

## Chapter Seven

### Reasoning Competency #3: Situational Learning

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## Reasoning Competency #3: Situational Learning

### Introduction to Situational Learning

It's almost impossible for a man to be President of the United States without learning something. – Harry Truman, 33<sup>rd</sup> U.S. President

A major life management activity is dealing with the wide variety of situations we encounter on a daily basis. Some situations are routine and need little attention while at the other end of the continuum they may be significantly life and/or career threatening. What is important to understand is that every situation we encounter requires some amount of information gathering and analysis followed by decision making and action – and every situation is a potential learning opportunity. The *situational learning competency* is a significant element in human capital development and in becoming a learnership practitioner which makes it a foundational anchor in the practice of learnership. *Situational Learning (SL) benefits from the support provided by Systems Thinking (ST) and Pattern Recognition (PR).*

Situational learning occurs through a sequential series of lifelong learning cycles in which aspiration, reasoning, action, and evaluation enable people in their roles as individuals, organization members, and community citizens to work toward the triple goals of self-fulfillment, high performance, and the common good. Clearly, learning is the process through which we strive to attain our aspirations. Learning is essential for human and social system development, learning results from resolving (albeit temporarily) the dynamic tension among societal issues, and learning is a precursor for system development toward a higher level-of-being. An ideal objective is to achieve *systems optimization* at the meta-system level, wherein people in their roles as individuals, and in organizations and communities, balance their respective developmental imperatives with consideration of the needs and interests of others. Improving on social system *information processing* (cognitive and emotional), *decision-making* (reasoning and judgment) and *action* (evaluation and feedback) provide a well-spring of new learning cycles, knowledge discovery, and insight into social development opportunities. Situational learning is depicted at the center of the learnership model to illustrate its catalytic potential for stimulating individual, organizational, and community system development.

**Five Disciplines.** Situational learning is informed by Peter Senge's five disciplines of the learning organization (*The Fifth Discipline*, 1990). All five disciplines are essential contributors to the use of critical thinking and interpersonal dialogue by individuals, organizations, and communities. Systems thinking and mental models (reference: pattern recognition) were introduced in previous chapters, and the other disciplines are also relevant to this topic. A high-level description of key learning-related features of the disciplines follows:

1. **Personal Mastery** – “Personal Mastery is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively. As such it is an essential cornerstone of the learning organization – the learning organization's spiritual foundation.” (p.6)
2. **Mental Models** – “Mental models are deeply ingrained assumptions, generalizations, or even pictures that influence how we understand the world and how we take action. Very often, we are not consciously aware of our mental models or the effects they have on our behavior.” (p.8)
3. **Building Shared Vision** – “The practice of shared vision involves the skills of unearthing shared ‘pictures of the future’ that foster genuine commitment and enrollment rather than compliance.” (p.9)
4. **Team Learning** – “Team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations. This where ‘the rubber meets the road’; unless teams can learn, the organization cannot learn.” (p.10)
5. **Systems Thinking** – “Systems thinking is a conceptual framework, a body of knowledge and tools that has been developed over the last fifty years, to make full patterns clearer, and to help us see how to change them effectively.” (p.7)

**[Author's Note:** The learnership philosophy and architecture are constructed to fulfill the learning organization possibilities articulated by Peter Senge and colleagues at MIT.]

**Double-Loop Learning.** In his book *Reasoning, Learning and Action* (1982) Chris Argyris provides the seminal explanation of the paradoxes between what people say they do (theories espoused) and what they actually do in real situations (theories-in-practice). He explains that oftentimes when people find themselves in complex or conflictive situations wherein interpersonal relationships could be at stake, they *distance* themselves from being part of the problem and even from helping solve the problem. This behavior is replicated by others creating self-fulfilling prophecies in which problems are not solved; or attempted to be solved. Rationality is therefore subverted, mistrust grows among the members, and face-saving political games are played to avoid responsibility and blame. (pp.6-8)

Another dysfunction that may be observed in addition to *distancing* is *disconnecting*. This is a related occurrence in that when distancing is in progress, people – that research has shown are not cognitively aware of their reasoning processes – follow programs in their head that are not consistent with the very reasoning skills they believe they possess. Together, distancing and disconnectedness establish a paradox wherein they conduct themselves contradictory to what they would advise others to do, and resist any attempt to clarify the issues to the extent that they will not even discuss the undiscussables. Their mental processing and behavior are contradictory and they do not want to acknowledge that fact. This behavior has been studied and researched over and over in attempts to develop antidotes to their occurrence and methods to correct the pathology when it is evident.

Argyris argues that this issue is a significant obstacle in creating good learners and learning organizations, and that *double-loop learning* is a potential solution if thoughtfully adopted by organizations. The difference between single and double-loop learning is significant in that in the former problems are met with standard, predictable responses already tried in other situations and proven to be minimally acceptable within the organizational context and culture. Quasi-solutions are attempted with marginal results due to the group's reticence to obtain essential information, challenge inaccurate information, and recognize their own limiting attitudes and behavior.

If and when double-loop learning is understood and group leaders have the courage and skill to facilitate and support the double-loop learning and problem solving processes, the organization can become better informed, build trusted relationships, and take action applicable to multi-dimensional, complex systems and work environments. The double-loop learning process encourage leaders and clients to:

1. Go beyond the convenient, and usual responses and solutions
2. Take time to collect more extensive, relevant information
3. Enter into dialogue with insiders and outsiders to get a true reading on the issue or problem to be solved
4. Be willing to run tests of potential solution for better learning
5. Be willing to reframe issues and problems if new data and information indicate a need to do so

**[Author's Note:** The learnership concept places greater emphasis on double-loop learning rather than single-loop learning cycles. The reason is that the pace of life and work, the degree of complexity, and the rate of change are all increasing thereby ensuring that today's "ready-fire-aim" techniques are likely to miss their target much of the time.]

**Learning-to-Learn.** In *Workplace Basics: The Essential Skills Employers Want* (Carnevale et al, 1990), the authors attribute to Robert M. Smith of Northern Illinois University the view that: "Learning how to learn involves possessing, or acquiring, the knowledge and skill to learn effectively in whatever learning situation one encounters." They add that learning-to-learn skills should be acquired by individuals because the situations which they encounter are likely to be unpredictable and fraught with changing task demands, thereby requiring them to be *adaptive learners and leaders*. Early contributors to this theme were: (1) Benjamin Franklin who founded a discussion club, the Junto, which had rules to forestall dogmatism, minimize conflict, and foster productive inquiry; members who broke the rules were fined, (2) Arnold Toynbee who advocated that learners turn themselves into "self-teachers," and (3) John Dewey who suggested that schools be evaluated in terms of their success in causing students to desire "continual growth" and in providing them with the capability to do so.

The challenge in assisting individuals to acquire the learning-to-learn skill is to first help them identify their own developmental needs and to take responsibility for their learning and its progress. Next, the task is to enlighten them with the knowledge, resources, and techniques that make the process manageable. Learning-to-learn training designs strive to help trainers use, and learners take personal advantage of the following learning theory components:

**Knowledge of Domains of Mental Activity.** There are three spheres or domains of mental activity within which learning takes place. The first is the "cognitive (thinking/knowing) domain" which involves the skills people use to know, understand, or comprehend information. The second is the "psychomotor (physical) domain which involves neuro-muscular coordination and the skills people use to control their body movements. The third is the affective (behavioral/attitudinal) domain which involves skills in dealing with emotions and feelings, and focuses on valuing, organizing, and characterizing the human aspects of situations. Different people have different strengths in these areas, but all learners can strive to increase their attention and openness while experiencing a learning activity in each domain.

**Knowledge of Learning Styles.** Various learning-style inventories have been constructed to illustrate how individuals differ in perceiving and acting on information. The authors reference *Learning How to Learn* (1982) by Robert M. Smith as a resource of available instruments and explain that individuals who become aware of their unique styles of learning have greater self-awareness, and potentially, are better able to communicate and learn from others and their experiences.

Examples given are Kolb's Learning Style Inventory, the Myers-Briggs Type Indicator (MBTI), and Herrmann Brain Dominance Inventory (HBDI).

Knowledge of Formal Learning Strategies. Both trainers who design learning experiences and learners who participate in them perform more effectively when they are aware of the range of techniques available to enhance learning. Five general techniques may be defined:

The first may be termed "rehearsal strategies" and includes activities to list, copy, or repeat items in order to commit them to memory.

The second technique may be called "elaboration strategies" and include mental imagery of the connections and relationships among items.

The third technique is termed "organizational strategies" that include grouping items that share certain characteristics or which can be arranged in a graphic diagram.

The fourth technique is called "comprehension monitoring strategies" in which individuals are aware of their learning process and are able to control their cognitive processes and change them as appropriate.

The fifth technique is termed "affective and motivational strategies" in which positive reinforcement and self-generated support is applied to maintain one's focus and progress.

When these strategies are understood and used in combination by the trainer and learner, the learner not only learns a subject better but *learns learning skills* transferable to other situations.

Knowledge of Informal Learning Strategies. Informal learning strategies occur outside formally planned learning activities, and are valuable experiences if the learner is aware that they are occurring and takes advantage of them. The techniques for using experiences for learning requires one to assume a questioning or inquiry stance towards an issue which includes:

1. Identifying the assumptions that underlay individuals' perspectives and test them for validity before proceeding
2. Generating and testing alternative interpretations of information in an effort to assess possible consequences of each choice. This approach improves a person's quality of learning by ensuring that misconstrued data or conclusions do not interfere with their reasoning.

## Critical Thinking and Dialogue

*Seized by an elemental togetherness, we touch the genuine power of dialogue, and magic unfolds. — William Issacs*

Critical Thinking Inquiry. M. Neil Browne and Stuart Keeley, authors of *Asking the Right Questions: A Guide to Critical Thinking* (2001) define their use of critical thinking by saying that: "Critical thinking consists of an awareness of a set of interrelated critical questions, plus the ability and willingness to ask and answer them at appropriate times." (p.3) The authors postulate two approaches to learning; the *sponge approach* and the *panning-for-gold approach*. In the *sponge approach*, the learner spends much time reading and listening carefully to information in the manner the writer or speaker chooses to present it – absorption is the passive technique. In the *panning for gold approach*, the learner is an active participant in *dialogue* seeking out the nuggets of knowledge he or she has decided to obtain. *Interactive involvement* is the technique used by the proactive panning-for-gold learner. Interactive involvement means careful pursuit of essential information for reasoning and decision-making, and engaging others through questioning that clarifies the information and/or motives of writers and speakers. The type of inquiries and direct questioning that gets to the essential information for contemplation are listed below and illustrated in Figure 7-1: (paraphrased)

1. Require facts and valid reasoning, reduce ambiguity, and challenge loaded language.
2. Request clarification and stronger reasons to support another's perspective.
3. Inquire as to the quality and appropriateness of research, observations and conclusions.
4. Build the impression that collaboration and inclusion are being pursued.
5. Convey a willingness to learn and accept new conclusions.

6. Present oneself as willing to suspend preconditions in the search for better information.
7. Voice critical questions with curiosity and a willingness to listen.
8. Constrain inappropriate emotions and concentrate on effective reasoning.
9. Encourage others to join in mutual examination of assumptions and factual information.
10. Restate what has been heard to assure others of being heard and respected.

