCIDENTS
- CFS INVOLVING EXPLOSIVES

PATROL ACTIVITIES INCIDENT RESPONSE
C-PHASE
EXAMPLES OF TRAINING PHASE
FOCUS ACTIVITIES

- TRAFFIC STOPS
- SUBJECT STOP
- BEAT RESPONSIBILITY
- PARKING PROBLEMS
- EQUIPMENT MAINTENANCE
- CITIZEN CONTACT
- SITUATIONAL AWARENESS
- GEOGRAPHICAL ORIENTATION
- PUBLIC HAZARDS
- BUSINESS ORIENTATION
- CRIME PATTERN IDENTIFICATION / CRIME ANALYSIS UNIT
- CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)
- SERVICE REQUESTS
- BEAT KNOWLEDGE; PERSONS, CRIME TRENDS, WANTED SUBJECTS

CRIMINAL INVESTIGATIONS INCIDENT RESPONSE
D-PHASE
EXAMPLES OF TRAINING PHASE FOCUS ACTIVITIES

- CRIME SCENE, INVESTIGATION, PRESERVATION AND IDENTIFICATION
- INTERVIEWING SUSPECTS
- COLLECTING AND PROCESSING EVIDENCE
- MEDIA ISSUES
- AREA CANVASS
- DETECTIVE RESPONSE / CALL OUT
- CONDUCTING FOLLOW-UP INVESTIGATIONS
- APPLYING FOR AND SERVING SEARCH /ARREST WARRANTS
- BASIC PRELIMINARY CRIME INVESTIGATIONS (FIRST RESPONDERS)
- MISSING PERSONS INVESTIGATIONS
- DEATH INVESTIGATIONS

Police **T**raining **O**fficer **P**rogram
Weekly Core Competency Log

PTO: Officer Dixon

Trainee: Officer Jones

PTOs are to select five different core competencies from which to focus on each week. The trainee will comment in each of the selected core competencies to include; self-assessment, self-reflection, emotional intelligence, and ways the trainee has identified what they have learned is relevant to their activity report. Please note; comments can be added to core competencies other than the selected five at anytime. This is a running daily log and is due at the end of the training phase. Please date each entry.

CORE COMPETENCY DETAIL:

Police Vehicle Operations:

Trainee's Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C
9/30/14: During this stop in the park, I pulled behind the suspect vehicle and used my spot light to illuminate the driver. As I approached the suspect vehicle I felt like I had no immediate cover or concealment. I learned that I could have used a better offset angle with my police car to provide better cover if needed.

Phase D

PTO Comments: What areas of trainee performance need improvement?

Conflict Resolution:

Trainee's Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Use of Force:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C
9/30/14: Today I conducted a traffic stop on a suspicious vehicle parked in a public park after hours. Inside was an adult male and, what I later learned to be a juvenile female. I used the appropriate amount of force with the driver when I had him exit the vehicle and conduct a pat search, however he still managed to runaway while I was performing my pat search. I learned I need to be more assertive with people. I need to know when to apply a higher level of force when dealing with people.

Phase D

PTO Comments: What areas of trainee performance need improvement?

Local Procedures:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Report Writing:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Leadership:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C
9/30/14: On the traffic stop in the park, I don't know of any leadership activities that could have been applied to this incident.

Phase D

PTO Comments: What areas of trainee performance need improvement?

Problem Solving Skills:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Community Specific Problems:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Cultural Diversity:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Legal Authority:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Individual Rights:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Officer Safety:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C
9/30/14: On the suspicious vehicle in the park, I knew that my initial approach to the vehicle was not as good as it could be. I did light the suspect vehicle up but I had no cover as I approached it. When I contacted the suspect, he was being evasive so I had him exit the car to perform a pat search. The suspect broke away from me and fled the area, I let my partner chase him and I called the chase out on the radio.

Phase D

PTO Comments: What areas of trainee performance need improvement?

Communication Skills:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C
9/30/14: During the park incident I was very direct with my questioning of the suspect. I used a line of questioning to establish a crime and to identify the suspect and the woman he was with. I used verbal commands to control the suspect. I felt I was very professional during my contact with the driver of the vehicle. I wanted to convey that I was in charge of the scene and made sure he understood that. I also used effective radio traffic when providing the dispatcher with information on the suspect's description and direction of travel once he fled.

Phase D

PTO Comments: What areas of trainee performance need improvement?

