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CTE 5

The Art of Cognitive Coaching

Art Costa

The First
Singapore Summer Institute on
Teaching Thinking
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The Art of Cognitive Coachingsm

Foundation Seminar

by
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Cognitive Coaching is a synthesis of modern research, theory, and practice drawing on the work of Robert Anderson, Morris Cogan, and Robert Goldhammer (Clinical Supervision); Richard Bandler, Robert Dilts, and John Grinder (Neuro-Linguistic Programming); David Berliner (Teacher, "Executive Processes"); Reuven Feuerstein (Mediated Learning); Carl Glickman (Developmental Supervision); Madeline Hunter (Teaching as Decision Making); Perc Marland (Teacher, Decision Making); Tom Sergiovanni (Supervision Theory); Richard Shavelson (The Basic Behaviors of Teaching); Norman Sprinthall and Lois Thies-Sprinthall (Teacher as Adult Learner); and Robert Stenberg (Metacognition and Intelligence). For their pioneering work we are indeed grateful.

We are also grateful to certain other people, particularly senior associates of the Institute for Intelligent Behavior, who have contributed to the continuing evolution of Cognitive Coaching concepts and practices. As they have since the inception of this work in 1985, they continue to test, refine, and develop these concepts as they conduct seminars in Cognitive Coaching, work directly in schools, and provide assistance to educators throughout North America.

Bill Baker is Director of Group Dynamics Associates. In addition to conducting Cognitive Coaching seminars, Bill provides management services to the Institute. Formerly of the Alameda County Superintendent of Schools office, he oversaw the most concentrated and comprehensive Cognitive Coaching training services in any location to date.

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Laura Lipton is Director of Educational Consulting Services in Yorktown, New York. She has extensive expertise in instruction, thinking skills, and organizational development. Dr. Lipton consistently focuses us at the Institute on the critical questions we should be posing and links our group's explorations to the current literature in a variety of fields.

Peg Luidens is an educational consultant from Holland, Michigan. In addition to Cognitive Coaching, she specializes in helping teachers develop expertise in the writing process and is deeply involved in leading several school restructuring efforts. She adds keen intelligence, grace, and invaluable courage and social consciousness to the group.

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Bruce Wellman is Director of Adaptive Learning Systems, a consulting firm in Guilford, Vermont. He consults with school systems, professional organizations, and publishers on teaching methods and materials in science, thinking skills, skillful teaching, and facilitating learning organizations. He keeps us laughing, committed to quality, and focused on the big picture.

Diane Zimmerman is currently Director of Personnel in the Davis Joint Unified School District. As a graduate student at California State University, Sacramento, she contributed to our original thinking. She has rich and successful experience in applying Cognitive Coaching to individual and organizational development and provides continuing intellectual capital and vision to our work.

Taken together, this group of senior associates is as bright, talented, and diverse a group as either of us has ever had the pleasure of working with. We are extremely grateful for our association with them, what we learn together, and what we create together. Cognitive Coaching's elegance is due, in large part, to their contributions.

We also wish to thank Institute associates who are continuing to expand, refine, and apply these ideas through their work with the Institute for Intelligent Behavior.

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PREFACE

When we no longer know what to do we have come to our real work and when we no longer know which way to go we have begun our real journey. The mind that is not baffled is not employed. The impeded stream is the one that sings.

Wendell Berry

As we look back into the decade of the 1970s and early 1980s we see that much of the educational research and staff development efforts were devoted to identifying and installing the behaviors of teaching. The teaching act was dissected into its component parts, and each part was then correlated with student achievement as measured by mostly elementary level, norm-referenced tests. An example of this approach was to count the number of higher level questions a teacher asks and then to correlate this number with student achievement. When high correlations were found, these behaviors, such as questioning, reinforcing, and giving clear directions, became the basis for teacher evaluation, supervision, staff development, and teacher training. In an effort to improve instruction, supervisors were trained to observe for, record, positively reinforce, and evaluate the teacher's use of these behaviors.

While this approach was found to be helpful in many ways, it had many shortcomings. One was the fallacy that the act of teaching could be reduced to scientific, quantifiable, scalar values. This overlooked the teacher's decisions about *when* to ask *which* level of questions under *what* level of questions under *what* circumstances. It over-generalized the elements of instruction to all grade levels, subject areas, and student characteristics. It failed to consider what previous experiences, intuition, or artistry on which the teacher relied to select that particular instructional behavior and the desired student learnings for which it was intended.

In the quantum world of the '90s and beyond, a new metaphor of teaching has emerged. The teaching act is being described as a constant stream of decisions, and any teacher behavior is the result of a decision, either conscious or unconscious (Shulman, 1986; Peterson and Clark, 1976; Shavelson, 1979). Teachers make an infinite number of decisions each day.

Richard Shavelson states:

"Any teaching act is the result of a decision, whether conscious or unconscious, that the teacher makes after the complex cognitive processing of available information. This reasoning leads us to the hypothesis that *the basic teaching skill is decision making.*"

If teaching is decision making, then the coaching of teaching is a process of coaching teachers' decision-making processes. Thus, *Cognitive Coaching*. This syllabus is designed to accompany and support a training workshop intended to develop participants' understanding of and skillfulness in employing a coaching system which helps others make better decisions about instruction. It is based on the assumptions that teachers do not just mindlessly ask questions or reinforce desired student behaviors. Rather, superior teachers know how to select a certain teaching act from their vast repertoire of behaviors; they decide when to use it based upon information about learners and the analysis of the teaching task and the evaluation of the teachable situation. They know how this act fits into a larger strategy, and they can predict the effects of that act on the learning performance of students. All of these are intelligent processes.

This syllabus is designed to help coaches examine the relationship between a teacher's perceptions, attitudes, thinking, and behaviors which, in turn, affect student learning. It is intended to accompany and stimulate a series of experiences for educators who provide staff development in, who are, or who are learning to serve in coaching or helping capacities. These might include such positions as resource teachers, administrators, supervisors of student teaching, vice-principals, department chairs, or peer teachers.

Note: This Syllabus is designed to accompany our book, *Cognitive Coaching: A Foundation for Renaissance Schools*, Norwood, MA, Christopher-Gordon, 1994.

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January, 1996

Peterson, P. and Clark, C. (1986). Teachers' Thought Processes in *Handbook of Research on Teaching*, 3rd edition, edited by M. Wittrock
AERA MacMillan Publishing Company, New York, p. 10.

Shavelson, Richard (1973). "The Basic Teaching Skill: Decision Making" (R & D Memorandum No. 104). Stanford, CA: Stanford
University, School of Education, Center for R & D in Teaching, 1973, p. 18.

Shulman, L. S. (1986). Paradigms and Research Programs in the Study of Teaching: A contemporary perspective. In M. C. Wittrock (Ed.)
Handbook of research on teaching. (3rd ed.) New York: MacMillan, pp. 3-36.

Throughout the United States, there appears a growing fascination with people functioning at their best. We hear peak performers talk of steadily developing their abilities as a natural part of "Knowing what I want and what I'm about." Their internal strength suggests an approach entirely different from any perfunctory attempt to tack on skills to the same old person. Some speak of single powerful occasions or periods. "Sweet spots in time," that offer them a glimpse of themselves as capable of "a great deal more than I previously thought possible." All maintain that the potential for major increases in achievement and self-development exists in everyone, and that the starting point is an internal decision to excel. Until that decision is made, nothing much will happen.

Charles Garfield. Peak Performers, 1986, p. 18.

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The Goals of Cognitive Coaching

It is only when we develop others that we permanently succeed.

Harvey S. Firestone

THE GOALS OF COGNITIVE COACHING



**A GOAL OF
COGNITIVE COACHING**

**Draws from prior
knowledge,
sensory data,
and intuition to
guide, hone, and
refine actions**

**Pursues
ambiguities and
possibilities to
create new
meanings**

**BECOMING
INTENTIONALLY
HOLONOMOUS,
ONE WHO ...**

**Explores choice
points between
self-assertion
and integration
with others**

**Seeks perspectives
beyond self and
others to generate
resourceful
responses**

**Seeks balance between
solitude - togetherness,
action - reflection, and
personal growth -
professional growth**

**A GOAL OF
COGNITIVE COACHING**

**Establishes and
maintains trust
in self,
relationships,
processes and
the environment**

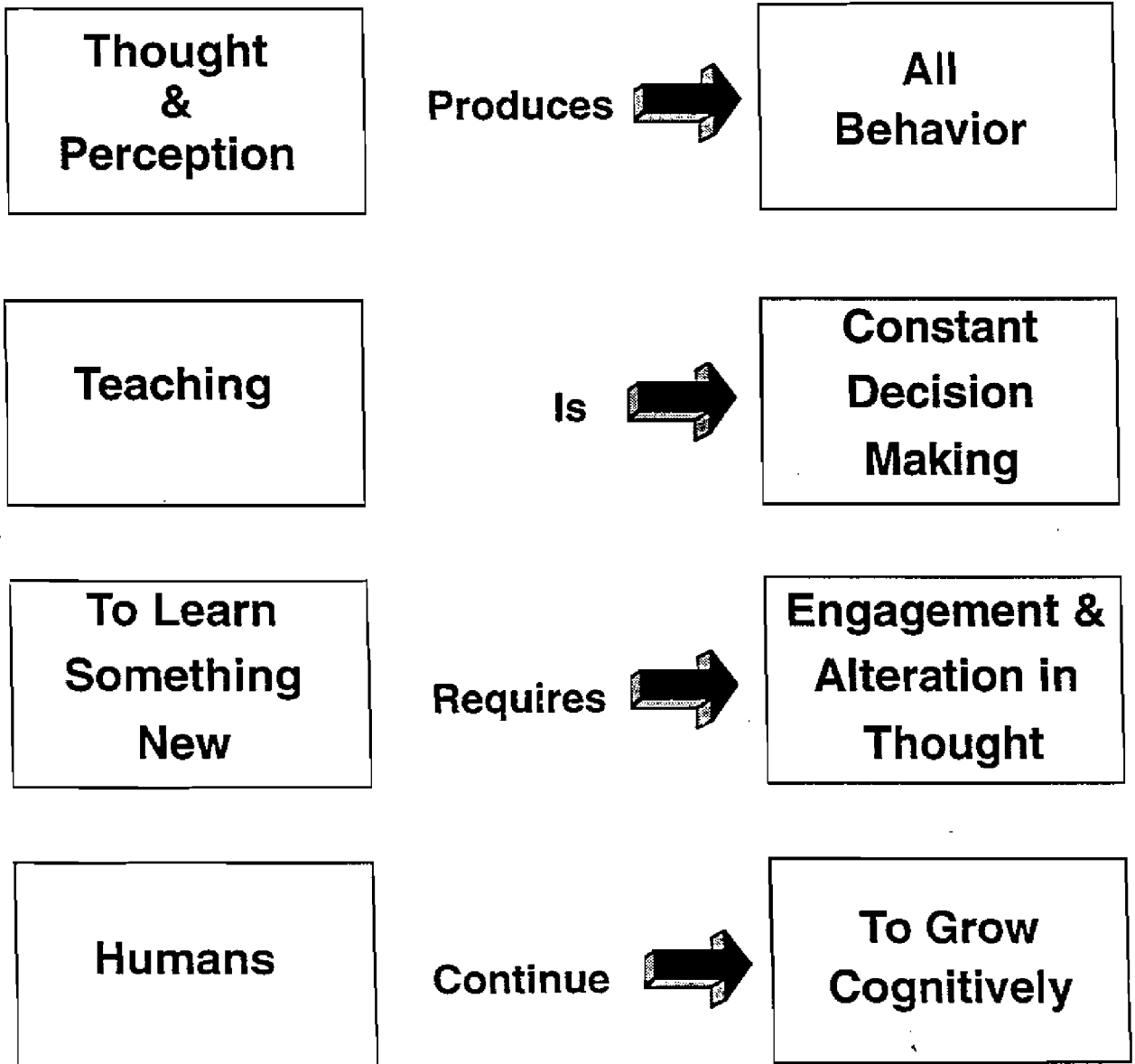
**Interacts with
the intention of
producing
self-directed
learning**

**DEVELOPING
ONE'S IDENTITY
AND CAPACITY AS
A MEDIATOR,
ONE WHO...**

**Maintains faith in the
ability to mediate own
and others' capacity
for continued growth**

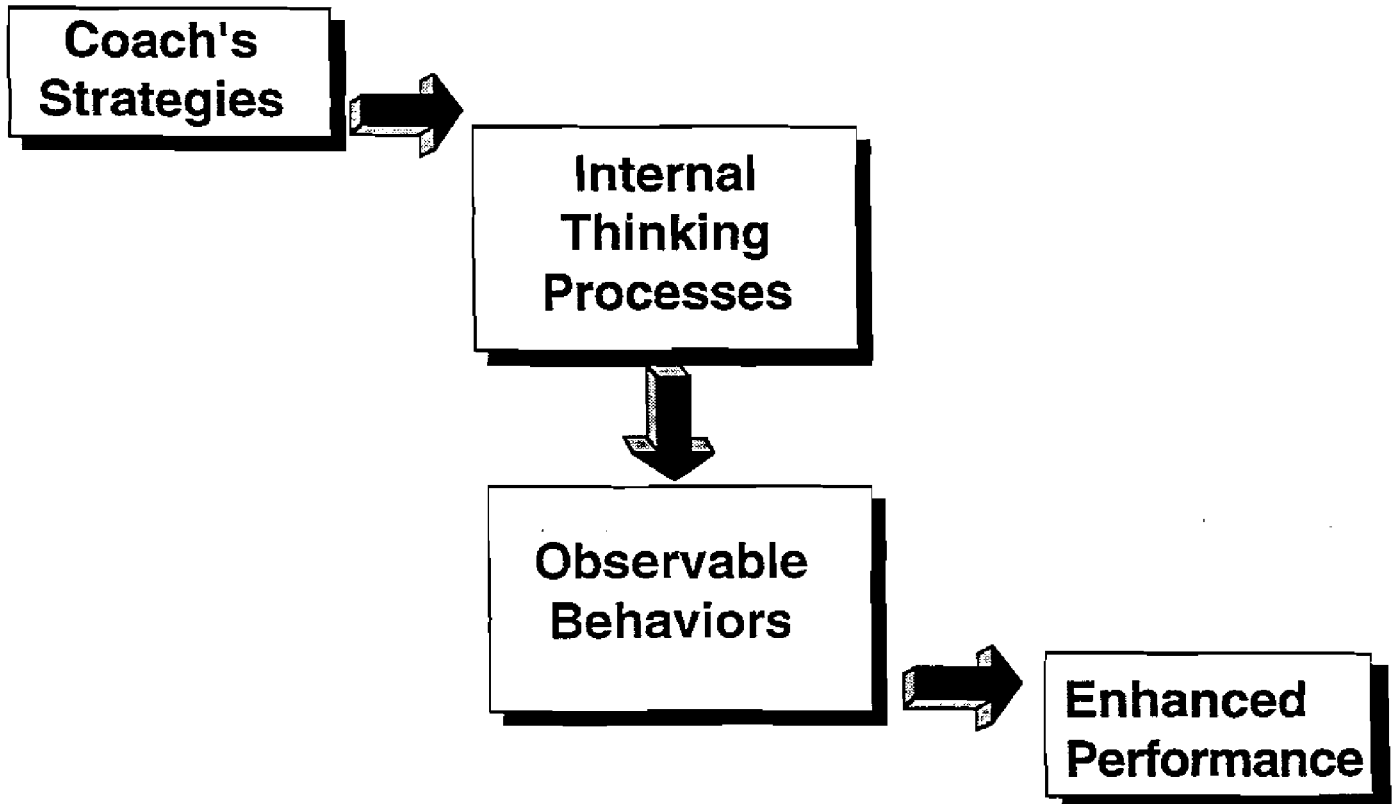
**Envisions and assesses
states of mind; generates
and applies a repertoire
of strategies to enhance
mind states**

ASSUMPTIONS



Cognitive Coaching Mediates

DEFINITION



Cognitive Coaching is:

- ✓ a set of strategies
- ✓ a way of thinking
- ✓ a way of working

that invites self and others to shape and reshape their thinking and problem solving capacities.