Browne and Keeley understand that the use of critical thinking skills can be intimidating to those unaware of the usefulness of asking pertinent questions seeking better information and clarity of thinking. To alleviate possible resistance they advocate a few guidelines for use during dialogue:

1. Be certain to demonstrate that you really want to grasp what is being said. As questions that indicate your willingness to grasp and accept new conclusions.
2. Restate what you heard or read and ask whether your understanding of the argument is consistent with what was written or spoken.
3. Voice your critical questions as if you were curious. Nothing is more deadly to the effective use of critical thinking than an attitude of “Aha, I caught you making an error.”
4. Convey the mindset that you and others are collaborators, working toward the same objective – improved conclusions.
5. Avoid critical thinking jargon that the other person would not understand.

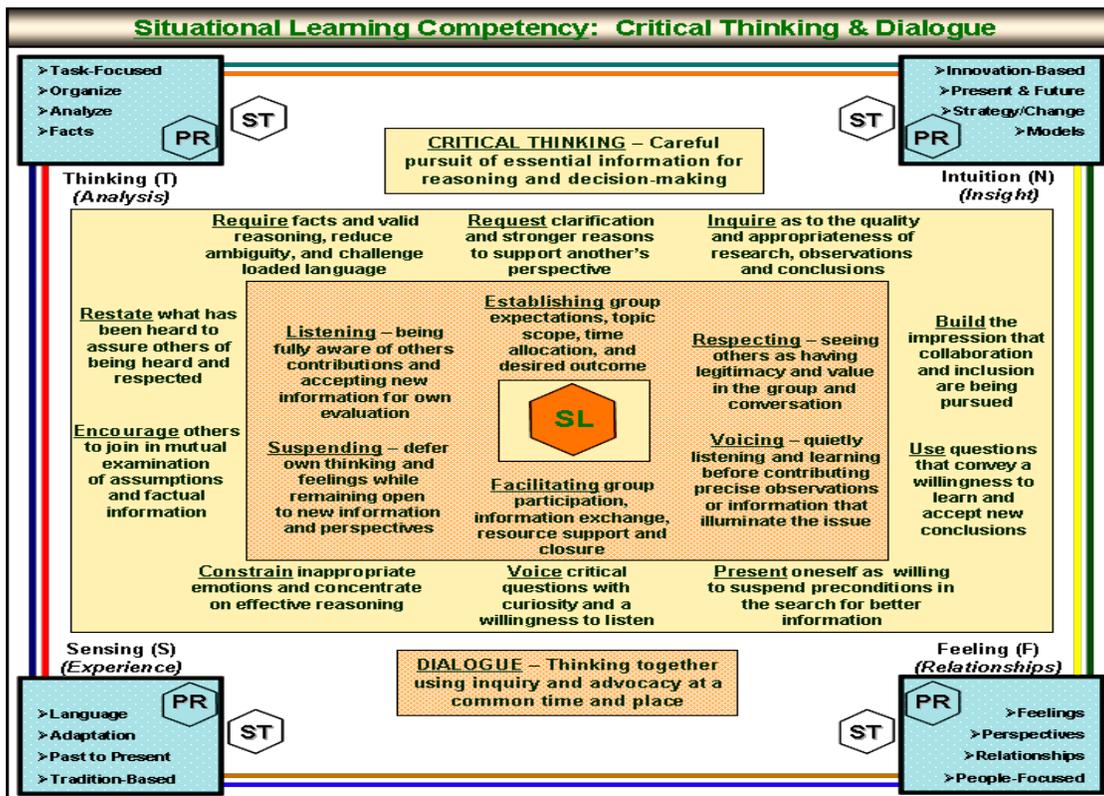


Figure 7-1

**Interpersonal Dialogue.** In *Dialogue and the Art of Thinking Together* (1999) author William Isaacs asks:

1. How can we learn, as individuals, to take actions that might be conducive to evoke dialogue?

2. How can we create dialogue in settings where people may not have initially been willing to engage in it? [And]
3. How can we prevent retrenchment?" (p.29)

He offers that "dialogue is a conversation with a center, not sides" (p.17), and that dialogue builds interpersonal relationships and trust that leads to more effective communication and results in social situations. Specifically, the objectives of dialogue are to produce coherent actions, create fluid structures of interaction, and provide a wholesome space for dialogue." (pp.29-30)

A short definition of dialogue as used in this text is: *Dialogue is thinking and conversation using information inquiry and advocacy at a common time and place.* And, the view here is that situational learning is enabled whenever communications is based more on dialogue and less on debate or argument. Isaacs proposes four characteristics that distinguish dialogue from other forms of communication. These are paraphrased below, along with additional insight on the role of facilitators in the dialogue process. Dialogue characteristics listed below and in Figure 7-1 include: (paraphrased)

1. Listening – Being fully aware of others contributions and accepting new information for own evaluation.
2. Respecting – Seeing others as having legitimacy and value in the group and conversation.
3. Suspending – Defer own thinking and feelings while remaining open to new information and perspectives.
4. Voicing – Quietly listening and learning before contributing precise information that illuminates the issue.
5. Facilitating – Assisting in group participation, information exchange, resource support, and closure.
6. Establishing – Group expectations, topic scope, time allocation, and desired outcome.

**Facilitating Dialogue.** Effective facilitation of group activity and dialogue brings people with different objectives, interests, knowledge, and preferences together to listen, learn and deliberate toward consensus and eventual action. When done well, individuals are empowered by the learning they acquire and the group organization benefits from the decisions that are made and supported. Figure 7-2 illustrates what occurs when a meeting facilitator provides a dialogue framework and coaches participants in systematic conversation. Assuming there is a spirit of mutual respect and trust among the participants, the facilitator obtains agreement for the group to hold two conversations, sessions 1 and 2 separated by a break period in-between.

The first session is used for participants to learn and reflect on the issue of problem under consideration. The obligation of the group is to use systems thinking and explore patterns of belief and mental models that may be relevant in session 2. Essentially, this is a period for getting increasingly open, absorbing contributed information and varying perspectives, and practicing dialogue skills so all are involved and committed to group success. Topics are discussed in a respectful manner, potential approaches and methods are explored, but no commitment is made other than some tentative clarification of the issue/problem space.

If the group is known to have significant interpersonal conflict on the topic being discussed or with one another, two extra initiatives may be useful:

1. Acknowledge the likelihood of different expectations and subsequent expectations, and
2. Request recommendations for corrective action and offer support for considerate communications.

The second session is used for participants to decide and act on what they now hold together in trust for one another – their understandings, contributions, and expertise. The facilitator, having done some prior organization of contributions during the break period, helps the group start to move toward closure. Continued dialogue (perhaps interspersed with occasional mild debate) focuses on alternative ways to organize and prioritize the group's thoughtful submissions. Eventually, a reasonable level of consensus becomes apparent wherein everyone acknowledges their views have been heard and considered, and that they can sign on to a final product. A plan of action and a communication strategy are prepared to communicate the group's decision.

Again, given a heightened amount of interpersonal attention the following actions may be beneficial:

1. Assert the value of working toward mutual respect and shared purpose, and
2. Recognize conciliatory comments and support for productive action.

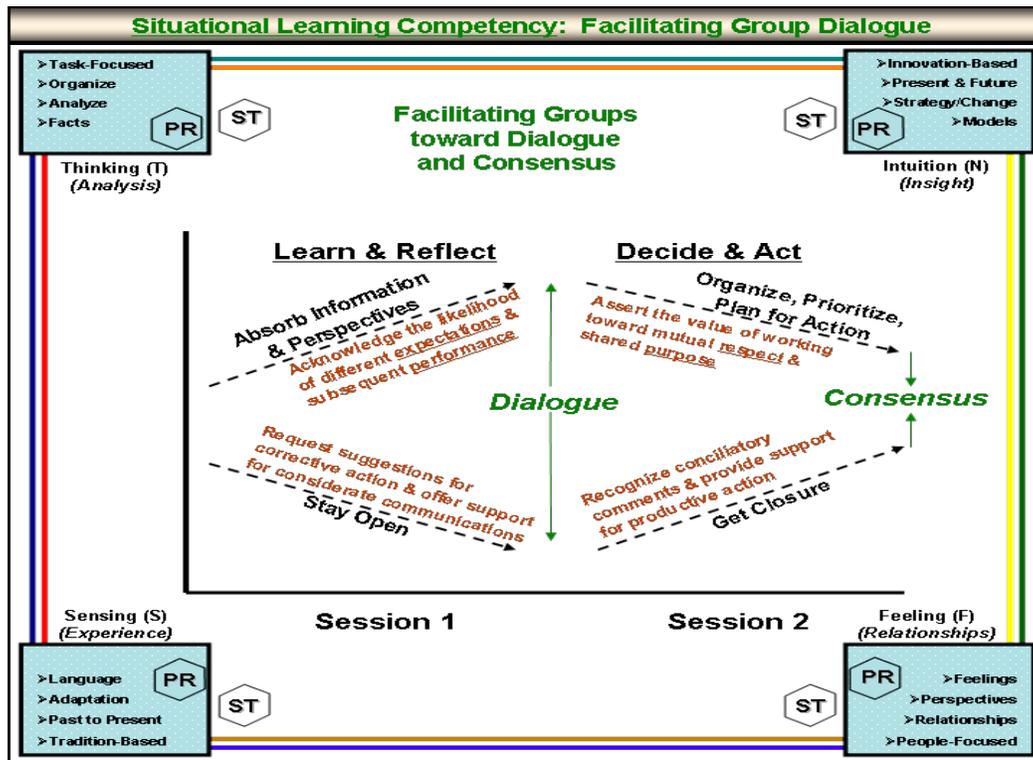


Figure 7-2

## Reasoning, Learning and Knowledge

*To be adequate for our strange new world we must come to think of learning as being the same as living. — Malcolm Knowles*

### Selected Perspectives.

**Motives and Conditions for Learning.** In *Understanding and Facilitating Adult Learning* (Brookfield, 1986), the author suggests that a society is able to realize its humanity through its ability to learn. It is through learning that we are able to both create and alter our beliefs, values, behaviors, and relationships which form our culture. He states: "The extent to which adults are engaged in a free exchange of ideas, beliefs, and practices is one gauge of whether society is open, democratic, and healthy. If adults of widely differing class and ethnic groups are actively exploring ideas, beliefs, and practices, then we are likely to have a society in which creativity, diversity, and the continuous re-creation of social structures are the accepted norms." (p.8) What is implied is that learning is a fundamental individual and collective function, and that the capability of a people to learn what they have in common and to forge agreements is essential for societal growth and development.

Brookfield emphasizes learning in adulthood as the basis for continued societal development, and addresses the importance of adult motivation, styles of learning, and conditions that facilitate learning. He offers six principles of effective practice (pp.9-10) in establishing a learning environment. These are paraphrased for general use in the context of this book as follows:

1. Learning should be voluntary – Better learning and commitment to what is learned is the result of voluntary participation wherein the learner's objectives create his or her own motivation.
2. Learning requires respect – Individuals whose self-worth is in doubt are limited in their ability to learn.
3. Learning is collaborative – The teacher (leader) and learner are engaged in a cooperative enterprise in which objectives, roles, and responsibilities are discussed and renegotiated as required.
4. Learning is reflection upon experience – It is through collaborative analysis of actions and consequences that strategies for obtaining improved results are established for future use.