Ethics:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

Lifestyle Stressors, Self Awareness:

Trainee Comments: What did you learn? What do you still need to know?

Phase A

Phase B

Phase C

Phase D

PTO Comments: What areas of trainee performance need improvement?

TRAINEE:_____

PTO/PTE:_____

Reno Police Department
Police Training Officer Program
Evaluation Report

PTO/PTE: Jones, R

Trainee: Allen, Michael

Date: August 18, 19, 20, 21 - 2003

Evaluation Term: Mid Term

The PTE will evaluate the trainee's performance during the evaluation period using the learning matrix. The evaluation will reflect the PTE's observations over the entire evaluation period.

CORE COMPETENCY DETAIL

1. Police Vehicle Operations:

Mike is very aware of, and, practically displays the safe and sound operation of a marked patrol vehicle. Mike has been tasked at the start and end of shift with ensuring the assigned vehicle is operational and ready for the tour of duty. Mike has completed these task(s) each day without flaw. Mike drives the vehicle in safe and prudent manner during all aspects and situations of patrol work. Mike appears to be aware of traffic conditions and alternate routes of travel prior to being forced into situations that would normally cause disruption, if not considered prior to the encounter. I have verbally tested Mike in Department General Orders regarding vehicle usage and operation. Mike has shown acceptable and consistent knowledge in those aforementioned areas. Mike has displayed the ability to conduct essential tasks (radio work, emergency equipment use, MDS work, etc.) while driving. Mike is aware of his most often used surface streets when responding to radio calls. He is quite able when using his map book. Overall, Mike's orientation is at the acceptable level for this evaluation period. If Mike is unsure of a geographic location and needs to review his map book, he stops the vehicle in a safe place to conduct this review rather than attempting to read while driving.

2. Conflict Resolution:

Mike shows positive command and force presence when dealing with subject(s) and suspect(s.) During this Mid Term I have observed Mike to initiate contact and conversation with reporting parties, subjects, suspects, and peers. It appears that Mike has a natural ability coupled with a learned ability to speak with people in a very business-like, but pleasant demeanor and tonality. This type of Conflict Resolution skill and command/force presence has been successful in the de-escalation of several radio

calls that we have been involved with during this week where the situation could have very well worsened if Mike did not handle it in the manner in which he did.
I have yet to see Mike become rattled or be distracted during situations that were initially the scene was somewhat chaotic in nature. Mike appears to be quite methodical, is a good listener, and, has the ability to prioritize what needs to be completed during the initial stage and throughout conflict resolution type events.

3. Use of Force:

During the Mid Term Evaluation week Mike has engaged in several U of F activities. These have included, but not limited to, field interviews, "Pat Searches", physical control restraint(s,) arrest and control techniques – to include hand cuffing suspects. Mike appears to be familiar with the techniques he decided to deploy during these encounters. I have spoke to Mike during our tours about the U of F, and the relationship to various situations, both regarding calls that we have been exposed to and in verbal scenarios. Mike seems to have a grasp of the Department's General Order regarding same, and, also presents a common sense approach to scenarios we have discussed. Mike is curious about his ability to utilize more complex alternatives of force due to the limited amount of prior training and actual field experience. I have advised Mike to continue his practice of these disciplines, become very aware of the use of force alternatives, and continue to seek knowledge in the areas of practical application, and, U of F reporting skills. At this time, it is my opinion that Mike will continue to refine his current acceptable level in the area of U of F, and will continue to improve his finesse during practical application both on the street and within a controlled environment. During this Mid Term period, I have not observed Mike to utilize any force alternative that was not appropriate for the situation presented. I have not observed Mike to draw and present any duty belt carried defensive weapon prematurely during street encounter(s.)

4. Local Procedures:

Mike has had the opportunity to handle several investigations where he was involved with other local agencies and outside resources. I have noted that during A/B Cell officer Pond exposed Mike to a variety of local resources that assisted Mike with procedural knowledge. During this evaluation period it was obvious to me that Mike is becoming decently versed in the areas of local law, procedural methodology, and Department philosophy. Officer Pond made arrangements for Mike to spend a tour with traffic accident investigations as well as with DUI investigations. Mike has also worked cases with Social Services, Code Enforcement, Washoe County Juvenile Services, Washoe County Parole and Probation, and, the consolidated R.O.P. Unit. During this evaluation period I have observed Mike to make the correct decision when it came time to identify and take action in regards to the appropriate law for the given situation. Mike also stays well aware of crime trend and beat specific problems within his district. The first day of this period Mike questioned me in regards to the aforementioned within the beat he was now working.