THE METAPHORS OF IDENTITY

Our identity, who we believe we are, drives our perceptions of our world, our interactions with others, our construction of meaning, our choices and behaviors, and the way we fulfill the responsibilities of our many roles. At different times, we are husband or wife, grandchild or sibling, boss or employee, expert or student, depending on both the context in which we find ourselves and the other persons with whom we interact. How we carry out each role is influenced by the identity we have developed for ourselves.

In our professional roles as teacher, administrator, or support staff member, the psychological messages we send others derive from the metaphor of identity we hold for ourselves. These messages are manifested by our entire being: our language, nonverbal communication, and points of view. They signal our intention and our belief about the roles each of us play.

Furthermore, our beliefs, values, capacities, and behaviors are always congruent with our sense of identity. As our sense of identity changes, so do our beliefs, values, capacities and behaviors. Most often, this sense of identity is held unconsciously, without calculation or deliberation. It is often expressed metaphorically. Each metaphor of identity carries with it goals and presuppositions that influence the setting of personal standards and criteria for interactions with others.

The following table offers some examples:

IDENTITY	ORIENTATION / GOALS	PRESUPPOSITIONS
Parent	<u>Protector</u> : I want you to grow up strong & healthy, be successful, and invested in my values.	I am wiser and more experienced. This is a dependency relationship. There is reciprocated caring.
Expert	<u>Instructor</u> : Transmit expertise. I want you to develop correct and appropriate performance.	There is a certain way. Expertise is hierarchical. Authority is related to knowledge and skill.
Friend	<u>Advisor / Colleague</u> : I want us to develop and maintain companionship, comfort and affection for each other.	We have a relationship. The relationship is of primary value. We must protect it.
Boss	<u>Authority</u> : I expect compliance. I am responsible for success or failure.	I am responsible. Power comes from position. I am required to direct and control.
Coach	<u>Co-learner</u> : We have an interdependent relationship in which you support my learning, and I yours.	Resources are internal. Each of us has the capacity to self-mediate and self-modify. There are many ways to do this.

FIVE HOLONOMOUS STATES OF MIND

(Acting Autonomously - Working Interdependently)

- ***EFFICACY***

Knowing that I have the capacity to make a difference through my work, and being willing to take the responsibility to do so.

- ***FLEXIBILITY***

Knowing that I have and can develop options to consider about my work, and being willing to acknowledge and demonstrate respect and empathy for diverse perspectives.

- ***CRAFTSMANSHIP***

Knowing that I can continually perfect my craft, and being willing to work toward excellence, and pursue ongoing learning.

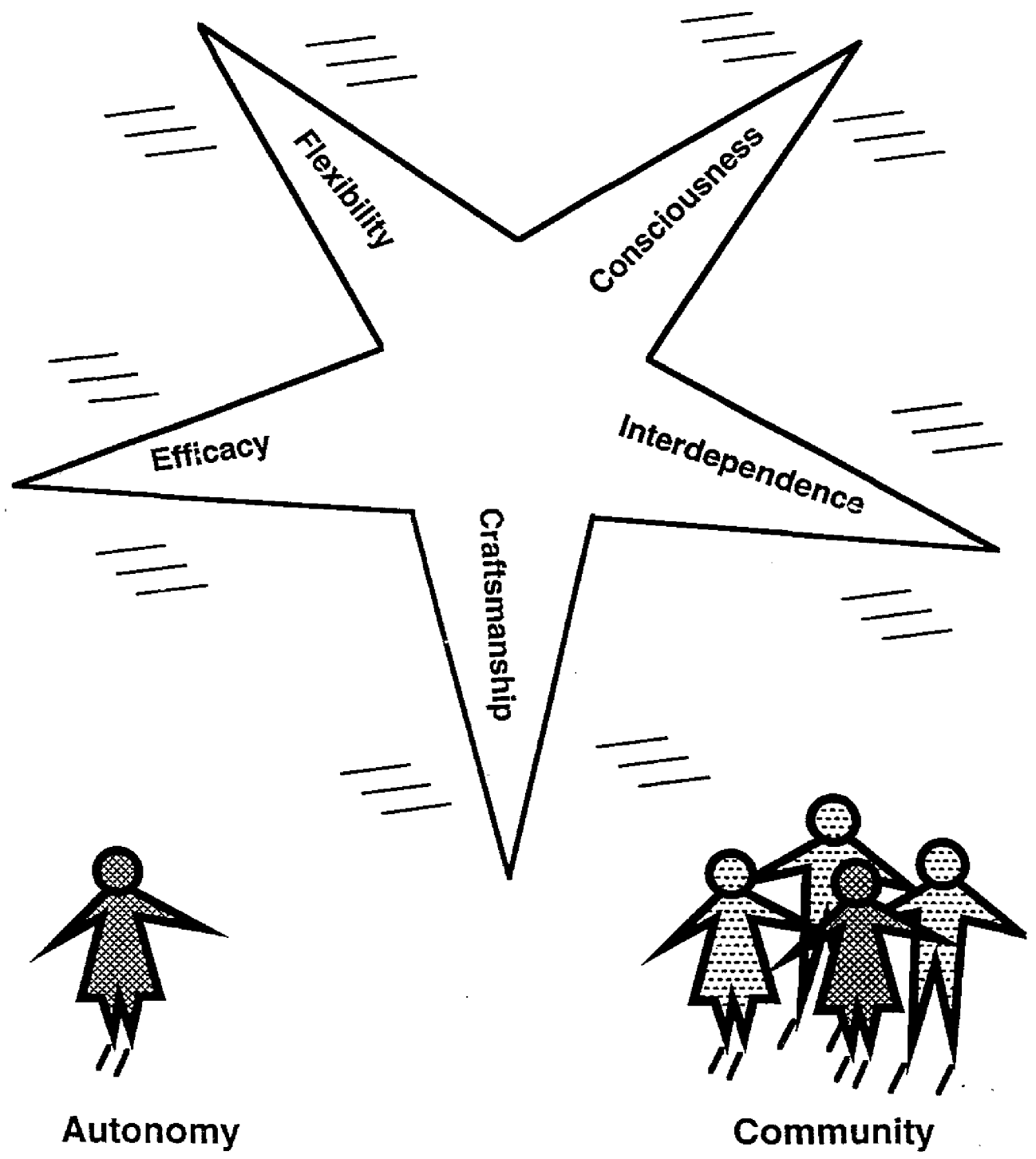
- ***CONSCIOUSNESS***

Knowing what and how I'm thinking about my work in this moment, and being willing to be aware of my actions and their effects.

- ***INTERDEPENDENCE***

Knowing that we will benefit from participating in, contributing to, and receiving from professional relationships; and being willing to create and change relationships to benefit our work.

HOLONOMY



Five States of Mind

HOLONOMOUS PEOPLE

- **Align Behaviors with Values**
- **Act with Intentionality**
- **Contribute to and Learn From Others**
- **Seek Alternative Perspectives**
- **Strive for Constant Improvement**
- **Reflect On and Learn From Experience**
- **Generate Reciprocity Among Self and Larger Systems**

Coaching Conversations

*. . . when it is appropriate — usually after I have developed trust with a client or colleague — I offer generative metaphors and stir the waters.
In a true partnership, a consultant is seen as a coach stirring things up, rather than an expert pouring knowledge into a client or participant.*

Susan J. Bethanis, Learning Organizations (1995), p. 194

A COACHING CYCLE: FOUR PHASES OF THOUGHT

Planning	<p>I. Planning: Coaches mediate by having the planner:</p> <ul style="list-style-type: none"> • Clarify goals • Determine success indicators and a plan for collecting evidence • Anticipate and plan for approaches, strategies, decisions, and monitoring procedures • Identify personal learning focus, and processes for self-assessment
Event	<p>II. Monitoring: For:</p> <ul style="list-style-type: none"> • Evidence of success indicators • Effectiveness of approaches, strategies and decisions
Reflecting	<p>III. Analyzing: Coaches mediate by having the reflector:</p> <ul style="list-style-type: none"> • Summarize impressions • Recall supporting information • Compare planned with achieved results • Analyze, infer, and determine cause and effect relationships <p>IV. Applying: Coaches mediate by having the reflector:</p> <ul style="list-style-type: none"> • Construct new learnings and applications • Reflect on the coaching process and explore refinements

PLANNING

Planning Map

Coaches mediate by having the planner:

- **Clarify** goals
- **Determine** success indicators and a plan for collecting evidence
- **Anticipate** and plan for approaches, strategies, decisions, and monitoring procedures
- **Identify** personal learning focus, and processes for self-assessment
- **Reflect** on the coaching process and explore refinement

Tools

Use the following coaching tools:

- **Pause** now and then to allow your partner time to think.
- **Paraphrase** from time to time; summarize your partner's thoughts by saying, "so,"
- **Probe** gently to support your partner in gaining clarity in his/her thinking by asking: "Say a little more about....."
- **Pay close attention** to your partner. Attend with both your mind and body.

PLANNING CONVERSATION

(Record your observations)

A large empty rectangular box with a vertical line on the right side, intended for recording observations.

REFLECTIONS ABOUT REFLECTION

- Holding conversations about one's work is essential to professional growth and development.
- Insights (complex learning) result from reflecting on one's experience.
- Reflecting on experience is amplified when done with others.
- Professional conversations are enhanced when they are focused and structured.
- Professional conversations are enriched when all members consciously use the tools of inquiry and nonjudgmental response behaviors.
- Professional growth is fostered when each member of an agency takes:
 - An active role in the conversations,
 - A stance of exploration and experimentation, and
 - Is in control of her/his own learning.

REFLECTING

Reflecting Map

Coaches mediate by having the reflector:

- ▷ **Summarize** impressions
- ▷ **Recall** supporting information
- ▷ **Compare** planned with achieved results
- ▷ **Analyze**, infer, a determine cause and effect relationships
- ▷ **Construct** new learnings and applications
- ▷ **Reflect** on the coaching process and explore refinements

Tools

Use the following coaching tools:

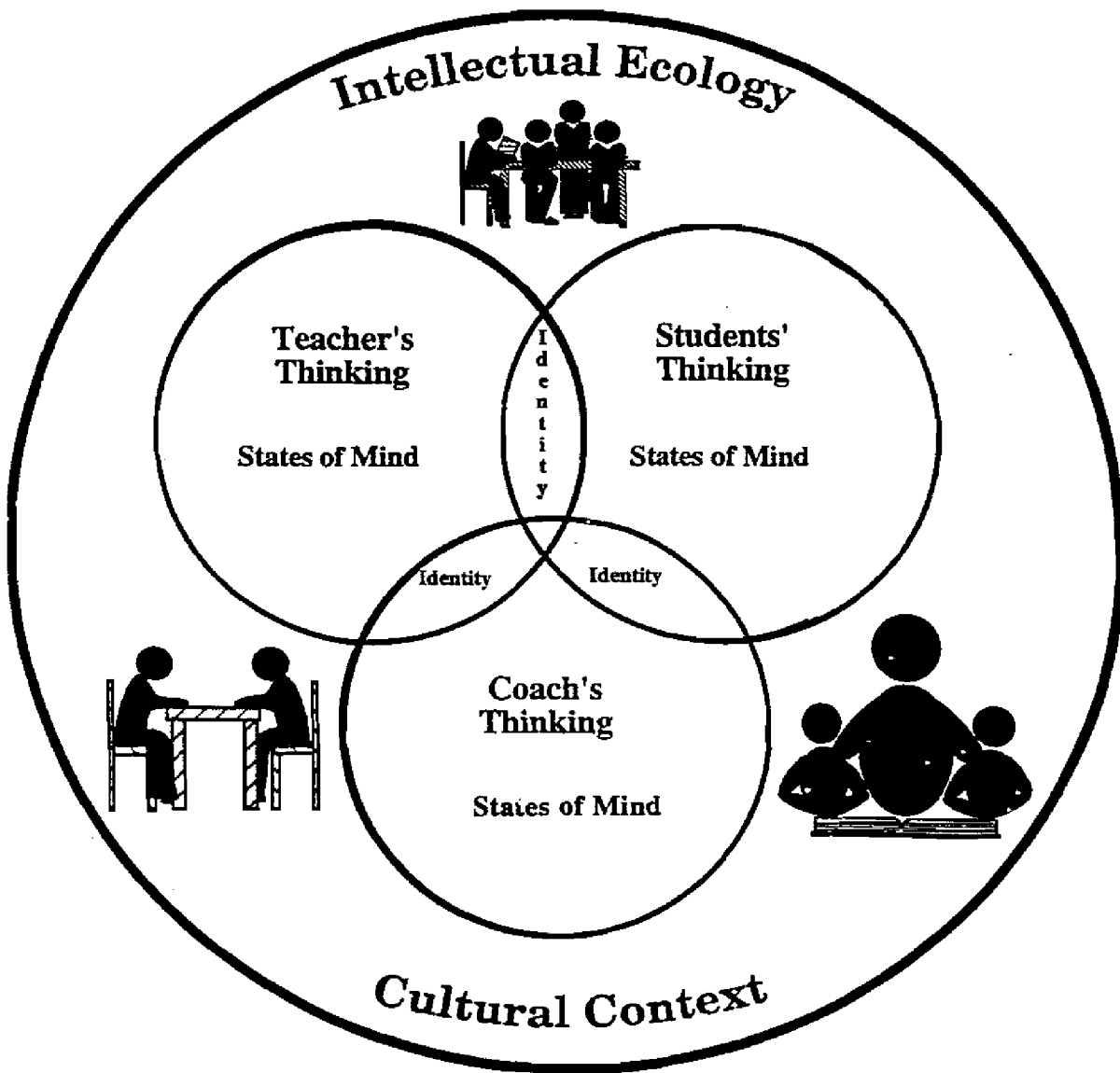
- ▷ **Pause** now and then to allow your partner time to think.
- ▷ **Paraphrase** from time to time; summarize your partner's thoughts by saying, "so,"
- ▷ **Inquire** gently to support your partner in constructing new learning by asking: "*What are some of the things you are learning from this?*" or "*How might you apply this in other settings?*"
- ▷ **Pay close attention** to your partner. Attend with both your mind and body.

REFLECTING CONVERSATION

(Record your observations)

--	--

EMBEDDED THEMES AND VALUES



Transforming Identities

Student
Teacher
Coach

As
Mediator
Of

- A vision of desired states for self, others and the ecology
 - Growth towards desired states for self, others, and the ecology
 - Knowledge production and meaning making for self, others, and the ecology
- Environment
- Data gathering to assess growth towards desired states for self, others, and the ecology

5 TYPES OF VERBAL COMMENTS

A	B	C	D	E

DISTINCTIONS BETWEEN COACHING AND EVALUATION

Coaching and evaluation, while they are similar in some respects, are vastly different in others. Because they are often confused in the perceptions of the teacher, it is essential to distinguish between them in order to clarify the two roles so that all participants know when and how each process is performed.

Coaching		Evaluation
Colleague/Peer	Responsibility	Administrator/Superior
Formative Throughout the year	Timing	Summative deadline set by district/ board policy (e.g., Apr.15)
Cyclical		Terminal
Trust building, learn more about teaching and learning, develop teacher holonomy	Purposes	Judgment of effective performance
Teacher	Sources of criteria	Predetermined or set by board policy or administration
Returned to teacher	Use of data collected	Placed in personnel files as a documentation of performance
Classroom interaction: instruction, student learning, individual student behaviors, teacher behaviors, etc.	Topics covered	Total professional performance: participation on school committees and in school events, attendance, grooming, punctuality, etc.
Made by teacher	Value judgments	Made by administrator/supervisor
Directed by teacher	Role of observer	Determined by supervisor

DISTINCTIONS BETWEEN COACHING AND EVALUATION

Coaching and evaluation, while they are similar in some respects, are vastly different in others. Because they are often confused in the perceptions of the teacher, it is essential to distinguish between them in order to clarify the two roles so that all participants know when and how each process is performed.