5. Learning should include critical reflection – Learners can develop further if they are able to recognize the underlying values, beliefs, behaviors, and ideologies that are culturally transmitted during their experiences, and if they are thereby able to appreciate the situational nature of their experiences.

6. Learning should be self-directed – Learners who take responsibility for what and how they learn are empowered adults in control of themselves, and to some extent, their environment.

Brookfield expands on his views by adding insights provided by C. Suanmali in an unpublished doctoral dissertation entitled: “The Core Concepts of Androgyny.” Suanmali suggests that adults have enhanced capability to function as self-directed learners when they are able to:

1. Decrease their dependence on educators (leaders).
2. Identify and use learning resources.
3. Define their learning needs and objectives.
4. Organize what is to be learned in terms of their problems and level of understanding.
5. Improve their decision making and problem solving capability.
6. Develop and apply criteria for judging experience..

**[Author’s Note:** An observation here is that human and social system learning is based on the same principles and practices advocated for adult learning. It appears that one who is motivated to learn, is willing to be responsible for his or her own learning, and is able to participate with those who can act as facilitators and sources of information, will experience growth and development commensurate with their personal capabilities and time investment.]

Orientations to Learning. In their book, *Learning in Adulthood: A Comprehensive Guide* (Merriam & Caffarella, 1991), the authors summarize major theories about the learning process into four orientations: behaviorist, cognitivist, humanist, and social learning. Each orientation poses a perspective on what happens during the learning process, and each offers insight into the multiple purposes and developmental outcomes from effective learning. They are:

1. The Behaviourist Orientation – Behaviorism focuses on the systematic design and delivery of instruction for the purpose of producing desired behavior change. Three underlying assumptions are held to be true. First, observable behavior rather than internal thought processes is the focus of study; in particular, learning is manifested by change in behavior. Second, the environment shapes one’s behavior; what one learns is determined by the elements in the environment, not by the individual learner. And third, the principles of contiguity and reinforcement are central to explaining the learning process. “Stimulus-response” and “operant conditioning” theories hold sway in the behaviorist perspective as evidenced by the view attributed by the authors to B. F. Skinner that “. . . the ultimate goal of education is to bring about behavior that will ensure survival of the human species, societies, and individuals (Skinner, 1971).

2. The Cognitive Orientation – In contrast to the behaviorist viewpoint, cognitive orientation is based primarily on the Gestalt (German word for pattern or shape) or wholeness of a situation or event. The importance of individual perception, insight, and meaning are major contributions to cognitivism from Gestalt learning theorists. While behaviorists emphasize the environment as the locus of control over learning, the cognitivists (Gestaltists) place responsibility for learning with the individual or adult learning theory.

Cognitive psychologist Jean Piaget (1966) proposed a four-stage theory of cognitive development based on the view that one’s internal cognitive structure changes partly because of maturational changes in the nervous system and partly because of the organism’s experience with its external environment. Piaget explained that during childhood individuals pass through four stages of cognitive development that represent different ways of making sense, understanding, and constructing knowledge of the world. He suggested that the individual was capable of mature adult thought by the age of twenty. His four stages of cognitive development are:

- a. Sensory-motor, in which thought is stimulated by innate reflex actions
- b. Pre-operational, wherein concrete objects may be represented in symbols and words
- c. Concrete operational, in which there is understanding of concepts and relationships of ideas
- d. The formal operational, wherein the ability to reason hypothetically, logically, and systematically is fully developed

Others have built upon Piaget’s foundational theory by adding their perspectives on various facets of cognitive learning and human development. Some of those directly applicable to this chapter include D. P. Ausubel’s (1967) view that

“meaningful learning” as opposed to “rote learning” occurs when it can be related to concepts which already exist in a person’s cognitive structure and that “advance organizers” are necessary to prepare a person for new learning. Ausubel’s work apparently stimulated research by others into *schema theory* wherein schemata – structures that organize the learner’s worldview – in turn determine how new experiences are processed (Di Vesta, 1987; Greeno, 1980). The relationship of schema theory to learnership is discussed more fully later in this section under the subject of knowledge.

**3. The Humanist Orientation** – Humanist theories consider learning from the perspective of the human potential for growth, and include affective as well as cognitive dimensions of learning. Rather than accept that behavior is predetermined by environment (behaviorist) or subconscious (cognitivist), humanists see people in control of their own destiny, people that are inherently good and are striving for a better world, people that are free to act and whose behavior is a consequence of human choice, and people that possess an unlimited potential for growth and development (Rodgers, 1983; Maslow, 1970).

Maslow, with his theory of motivation based on a hierarchy of human needs (discussed in the section on personal systems development), is considered to be the founder of humanistic psychology. Maslow stated that the need to learn is intrinsic and that it emanates from the learner. He believed that among growth motivations could be found the need for cognition – a desire to know and understand. In addition to the primary goal of self-actualization, Maslow identified other goals related to learning and understanding (p.439) which (selectively) include:

- a. The acquisition of a set of values
- b. The attainment of peak experiences
- c. A sense of accomplishment
- d. An understanding of the critical existential issues of life
- e. The control of one’s impulses
- f. Learning to choose judiciously.

Carl Rogers is another major figure who writes from a humanist orientation. In his view, “client-centered therapy” conducted by psychotherapists and “student-centered learning” led by educators are similar in outcome – both are concerned with significant learning in which the client and student, respectively, achieve personal growth and development. The characteristics of such learning are: (a) personal involvement – the affective and cognitive aspects of a person should be involved in the learning event, (b) self-initiated – a sense of discovery must come from within, (c) pervasive – the learning makes a difference in the behavior (d) evaluated by the learner – the learner can best determine whether the experience is meeting a need, and (e) essence is meaning – when experiential learning takes place, its meaning to the learner becomes incorporated into the total experience. (p.20)

**4. A Social Learning Orientation** – Social learning theory takes the position that people learn from observing other people in a variety of social settings. Bandura (1976) observes that: “Virtually all learning phenomena resulting from direct experiences can occur on a vicarious basis through observation of other people’s behavior and its consequences for the observer.” He contends that what he calls “observational or social learning” may be characterized by the concept of self-regulation, and that “persons can regulate their own behavior to some extent by visualizing self-generated consequences.” (p.392)

B. R. Hergenhahn (1988) adds the view that observational learning is influenced by the four processes of attention, retention or memory, behavioral rehearsal, and motivation. These processes are described as: (a) attention must first be given to someone who serves as a potentially worthy model for one’s behavior modification, (b) information from observing the actions of the model and the consequences of those actions on the observer is set into the person’s memory, (c) a rehearsal in which the learner imitates what has been modeled and compares the results received to the modeled experience, and (d) the modeled behavior is accepted as being useful and is stored for future use. Through this process, the interaction of the person with his or her social environment is described as a process of mutual influence, and learning is set completely within a social context.

**[Author’s Note 1:** These orientations to learning are believed to be particularly relevant to the Learnership model and hypothesis of this book. Learning occurs with maximum impact when all four orientations are factored into the learning experience of the individual, organization, or community. When learning results in (1) desired behavior change in response to influences in the social environment (behaviorist); (2) the ability of persons to take responsibility for their learning and to reason maturely with relevant information (cognitivist); (3) increased motivation to create a better quality of social life (humanist); and (4) the willingness to learn from high-quality role models (social learning), significant social growth and development may be anticipated.]

**[Author’s Note 2:** An observation in terms of this research project is that knowledge of learning theory and one’s own preferred way of learning, coupled with an understanding of the strategies used by others, is likely to enhance the quality of social discourse. The willingness to explore issues with others while simultaneously making the process one of inquiry

and learning contributes to the dignity and maturity of all concerned. This approach is linked directly to the quality of dialogue a group is able to achieve, and the range of social problem solutions they are able to develop for possible consensual action.]

Ordinary Knowledge and Problem Solving. In *Usable Knowledge: Social Problem Science and Social Problem Solving* (Lindblom & Cohen, 1979), the authors challenge the wide-spread view that social problems may be solved through scientific problem solving methodologies similar to those used in hard-science research. The authors opine that social problem complexity inhibits the effective conduct of social research, thereby invalidating much of the supposed evidence for the argument being made. In their view the formal technique of information gathering and analysis within defined, bounded, and controlled environments is impossible to achieve, and pretending to do so only minimizes the likelihood of problem solution and wastes resources. They point out that: "...a great deal of the world's problem solving is and ought to be accomplished through various forms of social interaction that substitute action for thought, understanding, and analysis." (p.10)

Lindblom and Cohen focus attention on the difficulty in handling "divergent problems," the importance of "social interaction and learning," the need for "political considerations" in problem identification and solution, the acceptability of "ordinary knowledge." They explain that *most social problems are diverging* rather than converging in nature. That is, they are *values-based* wherein increased deliberation often fails to bring the parties (with significantly different values) closer together on an issue. These issues require greater social interaction and learning by the participants, a desire to work for a political consensus, the admissibility of ordinary knowledge and experience as useful facts, and a willingness to take a series of iterative actions in the right direction with the expectation that a good solution will eventually be found. In their view, professional social inquiry can, at best, provide only modest new information that is both accurate and timely – the practical experience of informed people in the community must provide the bulk of the knowledge on an issue.

**[Author's Note:** This perspective is useful in that it reflects the need for participation of knowledgeable people in the affairs of their organizations and communities. There are no perfect scientific solutions to social issues that may be achieved without the involvement of those who are invested in the consequences of the decisions that are made. Divergent issues call for open inquiry and dialogue into values, assumptions, facts, objectives, and strategies relevant to the issue at hand. Individuals, organizations, and communities must engage one another and intelligently reason, learn, and act together for their common purpose.]

Knowledge, Learning, and Scheme Theory. In their book, *Learning in Adulthood: A Comprehensive Guide* (Merriam & Caffarella, 1991) explain that the ability to learn is based on an individual's previously developed cognitive structure and his or her skill at learning. They present the concept of "scheme theory" (plural of schemata) in which the way an individual packages knowledge and organizes his or her long-term memory establishes his or her perspective or worldview. This, in turn, influences how they interpret and assimilate new information. Two schematic types are distinguishable: *declarative knowledge* which are the facts one knows, and *procedural knowledge* which is one's knowledge on how to perform skills and tasks.

The authors identify three different modes of learning using scheme theory: *accretion*, in which there is a daily accumulation of facts, *tuning*, in which slow and gradual changes in the schemata occur, and *restructuring*, wherein new schemata are created and those already stored are reorganized. They state that the processes of tuning and restructuring are vital for adult learning, critical thinking, and problem solving. An important insight offered is that: "...in most problem-solving situations, we are trying to fit new ideas (declarative knowledge) and ways of thinking (procedural knowledge) into earlier patterns of thinking and doing (our current schemata). If we are unable to change our earlier thought patterns...our chances of being able to frame and act on problems from a different perspective is remote if not impossible." (p.171)

Another characteristic of prior knowledge and experience in learning is that novices and experts know things differently. Experts not only have a greater amount of knowledge, they also seem to have it organized differently. While novices organize their thinking in terms of the literal aspects explicitly given in a situation, experts are observant of underlying principles and abstractions that subsume the literal objects. Also, experts have knowledge on how to use or apply their knowledge.