5. Report Writing:

During this evaluation period, Mike has had the opportunity to complete reports in the following areas:

Commercial burglary (report,) Petit Theft (custody,) Trespassing (custody,) Narcotic Possession (custody,) and, Grand Theft Auto (report.)
Mike was able to, with very little assistance; complete all police reports accurately and with all pertinent information contained within same. Mike completed all necessary required attached paperwork properly. Mike seems to understand the Tiburon system and travels through the report system efficiently. During the narrative portion of the report, Mike tends to take a allener time to gather his thoughts and transfer his writing into the report. It is my opinion that this time period will lessen with added exposure to report writing. Again, Mike is completing these reports with the necessary information contained within the report. Mike obtains good statements, conducts complete scene investigations, and initiates proper field interviews with good note taking ability.

6. Leadership:

Mike shows an understanding of the Department chain of command, and appears to be able to work well in that environment. Mike clears calls in a timely manner and is ready to assist other officers during his tour, both within his district and when cross dispatched. Mike has shown the ability to direct other officer's at the scene when needed to. Mike has had numerous field contacts with individuals where he directed people in a positive manner to assist in the identified goal to complete the task at hand.

7. Problem Solving Skills:

Mike has been involved in several situations where the outcome could have been handled in a variety of methods, given the set of circumstances present. Some have been misdemeanant types of crimes, where they could have had the outcome ranging from advised to in-custody dispositions. It is my opinion that Mike handled these situations in the appropriate manner, taking into consideration alternative means to gain a positive solution to the task at hand. Mike is not locked into one way of doing business, which indicates to me that he is seeking to find and customize a solution that is appropriate and within guidelines. Mike appears to have a common sense approach when dealing with problem solving. Mike is aware of his Department and outside resources when dealing with problem solving.

8. Community Specific Problems:

As mentioned above, Mike appears to have knowledge in crime patterns that are common in his district and/or beat. Mike has spoken to me on several occasions in regards to the auto theft problem that seems to be apparent within the Southeast sector of our district. Mike has shown quite an interest in not only investigating this problem, but in finding some type of solutions in prevention of this type of crime. Mike has also commented on the fact that our district has quite a few juvenile related problems due to the fact that during non-school months youths are left unsupervised due to parents working full time jobs to make ends meet. Mike is aware that this is a fact of life, and alternatives for these children need to be identified and put into place.

9. Cultural Diversity:

Our district is inhabited by a wide range of cultural, social, and economic related difference. We do deal with a variety of language based barriers when dealing with individuals. Mike has shown to have an understanding of this fact, and deals with this variety positively. I feel that Mike's past employment in the area of retail management has assisted him in the positive transfer into his police officer role. The majority of the language based barrier Mike has encountered has been in dealing with Hispanic individuals. At a scene where it is has been necessary, Mike has sought out individuals that could translate for him. Mike has also expressed an interest in learning more of a Spanish based language to assist him in dealing with this barrier.
I have not observed Mike to exhibit any signs of cultural, social, and/or economic related bias when dealing with same.

10. Legal Authority:

Mike has been involved with both self-initiated field detentions and calls for service where suspect(s) have been detained for alleged crimes. I have observed Mike to initiate the appropriate action in regards to legal authority. Mike is aware of NRS 171.123 and has shown the practical ability to apply same. I have questioned Mike verbally regarding his legal authority to conduct field interviews and detentions. Mike has shown that he has a working knowledge during subject/suspect detention. Mike continually referrers to his NRS and RMC manual during his off duty hours to gain a further understanding of his legal authority. We have discussed and traded verbal scenarios in the areas of U of F, vehicle pursuits, subject detention, and custody encounters. During these scenarios, Mike has provided positive and correct feedback to the given situation(s.)

11. Individual Rights:

Mike has displayed sound judgment and correct actions taken in the area(s) of individual rights. Mike appears to have a good foundation in the areas of constitutional law, Miranda (how and when it applies,) search and seizure. During the week we had several opportunities to engage subjects within their residences. Mike has an understanding and showed that he can maintain his focus as to the nature of the investigation, while understanding that he has a certain right to conduct a protective sweep of the immediate area during specific investigations. Mike and I discussed the above listed areas of law during the week, whereby, I found Mike to have acceptable knowledge and practical application for this phase of his training program.