Purposes of Coaching	Purposes of Evaluation
1. To increase the opportunities for students to achieve the goals of the curriculum.	1. To meet contractual requirements, e.g., punctuality, attendance, extra-curricular assignments, etc.
2. To enhance the classroom climate for learning.	2. To certify the effectiveness of instruction to the board, public, and staff.
3. To improve the organization of instruction.	3. To illuminate and make commendations for excellence in instructional practices.
4. To align teaching processes and learning activities with theory and learners' needs.	4. To meet legal requirements as determined by legal mandates.
5. To identify and resolve school and classroom problems that may be hindering learning.	5. To apply district adopted criteria for judging instructional effectiveness.
6. To identify and remediate students' behavior problems.	6. To monitor professional conduct, e.g., dress, continuing to learn, participating in district improvement tasks, enthusiasm, etc.
7. To monitor the sequence, articulation, and integration of the curriculum vertically through the grade levels and horizontally across subject areas and that grade level.	7. To identify instructional deficiencies and to plan learning opportunities to remediate those deficiencies.
8. To enhance maximum diversity.	8. To guarantee minimum uniformity.
Furthermore	
9. The power to coach is bestowed by the teachers.	9. The power to evaluate is bestowed by the board, administration, and state/province.

BRAIN COMPATIBLE COACHING

Colleague

Coach

Planning



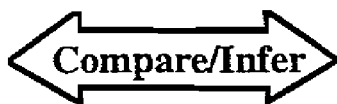
- Goals & objectives
- Evaluation methods
- Strategies
- Data collection methods

Implementing



- Performance
- Strategies and decisions

**Analyzing
&
Assessing**



- Actual vs. desired strategies and decisions
- Actual vs. desired results
- Evidence of achievement of outcomes
- Effectiveness of the strategies
- Relationship of chosen strategies to outcomes

Applying



- Appropriateness of desired objectives
- Alternative teaching strategies
- Coaching process

**WHAT GOES ON IN YOUR HEAD WHEN YOU:
Plan**

What	How

Implement/Monitor

Students	Self

WHAT GOES ON IN YOUR HEAD WHEN YOU: **Analyze/Apply**

Analyzing	Applying

Coaching Behaviors That Influence Thinking

"Shape-shifting is the very essence of communication. When we are trying to understand another person's ideas or we try to get them to understand ours, we shape-shift with that individual; that is, we make the effort to match energies with them. It is through this process of matching energies that we become one with someone or something . . . The same is true with being in the presence of animals or even places."

Heather Hughes-caller, The Flight of Winged Wolf (1993), p. 61

COACHING BEHAVIORS THAT INFLUENCE THINKING

- Applying Rapport Skills**
body matching, intonation, language
- Structuring**
time, space, purposes
- Using Silence**
wait-time, listening
- Acknowledging**
nonverbally, verbally
- Paraphrasing**
simple, summarizing, synthesizing
- Clarifying**
probing for values, meanings & specificity
- Mediating Questioning**
using positive presuppositions
- Providing**
data, resources

TRUST

When trust exists in a relationship, I . . .

Factors that promote trust:

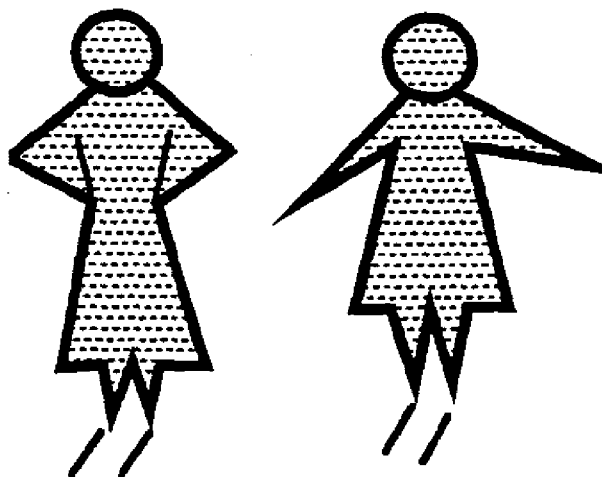
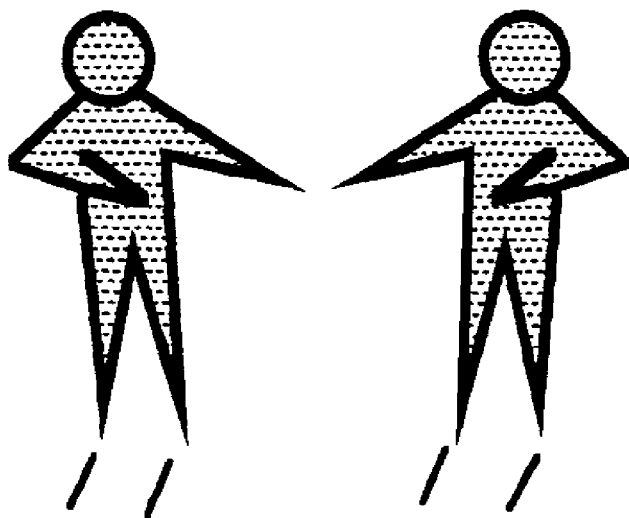
The way of being with another person which is termed empathic . . . means temporarily living in their life, moving about in it delicately, without making judgments . . . to be with another in this way means that for the time being you lay aside the views and values you hold for yourself in order to enter the other's world without prejudice . . . a complex, demanding, strong yet subtle and gentle way of being.

Carl R. Rogers

RAPPORT

Elements:

- Posture
- Gesture
- Tonality
- Language
- Breathing



When to Consciously Apply Rapport Tools:

- When I anticipate tension or anxiety in another.
- When tension or anxiety emerges during a conversation.
- When I can't understand another person or when I'm having difficulty paying attention to another.

Many, and sometimes most, of the critical meaning generated in human encounters are elicited by touch, glance, vocal nuance, gesture, or facial expression with or without the aid of words. From the moment of recognition until the moment of separation, people observe each other with all their senses, hearing pause and intonation, attending to dress and carriage, observing glance and facial tension, as well as noting word choice and syntax. Every harmony or disharmony of signals guides the interpretation of passing mood or enduring attribute. Out of the evaluations of kinetic, vocal, and verbal cues decisions are made to argue or agree, to laugh or blush, to relax or resist, to continue or cut off conversation.

D. Barnlund, Interpersonal Communication: Survey and Studies, pp. 256-257

PRINCIPLES OF PARAPHRASING

- ✓ Attend fully
- ✓ Listen with the intention to understand
- ✓ Capture the *essence* of the message
- ✓ Reflect the *essence* of voice tone and gestures
- ✓ Make the paraphrase shorter than the original statement
- ✓ Paraphrase before asking a question

PARAPHRASING

An effective paraphrase conveys understanding by reflecting both the feeling AND the content of the message.

A paraphrase sends three messages:

- I am listening
- I am interested / I care
- I understand you (or I'm trying to)

Four types of paraphrase:

1. **Empathizing** — a statement that reflects only the feelings within the message
2. **Simple** — brief restatement in the listener's own words
3. **Summary** — a restatement that captures the essence of a longer communication in shorter form; often reshaping or reorganizing the initiating communication
4. **Synthesizing** — a statement that raises, lowers, or extends the level of thinking

Paraphrase: From the Greek: *para*, beyond + *phrazein*, to tell = to tell beyond.
Webster's: "A rewording of the thought or meaning expressed in something that has been said or written."

INCREASING EFFECTIVENESS IN PARAPHRASING

BEING STRATEGIC

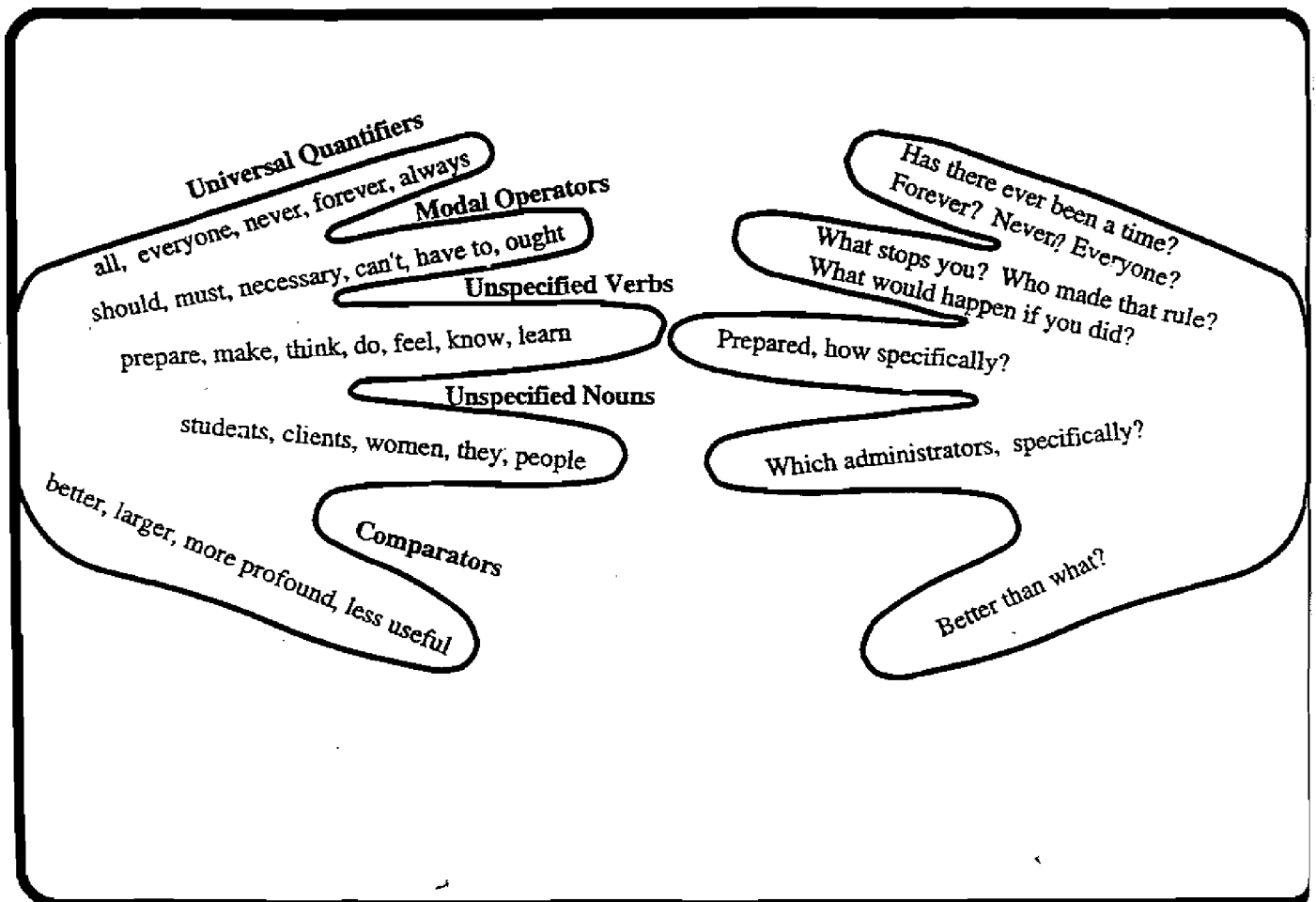
We can develop our paraphrasing skills by increasing our consciousness of our internal strategies for attending to, sifting, and organizing a speaker's content. What are some of your strategies?

USING PARAPHRASING OPENERS

The following are examples of words or phrases that may be used to begin a paraphrase. Check any that you currently use; then add others you might like to try.

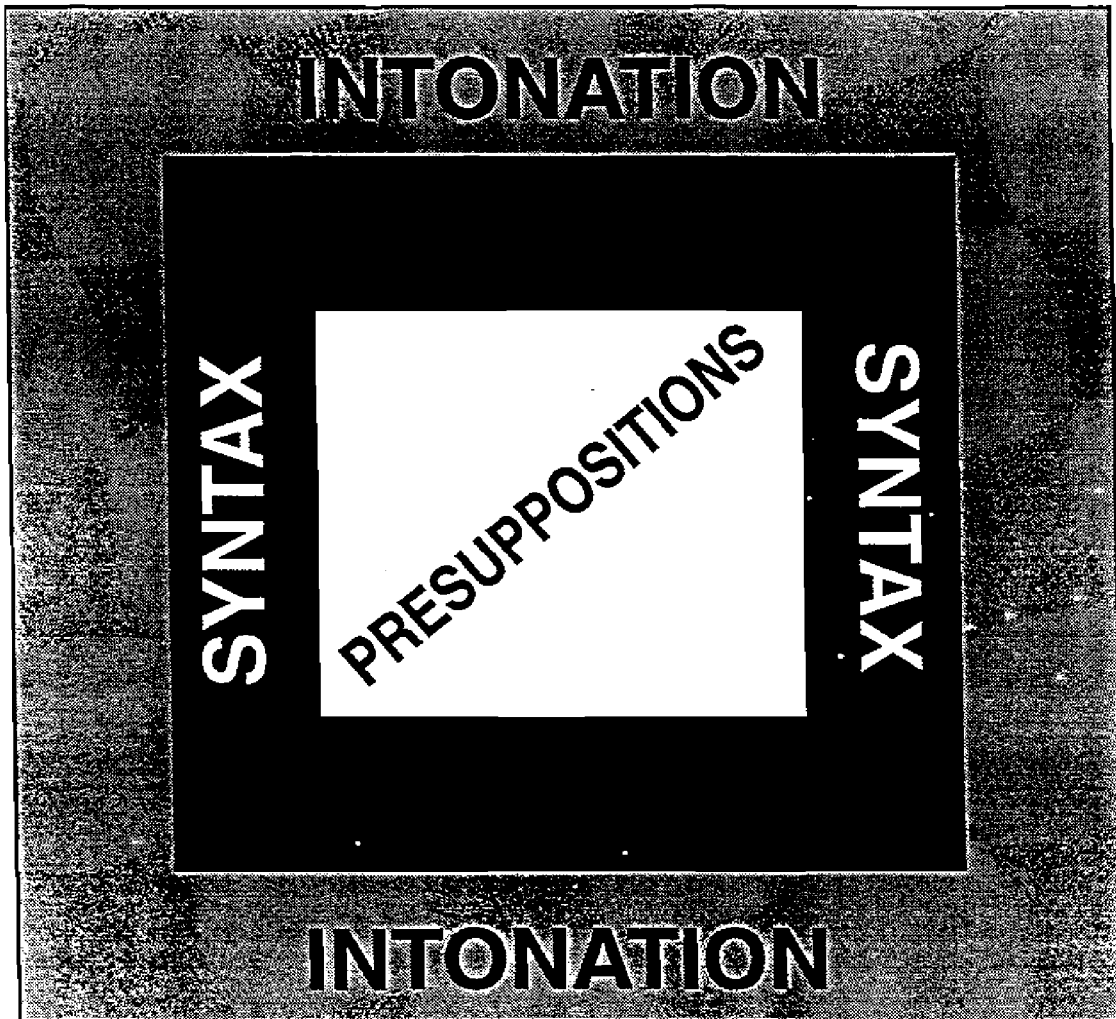
- So ...
- You're feeling ...
- You're feeling as if ...
- In other words ...
- You're saying that ...
- You're seeing ...
- As you ...
- You're thinking ...
- You're hoping ...
- You're wondering ...
- You're wanting ...
- You're suggesting ...
- Recapping ...
-
-
-
-

ELICITING PRECISION IN LANGUAGE AND THINKING (Meta-Model)