Finally, the authors speak to the importance of *dialectic thinking* in cognitive development. Dialectic thinking is thinking that recognizes alternative truths or ways of thinking about similar real-life phenomena. Whereas, *operational thinking* is focused on determining indisputable facts of a given situation, dialectic thinking seeks to recognize and understand the contradictory aspects of human thought and action. Some writers suggest that dialectic thinking is essential for the conduct of mature reasoning. The authors reference other writers' contributions on this subject, the highlights of which are useful in this work (bibliographic entries are provided for further inquiry). The highlights include:

1. Pascual-Leone (1983) offers that adult cognitive development continues past the formal operational thinking stage accepted by earlier writers, and suggests that there are four additional stages entitled: the late formal stage, the pre-

dialectical stage, the dialectical stage, and the transcendental stage. It appears that it is only at these higher levels of thinking that societal contradictions, conflicts, and meta-developmental concerns may be understood.

2. Benack and Besseches (1989) have developed a “dialectical schemata framework” that illustrates the twenty-four moves in thought that dialectical thinkers can be construed to make. Apparently, *individuals with higher-order worldviews* are better skilled at turning existing knowledge into processes of inquiry aimed at attaining greater and more mature understanding.

3. Kramer (1989) indicates that the acceptance of contradiction and different worldviews are the hallmarks of adult thinking and believes that “*mature dialectic thought rarely appears before middle age*”. (p.151) Merriam and Caffarella state that: “This mature dialectic thought is characterized by awareness that all thought processes are culturally and historically bound and therefore dynamic and constantly evolving.” (p. 187)

**[Author’s Note:** The significance of these views to the learnership model may be seen in the fact that they reinforce the notion that *pre-established paradigms or models for thinking affect the individual’s capacity to learn and develop*. Improved thinking structures lead to improved reasoning, learning, and action. This is precisely what the learnership model is intended to demonstrate. Also, the idea of dialectic thinking for improved learning is a fundamental skill in the concept of dialogue developed earlier, and which is foundational in creating improved *societal dialogue*.]

Ten Philosophical Mistakes. In *Ten Philosophical Mistakes* (Adler, 1985), the author argues that modern reasoning and judgment are often poorly accomplished due to “*little philosophical mistakes*” that entered into the thinking of some noted philosophers of the seventeenth century – specifically Thomas Hobbes in England and Rene’ Descartes in France. These mistakes continue in modern thought and are witnessed as erroneous premises persistently leading to false conclusions, inappropriate decisions, and failed consequences. In most cases when the little errors in the beginning are recognized, modern thinkers attempt to circumvent their impact further compounding the resulting difficulties. The ten philosophical mistakes (pp.xvi-xix) identified are:

1. Not recognizing that all of each person’s ideas or viewpoints are *subjective interpretations* of his or her own knowledge and experience. Ideas, then, are not perfectly correct expressions of some objective reality.
2. The failure to distinguish between *perceptual thought* about sensible objects and *conceptual thought* about those things that are constructed through the mind’s power of intelligence. Only humans can deal with the unperceived and the unimaginable.
3. Not recognizing that all *ideas are meanings*, and that they are the basis for all man-made words, signs, and symbols. Words, signs, and symbols cannot be said to be meaningless when they have referential ideas with which they are associated.
4. The failure to distinguish between *knowledge* and *opinion*. Having knowledge connotes being in possession of true information, the certitude of which is beyond reasonable doubt. Opinions on the other hand may be asserted with little basis in evidence or reason. Decisions in this case have to do with whether something exists or not and requires *descriptive judgment*.
5. The belief that there are no objectively valid and universally tenable moral standards or norms. The ability to distinguish and prefer human needs over human wants, and real goods over apparent goods, leads to a desire for knowledge and truth rather than opinion and the capacity to discern between “ought” and “ought not.” Decisions in this case are said to be *prescriptive judgment*.
6. The identification of *happiness* exclusively with the psychological state of contentment. This notion contributes to the inability to distinguish between human needs and wants and between real and apparent goods – which undermines the development of a moral philosophy in which happiness also conveys attaining a *life well-lived* and in balance.
7. The misunderstanding of the relation between *free choice* and *moral responsibility*. Determinists argue that people do not have free will and choice and therefore should not be held fully accountable for their actions. The counterpoint is that moral virtue depends upon the freedom of will and choice in one’s learning and development which necessitates moral responsibility and accountability.
8. The denial of common *human nature* among all people and cultures. Notwithstanding the deterministic characteristics common to species other than humans, and the belief that humans have no essential similarity because they each receive a different genetic beginning (nature), humans do have in common *potentialities* – man is a self-made creature who given a range of potentialities at birth may freely choose to develop him or herself within the guidelines of his or her culture (nurture).

9. The belief that the “social contract” theory of Rousseau and others explains the origins of a civil society and the state. Rather than the view that man moved from an independent “state of nature” to political association for protection, a better informed perspective is that human beings by nature are both socially- and politically-oriented and have a natural inclination to participate in government. As such, true *political community* may only exist in democratic, constitutionally based civil government.

10. The *fallacy of reductionism* – the assigning a much greater reality to the parts of an organized whole than to the whole itself. Notwithstanding the trends within the scientific community to differentiate entities and human existence into their respective parts for analysis and identification of their attributes, and the consequential tendency to reduce the value and responsibilities of the larger whole through this process; the potentialities of those entities and human beings that become present when viewed from a whole perspective are, from a common sense viewpoint, the predominant concern. Individual human beings are whole units with identifiable identities and the ability to choose patterns of growth and development. As such, “There can be no question about the moral responsibility that each of us bears for his actions.” (p.190)

What may be derived from Adler’s perspectives is that while empirical science and mathematics has resulted in breathtaking technological advances and knowledge of physical system reality (primarily in the last two centuries), the greatest achievements in philosophy occurred in Greek antiquity and the Middle Ages and should be the basis for an equally important knowledge of human system reality.

**[Author’s Note:** The importance of this perspective, in terms of learnership, lie in recognizing the need for society to emphasize its willingness to enter into self-reflection, and to re-learn and apply those principles and practices of human common sense that underpin all human experience from the earliest of times. Reasoning, learning, and action informed by past wisdom, applied systematically to social issues, and focused on the quality aspirations of individuals, organizations and communities establish a tenuous but important foundation for societal learning and development.]

Critical Thinking and Reflection. In *Developing Critical Thinkers* (Brookfield, 1987), Brookfield says that: “When we become critical thinkers we develop an awareness of the assumptions under which we, and others, think and act ...we learn to see our own actions through the eyes of others... we seek to exercise democratic control ...and hold in check demagogic tendencies...”. (p.ix) His fundamental purpose is to identify the primary capabilities individuals need to learn in order to become better at reasoning and making judgments. His themes (pp.5-9) are:

1. Critical thinking is a productive and positive activity. People learn to become open to possibilities, to appreciate social diversity, and to gain humility in understanding their own beliefs.
2. Critical thinking is a process, not an outcome. It is a process of continued inquiry into assumptions and healthy skepticism of universal truths and total certainties.
3. Manifestations of critical thinking vary according to the contexts in which it occurs. How critical thinking affects a person’s thinking is seen either through the way he or she speaks and writes (internal effects) or in the change behavior exhibited (external).
4. Critical thinking is triggered by positive as well as negative events. Both tragedies and “peak” experiences may prompt scrutiny of past assumptions, beliefs, and abilities.
5. Critical thinking is emotive as well as rational. Emotions are central to the critical thinking process in that they respond to questioning of accepted values and behaviors and raise feelings of resistance and confusion.
6. Identifying and challenging assumptions is central to critical thinking. Once one’s assumptions are identified, the accuracy and validity of those assumptions may be tested.
7. Challenging the importance of context is crucial to critical thinking. Being aware that habitual perceptions, understandings, and interpretations of the world frame our thinking structures.
8. Critical thinkers try to imagine and explore alternatives. Being open to new ways of thinking and perspectives on life for greater flexibility of thought and the adoption of new insights
9. Imagining and exploring alternatives leads to reflective skepticism. Critical thinkers understand that present methods of doing things are not automatically “right,” and are suspicious of those with answers to all of life’s problems.

Brookfield implies that critical thinking is not necessarily a rational activity; in fact, it is a means for breaking out of prescribed modes of thinking and action in favor of new learning and greater creativity. There are at least three alternative

interpretations of the linkages of critical thinking to other modes of thinking and learning: *emancipatory learning, dialectical thinking, and reflective learning*.

1. Emancipatory Learning – “Emancipatory learning is that which frees people from personal, institutional, or environmental forces that prevent them from seeing new directions, from gaining control of their lives, and their society and their world”.

2. Dialectical Thinking – “Dialectical thinking is viewed as a particular form of critical thinking that focuses on the understanding and resolution of contradictions... [it] welcomes them as a stimulus for development.”

3. Reflective Learning – The process of considering the meaning of an issue or experience through internal examination of what the experience means to oneself, and which results in changes in one’s conceptual perspective.” (pp.12-14)

**[Author’s Note:** Brookfield’s viewpoint is significant for the learnership model because it recognizes the importance of understanding the context within which an issue exists, and identifies a strategy for reflective learning and deliberative development. The learnership construct is based on the notion of reflective learning from the experience of *being in social dialogue and discussion*. The premise is that applying learnership will lead to more effective societal development.]

Effective Reasoning. In *Clear Thinking* (Ruchlis, 1990), the author makes the case for the importance of clear thinking and reasoning. He notes that: “Reasoning power will be essential if we are to find workable solutions to the problems created by our own technology”. (p.13) It is clear that human reasoning plus the ability to speak and to skillfully use our hands has brought society to its current level of development and dysfunctionality. If we are to make further progress, today’s problems must at least be partially overcome or American society cannot achieve the potential imbued in its democratic founding. Ruchlis defines reasoning in terms of a general problem solving model which includes:

1. Identification of the *problem or issue* to be resolved.
2. *Mental searching* for facts that apply to the problem through recall of applicable information in one’s memory.
3. Juggling facts to put together different possible solutions. This requires *thought experiments, correct reasoning, and drawing conclusions*.
4. Mental evaluation of each alternative solution and rendering a *judgment*.
5. Taking *action* to solve the problem.

At a more detailed level, the activities involve:

1. Obtaining appropriate facts,
2. Applying inductive reasoning (specific observations are used to create generalized theories)
3. Applying deductive reasoning (premises are established and used to deduce an outcome or conclusion)
4. Considering the applicability of intuitive insights
5. Using analogies for comparative analysis.

During the reasoning process it is essential that common errors in reasoning are avoided. Through elaboration on Ruchlis’s thinking, the following cautions in reasoning may be articulated:

1. Keep an open mind and a spirit of inquiry.
2. Avoid jumping to premature conclusions.
3. Beware of overgeneralizations from limited data.
4. Don’t confuse evidence with proof.
5. Beware of false analogies that don’t fit the situation.
6. Consider conflicting opinions as opportunities to learn.
7. Avoid stereotypes, prejudice, and discrimination.
8. Be alert for illogical reasoning.
9. Use language accurately and with consideration of others’ views.
10. Seek objectively obtained data versus subjective opinion.
11. Avoid being influenced excessively by emotional appeals.
12. Seek new knowledge from emerging contradictions.
13. Include the views of knowledgeable others.
14. Include those affected by the potential consequences of decisions.