12. Officer Safety:

Mike has overall displayed sound officer safety tactics during this evaluation process. Mike is very aware of the Contact and Cover Principles and understands his responsibilities when placed into either role. Mike has performed subject

stops, vehicle stops, on-scene investigations, building search, and arrest and control techniques during this evaluation period. Mike has also responded to several crimes in progress calls. Mike is always thinking and looking for the proper approach to contact, maintains proper positioning, and is aware that he needs to fix “problems” immediately when observed. Mike is always asking for critique and advice upon completion of a call in regards to officer safety concerns. I have not observed Mike to be hesitant to initiate the proper tactic for the given task at hand. Mike works well with other officers at the scene in respect to officer safety concerns and is very receptive to their requests, needs, and/or advice.

13. Communication Skills:

Regarding this category, I would refer back to Conflict Resolution. Mike has advised that he believes that his past profession in the retail sales business has heightened his ability when dealing (communicating) with people from all walks of life. Mike seems to understand that we deal with an environment where we engage people with limited communication attributes. Again, Mike is a very good listener. Mike never speaks in a demeaning fashion, or communicates with others in a manner that would be construed as offensive. During street activity, Mike has an excellent rapport with his peers, supervisors, and the public. I have observed Mike to spend the extra time with the public during contacts and ensure that they have answers to their questions, or provide the necessary information to victim(s) as deemed necessary. I have observed Mike on calls with other officers where Mike was the Contact and/or Cover officer. Mike provides the necessary information to other officers at the scene to ensure the case goes well, in all aspects. Mike deals well with the radio, being concise and clear in his transmissions.

14. Ethics:

I have had the opportunity to work with Mike during his academy and during this week of Mid Term Evaluation. I have noted Mike to be extremely ethical. Mike is very aware of his conduct and the relationship to both his profession and to the public. I have not observed Mike to be challenged in this area.

15. Self-awareness/Self-regulation:

Mike is very focused in both his career and personal life. During the entire week of this evaluation process Mike was entirely void of any type of excuse or attempted mitigation during all field work where he was asked to explain actions taken, or, maybe how he could have done things differently to achieve a more positive outcome. Mike appears to take the physical fitness importance serious. I have noted Mike to remain on an even keel during shift work, and did not appear to change his demeanor when presented with ill-structured situations. This, in my opinion, is indicative of an individual that is very self-aware, not over confident, and secure in his place in life/lifestyle.

Areas for continued improvement:

Continue his studies in the areas of criminal law and the application of same to street level police work. Continue to refine his officer safety related skills and General Orders pertaining to same. Remain contemporary in the area of Department General Orders and Policy. Attend criminal courtroom proceedings when possible. Make contact with Detectives and gain further knowledge in the area of report writing.

_____ _____

PTE **Trainee**

The Needs of Adult Learners

Adult Learners:

- Have a good deal of first-hand **experience** that they wish to use and share in class.
- Expect to be treated with **respect** due to their maturity and individualism in the learning situation.
- Usually have **specific** and immediate **learning goals** and expect structure and clear outcomes for the learning program. They want to know how to apply learning to their personal or professional lives.
- Have a desire to be **active participants** in the learning process. Effective learning situations are interactive and to be centered on problem solving.
- Are frequently **anxious** about their learning abilities and the appearance of competence in the classroom, but are anxious for educational success.
- Have a strong need for periodic **feedback**, encouragement, and learning in an atmosphere where there is a high degree of safety, mutual commitment, and choice.
- Are **critical** of unprepared teachers, poorly articulated programs, and individuals or processes which interfere with their learning.
- Expect to have their **physical needs met** (adequate furniture, breaks, etc.).
- Need a good **instructional balance** between tight, well-paced, content-oriented presentations and the time needed for learning integration.

Purposeful Teaching™
A Baker's Dozen Instructional Factoids

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1. **Instructional decisions and practice must be focused on the needs and experience of the learner** to ensure that the acquisition of knowledge and skills required by the organization takes place. Optimal learning has taken place when the learner is able to transfer acquired knowledge and skills into practice and/or use it to critically think through situations and solve problems.

2. **What the learner discovers supports better learning than what the learner is given**. Instructional activities which are provided in authentic contexts, with hands-on activities which require critical thinking and problem solving tend to create deeper, longer lasting learning.