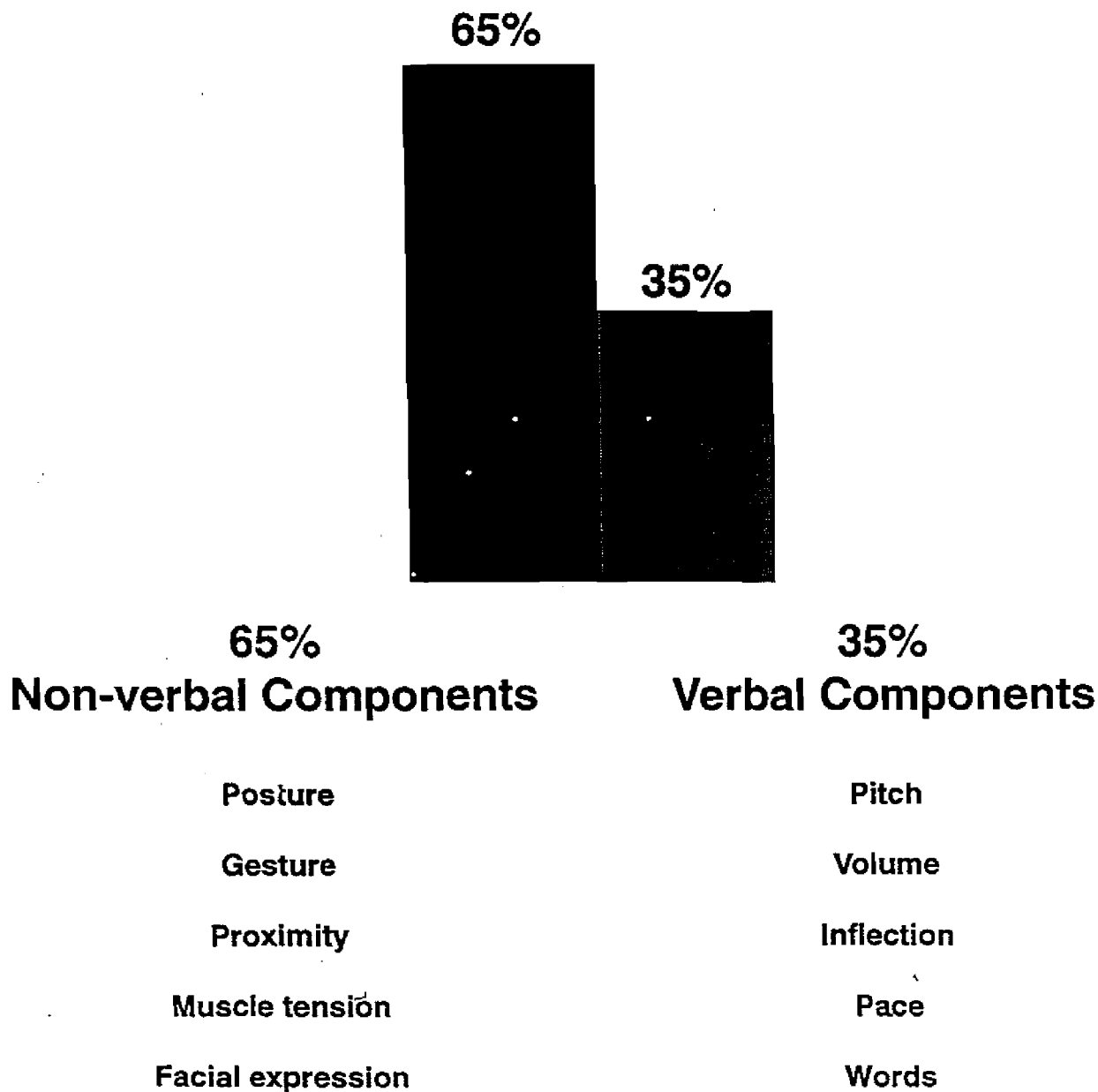
*Based on Richard Bandler, John Grinder,
and Genie Z. Laborde*

WHEN QUESTIONING, PAY ATTENTION TO:



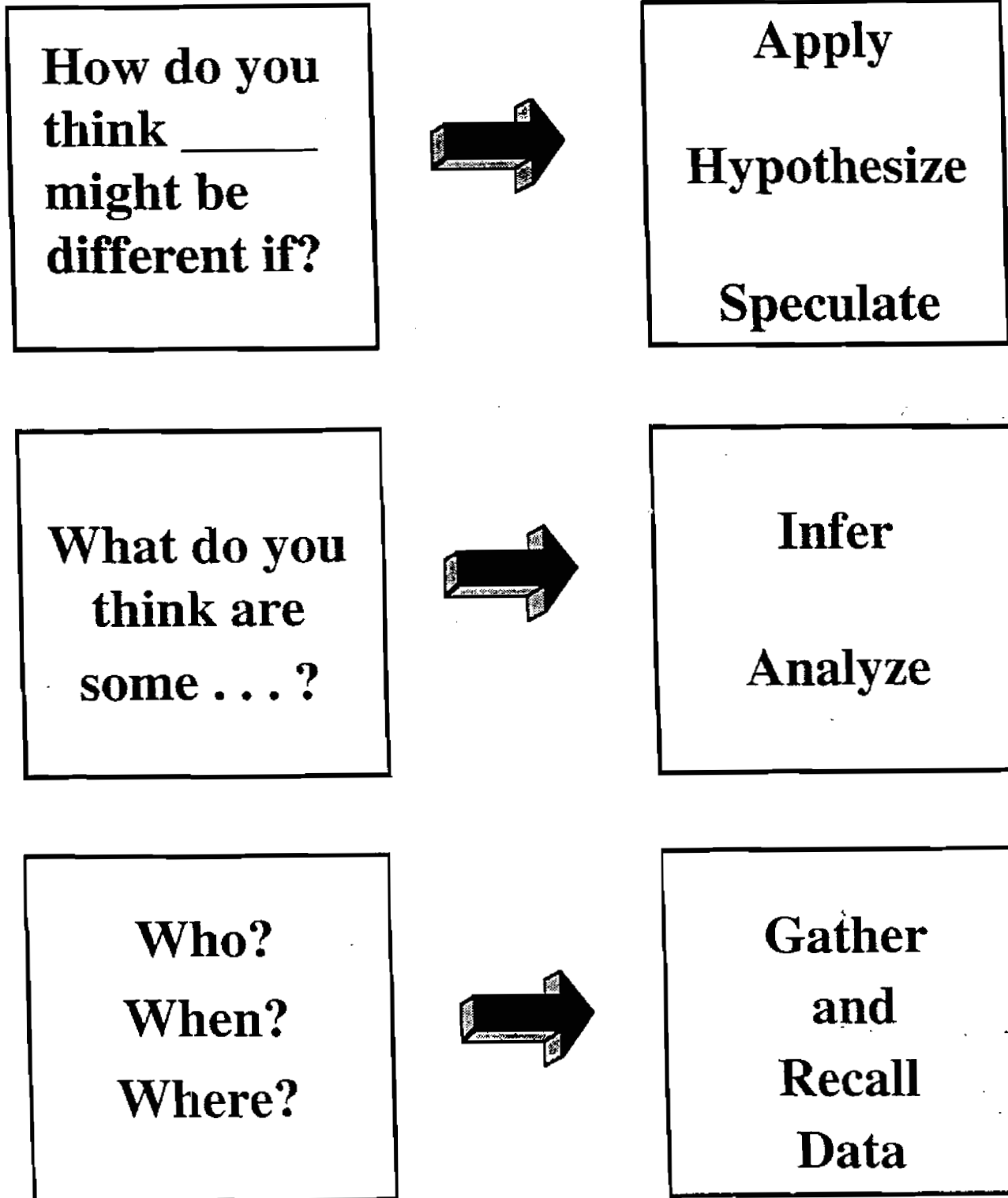
COMMUNICATING MEANING

Proportion of meaning inferred from non-verbal and verbal components



Source: Burgoon, J.K., D. B. Buller, and W.G. Woodall (1989). *Nonverbal Communication: The Unspoken Dialogue*. N.Y., Harper and Row.

QUESTION SYNTAX



ASKING MEDIATIONAL QUESTIONS

Examples:

Intention of Inquiry: Syntax:

**data, information,
facts**

"What use will you make of the information?"
"How is the information related to . . . ?"

time

Sequence: "What happens first, second . . . "
Duration: "How long . . . "
Rhythm: "How often . . . how frequently . . . "

metacognition

"What were you thinking when . . . "

elaboration

"Tell me more about . . . "

clarification

"Explain what you mean by . . . "

intentionality

"For what purpose, toward what end . . . "

prediction

"If you do . . . , what do you think will happen?"

flexibility

"What if you were to . . . "
"How else might you . . . "

application

"What will you do with this?"
"How will you apply this in another situation?"

values/beliefs

"What is important for you in . . . "
"What do you believe about . . . "

feelings

"What are your feelings about . . . "
"How do you feel about . . . "
"How do you feel when . . . "

commitment

"What are you choosing to do . . . ?"
"What follow-up needs to take place?"

PRESUPPOSITIONS

Our language contains overt and covert messages. The deeper meanings we interpret from the language of others is not always communicated by the surface structure of the words and syntax. In *The Gentle Art of Verbal Self-Defense*, Suzette Haden Elgin points out the subtle and, at times, not so subtle ways in which the embedded presuppositions in our language can be hurtful to others.

For instance, every native speaker of English knows that the utterance, "Even Bill could get an A in that class," means (a) that Bill is no great shakes as a student, and (b) that the class is not difficult in any way. But notice that neither one of those pieces of information is present in the surface structure of the sentence, in its overt wording. That is, the sentence does not read: "Even Bill, who is certainly no great shakes as a student, could get an A in that class, which is not difficult in any way." Nevertheless, that is what it means. The two unstated pieces are part of the presuppositions or assumptions of the utterance.

By paying attention to the presuppositions that we use and choosing our words with care, we can more positively influence the thinking and feelings of others with whom we are communicating.

Analyzing Questions for Presuppositions

Identify the presupposition(s) in each question. Describe the possible impact on the person's (a) feelings, and (b) cognition. Then write an improved question.

1. Have you been able to come up with a goal?
2. Why did you do that?
3. How can you possibly solve such a difficult problem?
4. What could you have done to make it more successful?
5. Why don't you try _____?
6. How can I help you improve?

POSITIVE PRESUPPOSITIONS

- Presume:
 - Capacity
 - Positive intentionality
 - Prior and ongoing thought

- Ask questions framed from a spirit of inquiry

- Seek multiple perspectives rather than single causes

- Are accepting

- May use a variety of introductory phrases, such as
 - As you . . .
 - When you . . .
 - While you . . .

COACHING QUESTIONS

Interrogation	Inquiry
<ol style="list-style-type: none"> 1. Why did you do that? 2. What percentage of the time are you successful? 3. Are you still having difficulty with the new _____? 4. What makes you think that? 5. Were you able to follow your plan? 6. Why do you oppose working in teams? 7. What could you have done to get better results? 	<ol style="list-style-type: none"> 1. What were some of your reasons for making that choice / decision? 2. What are you seeing that indicates you are getting the results you expect? 3. Which part of the new _____ seems to be the most challenging? 4. How did you come to that answer? 5. How was your plan useful to you as you carried out the activity? 6. What is it about working in teams that troubles you? 7. What other possibilities might there be to produce different results next time?
<p>What characteristics do these questions have in common?</p>	<p>What characteristics do these questions have in common?</p>

How are the questions in the two columns different?

MEDIATIONAL QUESTIONS:

- Invite complex thinking and reflection
- Are open-ended, allowing for many possible responses
- Are non-judgmental and embed positive presuppositions
- Use plural nouns and tentative language
- Focus on self-directed learning

Mediational questions invite complex thinking and promote reflection. Such questions are directed to the internal process rather than the external situation, task, or content. Effective mediational questioning focuses on the thinking processes which underlie a person's perceptions, behaviors, decisions, or choices.

COACHING QUESTIONS TO ELICIT DESIRED THINKING

PLANNING EXERCISE:

	Purpose	Examples
P L A N N I N G	<ul style="list-style-type: none"> • Clarify goals 	
	<ul style="list-style-type: none"> • Determine success indicators and a plan for collecting evidence 	
	<ul style="list-style-type: none"> • Anticipate and plan for approaches, strategies, decisions, and monitoring procedures 	
	<ul style="list-style-type: none"> • Identify personal learning focus, and processes for self-assessment 	
	<ul style="list-style-type: none"> • Reflect on the coaching process and explore refinements 	

COACHING QUESTIONS TO ELICIT DESIRED THINKING

REFLECTING EXERCISE:

REFLECTING	Purpose	Examples
	• Summarize impressions	
	• Recall supporting information	
	• Compare planned with achieved results	
	• Analyze, infer, and determine cause-and-effect relationships	
	• Construct new learnings and applications	
	• Reflect on the coaching process and explore refinements	

Coaching Flexibility

The test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time and still retain the ability to function.

F. Scott Fitzgerald

STYLES AS FILTERS

REPRESENTATIONAL SYSTEMS

- Kinesthetic
- Visual
- Auditory

COGNITIVE STYLES

- Field Dependent
- Field Independent
- Cognitive Flexibility

EDUCATIONAL BELIEF SYSTEMS

- Self-Actualizer
- Cognitive Processor
- Technologist
- Academic Rationalist
- Social Reconstructionist

Style Preferences

- are what others associate with us and find typical and consistent about us.
- influence our personal and professional behavior—how we approach our work, our learning, our interaction with others!

Style Preference

Influences

- How we think
- How we learn
- How we make decisions
- How we perceive things
- How we work with others
- What we value

Knowing about my style helps me understand how I affect others.

Knowing others' style helps me understand and modify my responses to their behavior.

Awareness of style, my own and others, helps me to take into consideration differences in preferences, beliefs, and values as I work with others.

REPRESENTATIONAL SYSTEMS

LANGUAGE INDICATORS OF MODALITY PREFERENCES

As you listen to a person talk, you may discover there are times when a majority of his/her predicates (descriptive words and phrases – primarily verbs, adverbs and adjectives) are from one of the modality or representational systems listed below. This person is choosing, usually at an unconscious level, to isolate one system from his/her ongoing stream of representational system experiences. This is an indicator for you of how this person is best understanding his/her experiences and how you can best communicate.

Visual

see
look
observe
watch
clear
viewpoint
perspective
point of view
visualize
eyeball
hazy
fuzzy
murky
vivid
light
transparent
lighten up
look something up
picture
reflect
acuity
see the light
focus
image
mirror
insight
foreshadow
red
purple

Auditory

hear
listen
speak
tell myself
verbalize
told
talk
say
clear as a bell
tune in
resonate
tone
harmonious
volume
loud
dissonant
pitch
high pitched
low key
squeaky
singsong
ring my chimes
unheard of
well said
answer
so to speak
drum it in
mellifluous

Kinesthetic

feel
grasp
handle
energetic
in touch
gut feeling
firm
foundation
on the level
relaxed
tense
weighy
heavy
come to grips
lightweight
raise an issue
grasp the situation
let go
sleep on it
hurt
touchy
irrational
pushy
pain in the neck
itchy
foot the bill
shoulder the blame
soft touch

Olfactory

smell
odor
scent
aroma
fragrant
rotten
fresh

Gustatory

taste
tasteless
tasteful
salivate
mouthwatering
tip of my tongue
delicious
lip smacker
sweet
spicy
bitter pill to swallow
bit off more than she/he could
chew

Nonspecific

think
experience
know
intellectualize
understand
perceive
respond
accurate
solution
resolve
strategy
logical

REPRESENTATIONAL SYSTEM PRACTICE

1. My boss walks all over me like I'm a door mat.

Match:

Translate:

Translate:

2. I get the feeling I'm unappreciated.

Match:

Translate:

Translate:

3. I have trouble looking back to that problem.

Match:

Translate:

Translate:

4. I'm guiding this project by the seat of my pants.

Match:

Translate:

Translate:

5. She's a sweet girl.

Match:

Translate:

Translate:

6. I can imagine what she's like."

Match:

Translate:

Translate:

7. I ask myself, "How did I ever get into this?"

Match:

Translate:

Translate:

8. Something tells me I'm making a mistake.

Match:

Translate:

Translate:

9. I've tried to get a handle on what my boss means.

Match:

Translate:

Translate:

10. I keep stubbing my toe on unexpected obstacles.

Match:

Translate:

Translate:

11. Joe paints a clear picture of disaster ahead.

Match:

Translate:

Translate:

12. Smells like a dead fish to me.

Match:

Translate:

Translate:

GOALS OF EDUCATION

In the space provided, rank each of the following statements from 1 (most important) to 5 (least important) according to your personal priorities and belief systems.

My priority ranking of the main purposes of education is as follows:

- _____ 1. To develop students' ability to think clearly, to use intellectual reasoning to solve problems, and to make rational decisions.

- _____ 2. To nurture the individual child's unique potential to allow full development of his/her creativity and sensitivity, and to encourage personal integrity, love of learning, and self-fulfillment.

- _____ 3. To diagnose the learner's needs and abilities, to design instructional strategies which develop skills and competencies, and to produce trained people who are able to function efficiently in our changing, complex, technological society.