**[Author's Note:** Ruchlis's work provides insight to the learnership emphasis on reasoned judgment. As previous writers have indicated, a major purpose in life is the pursuit of truth and happiness. The fact that this is accomplished in social units such as organizations and communities creates an imperative that scientific inquiry and interpersonal deliberations are open, informed, and constructive as viewed by the vast majority of society's members.]

## Learning Systems: Cycles of Learning

*One of the most important barriers to overcome is individuals' unawareness of their own unawareness. — Chris Argyris*

**Action Learning.** David Garvin, in *Learning in Action* (2000) summarizes the three stages of the learning process and their potential disabilities. His recommended framework applies to organizational individuals and teams in the following manner:

Acquiring Information. "The real challenge for managers is to distinguish relevant from irrelevant information, while remaining open to unexpected, and occasionally unwelcome, surprises. Effective organizational learning demands clear signals and minimal noise, as well as the ability to share critical insights so that they do not remain isolated or unacknowledged." (p.21) (the disability = biased information). According to Garvin, data can be gathering in a variety of ways:

1. Search – Identification and look-up data/information from known sources.
2. Inquiry – Descriptive (closed-ended questions) or exploratory (open-ended questions) constructed and used to solicit data/information.
3. Observation – Participate in and experience a situation, conduct interviews and take notes.
4. Reflection and Review – Reflect on experiences and develop lessons for the future after situations have occurred.
5. Experiential Learning – Reflect on experience and conduct reviews for alternating periods during the experience.

Interpreting Information. "Even if organizations were able to acquire all essential information, they would still have to interpret it...Unadorned facts and opinions are therefore of limited value. They become useful only after they have been classified, grouped, or placed with a larger context." (p.24) (The disability = illusion of information validity or causation). Garvin notes that unfortunately people "routinely develop interpretations, causal connections, and probability estimates that are seriously biased...some distinctive problems are:

1. Illusory Correlation – Viewing events as related simply because they have appeared together.
2. Illusory Causation – Ascribing causality to events that occur in sequence as seem to be linked.
3. Illusion of Validity – Increasing confidence in one's judgment, especially with larger and larger amounts of information, even though the accuracy of judgment remains unchanged.
4. Framing Effects – Different responses are identical, uncertain payoffs that have been framed as potential gains rather than potential losses.
5. Categorical Bias – The use and persistence of stereotypical categories for classifying people and events, even when faced with conflicting information.
6. Availability Bias – Assessing the probability of events by the ease with which examples come to mind, rather than their actual frequencies and likelihood
7. Regression Artifacts – Ascribing causality to actions that change a variable from an extreme (high or low) level to an average level, even though the change is really due to a chance (i.e., the greater likelihood that an average score will be obtained rather than an extreme value).
8. Hindsight Bias – The systematic biasing of probability estimates toward actual outcomes." (p.31)

Applying Information. Managers must translate their interpretations into concrete behaviors and must then ensure that a critical mass of the organization adopts the new activities...It is essential to eliminate unnecessary or outdated tasks as the same time that new ones are added. Otherwise, overload is inevitable.” (p.27) (The disability = inaction). The shortcoming here pertains to passivity; an inability or unwillingness to act on new interpretations.

Garvin comments that “supportive learning environments” are essential to overcoming learning disabilities. He recommends four conditions for learning to flourish:

1. The recognition and acceptance of differences
2. The provision of timely, unvarnished feedback;
3. The pursuit of new ways of thinking and untapped sources of information
4. The acceptance of errors, mistakes, and occasional failures as the price of improvement

**Situation-Handling.** Karl Wiig, author of *People-Focused Knowledge Management* (2005) anchors his subject of knowledge management in a four stage process model with the following activities:

1. Situation Recognition
2. Decision-Making/Problem-Solving
3. Execution Method
4. Process Monitoring

While this approach works well for Wiig's purpose, it is in fact a restatement of the traditional learning cycle model advocated for decades by other researchers and authors explaining how *experiential learning* works. Of particular interest here is Wiig's emphasis on the fundamental need to understand the situation within which individuals and organizations find themselves – know the content and context of the situation – before attempting to determine a final solution or course of action.

According to Wiig, “People are required to act in all kinds of situations – large and small...The actions that are required depend upon the situation, its context and objectives, the person's understanding of the situation, and the person's capabilities. [And] Good situation-handling by people implies that the personal performance will be good. Personal situation-handling performance results from the quality of personal actions.” (p.117) His emphasis on this topic is similar to others who have written that unless we know the real problem and its context, it is certain that we cannot determine the best solution.

**[Author's Note:** The learnership *systems thinking* and *pattern recognition* competencies addressed earlier in this text, as well as the specific perspectives provided on peoples' *personalities* and *frames of reference* demonstrate strong agreement with the information processing frameworks provided by Garvin and Wiig.]

**Adaptive Learning Process.** Stephen Haeckel, author of *Adaptive Enterprise: Creating Sense and Respond Organizations* (1999) contributes a contemporary view of how organizations' should continuously learn so as to be competitive in their marketplace. He argues that today's organizations need to be continuously adaptive, and to do so they have to increase to speed of their learning cycles – or if need be, short-change the time allowed for learning cycles to reach a conclusion. Basically, he says that the need is to move rapidly from *sensing a situation* to *responding to the situation* by reducing the time spent on *interpretation* and *decision-making*. He proposes that organizational strategy is traditionally treated as a *strategy-plan* activity, but in many industries it should now be understood as a *strategy-design* responsibility. That is, remake the organization by changing the operational structure and its locations through modularization of functions – and the corresponding management policies and procedures. This way greater effort is spent on preparing for client-stimulated action and providing the adaptive response that clients value.

**[Authors' Note:** The interpretation of Haeckel's recommendations in this text is that: (1) to the degree that significant learning has already occurred and is guiding client-focused organizational transformation, the recommendations are sound. And, (2) that learning cycles are, in fact, not eliminated but are streamlined and fine-tuned to operate more like a closed system which gains efficiency – however, a possible down-side is that narrowing opportunities for learning to gain speed may once again open the door to a “we don't do it that way” syndrome sometime in the future.]

**Learnership Learning Cycles.** A variation of both Garvin’s learning process, Wiig’s situation-handling approach, and Haecckel’s adaptive learning process is advocated as the learnership learning cycle framework depicted in Figure 7-3.

The figure has two methodological features that illustrate the basic learning cycle concept. The first methodology is the traditional, *sequential approach* used for decision-making and problem-solving, which is: (a) Information Gathering; (b) Information Analysis; (c) Strategy Development; (d) Strategy Implementation; (e) Results Evaluation; and (f) Adaptive Action.

The second methodology is the use of basic human cognitive and feelings shown as *three stages of mental activity*: (a) *Perception* – use of sensing and intuition, (b) *Judgment* – use of thinking and feeling, and (c) *Action* – representing (hard) cognitive results or (soft) social developmental accomplishment. Together, these two contextual features convey the systematic and dynamic elements of the learnership learning cycle concept. [Note that these capabilities are based on the preferred styles of individual thinking and behavior discussed in chapter six. They are used here to create a sense of clockwise movement for understanding the recurring nature of learning cycles.]

The next area of learning cycle examination concerns the two developmental processes used in this book by learnership practitioners. First there is the cognitive, objective (fact based, hard) learning cycle consisting of the *Assess, Decide, and Execute* phases. Second there is the emotional, subjective (feeling consciousness, soft) learning cycle which follows the *Sense, Adapt, and Renew* phases of internal learning. (Figure 7-3)

Assess, Decide, Execute. This process is preferred when decisions and problems primarily require the acquisition and use of empirical facts and practical experience. The process requires the collection and *Assessment* of explicit information in accordance with standard and best practices. Data and information collected is then reviewed using further inquiry and dialogue in a decision-making or problem-solving process in which analysis, synthesis, prioritization, decision criteria, and risk management are considered. *Decisions* are then codified into implementation plans and *Executed* using good management practice. In practical experience individuals, organization and communities all need to use this approach on a daily basis.

Sense, Adapt, Renew. In this case, there are major tacit and/or feeling factors in play and the individual, using self-reflective intuition and/or emotional sensitivity, becomes aware or *Senses* the need to attend to the situation. Using a sorting process similar to the cognitive decision process, the individual considers how to *Adapt* to the new events or situation. Adaptation requires that new learning and knowledge be applied in the form of personal change or *Renewal*, which in turn, creates a new level of “*being*” or “*personal realization*.” Again, practical experience indicates that everyone has the occasion to recognize their own personal dilemmas and treat them as learning opportunities.

Time, Change and Complexity. Lastly, the *contextual setting* within which the hard and soft learning cycles operate can either support or detract from learning cycle efficiency and subsequent knowledge building. When *time* for decisions and problem-solving is sufficient, *change* is desired and supported, and *complexity* is manageable; learning cycles operated productively. At the other extreme, when *time, change* and *complexity* are not managed and supportive little learning and knowledge creation is possible.

**[Author’s Note 1:** In both the hard and soft learning cycles, learning occurs as the outcome from the *Execute* or *Renewal* phase is evaluated, then *assessed* or *sensed* to begin another learning cycle. Also, the contextual impact of time, change, and complexity are significant variables that can pose major challenges and roadblocks to efficient and effective learning.]

**[Author’s Note 2:** When coaching others through both the hard and soft learning cycles, the Adult Development Theory and Executive Coaching style of coaching may be most effective according to *Evidence-Based Coaching Handbook* by D. R. Stober and A. M. Grant, Jennifer Berger, Chapter 3, 2006)]