3. **Learning takes place best in a supportive learning environment**. A supportive learning environment provides clear articulation of challenging expectations; outcome structured instructional activities which are based on learners' needs and structured for incremental success; fair and consistent accountability for expectations; collaborative feedback systems for performance improvement; and recognition for work well done.

4. **Learning also takes place in a non-supportive learning environment** of coercion, constant or engineered failure, harassment, humiliation, and personal attack. There are a number of potential negative side effects to this type of environment. Learning is more focused on surviving the situation than long-term transfer of knowledge and skills into practice or in critical thinking or problem solving. The immediate side effects of this learning environment are often quiet rebellion (retreating from the situation mentally or physically), overt rebellion (acting out or challenging authority), and/or sabotage of the system (sneaky "gotcha" games). The long term effects for learners are an aversion to training/education, an aversion to the subject matter or skill being taught, and replication of the behavior received from other people in other situations. (The "It's my turn to do it to you now" syndrome found in situations where people have been the target of hazing.)

5. The **greater the power difference** perceived by the learner between the learner and instructor, **the lower the acquisition of learning**.

6. In order for optimal learning to take place, the **instructor has to have clear learning outcomes** in mind and those outcomes must be targeted at learning levels above simple acquisition of facts and skills.

7. **The attention span of the adult is 7-20 minutes for passive engagement activities** (listening, watching, and reading). Telling/showing is not teaching because listening/watching does not result in optimal learning. The higher the level of engagement, the more optimal the learning. Physical engagement is better than passive engagement, and mental engagement in critical thinking and problem solving is the most effective learning activity.

8. **Success breeds success in learning**. Continually putting learners in situations to fail produces low motivation in most learners, rebellion in some, and high motivation in a very few. Providing learners with incremental challenges and appropriate instruction for success increases competence and also builds confidence.

9. **Learning takes place best in an instructional setting of dialogue**. It produces not only physical and mental engagement, it also supports a continuous check for participant learning for the instructor. Instruction can then be better tailored to the needs of the participants.

10. The most learning takes place at the **beginning and end** of the learning session.

11. The primary instructional strategies should **draw, not dump** information.

12. Before learners can be expected to think on their feet, they must be provided opportunities to **think in their seat**.

13. Effective instructors are more often "**guides on the side**" than "sages on the stage."

When learning in a passive mode we forget:

41.8%	AFTER…….....	20 minutes
55.8%	AFTER……	1 hour
66.3%	AFTER……	24 hours
84.6%	AFTER……	6 days
98.9%	AFTER……	1 month

Retention Statistics for Different Levels of Engagement

10% of what we READ

20% of what we HEAR

30% of what we SEE

40% of what we both SEE and HEAR

60% of what is DISCUSSED with others

70% of what is EXPERIENCED personally

80% of what we DISCOVER or SOLVE individually or in groups

95% of what we TEACH to someone else

Adult Learning
Websites/Sources

Blooms Taxonomy
http://www.officeport.com/edu/blooms.htm

John Dewey
http://www.utm.edu/research/iep/d/dewey.htm

Learning Theories
http://tip.psycology.org/theories.html

"A Critical Investigation of the Problems with Problem-Based Learning"
www.ntlf.com

The University of Delaware
http://www.udel.edu/pbl/

Topic Tutorial
http://edweb.sdsu.edu/clrit/learningtree/PBL/WhatisPBL.html

Barrow's Site - Southern Illinois**
http://www.pbli.org/core.htm

Emotional Intelligence
http://eiconsortium.org

Skills
http://www.myskillsprofile.com/

**The Barrow's site (http://www.pbli.org/core.htm) includes the following publications:

Barrows, H. (l994). *Practice-Based Learning: Problem-Based Learning Applied to Medical Education*, Springfield, IL: Southern Illinois University School of Medicine.

Barrows, H. (l988). *The Tutorial Process*. Springfield, IL: Southern Illinois University School of Medicine.

Barrows, H. (1985) *How to Design a Problem-based Curriculum for Pre-clinical Years*. New York: Springer Publishing Co.

Barrows, H. (l996). *What Your Tutor May Never Tell You*, Springfield, IL: SIU

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Barrows, H.S., Pickell, G.C. (1991). *Developing Clinical Problem-solving Skills: A Guide to More Effective Diagnosis and Treatment*. New York, London, Norton Medical Books, W. W. Norton & Co.

Barrows, H. S., Tamblyn, R.M. (1980) *Problem-Based Learning: An Approach to Medical Education*. New York: Springer Publishing Company.

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