- _____ 4. To transmit to young people the basic knowledge, skills, traditions, academic concepts, and values necessary to interpret, participate in, and further the heritage and traditions of our country.

- _____ 5. To create an intense awareness of the critical social and environmental issues, and develop a consciousness of responsibility and reform to ensure the survival of society.

EVIDENCE OF THINKING: BMIRS
(Behavioral Manifestations of Internal Response States)

Verbal

Non-Verbal

--	--

COGNITIVE SHIFTS

STRATEGIES FOR INVITING SHIFTS IN THOUGHT:

- Propose a data search**

- Pose a question that invites analysis**

- Encourage the making of new connections**

- Invite a shift in perceptual position**

- Invite creation or imagination**

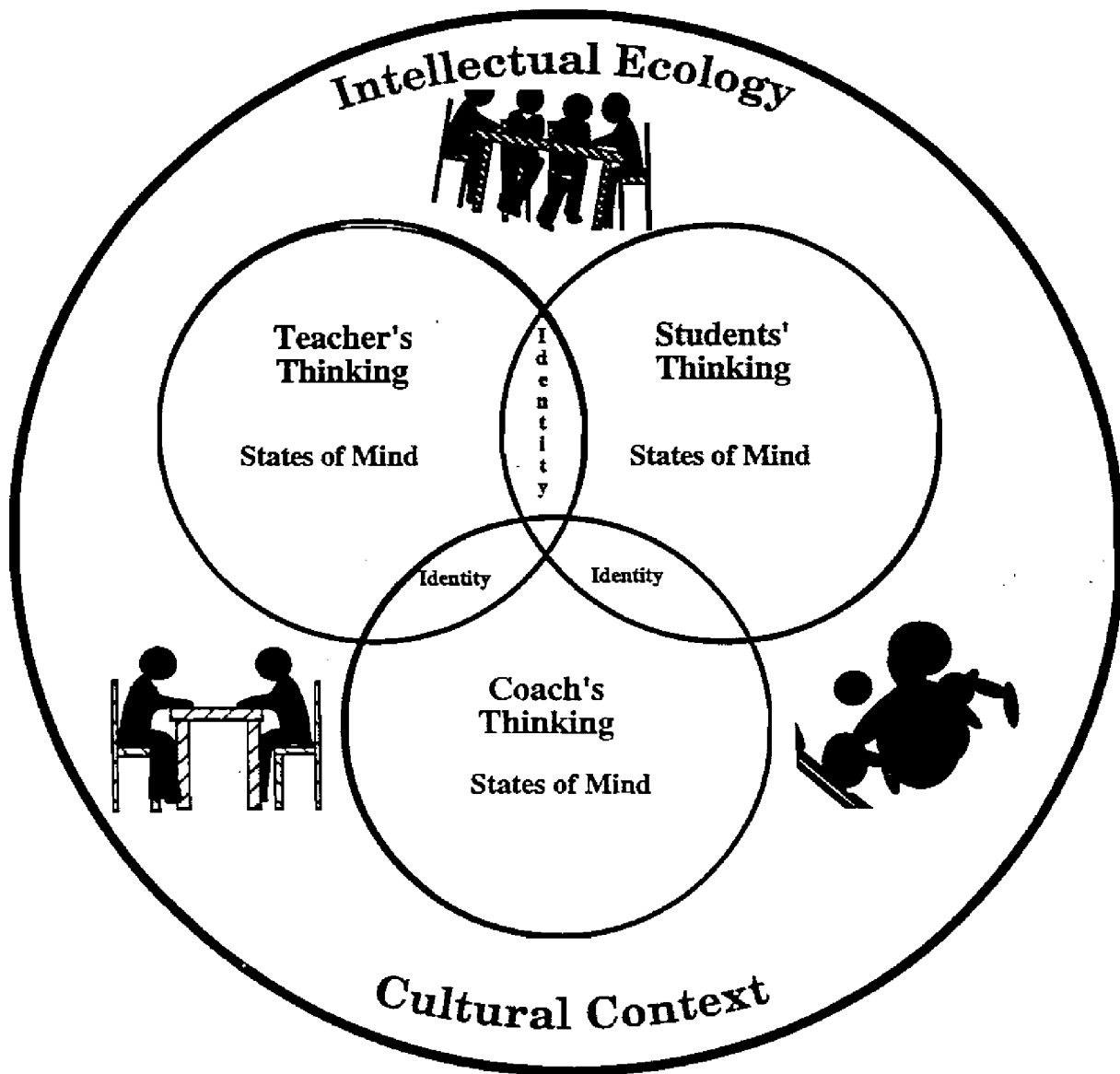
- Seek an expression of values**

- Elicit a choice from among alternatives**

GOALS AND OPPORTUNITIES: A METACOGNITIVE MATRIX

	Myself	Those I directly influence	The larger organization
Desired Outcome (Stated in action terms)			
Opportunities for Action			
Strategies to Maximize Success			
Evidence of Achievement			

EMBEDDED THEMES AND VALUES



Transforming Identities

Student

Teacher

Coach

As
Mediator
of

- A vision of desired states for self, others, and the ecology
- Growth toward desired states for self, others, and the ecology
- Knowledge production and meaning making for self, others, and the ecology
- Data gathering to assess growth toward desired states for self, others, and the ecology

Environment

THE META COACH

The Role of the Meta Coach

The role of the meta coach is an accelerated learning strategy. Meta coach means coaching the metacognition of the coach. It is an opportunity to coach the coach's thinking.

Guidelines for the Meta Coach

- Be nonjudgmental
- Paraphrase and listen
- Ask questions to promote coach's thinking

EYE ACCESSING CUES*

10:00
visual construct

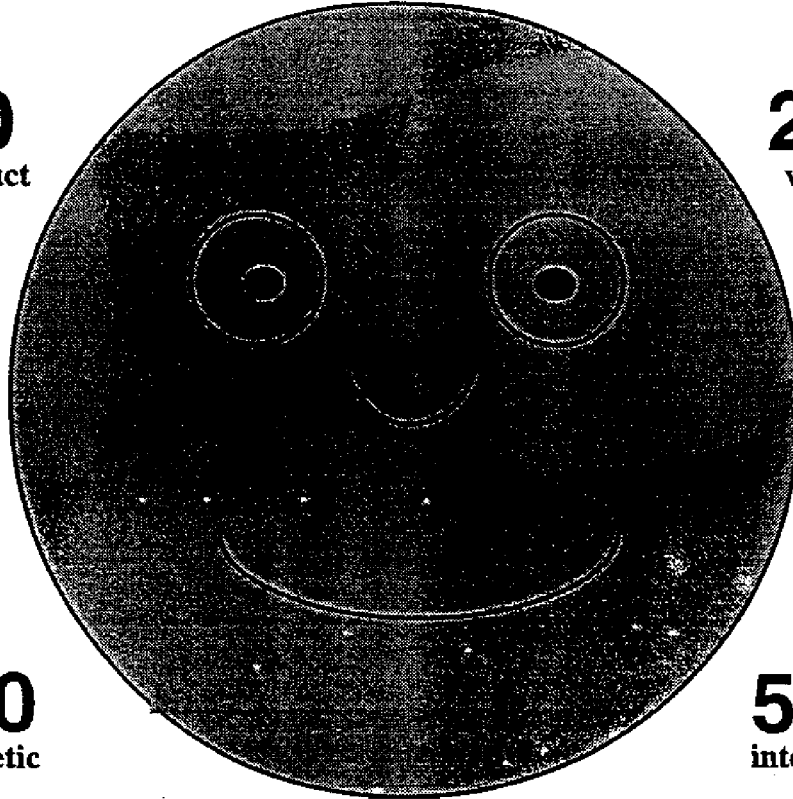
2:00
visual recall

9:00
auditory
construct

3:00
auditory recall

7:00
kinesthetic

5:00
internal dialog



* For Normally Organized Right-Handed People

APPENDIX

Take care of each other. Share your energies with the group. No one must feel alone, cut off, for that is when you do not make it.

Willi Unsoeld

SKILL AND CONCEPT DEVELOPMENT SUGGESTIONS

1. Practice coaching with colleagues before the next seminar dates.
2. Self-assess your coaching practice and experiences.
3. Consciously build a trusting relationship with a colleague.
4. Keep a journal about your interactions with, observations of, and reflections about your practice with Cognitive Coaching.
5. Experiment with, and make inferences regarding, elements of rapport.
6. Refer to Chapters 1, 2, and 3 in *Cognitive Coaching: A Foundation for Renaissance Schools*, by Arthur L. Costa and Robert J. Garmston, Norwood, MA, Christopher-Gordon Publishers, 1994.
7. Pay attention to particular states of mind as you go about your daily work. Reflect on your states of mind and identify specific examples of your accessing them to enhance your growth toward holonomy.
8. Practice observing eye movements (see Appendix, p. 121) monitoring wait time, and assessing thinking patterns.
9. Describe to someone what you are learning about Cognitive Coaching.
10. Apply the coaching maps to your own work — as self-coaching tools.

We are conscious of an animal in us, which awakens in proportion as our higher nature slumbers. It is reptile and sensual, and perhaps cannot be wholly expelled.

Henry David Thoreau, Walden

SKILL AND CONCEPT DEVELOPMENT SUGGESTIONS

11. Practice planning and reflecting conversations.
12. Find an occasion to record about 10 minutes of another person's language. Record the words that characterize their representational system preferences.
13. Practice questioning and responding behaviors (paraphrasing, clarifying) in varied settings.
14. Listen for presuppositions in your own and other's questions.
15. Refer to Chapters 4, 5, and 6 in *Cognitive Coaching: A Foundation for Renaissance Schools*. For extended reading refer to Appendix A and C.
16. Continue noticing visual, auditory, and kinesthetic indicators such as a colleague's language or eye accessing cues. Use language congruent with your observations.
17. Describe to someone what you are learning as you apply the principles and practices of Cognitive Coaching.

Nothing worse could happen to one than to be completely understood.

Carl Jung

SKILL AND CONCEPT DEVELOPMENT SUGGESTIONS

18. Schedule periodic planning and reflecting conferences with a person that you know well, so that you can hone specific coaching knowledge and skills.
19. Continue to keep a journal of your experiences. What are you learning? What insights are you having?
20. Experiment with inviting cognitive shifts in others. Collect indicators of cognitive shifts.
21. Search for generalizations, deletions, and distortions in your own experiences.
22. Be conscious of States of Mind as you perform your work and interact with others.
23. Diagnose colleagues' language for indicators of colleagues' states of efficacy, flexibility, craftsmanship, consciousness, and interdependence. Practice language of empowerment tools with them and notice shifts toward more holonomous behavior.
24. When confronted with problematic situations in your personal and professional life, be aware of the State of Mind that would be most useful in dealing with the situation. Ask how you might draw on the resources of that State of Mind to assist you.
25. Reflect on your organization (classroom, school, or district). What indicators are you observing that suggest which States of Mind are most or least prevalent?
26. Refer to chapters 7, 8, and 9 in *Cognitive Coaching: A Foundation for Renaissance Schools*.

The word organization is a product of how we think and how we interact; they cannot change in any fundamental way unless we can change our basic patterns of thinking and interacting.

Peter Senge, the Learning Organization Made Plain, October, 1991.

COGNITIVE COACHING: TOWARD GREATER LEARNING FOR ALL

Why Coaching?

Improving Student Outcomes

There is a direct link between the types and qualities of teacher thinking and student outcomes. Traditional models of supervision and coaching have focused on installing and extinguishing certain teacher behaviors. These approaches have had limited success and, over time, have narrowed teachers' conceptual frameworks. Cognitive Coaching focuses on the internal thinking and decision making capabilities of the teacher. Bruce Joyce and Beverly Showers refer to these as the invisible skills of teaching. A focus on these skills helps teachers to generate new possibilities, increase instructional flexibility, and focus on outcomes, not problems. (Costa and Garmston)

Supporting Instructional Change

Conventional approaches to staff development — workshops, lectures, demonstrations, etc., show little evidence of transfer into ongoing daily instructional practice. In several studies by Bruce Joyce and Beverly Showers, the level of classroom application after even high quality training hovered around 5%. When they added peer coaching to the training designs the level of application increased to 90%, and with periodic review of both the teaching models and coaching skills, classroom application remained at the 90% level. (Joyce and Showers)

Enhancing Student Thinking

There is a direct link between the language that teachers use and the quality of their thinking. Precision in language leads to precision in thinking. Cognitive Coaching leads to greater language precision for all involved. This linkage extends to the quality of student thinking in the classrooms of those same teachers. Further, Cognitive Coaching includes skill development in questioning and response behaviors appropriate to adult interaction and teacher/student interaction as well. Teacher question and response behaviors and language patterns cue student thinking, mediate student responses, focus student attention on details and essential processes, and convey caring and expectations. (Costa and Marzano; Costa and Garmston)

Appreciating and Celebrating Diversity

Human beings operate with a rich variety of cultural, personal, and cognitive style differences. These differences are resources for learning. Appreciating and working with style differences requires awareness, knowledge, skills, and positive attitudes for all involved. Key strands in the Cognitive Coaching training provide frameworks and tools for coaches to work with other adults and with students in open and resourceful ways. (Costa and Garmston; Witkin; Bandler and Grinder)

Promoting Collegiality

Problem solving, creativity, and faculty collaboration are powerful sources of teacher renewal. Collegiality is not the same as conviviality. True professional collegiality is built upon shared norms of interaction that focus on the many roles of teachers as they share materials and ideas and seek and offer assistance to one another. The Cognitive Coaching model provides a comfortable format for professional dialogue and develops the skills for deep instructional planning, reflection on practice, and problem solving. (Little; Rosenholtz; Costa and Garmston)

Developing Teacher Conceptual Development

Cognitive Coaching enhances and stretches the conceptual frameworks of teachers. Teachers with higher conceptual levels are more adaptive and flexible in their teaching style, approaches to students, and classroom designs (Hunt; Harvey). They employ a broader repertoire of teaching strategies and a wider range of coping behaviors (Hunt and Joyce). High concept teachers are more effective with a wider range of students, including students from diverse cultural backgrounds (Harvey, Prather, White & Hoffmeister; Hunt). And they are more stress tolerant and able to deal with ambiguity. (Tomlinson and Hunt; Gordon; Suedfeld)

Building School Culture

Good instruction does not exist in a vacuum. Effective teachers working in isolation cannot create cohesive instructional patterns that serve students in a cumulative fashion. The culture of the school — the pattern of adult interaction, the traditions, rituals, and shared norms — has a strong influence on the instructional outcomes for students. Cognitive Coaching promotes cohesive school cultures where norms of experimentation and open and honest communication enable everyone in the school to interact in healthy and respectful ways. (Saphier and King)

KEY CHARACTERISTICS OF STATES OF MIND

<i>EFFICACY</i>	<i>CONSCIOUSNESS</i>	<i>CRAFTSMANSHIP</i>	<i>FLEXIBILITY</i>	<i>INTERDEPENDENCE</i>
<ul style="list-style-type: none"> • Having internal resourcefulness 	<ul style="list-style-type: none"> • Being aware of self, others, & setting 	<ul style="list-style-type: none"> • Being intentional 	<ul style="list-style-type: none"> • Seeking alternatives 	<ul style="list-style-type: none"> • Contributing to the common good
<ul style="list-style-type: none"> • Taking responsibility 	<ul style="list-style-type: none"> • Knowing about one's thinking 	<ul style="list-style-type: none"> • Striving for improvement and refinement 	<ul style="list-style-type: none"> • Seeing multiple perspectives 	<ul style="list-style-type: none"> • Participating with others
<ul style="list-style-type: none"> • Knowing one has choices and making choices 	<ul style="list-style-type: none"> • Seeking data about self, others, & setting 	<ul style="list-style-type: none"> • Seeking clarity and precision 	<ul style="list-style-type: none"> • Being willing to consider change 	<ul style="list-style-type: none"> • Developing capacity in interacting with others
<ul style="list-style-type: none"> • Being a problem solver 	<ul style="list-style-type: none"> • Being aware of one's own and others' styles and preferences 	<ul style="list-style-type: none"> • Assessing for excellence 	<ul style="list-style-type: none"> • Adjusting to others' styles and preferences 	<ul style="list-style-type: none"> • Seeking collegiality and collaboration
<ul style="list-style-type: none"> • Taking action 	<ul style="list-style-type: none"> • Monitoring one's own actions & the resulting effects 	<ul style="list-style-type: none"> • Pursuing ongoing learning 	<ul style="list-style-type: none"> • Tolerating ambiguity 	<ul style="list-style-type: none"> • Balancing self needs and group needs



COGNITIVE COACHINGsm CONVERSATIONS

The coach mediates by (1) Attending to trust and rapport and (2) inviting the other person to select a direction & significant focus and (3) having the other person:

REFLECT by:

- Summarizing impressions
- Recalling supporting information
- Comparing planned with achieved results
- Analyzing, inferring, and determining cause-and-effect relationships
- Constructing new learnings and applications

PLAN by:

- Clarifying goals
- Determining success indicators and a plan for collecting evidence
- Anticipating and planning for approaches, strategies, decisions, and monitoring procedures
- Identifying personal learning focus, and process for self-assessment

Reflecting on the coaching process and explore refinements

THE META COACH

The Role of the Meta Coach

The role of the meta coach is an accelerated learning strategy. Meta coach means coaching the metacognition of the coach. It is an opportunity to coach the coach's thinking.