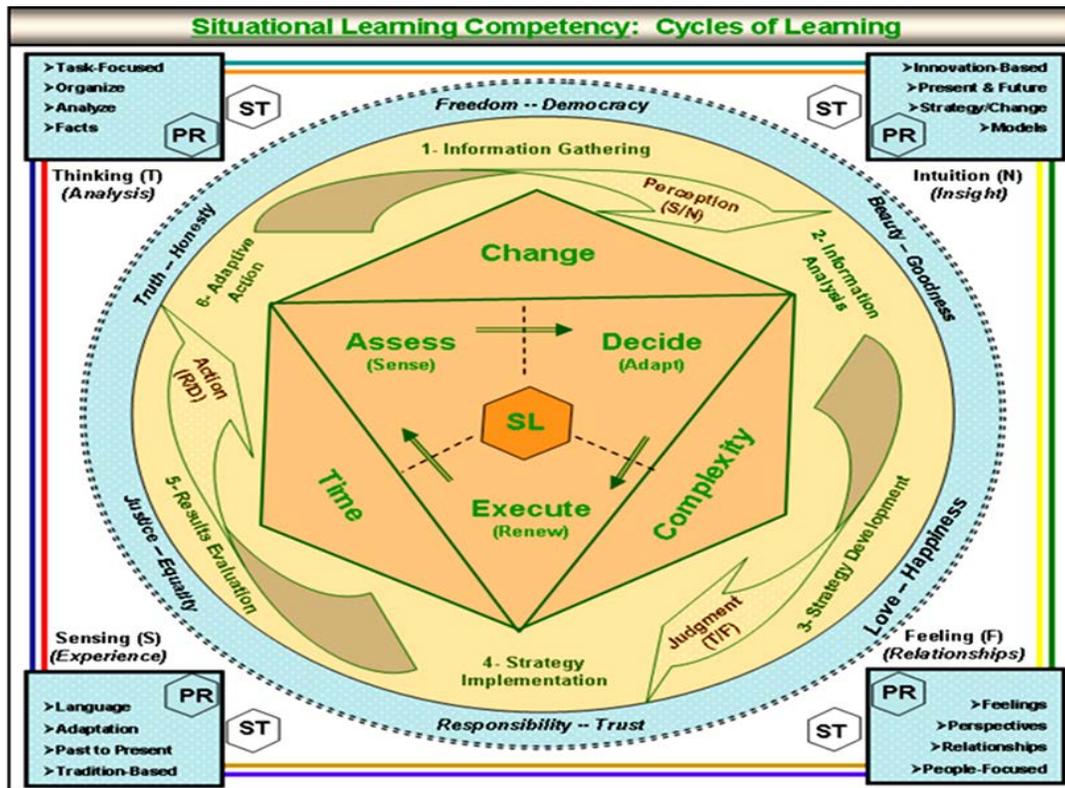


Figure 7-3

**Learning-in-Action.** Michael Marquardt, is the author of *Action Learning in Action* (1999) in which he proposes greater emphasis on the process of learning, itself. He argues that organizations that approach the learning process in a dynamic, reflective manner handle problem and decision content more efficiently leading to more effective outcomes. Marquardt says that: "...action learning is both a process and a powerful program that involves a small group of people solving real problems while at the same time focusing on what they are learning and how their learning can benefit each group member and the organization as a whole...Among the benefits, applications, and program components of action learning are: (pp.4-8)

1. Benefits:

- a. Shared learning throughout various levels of the organization
- b. Greater self-awareness and self-confidence due to new insights and feedback
- c. Ability to ask better questions and be more reflective
- d. Improved communications and team work

2. Applications:

- a. Problem solving
- b. Organizational learning
- c. Team building
- d. Leadership development
- e. Professional growth and career development

3. Program Components:

- a. A Problem – The problem should be significant, be within the within the responsibility of the team, and provide opportunity for learning.
- b. The Group – The group is composed of four to eight individuals who examine an organizational problem that has no easily identifiable solution. Group characteristics include having an ability to listen, willingness to be open, respecting others, awareness of the need to learn, and a commitment to taking action.
- c. The Questioning and Reflective Process – By focusing on the right questions rather than [solely] on the right answers, action learning focuses on what one does not know, as well as on what one does know. It is essential that

time be allowed for this activity.

d. The Resolution to take Action – There is no real learning unless action is taken, for one is never sure the idea or plan will be effective until it has been implemented.

e. The Commitment to Learning – There is equal emphasis on accomplishing the task and on the learning/development of individuals and organizations. Having everyone learn and grow through the process is an important outcome.

f. The Facilitator – Helps the group members slow down their process, which will then allow sufficient time for them to reflect on their learning. Supporting attitudes and collaborative group behavior is required to aid the facilitation process.

The advantage of Marquardt's approach is that it establishes interpersonal relations and creates involvement while building long-term organizational capability to learn, know, and perform. Some *personal attributes* developed by participating in action learning teams include: critical inquiry, inquiry and questioning, openness and willingness to change, clear personal vision, personal mastery, empathy, active listening, courage and frankness, skills in advising and helping others, facilitation and presentation skills, wisdom and common sense, and self-awareness. Also, a person cannot lead or participate actively in a change program (personal, organizational, community) unless they themselves are changed in the process. The objective of action learning is to make good choices and grow in the process.

“Action learning creates conditions in which managers learn from their own experiences of real-life problems, helped by and helping others in similar or dissimilar situations. A manager actually changes the way he or she manages, on the basis of reality. The focus of action learning is on learning about the process of managing change by actually managing an organizational change.” (p.123) Action learning develops leaders to be servants and stewards: finding answers to problems, learning from others' perspectives, challenging others and groups' assumptions, asking questions and improving reasoning, correcting mistakes and reframing learning experiences are all significant learning and development activities.

### **Dynamic Learning Environment: Perspectives on Time, Change, Complexity**

*Some problems are so complex that you have to be highly intelligent and well informed just to be undecided about them. — Laurence Peter*

**Wicked Problems and Social Complexity.** In *Wicked Problems and Social Complexity* (2001) author Jeff Conklin addresses the all too familiar concern that the issues and problems modern society has to address are so dynamic and complex that they resist the thinking and efforts of even the most skillful of experts and leaders. Conklin states that wicked problems and social complexity are *forces of fragmentation* that challenge collective intelligence, doom projects, and make collaboration difficult or impossible. According to Conklin fragmentation is as “a condition in which the people involved see themselves as more separated than united, and in which information and knowledge are chaotic and scattered. The fragmented pieces are, in essence, the perspectives, understandings, and intentions of the collaborators...and can be hidden as when stakeholders don't even realize that there are incompatible tacit assumptions about the problem, and each believes that his or her understandings are complete and shared by all.” (p.1)

Conklin attributes the definition of wicked problems to Horst Rittel, an early expert on the topic. Accordingly, problems are wicked when:

1. You don't understand the problem until you have developed a solution.
2. Wicked problems have no stopping rule.
3. Solutions to wicked problems are not right or wrong.
4. Every wicked problem is essentially unique and novel.
5. Every solution to a wicked problem is a “one- shot” operation.
6. Wicked problems have no solutions.

Conklin adds that when social complexity co-concurs with wicked problems the combination fragmentation is virtually certain to be the result. “Social complexity is a property of the social network that is engaging with the problem.” (p.13) For

example, when there are numerous organizations, experts, senior executives, and different skill sets actively involved there is sure to be social complexity. And, if technical complexity is a factor due to different levels of knowledge and experience, the situation becomes exacerbated.

Conklin advises that about the only way to proceed effectively is by “creating shared understanding about the problem, and shared commitment to the possible solution.” (p.17) He says that this occurs when an “Opportunity Driven Problem Solving” methodology is employed. He indicates that the *antidote for fragmentation is coherence* and that can only occur when problems and solutions both become subjects for iterative thinking, design, and dialogue that leads incrementally, to clarification of what problems and solutions fit well together. Through iterative processing and learning *coherence* begins to take shape and consensus is possible because the group involved comes to believe something constructive has occurred. The caveat is that without leadership acceptance and support of the group’s findings and suggestions improvement may not be achieved.

**The Loss of the Stable State.** In *Beyond the Stable State* (Schon, 1971), Schon presents a series of observations on human and social system striving for the *stable state*. He states that: “...belief in the stable state is belief in unchangeability, the constancy of central aspects of our lives, or belief that we can attain such constancy. We institutionalize it at every domain.” (p.9) Evidence of this belief may be seen in our talk in which we identify ourselves in terms of our current state of being (e.g., “I’m a chemist,” “I work for the government,” “I live in Nebraska,” and “I believe in the family”), rather than the directions toward which we are evolving. He finds that by believing that things will remain fairly stable, people are able to fend off feelings of uncertainty, personal inadequacy, and anguish. And, the more radical the change is likely to be, the greater the defense that is offered. Unexpected instability is even more of a concern because it creates larger “zones of uncertainty.” Technological change is a major driver of change, not only in and of itself, but because of its interconnectivity and influence on human and social systems. All of this appears to apply to individuals, organizations, and communities.

People use various tactics to maintain a belief that relevant systems are stable. These include being selectively inattentive to new data, laboring vigorously to maintain the current system, and averting their attention to other areas of their lives to find compensatory constancy. The nature of the threat to the stable state is revealed by the actual and threatened dissolution of our previously stable organizations and institutions, our anchors for personal identity, and our system of values. According to Schon, trends may be seen that indicate a growing awareness and intolerance of economic imbalance, a growing dissatisfaction with the relative powerlessness of minority groups, and a general disenchantment with the values and goals of “social progress.” He offers that: “No established institution in our society now perceives itself as adequate to the challenges that face it.” (p.17)

Schon’s view is that scientific activity and technology is accelerating at an exponential rate, and *implosive effects* are the likely outcome. That is, technology drives the very core of human systems by effecting the community’s communications, its flow of goods and services, and its operating methodologies so as to exacerbate social inequities. The adaptation to large magnitude changes that used to be managed inter-generationally must now be accommodated within each person’s own career and normal life span. The responses to the loss of the stable state tend to be anti-responses and may be identified as being in three primary forms: (1) *return* – the reaction that one should return to some previously better condition of life, or favoring some form of sustained isolationism, (2) *revolt* – the total rejection of all that was part of the past, a form of “reactionary radicalism,” and (3) *mindlessness* – evading any form of self-consciousness to escape the anxiety, and as Schon suggests: “Mindlessness avoids the dreaded reality only by giving up awareness and humanity.” (p.29)

The preferred strategy for dealing with accelerating change is to bring to the forefront new or modified institutions and methodologies that build human and organizational capacity to deal with growing instability in reasoned, constructive ways. The challenge is to maintain a healthy identity and self-respect while stable values and anchors are under review. It is preferred that transformations be accomplished through understanding of their causes and potential effects, and the taking of informed, collaborative action by those effected. Schon states that: “The task which the loss of the stable state makes imperative, for the person, for our institutions, for our society as a whole, is to learn about learning.” (p.30)

**[Author’s Note:** Schon’s perspective articulated here is especially important to the “Learnership Integrated Systems Architecture (LISA).” A major premise is that all personal, organizational, and community development occurs in the context of a conflicted environment in which the current infrastructure or forces for stability are under attack from the ubiquitous forces for change. The capacity of each social domain to anticipate and accommodate this dynamic tension constructively, and to continuously learn and remain focused on long term goals is essential for balanced growth and development. This capability recently became known as *complexipacity*. Learning how to learn for a lifetime is what Schon argues for and is a *learnership practitioner* anchor.]

**Adjusting to Turbulent Times.** In *Rapids of Change: Social Entrepreneurship in Turbulent Times* (Theobald, 1987), the author describes the forces for change that may be seen impacting the society's current infrastructure. He observes that we live in a world of change: in ourselves, our culture, and our society. Because we are unable to slow down the pace of change we must learn to live with turbulence rather than letting it overwhelm us. He advises that we strive to see the world in its whole form rather than try to "analyze it apart." Contradictions, paradox, and diversity are embedded in our everyday experience requiring that we learn to deal with our affairs and social issues with balance and fairness. Regarding "balance," he recommends that we "seek dynamic balance and shun chaos and breakdown." (p.17)

Theobald identifies the following "driving forces" for change which need consideration in our policy and management discussions: the weaponry revolution, the computer and robot revolution, the environmental revolution, the human rights revolution, population growth, migration within and among countries, biotechnology, and knowledge systems. To deal with these forces, he advocates adopting the assumption that: ". . . *healthy* human beings want to grow and to help others to grow," and "we must change our thought and action patterns:

1. We must see conflict as a challenge to creative thinking, rather than as an excuse for violence both within and between countries.
2. We must learn to live within environmental and ecological limitations, rather than strive for maximum economic growth.
3. We must recognize that modern technology is freeing us from toil and will require profoundly different life cycles.
4. We must provide the possibility of dignity to all human beings, regardless of sex, age, race, or creed." (pp.16-17)

Particular attention is given to the complexity and interdependencies of today's problems. He notes that problems are often sets of interconnected issues and that tackling just one problem at a time can be very counterproductive. In other words, *system thinking* is required to understand and develop solutions to the more difficult social problems. Improving social dialogue and finding shared goals and solutions is also recognized when he offers that: "The bottom line of our [change agent] work is no longer converting others to a particular point of view, but encouraging commitment and will, so that we shall all learn how to search for positive changes." (p.44)

Theobald comments: "All societies must make arrangements to educate people, to get work done, to keep people healthy, to provide the necessities of life, and to make political decisions. The unique shape of each period of history emerges from the models used to meet those needs. We are at the point where we can state the basic models by which we shall live in our emerging era. When we create conditions suitable to our new realities; people, groups, and institutions will be able to be more effective." (p.55)

**[Author's Note:** An observation at this point is that the learnership is supported by Theobald's description of the forces for change that disrupt our level of comfort with the social status quo. The emphasis on *dialogue* and *balance* goes to the core of the learnership philosophy and is seen as an insightful understanding of how to help social change occur. His presentation suggests the need for new models for shaping our understanding of our world and our rights and responsibilities in it.]

**Handling Discontinuous Change.** In *The Age of Unreason* (Handy, 1989), the author argues that change is no longer the same as it used to be. Change is now discontinuous and not part of an easily identified pattern. Instead, it is random, unpredictable and is both confusing and disturbing. He notes that little changes may be seen making big differences, and that the way our work is organized is greatly impacting how we live our lives. His notion is that: "Discontinuous change requires discontinuous upside-down thinking to deal with it." Regarding current organizations and systems, he opines that: "For those in charge, continuity is comfort, and predictability ensures that they can continue in control. Revolutions . . . may be required in order to unblock societies and shocks, to galvanize organizations." (p.10)

Handy introduces the concept of *Triple I Organizations* of the future in which *Intelligence*, *Information*, and *Ideas* equal Added-Value ( $I+I+I = AV$ ). He suggests that *quality is truth* in organizations, and that it takes "the right equipment, the right people, and the right environment to make quality happen." (p.145) Top management in these organizations will be dedicated to continuous learning, will focus more on the conceptual and human vice technical skills of management, and will learn to listen more willingly to subordinates rather than just talking at them. The new focus, he predicts, will be that organizations will stop trying to manage employees' careers, and instead, will help them develop their capabilities to take advantage of opportunities as they appear. In effect, education becomes as investment for future performance, and employees will be performing in teams and on projects in flatter organizations rather than the steeply hierarchical organizations of today.

**[Author's Note:** In terms of the learnership model, Handy's views are important in that they confirm the tension between the current infrastructure and forces for change, and illustrate that in order for organizations to cope they will need to

focus on quality and adding value in their marketplaces. Continued quality learning, in terms of customer desires, need to become essential activities for managers and subordinates alike.]

**Managing in Dynamic Environments.** In his book *Beyond Rational Management: Mastering the Paradoxes and Competing Demands of High Performance* (Quinn, 1988), Robert Quinn offers that in order to manage in today's organizational environment, managers must deal with unprecedented levels of change, ambiguity, and contradiction. To do so they need the perspective of the *Master of Management*: "The people who come to be masters of management do not see their environment only in structured, analytic ways. Instead, they also have the capacity to see it as a complex, dynamic system that is constantly evolving. In order to interact effectively with it, they employ a variety of different perspectives." (p.3) Quinn offers three streams of research that address the thought processes and developmental approaches of high-performing managers:

1. How Managers Think – High-performing managers have developed greater *cognitive complexity* in thinking and problem solving, which means that they are better at both differentiation and integration of data and perspectives; they are able to handle more dimensions and relationships the issue environment. Also, they demonstrate "more moderated attitudes, openness to disconfirming information and adjustment in thinking, more effective discernment of the intents and strategies of others, better interrelationship of decisions, more appropriate strategy development, and more flexibility in consideration of distant goals." (p.5)

2. Torbert's Developmental Model – Using the psychological theories of ego development, Torbert (1967) argued that there were seven developmental stages and that as one moved between stages, a new worldview was needed. Manager competencies may be seen in stages three through six as follows:

- a. *Diplomat stage* where conformity to group norms is important.
- b. *Technician stage* where expertise is essential.
- c. *Achiever stage* where feedback and adjustment of behavior is valued.
- d. *Strategist stage* where paradox and anomalies are welcomed and various frames of thinking are employed.

An important insight by Torbert was that at the higher developmental levels, the capacity for *action inquiry* was a recognizable. This is the capacity to explore an issue while simultaneously framing and reframing the issue environment and maintaining focus on priorities.

3. Evolution of Mastery – Some researchers subscribe to a five-stage model for evolution from novice to master manager:

- a. *Novice stage*, able to understand and use facts and rules.
- b. *Beginner stage*, gaining experience and learning to see beyond stated facts and rules.
- c. *Competence stage*, able to appreciate the complexity of tasks and find important clues.
- d. *Proficiency stage*, able to "read" the evolving situation and gain an intuitive grasp of the nature of the issue.
- e. *Expert stage*, able to see beyond others' capabilities to recognize many dimensions of an issue and to reframe strategies as appropriate in terms of evolving clues.

According to Quinn, the high-performing, master manager must learn to operate in a "competing values" environment, and to do so require a *holistic* approach to skill development. A variety of continua are suggested, e.g., control/flexibility, long-term/short-term, task/people, internal/ external, etc., that define eight management perspectives and roles that may be used as situations warrant. These are: facilitator, mentor, innovator, broker, director, producer, monitor, and coordinator. Quinn says that beyond rational management means being able to see the polarities in given situations, evaluating the polarities for their respective strengths and weaknesses, and then moving one's perspective to a meta-level "to see the interpenetration and the inseparability of the two polarities...a simultaneous integration and differentiation." (p.165) Only those at the highest developmental levels are able to reason, learn, and act at this level.

**[Author's Note:** The significance in this perspective is in its support to the learnership concept of stages of adult development which are defined, in part, as the ability to deal effectively with complex, paradoxical and ambiguous issue environments. High quality learning occurs amid the tension between stability and change, in fact, it is probably accelerated by the ebb and flow of that tension. The resolution of social issues will depend in large part on the master manager capabilities of individuals, organizations, and communities to function with a high degree of cognitive complexity and action inquiry.]

**Attaining Temporal Balance.** In *Marking Time* (Rappaport, 1990), the author considers the impact of people's sense of time on their mental and emotional health, and their ability to attain a sense of balance within the social order. From childhood through adulthood, people's senses of time change from the infinite to the finite and they become aware that their time and their lives are passing by. They become more concerned with their identity and the directions in which they

are tending as they reflect on their individual sense of past, present, and future. Rappaport refers to this aspect of human awareness as “temporal organization,” and advises that human attention should be allocated to all three time dimensions of life for normal mental and emotional health. Apparently, fixation on the past or present with little thought for the future inhibits the development of a balanced sense of one’s purpose and identity. The inability of individuals to develop this capacity often leads to a state of depression and social maladaptation.

Normal human and social development progresses from the period of childhood dependency, in which stability and predictability are essential, through periods of adolescence and adulthood in which achievement of the senses of independence and interdependency, denote maturity. Through this process, a greater understanding of one’s purpose and history is obtained. The anticipation of the future and its potentialities creates the positive life force and necessary energy to pursue *a life well lived*.

The developmental challenge in modern society concerns our ability to sustain human and social system development amid the uncertainty, complexity, overload, contradiction and values differences so prevalent. Rappaport characterizes society today as being “...a culture struggling to find ways to cope with anxiety, depression, and addiction.” (p.197) He says that a major reason for the situation is the breakdown of our value system, the lack of social ideals, and the lack of meaningful future images. From what Rappaport suggests, *the solution seems to be for individuals and society to redefine their purpose, establish common values, dream of future possibilities, and commit to working for their interdependent development.*

**[Author’s Note:** This perspective is useful for understanding the learnership integrated systems architecture in that it establishes the need for human and social organization goals, recognizes the life-long process of learning and development, appreciates the dynamic nature of the social environment and the tension between the current infrastructure (past and present conditions) and forces for change (future potentialities), and alludes to the importance of attaining system balance for societal development.]

In summary of this section, it is useful to recapitulate the foundational themes of the learnership meta-system perspective: continuous learning in a dynamic environment. The construct proposes the idea that at the center of all human and social activity is the learning process. Through learning, individuals, organizations, and communities acquire the capacity for improved reasoning and action which supports the accomplishment of their respective goals. Learning occurs as new *information* is evaluated in terms of system *requirements* and *values* using current skills in *judgment* and *decision making*. The learning process is interactive and integrative, and all subsystem development is inextricably linked in a network of mutual influences.

The context for learning and systems development is one of continuous change and turmoil. The availability of information from the various *fields of education* (physical science, social science, mathematics, etc.) is growing exponentially, and unfortunately, toward greater differentiation as specialties are added and experts establish their paradigms of thought and action within the boundaries of their respective fields of endeavor.

*Forces for change* are colliding with the *current infrastructure* which has been established to protect past traditions and accomplishments. An explosion of values, viewpoints, and technological capability is being experienced at an increasing pace, and in a discontinuous manner that negates social comprehension. The result appears to be greater alienation, social upheaval, and the sub-optimization of the performance of most, if not all, societal systems.

The learnership architecture is a new mind-frame for contemplating society as a higher-order meta-system with the potential for optimization. The purpose of this inquiry so far has been to explicate those common themes and elements that provide the web of connectivity and interdependence among the various subsystems that form the model, and to establish the usefulness of the model for improving societal learning and development.

## **Communications and Culture**

A major challenge for all of us is to understand the process of situational learning at its most subtle, but very persuasive level. That setting is at the intersection of social communications and societal culture. It is the place where daily information is dynamically exchanged between individuals, organizations and their communities – and it occurs continually day and night all year long. Figure 7-4 displays the fundamentals of social systems communications as they interface with social systems culture. The setting also recognizes the presence of people with different points of view and social preferences, albeit within a general adherence to established *universal ideals* and *spheres of knowledge*.

### **Social System Culture**

Culture may be viewed dynamically as two social processes operating at three levels of depth or intensity. Over time, a culture tends to solidify and become predictable to both group members and others in their social arena. The paradox of

culture is that provides group members with a sense of belonging, purpose and appreciation; but it can be seen by outsiders as a situation of groupthink, limited intelligence and purposeful exclusion. (Figure 7-4)

1. A learning (outside-in) process. Readily available Information and knowledge in a group moves from *Awareness*, to *Knowledge*, to *Understanding* as the group synthesizes a set of agreed perspectives they believe together e.g. purpose and worldview.

2. An action (inside-out) process. The group individually and together transcribe their agreed *Worldview* into *Principles* and *Values*, and then take on others in more observable *Communications* and *Relationships*.