Guidelines for the Meta Coach

- Be nonjudgmental
- Paraphrase and listen
- Ask questions to promote coach's thinking

THE TRIUNE BRAIN

Bruce M. Wellman

"We are conscious of an animal in us, which awakens in proportion as our higher nature slumbers. It is reptile and sensual, and perhaps cannot be wholly expelled."

Henry David Thoreau, Walden

The human brain is a wondrous thing. Through the centuries of human history, poets, philosophers, and scientists have marveled at its properties and functions. Our brains are both rational and irrational, containing many different physical structures, chemical processes, and electrical signals. Some of these help us to create great art. Others can cause thinking to shut down and immobilize major muscle groups.

The work of Dr. Paul D. MacLean, former head of the Laboratory of Brain Evolution and Behavior at the National Institute of Mental Health in Bethesda, Maryland, provides a useful model of how the brain evolved. MacLean's theory builds on the earlier work of James Papez. It holds that the human brain is really three brains in one — a triune brain.

The three brains developed successively in response to evolutionary need. Dr. MacLean refers to the three brains as the Reptilian Brain, or R-Complex, the Paleomammalian Brain (old mammal), and the Neomammalian Brain (new mammal). They are located on top of and around one another. Each is chemically and structurally distinct. They now have overlapping functions and are highly interconnected. This interconnection is a source of strength and a source of inner mental conflict. "Our brain as a whole is not harmonious, but works through a precarious, constantly changing balance of the three 'partners.'" (Hart, 1983)

The modern adult brain weighs a little over three pounds. If you put your fists together, extend your thumbs, and tip your hands inward, you have an approximation of the brain's size and position in the skull. MacLean and his research team reached back over 250 million years by arranging their collection of human skulls in chronological order, from the earliest hominoids through later developmental stages to modern humans. By comparing the brain cases and noting changes in shape and size they were able to infer changes in brain growth and development. Modern neuroscience validates much of this work. When brain tissues are stained with dyes, three separate regions appear. Electron scanning devices are now able to monitor the brain in action and can locate distinct thoughts and emotions.

THE REPTILIAN BRAIN

Evolutionarily, the oldest portion of our brain resembles the brain structure of reptiles. This finger-sized clump of neurons includes the brain stem and the clusters on the top and back of the brainstem.

The reptilian brain controls the body's housekeeping and maintenance systems. It monitors and adjusts the autoreflex systems that govern blood circulation, respiration, food and waste disposal, and our deeply held drives and rituals. These include our sense of territory and our fight, flight, or freeze mechanisms.

The **cerebellum** ("little brain") is an important structure in the reptilian brain. This area directly receives sensory information from muscle receptors and from the sense organs in the inner ear that signal head position and head movement. The cerebellum integrates all of this information and smoothly coordinates muscle action and our sense of balance. This enables us to perform skilled movement automatically. "There is evidence that, as we learn to walk, speak or play the violin or piano, the necessary detailed control information is stored in the cerebellum where it can be called upon by commands from the cerebral cortex." (Carey, 1990)

If you close your eyes, extend either arm, and bring your hand back to touch your nose, you are experiencing the cerebellum in action. When we learn to ride a bicycle as a child, the memory of balance and muscle control is stored in the "little brain." These skill-memories can quickly be brought back into use after a lapse of many years.

The **reticular activating system** is located at the bottom of the reptilian complex. This thimble-sized structure serves the same function as a busy office receptionist, assessing the importance of incoming messages, then holding or relaying them to the appropriate receiver. The reticular formation may choose to ignore the smell of cigarette smoke at a party or in a bar, but one whiff of smoke in our house at 3:00 A.M. and the mental alarms go off; we grab our loved ones and rush to safety.

Many of our deepest animal drives are stored in and activated by the reptilian portion of our brain. Preening behavior and ritualistic displays of clothing and hair styles are easily observed in adolescents. These behaviors are also triggered by flocking instincts, mating rituals such as flirting, and the maintenance of social and dominance hierarchies.

One of the strongest needs driven by the reptilian brain is the need for a home territory. We can see this in the seating patterns in staff lounges or at meetings where "sophisticated" adults take the same chair every week for years on end. The same phenomenon can also be observed in college classrooms where students pick a seat on the first day of class and automatically sit in that spot for the whole term.

To test the need for territory and observe the reptilian brain in action all one needs to do is go to an airport waiting lounge. If we arrive early, it is easy to observe travelers staking out territory. At first, when the area is not crowded, people space themselves out well away from one another. Then, as space gets tighter, it is "socially permissible" to sit next to a stranger.

To really test out territorial needs and comfort zones, arrive early for your next flight. Ignore the wide-open spaces with empty seats and march over to the seat next to a stranger and plunk yourself down. Watch your neighbor for signs of discomfort. They may in fact get up and move to a new seat unaware that a 200-million-year-old part of their brain is sending signals to their muscles.

THE PALEOMAMMALIAN BRAIN

The paleomammalian or limbic brain developed around the older reptilian complex. Limbic means "hemming in" or "bordering around." It is comprised of two nearly concentric rings, one for each hemisphere, that are folded in upon a central core. The limbic brain plays a strong role in our emotions. It registers rewards and punishments and acts as the essential coordinator of the central nervous system.

Our old mammal brain lies between our older reptilian brain and the more recently developed neomammalian brain. It acts as a broker between the two. "Because the limbic system is capable of combining messages from our inner and outer experiences, it serves to inhibit the R-complex and its preference for ritualistic, habitual ways of responding. In that sense, the limbic system offers us our first opportunity to "rewrite our ancestral responses." (Caine & Caine, 1991)

The paleomammalian brain houses several important structures that greatly influence learning and memory processes. These special regions regulate body temperature, control thirst and appetite, and influence blood pressure, sexual behavior, aggression, fear, and sleep. It is here that we find olfactory processing centers and many aspects of long-term memory. These latter two processes are closely linked. Aromas and smells have the power to evoke rich memories of specific times and places in our lives.

The **thalamus** consists of two egg-shaped masses that sit astride the brainstem and are joined across the midline of the brain by a tract of fibers called the *massa intermedia* ("intermediate mass"). The two thalami ("deep chambers") are major integrators of the information that flows in from sensory organs to the cerebral cortex. The thalamus acts as a valve that opens and closes off information flow. Stress has a major impact on this valve.

The **hypothalamus** ("under the thalamus") is no larger than your thumbtip and weighs 1/4 ounce. Neurons in the hypothalamus serve as relay stations for internal regulatory systems and monitor information coming in from the autonomic nervous system. They command the body through those nerves and the pituitary gland.

The **pituitary gland** ("slime gland") got its misleading name from an old notion that nasal secretions originated in this pea-sized nerve center. The pituitary gland is closely linked with the hypothalamus, which controls the pituitary's storage and output of hormones. When the hypothalamus receives feedback from major body systems that things are out of balance, it signals the pituitary to release the appropriate hormones into the bloodstream to restore the body's equilibrium.

The **pineal gland** was once considered a vestigial third eye. It is now known that this gland acts like a light-sensitive clock, keeping track of the body's natural cycles. It registers changes in the amount of light and secretes a chemical that makes us sleepy.

The **hippocampus** is important to several different aspects of memory and learning. This area and others are critical to short-term memory functions. It is linked to areas of the temporal lobe in the processes of memory consolidation. These are changes that go on as the brain organizes and restructures information before it becomes part of long-term memory.

The **amygdala** associates events with emotions by linking sensory data to feelings. In this region the brain compares visual and tactile memories. This area is also critical to learning. All incoming information is coded with emotional signals. The feelings and emotions associated with the learning are brought back when the information is later retrieved from memory. Math anxiety is a good example of this phenomenon. Neurologists have long known that electrical stimulation of the amygdala of a research subject can trigger reactions of rage and aggression.

Human beings are highly social animals. We bond with one another and care for one another both physically and emotionally. Our ancient mammalian selves lay within us waiting for the appropriate triggers. Like mother cats and lionesses, we groom our young for both comfort and cleanliness. When we see a smudge on the face of one of our children, we automatically wet a thumb or a tissue and rub it away. And as all teachers know, dangling hair is irresistible. The children sitting behind the hair have a great deal of trouble stopping themselves from reaching out to braid and fiddle with the enticing locks. Again, the grooming response gets triggered in the old mammalian brain and the history of our species surfaces from inside us.

THE NEOMAMMALIAN BRAIN

The neomammalian brain or neocortex is a layer of over 800 million nerve cells that is about 1/8th of an inch thick. The neocortex is folded and convoluted like a wadded dinner napkin to fit within the skull. It makes up the bulk of the modern brain mass. Unfolded, it would cover over three square feet. As the brain develops, the skull resists the brain's growth, causing brain tissues to fold in on themselves. Eventually the pressure is too great and the skull bulges, especially in the forebrain. This accounts for the different skull shape in children and adults. Humans, dolphins, whales, and the three great apes (gorillas, chimpanzees, and orangutans) are the only animals that possess a neocortex.

The neocortex is our rational and metaphoric brain, where creative thought and language are centered. This is where we create and recognize patterns and models and solve problems using logic and reason. This brain is divided into left and right hemispheres that are connected by the corpus callosum, a band of 200 million nerve fibers. The right hemisphere has many more neural connectors to the older limbic brain than does the left hemisphere. Many of the attributes of so-called right brain dominant people are really properties and responses of the limbic region. (Chilton-Pearce, 1989) The neocortex is divided into four lobes. Each lobe has specialized properties and functions.

The **frontal lobe** is the source of adaptation and planning. This is where we make decisions based on current sensory information. When there is damage to this portion of the brain, the victim can no longer solve problems they have not encountered before. They rely solely on old patterns of response that are stored elsewhere in the brain.

The **temporal lobe** houses our auditory processing centers. There are separate areas for language and sound production and for language and sound interpretation. The temporal lobe is also the site where emerging thoughts begin to be processed.

The **parietal lobe** is the site of kinesthetic processing. Actions, motions, and emotions are handled by this brain center.

The **occipital lobe** is the rearmost lobe. It is here the brain processes and stores visual information.

All four lobes play a role in learning and memory. We make associations with pictures, sounds, feelings, and emotions as a means of storing and retrieving memories. "Much of the processing of sensory data occurs in the neocortex. It renders logical and formal operational thinking possible and allows us to see ahead and plan for the future. Its capacities are at the heart of science and art." (Caine & Caine, 1991)

DOWNSHIFTING

Our three brains struggle for dominance with one another. Our personal history and the history of our species are both present in the daily operations of our brains. Over millions of years of evolution our foremost needs have been for physical survival. Our older reptilian brain is attuned to physical danger. We jump at the sound of sudden loud noises; our hearts start to pump blood vigorously into the major muscles groups so we can respond with physical action. Living in close quarters in caves and tightly knit social groups, our ancestors learned how to give and receive nonverbal and verbal signals. We are all bilingual. This first language for humans is body language. Our paleomammalian brain reads and interprets these signals for signs of threat, friendship, and social nuance. The ability to solve problems, make tools, and create and use language has led to the development of society and human life as we know it today. Our great neomammalian brain brings us poetry and computers.

We like to think of ourselves as rational and logical beings, removed from our animal heritage. But the human brain does not always remember this or operate this way. Under threat and stress the brain shuts down layer by layer. Paul MacLean refers to this phenomenon as downshifting.

When we are ill at ease, we are not verbally facile. We have all had the experience of being at a loss for words at a crucial moment. The French have a phrase for this, "Esprit De L'escalier" — "the wit of the stairway." This occurs when we leave the tense meeting or party and as soon as we relax, the clever response or appropriate rejoinder pops into our head.

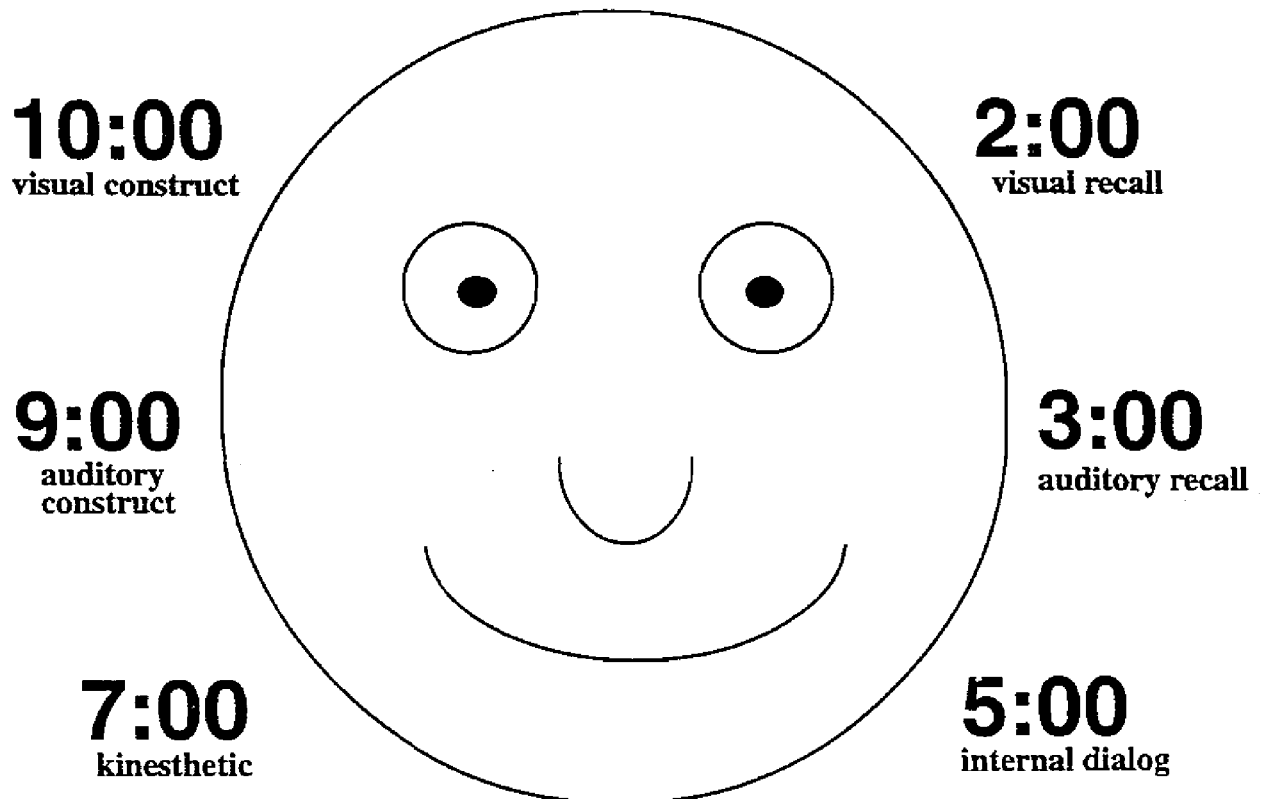
Under stress, the neocortex shuts down by degrees. The greater the stress, the greater the shutdown. Under great stress, we go reptilian. We lash out, we run away in terror, or we freeze in place like an animal caught in the headlights of an onrushing automobile.

Physical rapport, the subtleties of body language, voice tone, and the embedded presuppositions in language all have an effect on the thinking of other human beings. To communicate with skill and grace, we must communicate with all three brains. Our older selves, the brains that process nonverbal signals and feelings, are as important to thinking processes as is the newer bulk of our neomammalian development.

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EYE ACCESSING CUES*



* For Normally Organized Right-Handed People

QUESTIONS FOR OBSERVING EYE ACCESSING CUES

SET A

When asking questions, one can often observe a sequence of eye movements before the individual responds verbally. They may be accessing a number of different representational systems (modalities) in a sequence called a "strategy." To verify your interpretation of the accessing cues, ask individuals how they were able to answer each question, i.e., did they make a picture first? Hear something? Feel something?

A. Visual Remembered

1. Did you have a favorite toy when you were younger? Describe what it looked like.
2. How many windows were on the front of the house or apartment you grew up in?
3. Describe the room you had as you were growing up.

B. Visual Constructed

1. How would you look with purple (any color) hair?
2. How would you look from my point of view?
3. How would your bedroom look if you rearranged the furniture?

*Note: A remembered visual image may be "Visual Constructed" if it is seen as disassociated from its original surroundings of the person's original point of view. Example — Remembered visual images seen "floating in space" are actually visual constructs.

C. Auditory Remembered

1. Think of the 6th letter of the alphabet.
2. Can you hear your favorite song?
3. What's the sound of your mother's voice when she's mad at you?

D. Auditory Constructed

1. How would you sound if you were the opposite sex?
2. How would you sound if you were a child?
3. Imagine how you would sound speaking under water.

E. Auditory Digital (Talking to Self)

(Internal Dialogue — frequently accompanied by hand touching mouth, lips, cheek, etc.)

1. What do you say to yourself when you do something really well?
2. What would you say to yourself if you did something poorly?
3. If you don't feel like doing something, what would you say to yourself to help you to do it?

F. Kinesthetic — includes tactile and emotional

1. Imagine holding an ice cube as it starts melting and dripping through your fingers.
2. Imagine the feel of cornflakes in your bed.
3. Recall the last time you felt happy.

QUESTIONS FOR OBSERVING EYE ACCESSING CUES

SET B

When asking questions, one can often observe a sequence of eye movements before the individual responds verbally. They may be accessing a number of different representational systems (modalities) in a sequence called a "strategy." To verify your interpretation of the accessing cues, ask individuals how they were able to answer each question, i.e., did they make a picture first? Hear something? Feel something?

A. Visual Remembered

1. What did you wear to work last Monday?
2. Describe the route you took to get from home to work.
3. How many doors were there in the house in which you last lived?

B. Visual Constructed

1. How would it look if your son/daughter/child were riding on the back of an animated alligator?
2. How would it look if your house/apartment were set down in the middle of the desert/ocean/mountains?
3. How would you look with a tail?

*Note: A remembered visual image may be "Visual Constructed" if it is seen as disassociated from its original surroundings of the person's original point of view. Example — Remembered visual images seen "floating in space" are actually visual constructs.

C. Auditory Remembered

1. Can you hear someone you love say your name in an especially nice way?
2. When you first start your car, how does it sound?
3. Imagine you hear a German Shepherd barking. Now imagine you hear a Pekinese barking.

D. Auditory Constructed

1. Imagine saying something in a voice you've never used before.
2. Imagine the sound of a siren, turning into a train whistle, turning into a dog's howl.
3. Imagine someone you know talking to you with a horse's voice.

E. Auditory Digital (Talking to Self)

(Internal Dialogue — frequently accompanied by hand touching mouth, lips, cheek, etc.)

1. If you don't feel like doing something, what would you say to yourself to help you do it?
2. What do you say to yourself when you are bored or disagree with a presenter?

F. Kinesthetic — includes tactile and emotional

1. How do you feel when you first wake up in the morning?
2. How did you feel the last time you were sick?
3. Recall a time when you felt powerful.

MODALITY STRENGTH CHECKLIST

Directions: In each of the fourteen sections, check off the one or two descriptions that best represent your view of yourself. Give 1 point for each check; .5 if you choose two descriptions. Each section has only one check possible. After marking your selection in each of the fourteen sections, total the number of checks for columns V, A, and K. The column with the highest total broadly represents your preferred learning modality.

"I"	V VISUAL	A AUDITORY	K KINESTHETIC
1. Learning Style	Learn by seeing; watching demonstrations _____	Learn through verbal instructions from others or self _____	Learn by doing; direct involvement _____
2. Reading	Like description; sometimes stops reading to stare into space and imagine scene; intense concentration _____	Enjoy dialogue, plays; avoids lengthy description, unaware of illustrations; moves lips or subvocalizes _____	Prefer stories where action occurs early; fidgets when reading, handles books; not an avid reader _____
3. Spelling	Recognize words by sight; relies on configuration of words _____	Use a phonics approach; has auditory word attack skills _____	Often am a poor speller; write words to determine if they "feel" right _____
4. Handwriting	Tend to be good, particularly when young; spacing and size are good; appearance is important _____	Have more difficulty learning in initial stages; tend to write lightly; say strokes when writing _____	Good initially, deteriorate when space becomes smaller; push harder on writing instrument _____
5. Memory	Remember faces, forget names; write things down, take notes _____	Remember names, forget faces; remember by auditory repetition _____	Remember best what was done, not what was seen or talked about _____
6. Imagery	Vivid imagination; think in pictures, visualize in detail _____	Subvocalizes, thinks in sounds; details less important _____	Imagery not important; images that do occur are accompanied by movement _____
7. Distractibility	Generally unaware of sounds; distracted by visual disorder or movement _____	Easily distracted by sounds _____	Not attentive to visual, auditory presentation so seem distractible _____
8. Problem Solving	Deliberate; plan in advance; organize thoughts by writing them; list problems _____	Talk problems out, try solutions verbally, subvocally; talk self through problem _____	Attack problems physically; impulsive; often select solution involving greatest activity _____

MODALITY STRENGTH CHECKLIST (continued)

"I"	V VISUAL	A AUDITORY	K KINESTHETIC
9. Response to Periods of Inactivity	Stare; doodle; find something to watch _____	Hum; talk to self or to others _____	Fidget; find reasons to move; hold up hand _____
10. Response to New Situations	Look around; examine structure _____	Talk about situation, pros and cons, what to do _____	Try things out; touch, feel; manipulate _____
11. Emotionality	Somewhat repressed; stare when angry; cry easily, beam when happy; facial expression is a good index of emotion _____	Shout with joy or anger; blow up verbally but soon calm down; express emotion verbally and through changes in tone, volume, pitch of voice _____	Jump for joy; hug, tug and pull when happy; stamp, jump, and pound when angry, stomp off; general body tone is a good index of emotion _____
12. Communication	Quiet; do not talk at length; become impatient when extensive listening is required; may use words clumsily; embellishment; use words such as see, look, etc. _____	Enjoy listening but cannot wait to talk; descriptions are long but repetitive; like hearing self and others talk; use words such as listen, hear, etc. _____	Gesture when speaking; do not listen well; stand close when speaking or listening; quickly lose interest in detailed verbal discourse; use words such as get, take, etc. _____
13. General	Neat; meticulous, like order; may choose not to vary appearance _____	Matching clothes not so important; can explain choices of clothes _____	Neat, but soon becomes wrinkled through activity. _____
14. Response to the Arts	Not particularly responsive to music; prefer the visual arts; tend not to voice appreciation of art of any kind, but can be deeply affected by visual displays; focus on details and components rather than the work as a whole. _____	Favor music; find less appeal in visual art, but am readily able to discuss it; miss significant detail, but appreciate the work as a whole; am able to develop verbal association for all art forms; spend more time talking about pieces than looking at them. _____	Respond to music by physical movement; prefer sculpture; touch statues and paintings; at exhibits stop only at those in which I can become physically involved; comment very little on any art form _____
Total points in each column (combined total must equal 14)	V _____	A _____	K _____
Preferred Learning Modality is _____			

Adapted from: *Teaching Through Modality Strengths: Concepts and Practices*, by Walter B. Barbe and Raymond H. Swassing, Zaner-Bloser, Inc., Columbus, OH, 1979

EDUCATIONAL BELIEFS — PANEL DISCUSSION

Directions for panel discussion:

You have all been placed in a new school. You have been given the task of choosing supplemental literature for the school in the form of book sets. Your first task as a committee is to determine what criteria should be used to make these selections. As the moderator, I will ask you to give your viewpoint for one to two minutes. We will not have time to get into a huge debate, but if your view conflicts with another committee member, a quick side comment adds humor and builds the contrast between beliefs.

To start you thinking, compare your thoughts to the appropriate column on the Educational Beliefs summary sheet. Below are some starting comments to help you focus your thoughts. You may want to bring these sheets with you.

Cognitive Processor:

Books should foster thinking and encourage students to compare and contrast, analyze, and explain or justify their thinking. You might not want to recommend class sets, but instead half class sets that have similar themes for the students to compare.

Self-actualizer:

You advocate for human themes that teach students about real life and help them set personal growth goals. You advocate for books that kids would want to read because of their interests (for example, sports, adventure, etc.). The themes should focus around life themes of courage or reaching your full potential.

Technologist:

You are concerned about skill development. You advocate for literature that has well developed support materials. You are especially concerned about having programs that teach comprehension skills. Measurement is another concern of yours.

Academic Rationalist:

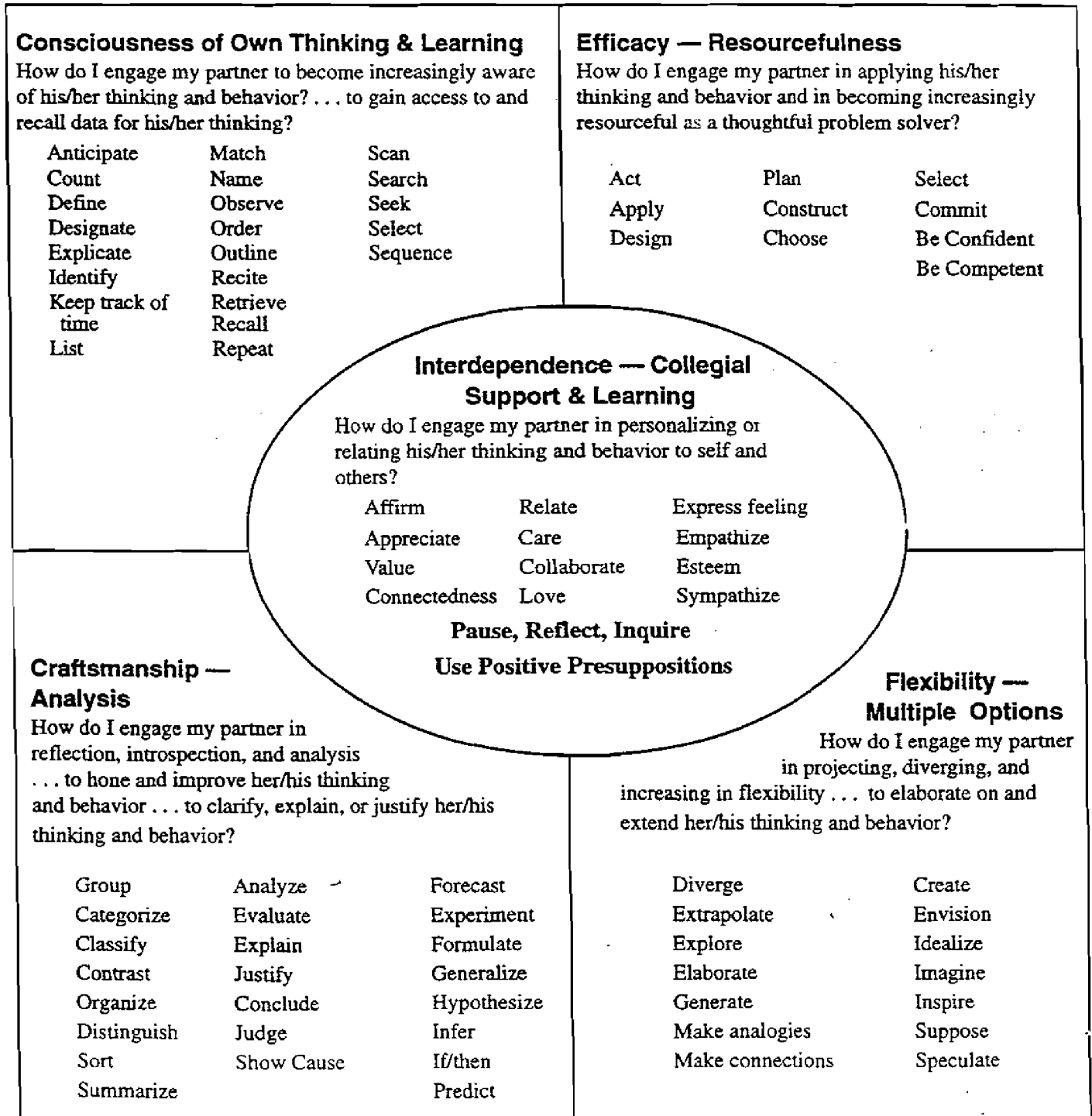
You lobby for the classics and for books that exemplify the traditions of the culture. You are concerned about the lack of a liberal arts education given to students today. You might accept Shakespeare for kids, but are not sure, because you also want them to read primary sources, not abridged or watered down versions. You want books that build character and have a moral to be taught. Kids today need to read things that help them learn the principles of a democratic citizenry.

Social Reconstructionist:

You lobby for historical fiction, especially if it describes how society worked during that period. You want books that teach about important social causes, such as biographies of Martin Luther King and others. And you might even suggest that some money should be set aside for the purchase of newspapers or *Newsweek* or *Time* so that kids can read about real events.

A FRAMEWORK FOR DEEPENING QUESTIONING IN A COACHING SITUATION

(Language to use to invite your partner to shift her/his thinking)



Developed by William Baker & Stanley Shalit for the Institute for Intelligent Behavior, Berkeley, CA. February 1992.
Adapted from the work of Arthur Costa, Robert Garmston, and Hanson Silver Strong & Associates.