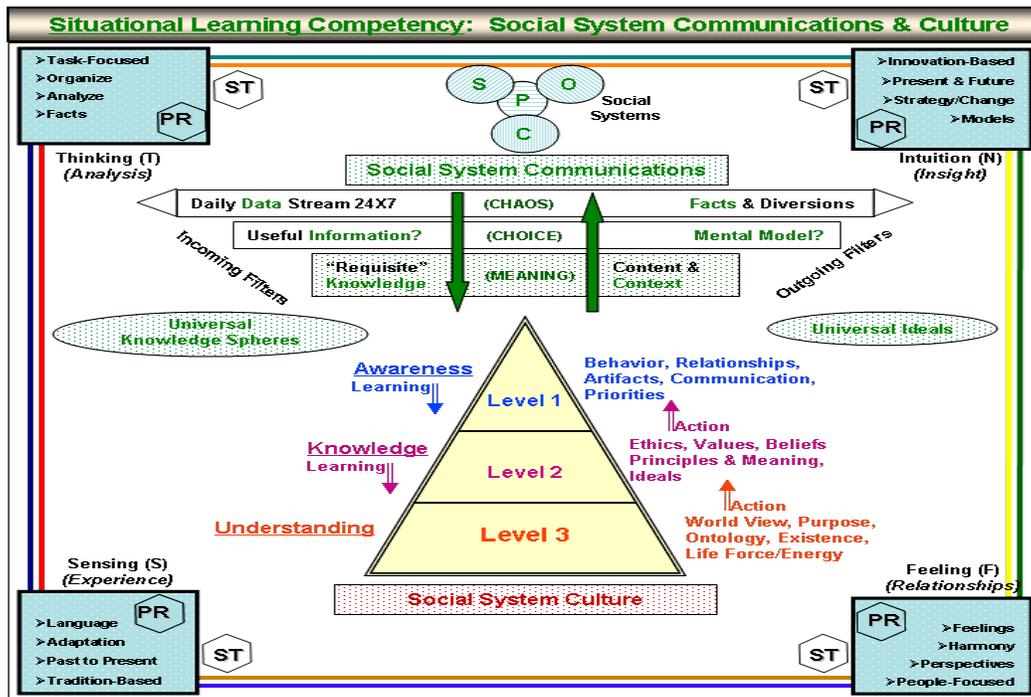


Figure 7-4

### Social System Communications

The world of social media and international communications has exploded astronomically the last few decades. At any point in time or topic individuals and groups are correct in labelling the huge stream of *Data* and *Facts* as being true or false – determining one’s opinion or options may be difficult to achieve. Because *chaos* is always at hand, people (in and out of the culture) construct mental filters to enable themselves to engage the *data/fact* stream in a useful manner. The mental filters are established when we make *choices* in how we accommodate data/facts. (Figure 7-4)

1. Incoming filters. These filters are applied when *data or facts* are assembled to form meaningful relationships known as *information*, which in turn, are then combined into *knowledge*. Not all knowledge is useful in all situations. The challenge for everyone is to separate the “*relevant*” knowledge for a situation from that knowledge that does not fit the situational context or issue.

2. Outgoing filters. These filters are pre-formed mental constructs or *mental models* that individuals or groups concoct when sending information, data and facts into the shared *data/fact* stream for others reading and learning. The content of the pre-formed mental models are often derived from the group culture all the way down to level 3.

Given the complexity of the communication and culture relationship, the rapid pace of information exchange across social groups and nations, and the proclivity for some in society to purposely deceive others for their personal gain, it is not surprising that misunderstanding and confusion are rampant in some locales and arenas.

### Thinking Straight

As if the communications and culture aspects of situational learning were not complex enough, we need to factor into consideration the relative thinking and communications skills of the people involved in our personal activities and business

functions. Authors Gillian Butler and Tony Hope in *Managing Your Mind* (1995) comment that “Becoming aware of the sources of error in thinking is the main resource we can draw upon to improve our thinking. The clearer we think, the better we will be at making decisions, at problem-solving, and also at keeping things in perspective.” (p. 407) They identify and explain four common mistakes and four statistical rules everyone should take care to understand and avoid:

### Common Mistakes

1. False assumptions – carrying unsupported prejudices and judgments tend to make people discount information that does not fit, or to distort and deflect certain information from being considered
2. What springs to mind – vivid or emotionally salient events people have experienced in the past tend to quickly come to mind at inappropriate circumstances
3. Influence of others – use of the “halo effect,” scientific jargon, humor at presentations, and selected attribution of another’s preferences at the moment tend to persuade our thinking
4. False associations – the willingness to associate something or someone with the same personal preferences of ourselves to be correct, or assume that the results we recognize in a situation must have come from the same category of causes we have witnessed before

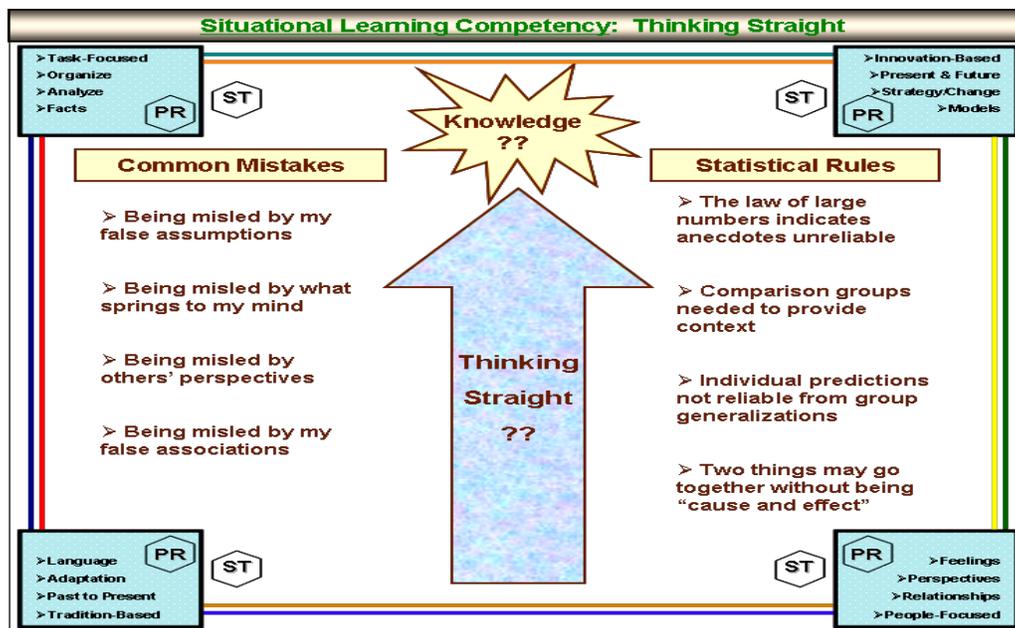


Figure 7-5

### Statistical Rules

1. Law of large numbers – The larger the sample from a population the more likely it is to reflect the characteristics from which it is drawn.
2. Comparison groups – Value judgements are only reliable if a comparison group, (e.g. related topic, location or timeframe) is selected for consideration
3. Individual predictions – While predictions may be useful for groups, one cannot assume that a member of that group has those same characteristics
4. Cause and effect – Just because two things appear to be related in some manner they made not represent a cause and effect relationship. They may not be at all related or just occur in a symbiotic manner.

### Conclusion

*Man’s mind stretched to a new idea never goes back to its original dimensions — Oliver Wendell Holmes*

**Situational Learning Competency.** Situational learning is the third of five life management competencies believed to be essential to the learnership philosophy, architecture, and practitioner way of being. The first competency, *systems thinking*, laid a foundation for expanding our awareness of related and mutually dependent people, organizations, and communities when resolving issues, solving problems, and taking on other personal and social system challenges. *Pattern recognition*, (similar to Senge’s metal models) is the second competency and asks us to look for and cognitively inquire into the beliefs, processes, methods, styles, and perspectives embedded in our own and others’ thinking and behavior. This allows us to “read” people and situations far better than when we are oblivious to the impact of such interpersonal strategies.

This chapter illustrated how the first two competencies play a useful role in the efficiency and effectiveness of personal and organizational learning. Learning cycles must be accurately “informed” at each stage of their activity. *Assessment and sensing* require collecting data that are accurate, relevant, and trustworthy; *Deciding and Adapting* cannot be efficient when there is a lack of factual information, use irrelevant criteria, and failure to discern appropriate priorities; and *Execution and Renewal* cannot achieve meaningful results if there is no buy-in to implementation plans and/or an unwillingness of key stakeholders and leaders to fulfill their responsibilities. Learnership practitioners are encouraged to develop the skills and heed the lessons from experts in personal and organizational learning.

**Implications for Integral Learning and Knowledge Management.** Unless there is efficient, effective learning, knowledge management will always be operating with too much decision-making risk. The reason is that required knowledge will often be inaccurate or too late thereby causing decisions to be made under excessive uncertainty and risk. Performance will be less than optimal and individuals and organizations will under-perform their objectives. Assertive learners cycling rapidly through numerous learning cycles are part of the remedy. So too, is an organization skilled in authentic dialogue and trusted collaboration wherein the parties involved know each other’s needs, are committed to each other’s success, and use critical thinking effectively without engaging in unnecessary game-playing or politics. Skills in Systems Thinking and Pattern Recognition support Situational Learning, which in turn, enables effective Knowledge Management.

**Personal Reflection.** This topic appears at the end of each chapter and is meant to serve two purposes: (1) be a reader’s guide to main points and “takeaways,” and (2) to encourage everyone to take a moment to engage their mental cognition and intuition on what the chapter means to them – especially at this time in their lives. Questions for chapter reflection follow immediately below; and for those readers inclined to maintain a self-assessment, your thoughts may be recorded in your *American Learnership: Life, Work, Wealth and Legacy Success* located at Appendix B.

### Questions for Discussion:

1. Have you ever had an experience in which during a decision meeting the ranking person, the most talkative person, or the most emotional person dominates the discussion and rushes the group to a decision before many of the relevant facts and perspectives are even considered? Please explain the impact on you.
2. Do you now think you are able and willing to speak up professionally and point out that facts and perspectives essential for good decision-making are not being considered? In the future, will you be prepared to advocate effective decision-making based on collecting relevant information, deliberation and prioritization of alternatives, and assigning responsibilities to be performed by reliable and capable people? Please explain why or why not.
3. How would you rate yourself as a critical thinker? What do you do well, and not so well, when engaging in a difficult topic?
4. Can you list two to three major learning points from this chapter that you want to keep in mind to improve your ability to manage your life and career?
5. What do you think the impact of this chapter’s information might be on the personal, organizational, community, and/or societal systems to be discussed later in the book?
6. Can you identify two to three topics, models, or perspectives in this chapter you would like to learn more about?
7. Should you be making an entry into your *American Learnership for Life, Work, Wealth, Health and Legacy Success* at Appendix B?

### Insights, Commitments and Skills

If you plan to participate in the American Learnership for Life, Work, Wealth, Health and Legacy Success self-development e-book experience, it is suggested you record your Insights, commitments and skills to be developed here in this chapter, and again in Appendix B:

My learning in terms of new insights, changing priorities, new commitments or skills I want to acquire:

1. Insights (Example): Remind myself that ...
2. Commitments (Example): Continue to ask myself ...
3. Skills (Example): Apply my knowledge and skills to ...