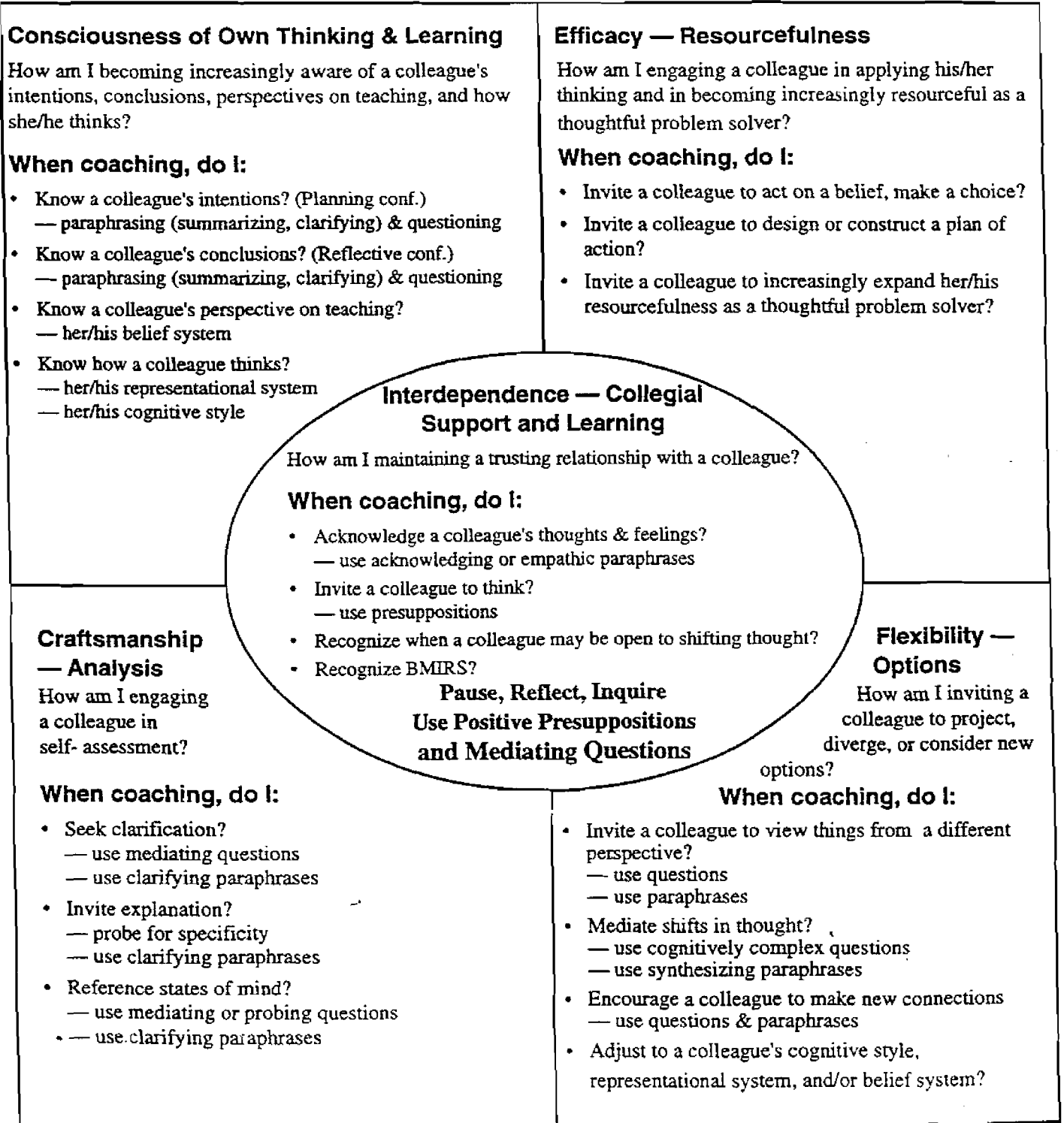
DIRECTIONS FOR ANALYZING COACHING

A Focused Approach:

1. Use the Framework for Analyzing Coaching.
2. Select one or more elements of the Framework to use as a basis for your analysis (i.e. Efficacy, Flexibility, Craftsmanship, Consciousness, or Interdependence).
3. Identify the specific question or questions that you want to answer. (e.g., Craftsmanship: When coaching, do I seek clarification?)
4. Listen to a portion of your coaching (via a tape recording or video tape) and record specific examples of the coach's language that reflect the data you want to gather.
5. Listen to the responses of the person being coached. Infer what effects you think your language is having on the person's thinking.
6. Draw some conclusions from your analysis.

A FRAMEWORK FOR ANALYZING COACHING

(Questions to ask and behaviors to look for to assess your own coaching)



Developed by William Baker & Stanley Shalit for the Institute for Intelligent Behavior, Berkeley, CA. February 1992.
Adapted from the work of Arthur Costa, Robert Garmston, and Hanson Silver Strong & Associates.

THE PATH OF COGNITIVE COACHING MASTERY I

A personal device for accelerating skills-development and learning

ACTIVITY	TIME DURATION	FREQUENCY	DISTRIBUTION
Isolated Skills Practice <ul style="list-style-type: none"> • Rapport • Pausing • Paraphrasing • Probing for specificity 	Approximately 10 minutes per skill	Daily	One week running for each selected skill
<ul style="list-style-type: none"> • Conduct brief planning conversations with colleagues 	5 to 15 minutes each	At least three	Now to _____
<ul style="list-style-type: none"> • Conduct extended planning conversations with colleagues 	20 to 30 minutes each	At least three	Now to _____
<ul style="list-style-type: none"> • Practice self-mediated planning conversations 	20 to 30 minutes each	At least three	Now to _____

SKILL

DATES PRACTICED

Rapport																			
Pausing																			
Paraphrasing																			
Probing for specificity																			

Brief Planning Conversation	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning

Extended Planning Conversation	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning

Self-mediated Planning Conversation	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning

New Insights

THE PATH OF COGNITIVE COACHING MASTERY II

A personal device for accelerating skills-development and learning

ACTIVITY	TIME DURATION	FREQUENCY	DISTRIBUTION
Isolated Skills Practice <ul style="list-style-type: none"> • Rapport • Pausing • Paraphrasing • Probing for specificity • Mediation questions 	Approximately 10 minutes per skill	Daily	One week running for each selected skill
• Conduct brief reflecting conversations with colleagues	5 to 15 minutes each	At least three	Now to _____
• Conduct extended reflecting conversations with colleagues	20 to 30 minutes each	At least three	Now to _____
• Practice self-mediated reflecting conversations	20 to 30 minutes each	At least three	Now to _____

SKILL

DATES PRACTICED

Rapport																			
Pausing																			
Paraphrasing																			
Probing for specificity																			
Mediation questions																			

Brief Reflecting Conversation	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning

Extended Reflecting Conversation	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning

Self-mediated Reflecting Conversation	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning

New Insights

A Personalized PATH OF COGNITIVE COACHING MASTERY

A personal device for accelerating skills-development and learning

ACTIVITY	TIME DURATION	FREQUENCY	DISTRIBUTION

SKILL

DATES PRACTICED

ACTIVITY

	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning
	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning
	Date	Date	Date	Date
	Key Learning	Key Learning	Key Learning	Key Learning

New Insights

PRIMARY TRAIT RUBRIC

NAME: _____

DATE: _____

RAPPORT	Not Yet	Sometimes	Consistently	With Automaticity
Applies Knowledge of Physical Rapport To:				
• Match posture/gesture				
• Attend to cues, i.e., <ul style="list-style-type: none"> • breathing • eyeshifts 				
Consciously Applies Verbal Rapport Skills To:				
• Match tonality				
• Match language for filters <ul style="list-style-type: none"> • representational system • cognitive style • educational belief systems 				
• Extend partner's metaphors				

MEDIATIONAL QUESTIONS	Not Yet	Sometimes	Consistently	With Automaticity
Asks Open-ended Questions Designed to Invite Complex Thinking and Cognitive Shift Which:				
• Employ plural nouns				
• Encourage a variety of responses				
• Embed specific thinking processes in the question				
• Explore multiple perspectives				
Embeds Positive Presuppositions Which:				
• Use language that assumes positive intentionality				
• Use language that assumes prior and ongoing thought				
• Use invitational stems				
• Mediate specific States of Mind				

Comments:

PRIMARY TRAIT RUBRIC

NON-JUDGMENTAL RESPONSE BEHAVIORS				Not Yet	Sometimes	Consistently	With Automaticity
Uses a wide repertoire of non-judgmental response behaviors to maintain trust and promote thinking							
• Pausing							
	Not Yet	Some- times	Consis- tently				
Wait Time I							
Wait Time II							
Wait Time III							
• Paraphrasing							
• Purposefully applies levels of paraphrase							
• Varies paraphrase stems							
• Paraphrases prior to inquiring							
• Matches language to coachee's filters							
• Probing for specificity							
• Probes to clarify							
• Probes for precision							
• Probes for elaboration							

Comments:

TEACHER SELF-ASSESSMENT

ASSESSING INDICATORS OF COGNITIVE DEVELOPMENT

Another way to assess the impact of coaching is to invite teachers to self-assess their cognitive development. Periodically, teachers reflect on their growth by self-assessing the following cognitive attributes.

COGNITIVE ATTRIBUTE: PLANNING	OFTEN	SOMETIMES	NOT YET
Observable Indicators			
1. States relationship between this lesson and a long-range goal.			
2. Predicts student learnings that will result from this instruction.			
3. Envisions, describes, and sequences an instructional strategy which includes: (Mental Rehearsal) ___ Content ___ Time sequences ___ Grouping/structuring ___ Sequences of learning activities ___ Repertoire of teacher behaviors ___ Materials of instruction ___ Other			
4. Identifies data about entry level of students, previous learnings, capabilities and learning styles.			
5. Anticipates a method of assessing outcomes.			
6. Relates knowledge of the structure of the discipline(s) to the lesson or unit.			
7. Selects from a repertoire of teaching skills strategies that are age, style, and content appropriate.			
COGNITIVE ATTRIBUTE: TEACHING			
Observable Indicators			
8. Deals with multiple activities, styles, objectives, outcomes simultaneously.			
9. Uses clear and precise language.			
10. Restrains impulsivity under stress.			
11. Monitors own progress along the instructional strategy (metacognition).			
12. Is conscious of behavioral cues coming from students (read and flex).			
13. Alters teaching strategy based on cues coming from students.			
14. Routinizes the classroom management tasks.			
15. Demonstrates empathy (allocentrism).			

TEACHER SELF-ASSESSMENT ASSESSING INDICATORS OF COGNITIVE DEVELOPMENT (Continued)

COGNITIVE ATTRIBUTE: REFLECTING	OFTEN	SOMETIMES	NOT YET
Observable Indicators			
16. Recalls data about student behavior during the lesson.			
17. Recalls data about teaching behaviors during the lesson.			
18. Makes comparisons between intended and actual outcomes.			
19. Makes comparisons between intended and actual instructional behaviors.			
20. Makes causal relationships as to why objectives were/were not achieved.			
21. Displays internal locus of control.			
22. Self-evaluates own actions, planning, accuracy of lesson goals, teaching strategies, specific behaviors (autocriticism).			
COGNITIVE ATTRIBUTE: APPLYING (PROJECTIVE STAGE)			
Observable Indicators			
23. Predicts or hypothesizes differences in learning outcomes if alternate strategies are to be used.			
24. Plans future lesson strategies based upon principles abstracted from the analysis of this lesson.			
25. Makes commitment to alter/experiment with new behaviors and strategies.			
26. Identifies inner resources needed for future successes.			
27. Seeks further assistance in learning and obtaining feedback.			

WALK-AROUND SURVEY

Only one item may be collected from each person

Recall	<hr/> Name	<hr/> Name	<hr/> Name
Observations	<hr/> Name	<hr/> Name	<hr/> Name
Insights	<hr/> Name	<hr/> Name	<hr/> Name

COGNITIVE COACHING PEOPLE SEARCH

Find Someone Who Can Describe the Characteristics of Someone Who Is:

- Field Dependent _____
- Field Independent _____
- An Academic Rationalist _____
- A Cognitive Processor _____
- A Technologist _____
- A Social Reconstructionist _____
- A Self-Actualizer _____
- Primary modality is Kinesthetic _____
- Primary modality is Visual _____
- Primary modality is Auditory _____

COMMUNICATE

A Structured Coaching Interchange Maintaining Trust and Rapport

Guidelines for this structured interchange:

QUESTIONER: Ask each question in sequence. After asking a question, **PAUSE** to offer your partner time to think about a response. After your partner responds, take time to **reflect**. You reflect by **PAUSING**, giving your partner time to think. Occasionally, after every two or three responses or more frequently if appropriate, summarize the latest response with a **PARAPHRASE** that begins, "So . . ." or **PROBE** for clarification by saying, "Tell me more about . . ."

[If you feel uncomfortable about asking a question, rephrase it or skip it.]

RESPONDER: When responding to a question from your partner, respond at a level of disclosure with which you are comfortable. If, at any time, you choose not to respond to a particular question, just say, "I pass." (No reasons for passing are necessary.)

Ask your partner a block of questions, then reverse roles so that you can respond to the questions. Continue to trade roles of questioner and responder, block by block, until you have dealt with all of the questions. You will have 30 minutes to carry out this exercise. You may not complete all 17 questions.

1. "What name do you prefer that I call you during this interchange?"
2. "Name . . ., where did you go to school?"
3. "Name . . ., what did you like best about school?"
4. "Name . . ., thinking about the teachers you've had in the past, what teachers have had a strong influence in your life?"
5. "Name . . ., what were some of the factors that influenced your decision to go into education or to be related to the field of education?"
6. "What do you like best about being in or related to education?"
7. "When you are asked questions about your work, how do you usually respond?"
8. "When you are carrying out something for the first time, how do you usually feel? . . . What do you usually do?"

"HOW ARE YOU FEELING RIGHT NOW?" (You may want to ask this question whenever your partner seems to be showing pleasure or discomfort or just before you reverse roles at the end of a block of questions.)

***** REVERSE ROLES *****

Reminder: The questioner asks, pauses, reflects, and inquires for clarity.

9. "Thinking about your own teaching, school, or work situation, under what circumstances or in what situations do you find yourself feeling most pleased and happy?"
10. "What is puzzling to you about your current work situation?"
11. "How do you usually approach a puzzling work situation?"

***** **REVERSE ROLES** *****

Reminder: The questioner asks, pauses, reflects, and inquires for clarity.

12. "What are you hoping to accomplish in your work situation this year?"
13. "What approaches are you planning to use to accomplish this?"
14. "What indicators will you be using to determine how successful you are?"

***** **REVERSE ROLES** *****

Reminder: The questioner asks, pauses, reflects, and inquires for clarity.

15. "As you think about the education profession and your role in it, what vision for yourself are you developing?"
16. "As you think about the education profession, about what are you most concerned?"
17. "As an educator, what do you believe in most strongly?"

***** **REVERSE ROLES** *****

Reminder: The questioner asks, pauses, reflects, and inquires for clarity.

WHAT HAVE YOU LIKED BEST ABOUT THIS STRUCTURED INTERACTION?

This exercise was adapted for the Institute for Intelligent Behavior by William Baker and Stanley Shalit from "*Dyadic Encounter*" by John E. Jones and Johanna Jones, University of Iowa, as printed in *A Handbook of Structured Experiences for Human Relations Training*, published by University Associates, Iowa City, Iowa. February, 1992.

A JOURNAL

WHAT IS A JOURNAL?

This Journal is a place where you can record your reflections, connections, observations, and questions. A journal is an ongoing record of your progress and consists of frequent, unpolished writings.

Journals are encouraged because they fit the principles and purposes of COGNITIVE COACHING. Journal writing engages such intellectual skills as fluency of thought, precision of language, formulation of theories, sequencing of tasks, analysis of concepts, synthesis of skills, inducing from experiences, deducing from generalizations, and creating metaphorical and personal analogies. As Flower and Hayes (1981) have asserted:

“Writing is among the most complex of all human mental activities. Essentially, it is a form of problem solving because the writer must produce an organized set of ideas for a paper by selecting, sequencing and synthesizing a manageable number of concepts and relations from a vast body of knowledge, and fit what they know to the needs of a reader and to the constraints of formal prose.”¹

You are encouraged to:

- record questions about puzzling passages in articles read or in presentations heard;
- make predictions about what comes next;
- respond with meaning and insight to ideas presented;
- think about your own level of performance;
- compare new ideas with previously held ideas;
- assign tasks and actions to yourself when you return from this workshop;
- jot down ideas you wish to remember and ponder in the future.

You may be asked to start a session with a journal entry, to end a session with another entry, or to begin a workshop by sharing ideas from your journal. You are encouraged to write in your journal daily. As you begin working more closely with others, you will want to record your insights about your and their styles, to keep track of the strategies you employed to make observations of what indicators of growth are being achieved.

All entries will be kept confidential, and you will not need to show or share your writing with anyone if you do not wish to. From time to time you will want to return to your initial entries, to compare first impressions with later insights to determine how you have grown in complexity of thought, how you have become more precise in your language, and how COGNITIVE COACHING is being diffused throughout your encounters in life beyond this workshop and your employment setting.

¹Linda Flower and John R. Hayes, “Plans That Guide the Composing Process,” in *Writing: The Nature, Development and Teaching of Written Communication*, eds. Carl H. Frederiken and Joseph F. Dominic, Vol. 2, (Hillsdale: Lawrence Erlbaum Associates, 1981), 39-40.

Some participants have divided their journal page with a vertical line in order to record ideas on one side and questions on the other. Some participants have appreciated a blank space to freely record ideas that come to mind, to make mind maps or other visual cues. Still other participants enjoy starter questions or stems to stimulate their flow of ideas.

Some sentence stems to “jump-start” your thinking might be:

What puzzles me is . . .

I'd like to talk more about . . .

I'm confused about . . .

This is similar to what I know in that . . .

When I get home I'm going to . . .

The big ideas seem to be . . .

A question I have is . . .

The way to use this idea is . . .

Another point of view is . . .

I've got it. It means . . .

YOUR THOUGHTS